UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2018

or

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____to_____

Commission file number: 001-35081

Kinder Morgan, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**80-0682103**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*

1001 Louisiana Street, Suite 1000, Houston, Texas 77002

(Address of principal executive offices) (zip code)

Registrant's telephone number, including area code: 713-369-9000

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Class P Common Stock	New York Stock Exchange
1.500% Senior Notes due 2022	New York Stock Exchange
2.250% Senior Notes due 2027	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act of 1933. Yes ☑ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934. Yes ☐ No ☑

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☑ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K(§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company (as defined in Rule 12b-2 of the Securities Exchange Act of 1934).
Large accelerated filer ☑ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐ Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Securities Exchange Act of 1934). Yes ☐ No ☑

Aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant, based on closing prices in the daily composite list for transactions on the New York Stock Exchange on June 29, 2018 was approximately $33,499,494,320. As of February 7, 2019, the registrant had 2,263,656,419 Class P shares outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's definitive proxy statement for the 2019 Annual Meeting of Stockholders, which shall be filed no later than April 30, 2019, are incorporated into PART III, as specifically set forth in PART III.

KINDER MORGAN, INC. AND SUBSIDIARIES
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KINDER MORGAN, INC. AND SUBSIDIARIES
GLOSSARY
Company Abbreviations

Calnev	=	Calnev Pipe Line LLC
CIG	=	Colorado Interstate Gas Company, L.L.C.
CPGPL	=	Cheyenne Plains Gas Pipeline Company, L.L.C.
EagleHawk	=	EagleHawk Field Services LLC
Elba Express	=	Elba Express Company, L.L.C.
ELC	=	Elba Liquefaction Company, L.L.C.
EPB	=	El Paso Pipeline Partners, L.P. and its majority-owned and controlled subsidiaries
EPNG	=	El Paso Natural Gas Company, L.L.C.
FEP	=	Fayetteville Express Pipeline LLC
Hiland	=	Hiland Partners, LP
KinderHawk	=	KinderHawk Field Services LLC
KMEP	=	Kinder Morgan Energy Partners, L.P.
KMGP	=	Kinder Morgan G.P., Inc.
KMI	=	Kinder Morgan, Inc. and its majority-owned and/or controlled subsidiaries
KML	=	Kinder Morgan Canada Limited and its majority-owned and/or controlled subsidiaries
KMLP	=	Kinder Morgan Louisiana Pipeline LLC
KMP	=	Kinder Morgan Energy Partners, L.P. and its majority-owned and controlled subsidiaries
KMTP	=	Kinder Morgan Texas Pipeline LLC
MEP	=	Midcontinent Express Pipeline LLC
NGPL	=	Natural Gas Pipeline Company of America LLC
Ruby	=	Ruby Pipeline Holding Company, L.L.C.
SFPP	=	SFPP, L.P.
SLNG	=	Southern LNG Company, L.L.C.
SNG	=	Southern Natural Gas Company, L.L.C.
TGP	=	Tennessee Gas Pipeline Company, L.L.C.
TMEP	=	Trans Mountain Expansion Project
TMPL	=	Trans Mountain Pipeline System
Trans Mountain	=	Trans Mountain Pipeline ULC
WIC	=	Wyoming Interstate Company, L.L.C.
WYCO	=	WYCO Development L.L.C.

Unless the context otherwise requires, references to "we," "us," "our," or "the Company" are intended to mean Kinder Morgan, Inc. and its majority-owned and/or controlled subsidiaries.

Common Industry and Other Terms

2017 Tax Reform	=	The Tax Cuts & Jobs Act of 2017
/d	=	per day
AFUDC	=	allowance for funds used during construction
BBtu	=	billion British Thermal Units
Bcf	=	billion cubic feet
CERCLA	=	Comprehensive Environmental Response, Compensation and Liability Act
C$	=	Canadian dollars
CO_2	=	carbon dioxide or our CO_2 business segment
CPUC	=	California Public Utilities Commission
DCF	=	distributable cash flow
DD&A	=	depreciation, depletion and amortization
Dth	=	dekatherms
EBDA	=	earnings before depreciation, depletion and amortization expenses, including amortization of excess cost of equity investments
EPA	=	United States Environmental Protection Agency
FASB	=	Financial Accounting Standards Board
FERC	=	Federal Energy Regulatory Commission
GAAP	=	United States Generally Accepted Accounting Principles
IPO	=	Initial Public Offering
LIBOR	=	London Interbank Offered Rate
LLC	=	limited liability company
LNG	=	liquefied natural gas
MBbl	=	thousand barrels
MDth	=	thousand dekatherms
MLP	=	master limited partnership
MMBbl	=	million barrels
MMcf	=	million cubic feet
NEB	=	Canadian National Energy Board
NGL	=	natural gas liquids
NYMEX	=	New York Mercantile Exchange
NYSE	=	New York Stock Exchange
OTC	=	over-the-counter
PHMSA	=	United States Department of Transportation Pipeline and Hazardous Materials Safety Administration
U.S.	=	United States of America
SEC	=	United States Securities and Exchange Commission
TBtu	=	trillion British Thermal Units
WTI	=	West Texas Intermediate

When we refer to cubic feet measurements, all measurements are at a pressure of 14.73 pounds per square inch.

Information Regarding Forward-Looking Statements

This report includes forward-looking statements. These forward-looking statements are identified as any statement that does not relate strictly to historical or current facts. They use words such as "anticipate," "believe," "intend," "plan," "projection," "forecast," "strategy," "outlook," "continue," "estimate," "expect," "may," or the negative of those terms or other variations of them or comparable terminology. In particular, expressed or implied statements concerning future actions, conditions or events, future operating results or the ability to generate sales, income or cash flow, service debt or pay dividends, are forward-looking statements. Forward-looking statements are not guarantees of performance. They involve risks, uncertainties and assumptions. Future actions, conditions or events and future results may differ materially from those expressed in our forward-looking statements. Many of the factors that will determine these results are beyond our ability to control or accurately predict. Specific factors that could cause actual results to differ from those in our forward-looking statements include:

- changes in supply of and demand for NGL, refined petroleum products, oil, CO_2, natural gas, electricity, coal, steel and other bulk materials and chemicals and certain agricultural products in North America;
- economic activity, weather, alternative energy sources, conservation and technological advances that may affect price trends and demand;
- changes in our tariff rates required by the FERC, the CPUC, Canada's NEB or another regulatory agency;
- our ability to acquire new businesses and assets and integrate those operations into our existing operations, and make cost-saving changes in operations, particularly if we undertake multiple acquisitions in a relatively short period of time, as well as our ability to expand our facilities;
- our ability to safely operate and maintain our existing assets and to access or construct new assets including pipelines, terminals, gas processing, gas storage and NGL fractionation capacity;
- our ability to attract and retain key management and operations personnel;
- difficulties or delays experienced by railroads, barges, trucks, ships or pipelines in delivering products to or from our terminals or pipelines;
- shut-downs or cutbacks at major refineries, petrochemical or chemical plants, natural gas processing plants, ports, utilities, military bases or other businesses that use our services or provide services or products to us;
- changes in crude oil and natural gas production (and the NGL content of natural gas production) from exploration and production areas that we serve, such as the Permian Basin area of West Texas, the shale plays in North Dakota, Oklahoma, Ohio, Pennsylvania and Texas, and the U.S. Rocky Mountains;
- changes in laws or regulations, third-party relations and approvals, and decisions of courts, regulators and governmental bodies that may increase our compliance costs, restrict our ability to provide or reduce demand for our services, or otherwise adversely affect our business;
- interruptions of operations at our facilities due to natural disasters, damage by third parties, power shortages, strikes, riots, terrorism (including cyber attacks), war or other causes;
- the uncertainty inherent in estimating future oil, natural gas, and CO_2 production or reserves;
- issues, delays or stoppage associated with new construction or expansion projects;
- regulatory, environmental, political, grass roots opposition, legal, operational and geological uncertainties that could affect our ability to complete our expansion projects on time and on budget or at all;
- the timing and success of our business development efforts, including our ability to renew long-term customer contracts at economically attractive rates;
- the ability of our customers and other counterparties to perform under their contracts with us;

- competition from other pipelines, terminals or other forms of transportation;
- changes in accounting pronouncements that impact the measurement of our results of operations, the timing of when such measurements are to be made and recorded, and the disclosures surrounding these activities;
- changes in tax laws;
- our ability to access external sources of financing in sufficient amounts and on acceptable terms to the extent needed to fund acquisitions of operating businesses and assets and expansions of our facilities;
- our indebtedness, which could make us vulnerable to general adverse economic and industry conditions, limit our ability to borrow additional funds, place us at a competitive disadvantage compared to our competitors that have less debt, or have other adverse consequences;
- our ability to obtain insurance coverage without significant levels of self-retention of risk;
- natural disasters, sabotage, terrorism (including cyber attacks) or other similar acts or accidents causing damage to our properties greater than our insurance coverage limits;
- possible changes in our and our subsidiaries' credit ratings;
- conditions in the capital and credit markets, inflation and fluctuations in interest rates;
- political and economic instability of the oil producing nations of the world;
- national, international, regional and local economic, competitive and regulatory conditions and developments, including the effects of any enactment of import or export duties, tariffs or similar measures;
- our ability to achieve cost savings and revenue growth;
- foreign exchange fluctuations;
- the extent of our success in developing and producing CO_2 and oil and gas reserves, including the risks inherent in development drilling, well completion and other development activities;
- engineering and mechanical or technological difficulties that we may experience with operational equipment, in well completions and work-overs, and in drilling new wells; and
- unfavorable results of litigation and the outcome of contingencies referred to in Note 18 "*Litigation, Environmental and Other Contingencies*" to our consolidated financial statements.

The foregoing list should not be construed to be exhaustive. We believe the forward-looking statements in this report are reasonable. However, there is no assurance that any of the actions, events or results expressed in forward-looking statements will occur, or if any of them do, of their timing or what impact they will have on our results of operations or financial condition. Because of these uncertainties, you should not put undue reliance on any forward-looking statements.

Additional discussion of factors that may affect our forward-looking statements appears elsewhere in this report, including in Item 1A "*Risk Factors,*" Item 7 "*Management's Discussion and Analysis of Financial Condition and Results of Operations,*" and Item 7A "*Quantitative and Qualitative Disclosures About Market Risk—Energy Commodity Market Risk.*" In addition, there is a general level of uncertainty regarding the extent to which potential positive or negative changes to fiscal, tax and trade policies may impact us and those with whom we do business. It is not possible at this time to predict the extent of any such impact. When considering forward-looking statements, you should keep in mind the factors described in this section and the other sections referenced above. These factors could cause our actual results to differ materially from those contained in any forward-looking statement. We disclaim any obligation, other than as required by applicable law, and described below under Items 1 and 2 "*Business and Properties—(a) General Development of Business—2019 Outlook*," to update the above list or to announce publicly the result of any revisions to any of our forward-looking statements to reflect future events or developments.

PART I

Items 1 and 2. ***Business and Properties.***

We are one of the largest energy infrastructure companies in North America. We own an interest in or operate approximately 84,000 miles of pipelines and 153 terminals. Our pipelines transport natural gas, refined petroleum products, crude oil, condensate, CO_2 and other products, and our terminals transload and store liquid commodities including petroleum products, ethanol and chemicals, and bulk products, including petroleum coke, metals and ores. Our common stock trades on the NYSE under the symbol "KMI."

(a) General Development of Business

Organizational Structure

We are a Delaware corporation and our common stock has been publicly traded since February 2011.

You should read the following in conjunction with our audited consolidated financial statements and the notes thereto. We have prepared our accompanying consolidated financial statements under GAAP and the rules and regulations of the SEC. Our accounting records are maintained in U.S. dollars and all references to dollars in this report are to U.S. dollars, except where stated otherwise. Our consolidated financial statements include our accounts and those of our majority-owned and/or controlled subsidiaries, and all significant intercompany items have been eliminated in consolidation. The address of our principal executive offices is 1001 Louisiana Street, Suite 1000, Houston, Texas 77002, and our telephone number at this address is (713) 369-9000.

Recent Developments

The following is a brief listing of significant developments and updates related to our major projects and other transactions. Additional information regarding most of these items may be found elsewhere in this report. "Capital Scope" is estimated for our share of the described project which may include portions not yet completed.

Asset or project	Description	Activity	Approx. Capital Scope
Divestitures			
TMPL(a)	Sold interests in TMPL, TMEP, Puget Sound system and Kinder Morgan Canada Inc. to the Government of Canada.	Completed in August 2018.	n/a
Placed in service or acquisitions			
TGP Broad Run Expansion	Second of two projects to create a total of 790,000 Dth/d of incremental firm transportation capacity from the southwest Marcellus and Utica supply basins to delivery points in Mississippi and Louisiana. Subscribed under long-term firm transportation contracts.	Broad Run Expansion (200,000 Dth/d) was placed in service October 2018. Broad Run Flexibility facilities (590,000 Dth/d) were placed in service November 2015.	$463 million
KM Base Line Terminal Development(b)	A 12 tank, 4.8 MMBbl, new-build merchant crude oil storage facility in Edmonton, Alberta. Developed as part of a 50-50 joint venture with Keyera Corp. Capital figure includes costs associated with the construction of a pipeline segment funded solely by Kinder Morgan. Subscribed under long-term contracts with an average initial term of 7.5 years.	First 6 tanks placed in service in first quarter 2018 with balance placed in service in the third and fourth quarters of 2018.	C$357 million
Elba Express and SNG Expansion	Expansion project that provides 854,000 Dth/d of incremental natural gas transportation service supporting the needs of customers in Georgia, South Carolina and northern Florida, and also serving ELC. Supported by long-term firm transportation contracts.	Initial service began in December 2016 and as of December 31, 2017, more than 70% of capacity had been placed in service. The final portion was placed in service November 2018.	$284 million

Asset or project	Description	Activity	Approx. Capital Scope
Utopia Pipeline	New 270 mile pipeline, supported by long-term transportation contracts, to transport ethane and ethane-propane mixtures from the prolific Utica Shale, with a design capacity of 50 MBbl/d, expandable to more than 75 MBbl/d. We own a 50% interest in and operate Utopia Holding L.L.C. Riverstone Investment Group LLC owns the remaining 50% interest.	Placed in service January 2018.	$275 million
TGP Southwest Louisiana Supply	Expansion project to provide 900,000 Dth/d of incremental firm transportation capacity from multiple supply basins to the Cameron LNG export facility in Cameron Parish, Louisiana. Subscribed under long-term firm transportation contracts.	Placed in service March 2018.	$175 million
KMLP Sabine Pass Expansion	Expansion project to provide 600,000 Dth/d of incremental firm transportation capacity from various receipt points to Cheniere's Sabine Pass Liquefaction Terminal in Cameron Parish, Louisiana. Subscribed under long-term firm transportation contracts.	Placed in service December 2018.	$133 million
SNG Fairburn Expansion	Expansion project in Georgia to provide 370,000 Dth/d of incremental long-term firm transportation capacity into the Southeast market, and includes the construction of a new compressor station, 6.5 miles of new pipeline and new meter stations.	Placed in service December 2018.	$122 million
TGP Lone Star	Expansion project to provide 300,000 Dth/d of incremental firm transportation capacity from Mississippi receipt points to Cheniere's Corpus Christi LNG export facility in Jackson County, Texas. Subscribed under long-term firm transportation contracts.	Placed in service December 2018.	$106 million
NGPL Gulf Coast Southbound Expansion	Expansion project to provide 460,000 Dth/d of incremental firm transportation capacity from various interstate pipeline interconnects in Illinois, Arkansas and Texas, to points south on NGPL's pipeline system to serve growing demand in the Gulf Coast area. Subscribed under long-term firm transportation contracts.	Partially in service April 2017 (75,000 Dth/d). Remaining (385,000 Dth/d) placed in service October 2018.	$88 million
Other Announcements			
Natural Gas Pipelines			
ELC and SLNG Expansion	Building of new natural gas liquefaction and export facilities at our SLNG natural gas terminal on Elba Island, near Savannah, Georgia, with a total capacity of 2.5 million tonnes per year of LNG, equivalent to approximately 357,000 Dth/d of natural gas. Supported by a long-term firm contract with Shell.	First of 10 liquefaction units expected to be placed in service at the end of first quarter 2019 with the remaining 9 units to come online throughout 2019.	$1.2 billion
Permian Highway Pipeline Project (PHP Project)(c)	Joint venture pipeline project (KMTP 50% and BCP PHP, LLC (BCP) 50% ownership interest) is designed to transport up to 2.1 Bcf/d of natural gas through approximately 430 miles of 42-inch pipeline from the Waha, Texas area to the U.S. Gulf Coast and Mexico markets. Subscribed under long-term firm transportation contracts.	Expected in-service date fourth quarter 2020, pending regulatory approvals.	$572 million
Gulf Coast Express Pipeline Project (GCX Project)	Joint venture pipeline project (KMTP 35%, DCP Midstream, LP 25%, an affiliate of Targa Resources Corp. 25% and Altus Midstream Company 15% ownership interest) to provide up to 1.98 Bcf/d of transportation capacity from the Permian Basin to the Agua Dulce, Texas area. Subscribed under long-term firm transportation contracts.	The first 9 miles of the Midland Lateral were placed in service in August 2018 with the remaining 40 miles to be placed in-service in April 2019. Expected full in-service date of the project is October 2019.	$637 million
Texas Intrastate Crossover Expansion	Expansion project that provides over 1,000,000 Dth/d of transportation capacity from the Katy Hub, the Company's Houston Central processing plant, and other third-party receipt points to serve customers in Texas and Mexico. Phase I is supported by long-term firm transportation contracts of nearly 700,000 Dth/d, including a contract with Comisión Federal de Electricidad. Phase 2, which is supported by long-term firm transportation contracts with Cheniere Energy, Inc. at its Corpus Christi LNG facility and SK E&S LNG, LLC, that will provide service to the Freeport LNG export facility and other domestic markets.	Phase 1 was placed in service in September 2016. Phase 2 is expected to be placed in service by second quarter 2020.	$298 million

Asset or project	Description	Activity	Approx. Capital Scope
EPNG South Mainline Expansion	Expansion project that provides 471,000 Dth/d of firm transportation capacity with a first phase of system improvements to deliver volumes to the Sierrita pipeline and the second phase for incremental deliveries of natural gas to Arizona and California. Subscribed under long-term firm transportation contracts.	Phase 1 placed in service October 2014, phase 2 expected to be in service third quarter 2020.	$138 million
NGPL Gulf Coast Southbound Expansion (second phase)	Expansion project to increase southbound capacity on NGPL's Gulf Coast System to serve Corpus Christi Liquefaction. Subscribed under a long-term firm transportaton contract.	Expected in-service date June 2021, pending regulatory approvals.	$114 million

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n/a - not applicable

(a) These assets were included in KML and were partially owned by KML's Restricted Voting Stockholders.

(b) These assets are included in KML and are partially owned by KML's Restricted Voting Stockholders.

(c) An affiliate of an anchor shipper exercised its option in January 2019 to acquire 20% equity interest in the project, bringing KMTP's and BCP's ownership interest to 40% each. Altus Midstream Company (Altus Midstream) (a gas gathering, processing and transportation company formed by shipper Apache Corporation) has an option to acquire an equity interest in the project from the initial partners by September 2019. If Altus Midstream exercises its option, KMTP, BCP and Altus Midstream will each hold a 26.67% ownership interest in the project. Our share of capital scope is adjusted to reflect the potential exercise of Altus Midstream's option.

Financings

On January 3, 2019, KML distributed to us our approximately 70% portion of the proceeds from the TMPL Sale of approximately $1.9 billion (after Canadian tax) which we used to repay our outstanding balance of commercial paper borrowings, and then in February 2019, to repay $500 million of maturing 9.00% senior notes and $800 million of maturing 2.65% senior notes.

In December 2018 and January 2019, we repurchased approximately 1.5 million and 0.1 million, respectively, of our Class P shares for approximately $23 million and $2 million, respectively, at an average price of $15.54 per share, as part of our $2 billion common share buy-back program approved by our board of directors in December 2017.

On November 16, 2018, we entered into (i) a new five-year $4.0 billion revolving credit agreement and (ii) a new 364-day $500 million revolving credit agreement with a syndicate of lenders and replaced the prior KMI credit agreement.

2019 Outlook

We expect to declare dividends of $1.00 per share for 2019, a 25% increase from the 2018 declared dividends of $0.80 per share, and generate approximately $5.0 billion of DCF in 2019. We also expect to invest $3.1 billion in expansion projects and contributions to joint ventures during 2019. Our discretionary spending will be primarily funded with excess, internally generated cash flow, with no need to access equity markets during 2019.

We are unable to provide budgeted net income attributable to common stockholders (the GAAP financial measure most directly comparable to DCF) due to the impracticality of predicting certain amounts required by GAAP, such as unrealized gains and losses on derivatives marked to market, and potential changes in estimates for certain contingent liabilities. See Item 7 "*Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations—Non-GAAP Financial Measures*."

Our expectations for 2019 assume average annual prices for WTI crude oil and Henry Hub natural gas of $60.00 per barrel and $3.15 per MMBtu, respectively, consistent with forward pricing during our 2019 budget process. The vast majority of revenue we generate is supported by multi-year fee-based customer arrangements and therefore is not directly exposed to commodity prices. The primary area where we have direct commodity price sensitivity is in our CO_2 segment, in which we hedge the majority of the next 12 months of oil and NGL production to minimize this sensitivity. For 2019, we estimate that every $1 change in the average WTI crude oil price per barrel from our budget of $60.00 per barrel would impact our budgeted DCF by approximately $8 million and each $0.10 per MMBtu change in the average price of natural gas from our budget of $3.15 per MMBtu would impact budgeted DCF by approximately $1 million.

In addition, our expectations for 2019 discussed above involve risks, uncertainties and assumptions, and are not guarantees of performance. Many of the factors that will determine these expectations are beyond our ability to control or predict, and

because of these uncertainties, it is advisable not to put undue reliance on any forward-looking statement. Please read our Item 1A "*Risk Factors*" below for more information. Furthermore, we plan to provide updates to our 2019 expectations when we believe previously disclosed expectations no longer have a reasonable basis.

(b) Financial Information about Segments

For financial information on our reportable business segments, see Note 17 "*Reportable Segments*" to our consolidated financial statements.

(c) Narrative Description of Business

Business Strategy

Our business strategy is to:

- focus on stable, fee-based energy transportation and storage assets that are central to the energy infrastructure of growing markets within North America;
- increase utilization of our existing assets while controlling costs, operating safely, and employing environmentally sound operating practices;
- leverage economies of scale from incremental acquisitions and expansions of assets that fit within our strategy and are accretive to cash flow; and
- maintain a strong balance sheet and return value to our stockholders.

It is our intention to carry out the above business strategy, modified as necessary to reflect changing economic conditions and other circumstances. However, as discussed under Item 1A. *"Risk Factors"* below, there are factors that could affect our ability to carry out our strategy or affect its level of success even if carried out.

We regularly consider and enter into discussions regarding potential acquisitions, and full and partial divestitures, and we are currently contemplating potential transactions. Any such transaction would be subject to negotiation of mutually agreeable terms and conditions, and, as applicable, receipt of fairness opinions, and approval of our board of directors. While there are currently no unannounced purchase or sale agreements for the acquisition or sale of any material business or assets, such transactions can be effected quickly, may occur at any time and may be significant in size relative to our existing assets or operations.

Business Segments

Our business segments and their primary activities and sources of revenues are as follows:

- Natural Gas Pipelines—the ownership and operation of (i) major interstate and intrastate natural gas pipeline and storage systems; (ii) natural gas and crude oil gathering systems and natural gas processing and treating facilities; (iii) NGL fractionation facilities and transportation systems; and (iv) LNG facilities;
- Products Pipelines—the ownership and operation of refined petroleum products, NGL and crude oil and condensate pipelines that primarily deliver, among other products, gasoline, diesel and jet fuel, propane, ethane, crude oil and condensate to various markets, plus the ownership and/or operation of associated product terminals and petroleum pipeline transmix facilities;
- Terminals—the ownership and/or operation of (i) liquids and bulk terminal facilities located throughout the U.S. and portions of Canada that transload and store refined petroleum products, crude oil, ethanol and chemicals, and bulk products, including petroleum coke, metals and ores; and (ii) Jones Act tankers;
- CO_2—(i) the production, transportation and marketing of CO_2 to oil fields that use CO_2 as a flooding medium to increase recovery and production of crude oil from mature oil fields; (ii) ownership interests in and/or operation of oil fields and gas processing plants in West Texas; and (iii) the ownership and operation of a crude oil pipeline system in West Texas; and
- Kinder Morgan Canada (prior to August 31, 2018)—the ownership and operation of the Trans Mountain pipeline system that transports crude oil and refined petroleum products from Edmonton, Alberta, Canada to marketing terminals and refineries in British Columbia, Canada and the state of Washington. As a result of the TMPL Sale, this segment does not have results of operations on a prospective basis.

Natural Gas Pipelines

Our Natural Gas Pipelines business segment includes interstate and intrastate pipelines and our LNG terminals, and includes both FERC regulated and non-FERC regulated assets.

Our primary businesses in this segment consist of natural gas transportation, storage, sales, gathering, processing and treating, and various LNG services. Within this segment are: (i) approximately 46,000 miles of wholly owned natural gas pipelines and (ii) our equity interests in entities that have approximately 26,000 miles of natural gas pipelines, along with associated storage and supply lines for these transportation networks, which are strategically located throughout the North American natural gas pipeline grid. Our transportation network provides access to the major natural gas supply areas and consumers in the western U.S., Louisiana, Texas, the Midwest, Northeast, Rocky Mountain, Midwest and Southeastern regions. Our LNG terminals also serve natural gas market areas in the southeast. The following tables summarize our significant Natural Gas Pipelines business segment assets, as of December 31, 2018. The Design Capacity represents transmission, gathering or liquefaction capacity, depending on the nature of the asset.

Asset (KMI ownership shown if not 100%)	Miles of Pipeline	Design (Bcf/d) Capacity	Storage (Bcf) [Processing (Bcf/d)] Capacity	Supply and Market Region
Natural Gas Pipelines				
TGP	11,775	12.10	76	Marcellus, Utica, Gulf Coast, Haynesville, and Eagle Ford shale supply basins; Northeast, Southeast U.S., Gulf Coast and U.S.-Mexico border
EPNG/Mojave pipeline system	10,660	5.65	44	Northern New Mexico, Texas, Oklahoma, to California, connects to San Juan, Permian and Anadarko basins
NGPL (50%)	9,100	7.60	288	Chicago and other Midwest markets and all central U.S. supply basins; north to south for LNG and to U.S.-Mexico border
SNG (50%)	6,950	4.32	66	Louisiana, Mississippi, Alabama, Florida, Georgia, South Carolina and Tennessee; basins in Texas, Louisiana, Mississippi and Alabama
Florida Gas Transmission (Citrus) (50%)	5,350	3.90	—	Texas to Florida; basins along Louisiana and Texas Gulf Coast, Mobile Bay and offshore Gulf of Mexico
CIG	4,280	5.15	38	Colorado and Wyoming; Rocky Mountains and the Anadarko Basin
WIC	850	3.83	—	Wyoming, Colorado and Utah; Overthrust, Piceance, Uinta, Powder River and Green River Basins
Ruby (50%)(a)	680	1.53	—	Wyoming to Oregon with interconnects supplying California and the Pacific Northwest; Rocky Mountain basins
MEP (50%)	510	1.80	—	Oklahoma and north Texas supply basins to interconnects with deliveries to interconnects with Transco, Columbia Gulf and various other pipelines
CPGPL	410	1.20	—	Colorado and Kansas, natural gas basins in the Central Rocky Mountain area
TransColorado Gas	310	0.80	—	Colorado and New Mexico; connects to San Juan, Paradox and Piceance basins
WYCO (50%)	224	1.20	7	Northeast Colorado; interconnects with CIG, WIC, Rockies Express Pipeline, Young Gas Storage and PSCo's pipeline system
Elba Express	200	1.06	—	Georgia; connects to SNG (Georgia), Transco (Georgia/South Carolina), SLNG (Georgia) and Dominion Energy Carolina Gas Transmission (Georgia)
FEP (50%)	185	2.00	—	Arkansas to Mississippi; connects to NGPL, Trunkline Gas Company, Texas Gas Transmission and ANR Pipeline Company
KMLP	135	2.95	—	Columbia Gulf, ANR Pipeline Company and various other pipeline interconnects; Cheniere Sabine Pass LNG and industrial markets
Sierrita Gas Pipeline LLC (35%)	60	0.20	—	Near Tucson, Arizona, to the U.S.-Mexico border near Sasabe, Arizona; connects to EPNG and via an international border crossing with a third-party natural gas pipeline in Mexico
Young Gas Storage (48%)	17	—	5.8	Morgan County, Colorado, capacity is committed to CIG and Colorado Springs Utilities
Keystone Gas Storage	15	—	6.4	Located in the Permian Basin and near the WAHA natural gas trading hub in West Texas

Asset (KMI ownership shown if not 100%)	Miles of Pipeline	Design (Bcf/d) Capacity	Storage (Bcf) [Processing (Bcf/d)] Capacity	Supply and Market Region
Gulf LNG Holdings (50%)	5	1.50	6.6	Near Pascagoula, Mississippi; connects to four interstate pipelines and a natural gas processing plant
Bear Creek Storage (75%)	—	—	59.2	Located in Louisiana; provides storage capacity to SNG and TGP
SLNG	—	1.76	11.5	Georgia; connects to Elba Express, SNG and Dominion Energy Carolina Gas Transmission
ELC (51%)	—	0.35	—	Georgia; expect phased in-service Q1 2019 through Q4 2019
Midstream Natural Gas Assets				
KM Texas and Tejas pipelines	5,640	7.00	134 [0.51]	Texas Gulf Coast
Mier-Monterrey pipeline	90	0.65	—	Starr County, Texas to Monterrey, Mexico; connect to CENEGAS national system and multiple power plants in Monterrey
KM North Texas pipeline	80	0.33	—	Interconnect from NGPL; connects to 1,750-megawatt Forney, Texas, power plant and a 1,000-megawatt Paris, Texas, power plant
Oklahoma				
Oklahoma System	4,075	0.75	[0.14]	Hunton Dewatering, Woodford Shale, Anadarko Basin and Mississippi Lime, Arkoma Basin
Cedar Cove (70%)	115	0.03	—	Oklahoma STACK, capacity excludes third-party offloads
South Texas				
South Texas System	1,300	1.93	[1.02]	Eagle Ford shale, Woodbine and Eaglebine formations
Webb/Duval gas gathering system (63%)	145	0.15	—	South Texas
EagleHawk (25%)	530	1.20	—	South Texas, Eagle Ford shale formation
KM Altamont	1,370	0.08	[0.08]	Utah, Uinta Basin
Red Cedar (49%)	900	0.55	—	La Plata County, Colorado, Ignacio Blanco Field
Rocky Mountain				
Fort Union (37%)	310	1.25	—	Powder River Basin (Wyoming)
Bighorn (51%)	290	0.60	—	Powder River Basin (Wyoming)
KinderHawk	520	2.35	—	Northwest Louisiana, Haynesville and Bossier shale formations
North Texas	550	0.14	[0.10]	North Barnett Shale Combo
Camino Real	70	0.15	—	South Texas, Eagle Ford shale formation
KM Treating	—	—	—	Odessa, Texas, other locations in Tyler and Victoria, Texas
Hiland - Williston	2,030	0.37	[0.20]	Bakken/Three Forks shale formations (North Dakota/Montana)
Midstream Liquids/Oil/Condensate Pipelines				
		(MBbl/d)	(MBbl)	
Liberty Pipeline (50%)	87	140	—	Y-grade pipeline from Houston Central complex to the Texas Gulf Coast
South Texas NGL Pipelines	340	115	—	Ethane and propane pipelines from Houston Central complex to the Texas Gulf Coast
Camino Real - Condensate(b)	70	110	60	South Texas, Eagle Ford shale formation
Hiland - Williston - Oil(b)	1,587	282	—	Bakken/Three Forks shale formations (North Dakota/Montana)
EagleHawk - Condensate (25%)	400	220	60	South Texas, Eagle Ford shale formation

(a) We operate Ruby and own the common interest in Ruby. Pembina Pipeline Corporation (Pembina) owns the remaining interest in Ruby in the form of a convertible preferred interest and has 50% voting rights. If Pembina converted its preferred interest into common interest, we and Pembina would each own a 50% common interest in Ruby.

(b) Effective January 1, 2019, these assets were transferred from the Natural Gas Pipelines business segment to the Products Pipelines business segment.

Competition

The market for supply of natural gas is highly competitive, and new pipelines, storage facilities, treating facilities, and facilities for related services are currently being built to serve the growing demand for natural gas in each of the markets served by the pipelines in our Natural Gas Pipelines business segment. Our operations compete with interstate and intrastate pipelines, and their shippers, for connections to new markets and supplies and for transportation, processing and treating services. We believe the principal elements of competition in our various markets are location, rates, terms of service and flexibility and reliability of service. From time to time, other projects are proposed that would compete with us. We do not know whether or when any such projects would be built, or the extent of their impact on our operations or profitability.

Shippers on our natural gas pipelines compete with other forms of energy available to their natural gas customers and end users, including electricity, coal, propane, fuel oils and renewables such as wind and solar. Several factors influence the demand for natural gas, including price changes, the availability of natural gas and other forms of energy, the level of business activity, conservation, legislation and governmental regulations, the ability to convert to alternative fuels and weather.

Products Pipelines

Our Products Pipelines business segment consists of our refined petroleum products, crude oil and condensate, and NGL pipelines and associated terminals, Southeast terminals, our condensate processing facility and our transmix processing facilities. The following summarizes our significant Products Pipelines business segment assets we own and operate as of December 31, 2018:

Asset (KMI ownership shown if not 100%)	Miles of Pipeline	Number of Terminals (a) or locations	Terminal Capacity (MMBbl)	Supply and Market Region
Plantation pipeline (51%)	3,182	—	—	Louisiana to Washington D.C.
West Coast Products Pipelines(b)				
Pacific (SFPP)	2,845	13	15.1	Six western states
Calnev	566	2	2.0	Colton, CA to Las Vegas, NV; Mojave region
West Coast Terminals	64	7	10.0	Seattle, Portland, San Francisco and Los Angeles areas, Vancouver Jet Fuel pipeline
Cochin pipeline(c)	1,525	4	1.1	Three provinces in Canada and seven states in the U.S.
Utopia pipeline (50%)(c)	270	—	—	Harrison County, Ohio extending to Windsor, Ontario
KM Crude & Condensate pipeline	264	5	2.6	Eagle Ford shale field in South Texas (Dewitt, Karnes, and Gonzales Counties) to the Houston ship channel refining complex
Double H Pipeline	512	—	—	Bakken shale in Montana and North Dakota to Guernsey, Wyoming
Central Florida pipeline	206	2	2.5	Tampa to Orlando
Double Eagle pipeline (50%)	204	2	0.6	Live Oak County, Texas; Corpus Christi, Texas; Karnes County, Texas; and LaSalle County
Cypress pipeline (50%)(c)	104	—	—	Mont Belvieu, Texas to Lake Charles, Louisiana
Southeast Terminals(d)	—	32	10.8	From Mississippi through Virginia, including Tennessee
KM Condensate Processing Facility	—	1	2.0	Houston Ship Channel, Galena Park, Texas
Transmix Operations	—	5	0.6	Colton, California; Richmond, Virginia; Dorsey Junction, Maryland; St. Louis, Missouri; and Greensboro, North Carolina

(a) The terminals provide services including short-term product storage, truck loading, vapor handling, additive injection, dye injection and ethanol blending.

(b) Our West Coast Products Pipelines assets include interstate common carrier pipelines rate-regulated by the FERC, intrastate pipelines in the state of California rate-regulated by the CPUC, and certain non rate-regulated operations and terminal facilities.

(c) Effective January 1, 2019, these assets were transferred from the Products Pipelines business segment to the Natural Gas Pipelines business segment.
(d) Effective January 1, 2019, a small number of terminals were transferred between the Products Pipelines and Terminals business segments.

Competition

Our Products Pipelines' pipeline operations compete against proprietary pipelines owned and operated by major oil companies, other independent products pipelines, trucking and marine transportation firms (for short-haul movements of products) and railcars. Our Products Pipelines' terminal operations compete with proprietary terminals owned and operated by major oil companies and other independent terminal operators, and our transmix operations compete with refineries owned by major oil companies and independent transmix facilities.

Terminals

Our Terminals business segment includes the operations of our refined petroleum product, crude oil, chemical, ethanol and other liquid terminal facilities (other than those included in the Products Pipelines business segment) and all of our petroleum coke, metal and ores facilities. Our terminals are located throughout the U.S. and in portions of Canada. We believe the location of our facilities and our ability to provide flexibility to customers help attract new and retain existing customers at our terminals and provide expansion opportunities. We often classify our terminal operations based on the handling of either liquids or dry-bulk material products. In addition, Terminals' marine operations include Jones Act-qualified product tankers that provide marine transportation of crude oil, condensate and refined petroleum products between U.S. ports. The following summarizes our Terminals business segment assets, as of December 31, 2018:

	Number	Capacity (MMBbl)
Liquids terminals(a)	52	89.6
Bulk terminals	34	—
Jones Act tankers	16	5.3

(a) Effective January 1, 2019, a small number of terminals were transferred between the Terminals and Products Pipelines business segments.

Competition

We are one of the largest independent operators of liquids terminals in North America, based on barrels of liquids terminaling capacity. Our liquids terminals compete with other publicly or privately held independent liquids terminals, and terminals owned by oil, chemical, pipeline, and refining companies. Our bulk terminals compete with numerous independent terminal operators, terminals owned by producers and distributors of bulk commodities, stevedoring companies and other industrial companies opting not to outsource terminaling services. In some locations, competitors are smaller, independent operators with lower cost structures. Our Jones Act-qualified product tankers compete with other Jones Act qualified vessel fleets.

CO_2

Our CO_2 business segment produces, transports, and markets CO_2 for use in enhanced oil recovery projects as a flooding medium for recovering crude oil from mature oil fields. Our CO_2 pipelines and related assets allow us to market a complete package of CO_2 supply and transportation services to our customers. We also hold ownership interests in several oil-producing fields and own a crude oil pipeline, all located in the Permian Basin region of West Texas.

Sales and Transportation Activities

Our principal market for CO_2 is for injection into mature oil fields in the Permian Basin. Our ownership of CO_2 resources as of December 31, 2018 includes:

	Ownership Interest %	Compression Capacity (Bcf/d)	Location
McElmo Dome unit	45	1.5	Colorado
Doe Canyon Deep unit	87	0.2	Colorado
Bravo Dome unit(a)	11	0.3	New Mexico

(a) We do not operate this unit.

CO_2 Business Segment Pipelines

The principal market for transportation on our CO_2 pipelines is to customers, including ourselves, using CO_2 for enhanced recovery operations in mature oil fields in the Permian Basin, where industry demand is expected to remain stable for the next several years. The tariffs charged on (i) the Wink crude oil pipeline system are regulated by both the FERC and the Texas Railroad Commission; (ii) the Pecos Carbon Dioxide Pipeline are regulated by the Texas Railroad Commission; and (iii) the Cortez pipeline are based on a consent decree. Our other CO_2 pipelines are not regulated.

Our ownership of CO_2 and crude oil pipelines as of December 31, 2018 includes:

Asset (KMI ownership shown if not 100%)	Miles of Pipeline	Transport Capacity (Bcf/d)	Supply and Market Region
CO_2 pipelines			
Cortez pipeline (53%)	569	1.5	McElmo Dome and Doe Canyon source fields to the Denver City, Texas hub
Central Basin pipeline	334	0.7	Cortez, Bravo, Sheep Mountain, Canyon Reef Carriers, and Pecos pipelines
Bravo pipeline (13%)(a)	218	0.4	Bravo Dome to the Denver City, Texas hub
Canyon Reef Carriers pipeline (98%)	163	0.3	McCamey, Texas, to the SACROC, Sharon Ridge, Cogdell and Reinecke units
Centerline CO_2 pipeline	113	0.3	between Denver City, Texas and Snyder, Texas
Eastern Shelf CO_2 pipeline	98	0.1	between Snyder, Texas and Knox City, Texas
Pecos pipeline (95%)	25	0.1	McCamey, Texas, to Iraan, Texas, delivers to the Yates unit
		(Bbls/d)	
Crude oil pipeline			
Wink pipeline	457	145,000	West Texas to Western Refining's refinery in El Paso, Texas

(a) We do not operate Bravo pipeline.

Oil and Gas Producing Activities

Oil Producing Interests

Our ownership interests in oil-producing fields located in the Permian Basin of West Texas include the following:

	Working Interest %	KMI Gross Developed Acres
SACROC	97	49,156
Yates	50	9,576
Goldsmith Landreth San Andres	99	6,166
Katz Strawn	99	7,194
Sharon Ridge	14	2,619
Tall Cotton	100	641
MidCross	13	320
Reinecke	70	3,793

Our oil and gas producing activities are not significant, and therefore, we do not include the supplemental information on oil and gas producing activities under Accounting Standards Codification Topic 932, Extractive Activities - Oil and Gas.

Gas and Gasoline Plant Interests

Operated gas plants in the Permian Basin of West Texas:

	Ownership Interest %	Source
Snyder gasoline plant(a)	22	The SACROC unit and neighboring CO_2 projects, specifically the Sharon Ridge and Cogdell units
Diamond M gas plant	51	Snyder gasoline plant
North Snyder plant	100	Snyder gasoline plant

(a) This is a working interest, in addition, we have a 28% net profits interest.

Competition

Our primary competitors for the sale of CO_2 include suppliers that have an ownership interest in McElmo Dome, Bravo Dome and Sheep Mountain CO_2 resources. Our ownership interests in the Central Basin, Cortez and Bravo pipelines are in direct competition with other CO_2 pipelines. We also compete with other interest owners in the McElmo Dome unit and the Bravo Dome unit for transportation of CO_2 to the Denver City, Texas market area.

Major Customers

Our revenue is derived from a wide customer base. For each of the years ended December 31, 2018, 2017 and 2016, no revenues from transactions with a single external customer accounted for 10% or more of our total consolidated revenues. We do not believe that a loss of revenues from any single customer would have a material adverse effect on our business, financial position, results of operations or cash flows.

Our Texas Intrastate Natural Gas Pipeline operations (includes the operations of Kinder Morgan Tejas Pipeline LLC, Kinder Morgan Border Pipeline LLC, Kinder Morgan Texas Pipeline LLC, Kinder Morgan North Texas Pipeline LLC and the Mier-Monterrey Mexico pipeline system) buys and sells significant volumes of natural gas within the state of Texas, and, to a far lesser extent, the CO_2 business segment also sells natural gas. Combined, total revenues from the sales of natural gas from the Natural Gas Pipelines and CO_2 business segments in 2018, 2017 and 2016 accounted for 23%, 22% and 19%, respectively, of our total consolidated revenues. To the extent possible, we attempt to balance the pricing and timing of our natural gas purchases to our natural gas sales, and these contracts are often settled in terms of an index price for both purchases and sales.

Regulation

Interstate Common Carrier Refined Petroleum Products and Oil Pipeline Rate Regulation - U.S. Operations

Some of our U.S. refined petroleum products and crude oil gathering and transmission pipelines are interstate common carrier pipelines, subject to regulation by the FERC under the Interstate Commerce Act, or ICA. The ICA requires that we maintain our tariffs on file with the FERC. Those tariffs set forth the rates we charge for providing gathering or transportation services on our interstate common carrier pipelines as well as the rules and regulations governing these services. The ICA requires, among other things, that such rates on interstate common carrier pipelines be "just and reasonable" and nondiscriminatory. The ICA permits interested persons to challenge newly proposed or changed rates and authorizes the FERC to suspend the effectiveness of such rates for a period of up to seven months and to investigate such rates. If, upon completion of an investigation, the FERC finds that the new or changed rate is unlawful, it is authorized to require the carrier to refund the revenues in excess of the prior tariff collected during the pendency of the investigation. The FERC also may investigate, upon complaint or on its own motion, rates that are already in effect and may order a carrier to change its rates prospectively. Upon an appropriate showing, a shipper may obtain reparations for damages sustained during the two years prior to the filing of a complaint.

The Energy Policy Act of 1992 deemed petroleum products pipeline tariff rates that were in effect for the 365-day period ending on the date of enactment or that were in effect on the 365th day preceding enactment and had not been subject to complaint, protest or investigation during the 365-day period to be just and reasonable or "grandfathered" under the ICA. The Energy Policy Act also limited the circumstances under which a complaint can be made against such grandfathered rates. Certain rates on our Pacific operations' pipeline system were subject to protest during the 365-day period established by the Energy Policy Act. Accordingly, certain of the Pacific pipelines' rates have been, and continue to be, the subject of complaints with the FERC, as is more fully described in Note 18 *"Litigation, Environmental and Other Contingencies"* to our consolidated financial statements.

Petroleum products and crude oil pipelines may change their rates within prescribed ceiling levels that are tied to an inflation index. Shippers may protest rate increases made within the ceiling levels, but such protests must show that the portion of the rate increase resulting from application of the index is substantially in excess of the pipeline's increase in costs from the previous year. A petroleum products or crude oil pipeline must, as a general rule, utilize the indexing methodology to change its rates. Cost-of-service ratemaking, market-based rates and settlement rates are alternatives to the indexing approach and may be used in certain specified circumstances to change rates.

Common Carrier Pipeline Rate Regulation - Canadian Operations

The Canadian portion of our condensate Cochin pipeline system is under the regulatory jurisdiction of the NEB. The National Energy Board Act gives the NEB power to authorize pipeline construction and to establish tolls and conditions of service.

Interstate Natural Gas Transportation and Storage Regulation

As an owner and operator of natural gas companies subject to the Natural Gas Act of 1938, we are required to provide service to shippers on our interstate natural gas pipelines and storage facilities at regulated rates that have been determined by the FERC to be just and reasonable. Recourse rates and general terms and conditions for service are set forth in posted tariffs approved by the FERC for each pipeline (including storage facilities or companies as used herein). Generally, recourse rates are based on our cost of service, including recovery of and a return on our investment. Posted tariff rates are deemed just and reasonable and cannot be changed without FERC authorization following an evidentiary hearing or settlement. The FERC can initiate proceedings, on its own initiative or in response to a shipper complaint, that could result in a rate change or confirm existing rates.

Posted tariff rates set the general range of maximum and minimum rates we charge shippers on our interstate natural gas pipelines. Within that range, each pipeline is permitted to charge discounted rates, so long as such discounts are offered to all similarly situated shippers and granted without undue discrimination. Apart from discounted rates, upon mutual agreement, the pipeline is permitted to charge negotiated rates that are not bound by and are irrespective of changes that may occur to the range of tariff-based maximum and minimum rate levels. Negotiated rates provide certainty to the pipeline and the shipper of agreed-upon rates during the term of the transportation agreement, regardless of changes to the posted tariff rates. The actual negotiated rate agreement or a summary of such agreement must be posted as part of the pipelines' tariffs. While pipelines and their shippers may agree to a variety of negotiated rate structures depending on the shipper and circumstance, pipelines

generally must use for all shippers the form of service agreement that is contained within their FERC-approved tariff. Any deviation from the *pro forma* service agreements must be filed with the FERC and only certain types of deviations in the terms and conditions of service are acceptable to the FERC.

The FERC regulates the rates, terms and conditions of service, construction and abandonment of facilities by companies performing interstate natural gas transportation services, including storage services, under the Natural Gas Act of 1938. To a lesser extent, the FERC regulates interstate transportation rates, terms and conditions of service under the Natural Gas Policy Act of 1978. Beginning in the mid-1980's, the FERC initiated a number of regulatory changes intended to ensure that interstate natural gas pipelines operated on a not unduly discriminatory basis and to create a more competitive and transparent environment in the natural gas marketplace. Among the most important of these changes were:

- Order No. 436 (1985) which required open-access, nondiscriminatory transportation of natural gas;
- Order No. 497 (1988) which set forth new standards and guidelines imposing certain constraints on the interaction between interstate natural gas pipelines and their marketing affiliates and imposing certain disclosure requirements regarding that interaction;
- Order Nos. 587, et seq., Order No. 809 (1996-2015) which adopt regulations to standardize the business practices and communication methodologies of interstate natural gas pipelines to create a more integrated and efficient pipeline grid and wherein the FERC has incorporated by reference in its regulations standards for interstate natural gas pipeline business practices and electronic communications that were developed and adopted by the North American Energy Standards Board (NAESB). Interstate natural gas pipelines are required to incorporate by reference or verbatim in their respective tariffs the applicable version of the NAESB standards;
- Order No. 636 (1992) which required interstate natural gas pipelines that perform open-access transportation under blanket certificates to "unbundle" or separate their traditional merchant sales services from their transportation and storage services and to provide comparable transportation and storage services with respect to all natural gas supplies. Natural gas pipelines must now separately state the applicable rates for each unbundled service they provide (i.e., for transportation services and storage services for natural gas);
- Order No. 637 (2000) which revised, among other things, FERC regulations relating to scheduling procedures, capacity segmentation, and pipeline penalties in order to improve the competitiveness and efficiency of the interstate pipeline grid; and
- Order No. 717 (2008) amending the Standards of Conduct for Transmission Providers (the Standards of Conduct or the Standards) to make them clearer and to refocus the marketing affiliate rules on the areas where there is the greatest potential for abuse.

In addition to regulatory changes initiated by the FERC, the U.S. Congress passed the Energy Policy Act of 2005. Among other things, the Energy Policy Act amended the Natural Gas Act to: (i) prohibit market manipulation by any entity; (ii) direct the FERC to facilitate market transparency in the market for sale or transportation of physical natural gas in interstate commerce; and (iii) significantly increase the penalties for violations of the Natural Gas Act, the Natural Gas Policy Act of 1978, or FERC rules, regulations or orders thereunder.

CPUC Rate Regulation

The intrastate common carrier operations of our Pacific operations' pipelines in California are subject to regulation by the CPUC under a "depreciated book plant" methodology, which is based on an original cost measure of investment. Intrastate tariffs filed by us with the CPUC have been established on the basis of revenues, expenses and investments allocated as applicable to the California intrastate portion of the Pacific operations' business. Tariff rates with respect to intrastate pipeline service in California are subject to challenge by complaint by interested parties or by independent action of the CPUC. A variety of factors can affect the rates of return permitted by the CPUC, and certain other issues similar to those which have arisen with respect to our FERC regulated rates also could arise with respect to its intrastate rates. The intrastate rates for movements in California on our SFPP and Calnev systems have been, and may in the future be, subject to complaints before the CPUC, as is more fully described in Note 18 "*Litigation, Environmental and Other Contingencies*" to our consolidated financial statements.

Railroad Commission of Texas (RCT) Rate Regulation

The intrastate operations of our crude oil and liquids pipelines and natural gas pipelines and storage facilities in Texas are subject to regulation with respect to such intrastate transportation by the RCT. The RCT has the authority to regulate our rates, though it generally has not investigated the rates or practices of our intrastate pipelines in the absence of shipper complaints.

Mexico - Energy Regulatory Commission

The Mier-Monterrey Pipeline has a natural gas transportation permit granted by the Energy Regulatory Commission of Mexico (the Commission) that defines the conditions for the pipeline to carry out activity and provide natural gas transportation service. This permit expires in 2026.

This permit establishes certain restrictive conditions, including without limitation: (i) compliance with the general conditions for the provision of natural gas transportation service; (ii) compliance with certain safety measures, contingency plans, maintenance plans and the official standards of Mexico regarding safety; (iii) compliance with the technical and economic specifications of the natural gas transportation system authorized by the Commission; (iv) compliance with certain technical studies established by the Commission; and (v) compliance with a minimum contributed capital not entitled to withdrawal of at least the equivalent of 10% of the investment proposed in the project.

Mexico - National Agency for Industrial Safety and Environmental Protection (ASEA)

ASEA regulates environmental compliance and industrial and operational safety. The Mier-Monterrey Pipeline must satisfy and maintain ASEA's requirements, including compliance with certain safety measures, contingency plans, maintenance plans and the official standards of Mexico regarding safety, including a Safety Administration Program.

Safety Regulation

We are also subject to safety regulations issued by PHMSA, including those requiring us to develop and maintain pipeline Integrity Management programs to evaluate areas along our pipelines and take additional measures to protect pipeline segments located in what are referred to as High Consequence Areas, or HCAs, where a leak or rupture could potentially do the most harm.

The ultimate costs of compliance with pipeline Integrity Management rules are difficult to predict. Changes such as advances of in-line inspection tools, identification of additional integrity threats and changes to the amount of pipe determined to be located in HCAs can have a significant impact on costs to perform integrity testing and repairs. We will continue our pipeline integrity testing programs to assess and maintain the integrity of our existing and future pipelines as required by PHMSA regulations. These tests could result in significant and unanticipated capital and operating expenditures for repairs or upgrades deemed necessary to continue the safe and reliable operation of our pipelines.

The Protecting our Infrastructure of Pipelines and Enhancing Safety Act of 2016 or "PIPES Act of 2016" requires PHMSA, among other regulators, to set minimum safety standards for underground natural gas storage facilities and allows states to set more stringent standards for intrastate pipelines. In compliance with the PIPES Act of 2016, we have implemented procedures for underground natural gas storage facilities.

The Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011, which was signed into law in 2012, increased penalties for violations of safety laws and rules and may result in the imposition of more stringent regulations in the future. In 2012, PHMSA issued an Advisory Bulletin which, among other things, advises pipeline operators that if they are relying on design, construction, inspection, testing, or other data to determine maximum pressures at which their pipelines should operate, the records of that data must be traceable, verifiable and complete. Locating such records and, in the absence of any such records, verifying maximum pressures through physical testing or modifying or replacing facilities to meet the Advisory Bulletin requirements, could significantly increase our costs. Additionally, failure to locate such records to verify maximum pressures could result in reductions of allowable operating pressures, which would reduce available capacity on our pipelines. There can be no assurance as to the amount or timing of future expenditures for pipeline Integrity Management regulation, and actual expenditures may be different from the amounts we currently anticipate. Regulations, changes to regulations or an increase in public expectations for pipeline safety may require additional reporting, the replacement of some of our pipeline segments, addition of monitoring equipment and more frequent inspection or testing of our pipeline facilities. Repair, remediation, and preventative or mitigating actions may require significant capital and operating expenditures.

From time to time, our pipelines or facilities may experience leaks and ruptures. These leaks and ruptures may cause explosions, fire, damage to the environment, damage to property and/or personal injury or death. In connection with these incidents, we may be sued for damages. Depending upon the facts and circumstances of a particular incident, state and federal regulatory authorities may seek civil and/or criminal fines and penalties.

We are also subject to the requirements of the Occupational Safety and Health Administration (OSHA) and other federal and state agencies that address employee health and safety. In general, we believe current expenditures are fulfilling the OSHA

requirements and protecting the health and safety of our employees. Based on new regulatory developments, we may increase expenditures in the future to comply with higher industry and regulatory safety standards. However, such increases in our expenditures, and the extent to which they might be offset, cannot be estimated at this time.

State, Provincial and Local Regulation

Certain of our activities are subject to various state or provincial and local laws and regulations, as well as orders of regulatory bodies, governing a wide variety of matters, including marketing, production, pricing, pollution, protection of the environment, and human health and safety.

Marine Operations

The operation of tankers and marine equipment create maritime obligations involving property, personnel and cargo under General Maritime Law. These obligations create a variety of risks including, among other things, the risk of collision, which may result in claims for personal injury, cargo, contract, pollution, third-party claims and property damages to vessels and facilities.

We are subject to the Jones Act and other federal laws that restrict maritime transportation (between U.S. departure and destination points) to vessels built and registered in the U.S. and owned and crewed by U.S. citizens. As a result, we monitor the foreign ownership of our common stock and under certain circumstances consistent with our certificate of incorporation, we have the right to redeem shares of our common stock owned by non-U.S. citizens. If we do not comply with such requirements, we would be prohibited from operating our vessels in U.S. coastwise trade, and under certain circumstances we would be deemed to have undertaken an unapproved foreign transfer, resulting in severe penalties, including permanent loss of U.S. coastwise trading rights for our vessels, fines or forfeiture of the vessels. Furthermore, from time to time, legislation has been introduced unsuccessfully in Congress to amend the Jones Act to ease or remove the requirement that vessels operating between U.S. ports be built and registered in the U.S. and owned and crewed by U.S. citizens. If the Jones Act were amended in such fashion, we could face competition from foreign-flagged vessels.

In addition, the U.S. Coast Guard and the American Bureau of Shipping maintain the most stringent regime of vessel inspection in the world, which tends to result in higher regulatory compliance costs for U.S.-flag operators than for owners of vessels registered under foreign flags of convenience. The Jones Act and General Maritime Law also provide damage remedies for crew members injured in the service of the vessel arising from employer negligence or vessel unseaworthiness.

The Merchant Marine Act of 1936 is a federal law that provides the U.S. Secretary of Transportation, upon proclamation by the U.S. President of a national emergency or a threat to the national security, the authority to requisition or purchase any vessel or other watercraft owned by U.S. citizens (including us, provided that we are considered a U.S. citizen for this purpose). If one of our vessels were purchased or requisitioned by the U.S. government under this law, we would be entitled to be paid the fair market value of the vessel in the case of a purchase or, in the case of a requisition, the fair market value of charter hire. However, we would not be entitled to compensation for any consequential damages suffered as a result of such purchase or requisition.

Environmental Matters

Our business operations are subject to federal, state, provincial and local laws and regulations relating to environmental protection, pollution and human health and safety in the U.S. and Canada. For example, if an accidental leak, release or spill of liquid petroleum products, chemicals or other hazardous substances occurs at or from our pipelines, or at or from our storage or other facilities, we may experience significant operational disruptions, and we may have to pay a significant amount to clean up the leak, release or spill, pay for government penalties, address natural resource damages, compensate for human exposure or property damage, install costly pollution control equipment or a combination of these and other measures. Furthermore, new projects may require approvals and environmental analysis under federal and state or provincial laws, including the National Environmental Policy Act and the Endangered Species Act. The resulting costs and liabilities could materially and negatively affect our business, financial condition, results of operations and cash flows. In addition, emission controls required under federal, state and provincial environmental laws could require significant capital expenditures at our facilities.

Environmental and human health and safety laws and regulations are subject to change. The clear trend in environmental regulation is to place more restrictions and limitations on activities that may be perceived to affect the environment, wildlife, natural resources and human health. There can be no assurance as to the amount or timing of future expenditures for environmental regulation compliance or remediation, and actual future expenditures may be different from the amounts we currently anticipate. Revised or additional regulations that result in increased compliance costs or additional operating

restrictions, particularly if those costs are not fully recoverable from our customers, could have a material adverse effect on our business, financial position, results of operations and cash flows.

In accordance with GAAP, we accrue liabilities for environmental matters when it is probable that obligations have been incurred and the amounts can be reasonably estimated. This policy applies to assets or businesses currently owned or previously disposed. We have accrued liabilities for estimable and probable environmental remediation obligations at various sites, including multi-party sites where the EPA, or similar state or Canadian agency has identified us as one of the potentially responsible parties. The involvement of other financially responsible companies at these multi-party sites could increase or mitigate our actual joint and several liability exposures.

We believe that the ultimate resolution of these environmental matters will not have a material adverse effect on our business, financial position, results of operations or cash flows. However, it is possible that our ultimate liability with respect to these environmental matters could exceed the amounts accrued in an amount that could be material to our business, financial position, results of operations or cash flows in any particular reporting period. We have accrued an environmental reserve in the amount of $271 million as of December 31, 2018. Our aggregate reserve estimate ranges in value from approximately $271 million to approximately $448 million, and we recorded our liability equal to the low end of the range, as we did not identify any amounts within the range as a better estimate of the liability. For additional information related to environmental matters, see Note 18 "*Litigation, Environmental and Other Contingencies*" to our consolidated financial statements.

Hazardous and Non-Hazardous Waste

We generate both hazardous and non-hazardous wastes that are subject to the requirements of the Federal Resource Conservation and Recovery Act and comparable state and Canadian federal and provincial statutes. From time to time, the EPA, as well as other U.S. federal and state regulators and Canadian federal and provincial regulators, consider the adoption of stricter disposal standards for non-hazardous waste. Furthermore, it is possible that some wastes that are currently classified as non-hazardous, which could include wastes currently generated during our pipeline or liquids or bulk terminal operations or wastes from oil and gas facilities that are currently exempt as exploration and production waste, may in the future be designated as hazardous wastes. Hazardous wastes are subject to more rigorous and costly handling and disposal requirements than non-hazardous wastes. Such changes in the regulations may result in additional capital expenditures or operating expenses for us.

Superfund

The CERCLA or the Superfund law, and analogous state laws, impose joint and several liability, without regard to fault or the legality of the original conduct, on certain classes of potentially responsible persons for releases of hazardous substances into the environment. These persons include the owner or operator of a site and companies that disposed or arranged for the disposal of the hazardous substances found at the site. CERCLA authorizes the EPA and, in some cases, third parties to take actions in response to threats to public health or the environment and to seek to recover from the responsible classes of persons the costs they incur, in addition to compensation for natural resource damages, if any. Although petroleum is excluded from CERCLA's definition of a hazardous substance, in the course of our ordinary operations, we have and will generate materials that may fall within the definition of "hazardous substance." By operation of law, if we are determined to be a potentially responsible person, we may be responsible under CERCLA for all or part of the costs required to clean up sites at which such materials are present, in addition to compensation for natural resource damages, if any.

Clean Air Act

Our operations are subject to the Clean Air Act, its implementing regulations, and analogous state and Canadian statutes and regulations. The EPA regulations under the Clean Air Act contain requirements for the monitoring, reporting, and control of GHG emissions from stationary sources. For further information, see *"—Climate Change"* below.

Clean Water Act

Our operations can result in the discharge of pollutants. The Federal Water Pollution Control Act of 1972, as amended, also known as the Clean Water Act, and analogous state laws impose restrictions and controls regarding the discharge of pollutants into waters of the U.S. The discharge of pollutants into regulated waters is prohibited, except in accordance with the terms of a permit issued by applicable federal, state or Canadian authorities. The Oil Pollution Act was enacted in 1990 and amends provisions of the Clean Water Act pertaining to prevention of and response to oil spills. Spill prevention, control and countermeasure requirements of the Clean Water Act and some state and Canadian laws require containment and similar structures to help prevent contamination of navigable waters in the event of an overflow or release of oil.

EPA Revisions to Ozone National Ambient Air Quality Standard (NAAQS)

As required by the Clean Air Act, the EPA establishes National Ambient Air Quality Standards (NAAQS) for how much pollution is permissible, and the states then have to adopt rules so their air quality meets the NAAQS. In October 2015, the EPA published a rule lowering the ground level ozone NAAQS from 75 ppb to a more stringent 70 ppb standard. This change triggered a process under which the EPA designated the areas of the country in or out of compliance with the new NAAQS standard. Now, certain states will have to adopt more stringent air quality regulations to meet the new NAAQS standard. These new state rules, which are expected in 2020 or 2021, will likely require the installation of more stringent air pollution controls on newly-installed equipment and possibly require the retrofitting of existing KMI facilities with air pollution controls. Given the nationwide implications of the new rule, it is expected that it will have financial impacts for each of our business units.

Climate Change

Studies have suggested that emissions of certain gases, commonly referred to as GHGs, may be contributing to warming of the Earth's atmosphere. Methane, a primary component of natural gas, and CO_2, which is naturally occurring and also a byproduct of the burning of natural gas, are examples of GHGs. Various laws and regulations exist or are under development to regulate the emission of such GHGs, including the EPA programs to report GHG emissions and state actions to develop statewide or regional programs. The U.S. Congress has in the past considered legislation to reduce emissions of GHGs.

Beginning in December 2009, EPA published several findings and rulemakings under the Clean Air Act requiring the permitting and reporting of certain GHGs including CO_2 and methane. Our facilities are subject to these requirements. Operational and/or regulatory changes could require additional facilities to comply with GHG emissions reporting and permitting requirements.

On October 23, 2015, the EPA published as a final rule the Clean Power Plan, which sets interim and final CO_2 emission performance rates for power generating units that are fueled by coal, oil or natural gas. The final rule is the focus of legislative discussion in the U.S. Congress and litigation in federal court. On February 10, 2016, the U.S. Supreme Court stayed the final rule, effectively suspending the duty to comply with the rule until certain legal challenges are resolved. In October 2017, the EPA proposed to repeal the Clean Power Plan. In August 2018, the EPA proposed to replace the Clean Power Plan and Affordable Clean Energy rule. The ultimate determination of the Clean Power Plan and Affordable Clean Energy rule remains uncertain. While we do not operate power plants that would be subject to the Clean Power Plan or the Affordable Clean Energy rule, it remains unclear what effect a final rule, if it comes into force, might have on the anticipated demand for natural gas, including natural gas that we gather, process, store and transport.

At the state level, more than one-third of the states, either individually or through multi-state regional initiatives, already have begun implementing legal measures to reduce emissions of GHGs, primarily through the planned development of emission inventories or regional GHG "cap and trade" programs. Although many of the state-level initiatives have to date been focused on large sources of GHG emissions, such as electric power plants, it is possible that sources such as our gas-fueled compressors and processing plants could become subject to related state regulations. Various states are also proposing or have implemented more strict regulations for GHGs that go beyond the requirements of the EPA. Some of the states have implemented regulations that require additional monitoring and reporting of methane emissions. Depending on the state programs pending implementation, we could be required to conduct additional monitoring, do additional emissions reporting and/or purchase and surrender emission allowances.

Because our operations, including the compressor stations and processing plants, emit various types of GHGs, primarily methane and CO_2, such new legislation or regulation could increase the costs related to operating and maintaining the facilities. Depending on the particular law, regulation or program, we or our subsidiaries could be required to incur capital expenditures for installing new monitoring equipment of emission controls on the facilities, acquire and surrender allowances for the GHG emissions, pay taxes related to the GHG emissions and administer and manage a GHG emissions program. We are not able at this time to estimate such increased costs; however, as is the case with similarly situated entities in the industry, they could be significant to us. While we may be able to include some or all of such increased costs in the rates charged by our or our subsidiaries' pipelines, recovery of costs in all cases is uncertain and may depend on events beyond their control, including the outcome of future rate proceedings before the FERC or other regulatory bodies, and the provisions of any final legislation or other regulations. Any of the foregoing could have an adverse effect on our business, financial position, results of operations and prospects.

Many climate models indicate that global warming is likely to result in rising sea levels, increased intensity of hurricanes and tropical storms, and increased frequency of extreme precipitation and flooding. We may experience increased insurance premiums and deductibles, or a decrease in available coverage, for our assets in areas subject to severe weather. These climate-related changes could damage our physical assets, especially operations located in low-lying areas near coasts and river banks, and facilities situated in hurricane-prone and rain-susceptible regions. However, the timing, severity and location of these climate change impacts are not known with certainty and, these impacts are expected to manifest themselves over varying time horizons.

Because natural gas produces less GHG emissions per unit of energy than competing fossil fuels, cap-and-trade legislation or EPA regulatory initiatives such as the Clean Power Plan or Affordable Clean Energy rule could stimulate demand for natural gas by increasing the relative cost of competing fuels such as coal and oil. In addition, we anticipate that GHG regulations will increase demand for carbon sequestration technologies, such as the techniques we have successfully demonstrated in our enhanced oil recovery operations within our CO_2 business segment. However, these potential positive effects on our markets may be offset if these same regulations also cause the cost of natural gas to increase relative to competing non-fossil fuels. Although we currently cannot predict the magnitude and direction of these impacts, GHG regulations could have material adverse effects on our business, financial position, results of operations or cash flows.

Department of Homeland Security

The Department of Homeland Security, referred to in this report as the DHS, has regulatory authority over security at certain high-risk chemical facilities. The DHS has promulgated the Chemical Facility Anti-Terrorism Standards and required all high-risk chemical and industrial facilities, including oil and gas facilities, to comply with the regulatory requirements of these standards. This process includes completing security vulnerability assessments, developing site security plans, and implementing protective measures necessary to meet DHS-defined, risk-based performance standards. The DHS has not provided final notice to all facilities that it determines to be high risk and subject to the rule; therefore, neither the extent to which our facilities may be subject to coverage by the rules nor the associated costs to comply can currently be determined, but it is possible that such costs could be substantial.

Other

Employees

We employed 11,012 full-time personnel at December 31, 2018, including approximately 936 full-time hourly personnel at certain terminals and pipelines covered by collective bargaining agreements that expire between 2019 and 2022. We consider relations with our employees to be good.

Most of our employees are employed by us and a limited number of our subsidiaries and provide services to one or more of our business units. The direct costs of compensation, benefits expenses, employer taxes and other employer expenses for these employees are allocated to our subsidiaries. Our human resources department provides the administrative support necessary to implement these payroll and benefits services, and the related administrative costs are allocated to our subsidiaries pursuant to our board-approved expense allocation policy. The effect of these arrangements is that each business unit bears the direct compensation and employee benefits costs of its assigned or partially assigned employees, as the case may be, while also bearing its allocable share of administrative costs.

Properties

We believe that we generally have satisfactory title to the properties we own and use in our businesses, subject to liens for current taxes, liens incident to minor encumbrances, and easements and restrictions, which do not materially detract from the value of such property, the interests in those properties or the use of such properties in our businesses. Our terminals, storage facilities, treating and processing plants, regulator and compressor stations, oil and gas wells, offices and related facilities are located on real property owned or leased by us. In some cases, the real property we lease is on federal, state, provincial or local government land.

We generally do not own the land on which our pipelines are constructed. Instead, we obtain and maintain rights to construct and operate the pipelines on other people's land generally under agreements that are perpetual or provide for renewal rights. Substantially all of our pipelines are constructed on rights-of-way granted by the apparent record owners of such property. In many instances, lands over which rights-of-way have been obtained are subject to prior liens that have not been subordinated to the right-of-way grants. In some cases, not all of the apparent record owners have joined in the right-of-way grants, but in substantially all such cases, signatures of the owners of a majority of the interests have been obtained. Permits

have been obtained from public authorities to cross over or under, or to lay facilities in or along, water courses, county roads, municipal streets and state highways, and in some instances, such permits are revocable at the election of the grantor, or, the pipeline may be required to move its facilities at its own expense. Permits also have been obtained from railroad companies to run along or cross over or under lands or rights-of-way, many of which are also revocable at the grantor's election. Some such permits require annual or other periodic payments. In a few minor cases, property for pipeline purposes was purchased by the Company.

(d) Financial Information about Geographic Areas

For geographic information concerning our assets and operations, see Note 17 "*Reportable Segments*" to our consolidated financial statements.

(e) Available Information

We make available free of charge on or through our internet website, at www.kindermorgan.com, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. The information contained on or connected to our internet website is not incorporated by reference into this Form 10-K and should not be considered part of this or any other report that we file with or furnish to the SEC.

Item 1A. ***Risk Factors.***

You should carefully consider the risks described below, in addition to the other information contained in this document. Realization of any of the following risks could have a material adverse effect on our business, financial condition, cash flows and results of operations.

Risks Related to Operating our Business

Our businesses are dependent on the supply of and demand for the products that we handle.

Our pipelines, terminals and other assets and facilities depend in part on continued production of natural gas, oil and other products in the geographic areas that they serve. Our business also depends in part on the levels of demand for natural gas, oil, NGL, refined petroleum products, CO_2, coal, steel, chemicals and other products in the geographic areas to which our pipelines, terminals, shipping vessels and other facilities deliver or provide service, and the ability and willingness of our shippers and other customers to supply such demand. For example, without additions to oil and gas reserves, production will decline over time as reserves are depleted, and production costs may rise. Producers may reduce or shut down production during times of lower product prices or higher production costs to the extent they become uneconomic. Producers in areas served by us may not be successful in exploring for and developing additional reserves, and our pipelines and related facilities may not be able to maintain existing volumes of throughput. Commodity prices and tax incentives may not remain at levels that encourage producers to explore for and develop additional reserves, produce existing marginal reserves or renew transportation contracts as they expire.

Changes in the business environment, such as declining or sustained low commodity prices, supply disruptions, or higher development or production costs, could result in a slowing of supply to our pipelines, terminals and other assets. In addition, changes in the overall demand for hydrocarbons, the regulatory environment or applicable governmental policies, including in relation to climate change or other environmental concerns, may have a negative impact on the supply of crude oil and other products. In recent years, a number of initiatives and regulatory changes relating to reducing GHG emissions have been undertaken by federal, provincial, state and municipal governments and oil and gas industry participants. In addition, emerging technologies and public opinion have resulted in increasing demand for energy efficiency, including energy provided from renewable energy sources rather than fossil fuels and fuel-efficient alternatives such as hybrid and electric vehicles. These factors could result in not only increased costs for producers of hydrocarbons but also an overall decrease in the demand for hydrocarbons. Each of the foregoing could negatively impact our business directly as well as our shippers and other customers, which in turn could negatively impact our prospects for new contracts for transportation, terminaling or other midstream services, or renewals of existing contracts or the ability of our customers and shippers to honor their contractual commitments. See "*—Financial distress experienced by our customers or other counterparties could have an adverse impact on us in the event they are unable to pay us for the products or services we provide or otherwise fulfill their obligations to us"* below.

We cannot predict the impact of future economic conditions, fuel conservation measures, alternative fuel requirements, governmental regulation or technological advances in fuel economy and energy generation devices, all of which could reduce the production of and/or demand for the products we handle. In addition, irrespective of supply of or demand for products we handle, implementation of new regulations or changes to existing regulations affecting the energy industry could have a material adverse effect on us. See "*—The FERC, the CPUC, or the NEB may establish pipeline tariff rates that have a negative impact on us. In addition, the FERC, the CPUC, the NEB, or our customers could initiate proceedings or file complaints challenging the tariff rates charged by our pipelines, which could have an adverse impact on us.*"

Expanding our existing assets and constructing new assets is part of our growth strategy. Our ability to begin and complete construction on expansion and new-build projects may be inhibited by difficulties in obtaining, or our inability to obtain, permits and rights-of-way, as well as public opposition, increases in costs of construction materials, cost overruns, inclement weather and other delays. Should we pursue expansion of or construction of new projects through joint ventures with others, we will share control and benefits from those projects.

We regularly undertake major construction projects to expand our existing assets and to construct new assets. New growth projects generally will be subject to, among other things, the receipt of regulatory approvals, feasibility and cost analyses, funding availability and industry, market and demand conditions. If we pursue joint ventures with third parties, those parties may share approval rights over major decisions, and may act in their own interests. Their views may differ from our own or our views of the interests of the venture which could result in operational delays or impasses, which in turn could affect the financial expectations of and our benefits from the venture. A variety of factors outside of our control, such as difficulties in obtaining permits and rights-of-way or other regulatory approvals, have caused, and may continue to cause, delays in or cancellations of our construction projects. Regulatory authorities may modify their permitting policies in ways that disadvantage our construction projects, such as the FERC's consideration of changes to its Certificate Policy Statement. Such factors can be exacerbated by public opposition to our projects. See "*—We are subject to reputational risks and risks related to public opinion.*" For example, changing public attitudes toward pipelines bearing fossil fuels may impede our ability to secure rights of way or governmental reviews and authorizations on a timely basis or at all. Inclement weather, natural disasters and delays in performance by third-party contractors have also resulted in, and may continue to result in, increased costs or delays in construction. Significant increases in costs of construction materials, cost overruns or delays, or our inability to obtain a required permit or right-of-way, could have a material adverse effect on our return on investment, results of operations and cash flows, and could result in project cancellations or limit our ability to pursue other growth opportunities.

We face competition from other pipelines and terminals, as well as other forms of transportation and storage.

Any current or future pipeline system or other form of transportation (such as barge, rail or truck) that delivers the products we handle into the areas that our pipelines serve could offer transportation services that are more desirable to shippers than those we provide because of price, location, facilities or other factors. Likewise, competing terminals or other storage options may become more attractive to our customers. To the extent that competitors offer the markets we serve more desirable transportation or storage options, this could result in unused capacity on our pipelines and in our terminals. We also could experience competition for the supply of the products we handle from both existing and proposed pipeline systems; for example, several pipelines access many of the same areas of supply as our pipeline systems and transport to destinations not served by us. If capacity on our assets remains unused, our ability to re-contract for expiring capacity at favorable rates or otherwise retain existing customers could be impaired.

The volatility of oil, NGL and natural gas prices could adversely affect our CO_2 business segment and businesses within our Natural Gas Pipelines and Products Pipelines business segments.

The revenues, cash flows, profitability and future growth of some of our businesses depend to a large degree on prevailing oil, NGL and natural gas prices. Our CO_2 business segment (and the carrying value of its oil, NGL and natural gas producing properties) and certain midstream businesses within our Natural Gas Pipelines business segment depend to a large degree, and certain businesses within our Product Pipelines business segment depend to a lesser degree, on prevailing oil, NGL and natural gas prices. For 2019, we estimate that every $1 change in the average WTI crude oil price per barrel would impact our DCF by approximately $8 million, each $0.10 per MMBtu change in the average price of natural gas would impact DCF by approximately $1 million, and each 1% change in the ratio of the weighted-average NGL price per barrel to the WTI crude oil price per barrel would impact DCF by approximately $3 million.

Prices for oil, NGL and natural gas are subject to large fluctuations in response to relatively minor changes in the supply of and demand for oil, NGL and natural gas, uncertainties within the market and a variety of other factors beyond our control. These factors include, among other things (i) weather conditions and events such as hurricanes in the U.S.; (ii) domestic and global economic conditions; (iii) the activities of the Organization of Petroleum Exporting Countries; (iv) governmental

regulation; (v) political instability in oil producing countries; (vi) the foreign supply of and demand for oil and natural gas; (vii) the price of foreign imports; (viii) the proximity and availability of storage and transportation infrastructure and processing and treating facilities; and (ix) the availability and prices of alternative fuel sources. We use hedging arrangements to partially mitigate our exposure to commodity prices, but these arrangements also are subject to inherent risks. Please read *"—Our use of hedging arrangements does not eliminate our exposure to commodity price risks and could result in financial losses or volatility in our income.*"

A sharp decline in the prices of oil, NGL or natural gas, or a prolonged unfavorable price environment, would result in a commensurate reduction in our revenues, income and cash flows from our businesses that produce, process, or purchase and sell oil, NGL, or natural gas, and could have a material adverse effect on the carrying value of our CO_2 business segment's proved reserves. If prices fall substantially or remain low for a sustained period and we are not sufficiently protected through hedging arrangements, we may be unable to realize a profit from these businesses and would operate at a loss.

In recent decades, there have been periods worldwide of both overproduction and underproduction of hydrocarbons, and periods of both increased and relaxed energy conservation efforts. Such conditions have resulted in periods of excess supply of, and reduced demand for, crude oil on a worldwide basis and for natural gas on a domestic basis. These periods have been followed by periods of short supply of, and increased demand for, crude oil and natural gas. The cycles of excess or short supply of crude oil or natural gas have placed pressures on prices and resulted in dramatic price fluctuations even during relatively short periods of seasonal market demand. These fluctuations impact the accuracy of assumptions used in our budgeting process. For more information about our energy and commodity market risk, see Item 7A "*Quantitative and Qualitative Disclosures About Market Risk-Energy Commodity Market Risk*."

Commodity transportation and storage activities involve numerous risks that may result in accidents or otherwise adversely affect our operations.

There are a variety of hazards and operating risks inherent to the transportation and storage of the products we handle, such as leaks; releases; the breakdown, underperformance or failure of equipment, facilities, information systems or processes; damage to our pipelines caused by third-party construction; the compromise of information and control systems; spills at terminals and hubs; spills associated with the loading and unloading of harmful substances at rail facilities; adverse sea conditions (including storms and rising sea levels) and releases or spills from our shipping vessels or vessels loaded at our marine terminals; operator error; labor disputes/work stoppages; disputes with interconnected facilities and carriers; operational disruptions or apportionment on third-party systems or refineries on which our assets depend; and catastrophic events such as natural disasters, fires, floods, explosions, earthquakes, acts of terrorists and saboteurs, cyber security breaches, and other similar events, many of which are beyond our control. Additional risks to our vessels include capsizing, grounding and navigation errors.

The occurrence of any of these risks could result in serious injury and loss of human life, significant damage to property and natural resources, environmental pollution, significant reputational damage, impairment or suspension of operations, fines or other regulatory penalties, and revocation of regulatory approvals or imposition of new requirements, any of which also could result in substantial financial losses, including lost revenue and cash flow to the extent that an incident causes an interruption of service. For pipeline and storage assets located near populated areas, including residential areas, commercial business centers, industrial sites and other public gathering areas, the level of damage resulting from these risks may be greater. In addition, the consequences of any operational incident (including as a result of adverse sea conditions) at one of our marine terminals may be even more significant as a result of the complexities involved in addressing leaks and releases occurring in the ocean or along coastlines and/or the repair of marine terminals.

Our operating results may be adversely affected by unfavorable economic and market conditions.

Unfavorable economic conditions worldwide have from time to time contributed to slowdowns in several industries, including the oil and gas industry, the steel industry, the coal industry and in specific segments and markets in which we operate, resulting in reduced demand and increased price competition for our products and services. In addition, uncertain or changing economic conditions within one or more geographic regions may affect our operating results within the affected regions. Volatility in commodity prices or changes in markets for a given commodity might also have a negative impact on many of our customers, which could impair their ability to meet their obligations to us. See *"—Financial distress experienced by our customers or other counterparties could have an adverse impact on us in the event they are unable to pay us for the products or services we provide or otherwise fulfill their obligations to us."* In addition, decreases in the prices of crude oil, NGL and natural gas will have a negative impact on our operating results and cash flow. See *"—The volatility of oil, NGL and natural gas prices could adversely affect our CO_2 business segment and businesses within our Natural Gas Pipelines and Products Pipelines business segments."*

If economic and market conditions (including volatility in commodity markets) globally, in the U.S. or in other key markets become more volatile or deteriorate, we may experience material impacts on our business, financial condition and results of operations.

Financial distress experienced by our customers or other counterparties could have an adverse impact on us in the event they are unable to pay us for the products or services we provide or otherwise fulfill their obligations to us.

We are exposed to the risk of loss in the event of nonperformance by our customers or other counterparties, such as hedging counterparties, joint venture partners and suppliers. Many of our counterparties finance their activities through cash flow from operations or debt or equity financing, and some of them may be highly leveraged. Our counterparties are subject to their own operating, market, financial and regulatory risks, and some are experiencing, or may experience in the future, severe financial problems that have had or may have a significant impact on their creditworthiness. For example, PG&E, a customer of Ruby, filed for Chapter 11 bankruptcy protection in January 2019. See Item 7 "*Management's Discussion and Analysis of Financial Condition and Results of Operations—General—Investment in Ruby.*" Further, the security that is permitted to be obtained from such customers may be limited by FERC regulation. While certain of our customers are subsidiaries of an entity that has an investment grade credit rating, in many cases the parent entity has not guaranteed the obligations of the subsidiary and, therefore, the parent's credit ratings may have no bearing on such customers' ability to pay us for the services we provide or otherwise fulfill their obligations to us. Furthermore, financially distressed customers might be forced to reduce or curtail their future use of our products and services, which also could have a material adverse effect on our results of operations, financial condition, and cash flows.

We cannot provide any assurance that such customers and key counterparties will not become financially distressed or that such financially distressed customers or counterparties will not default on their obligations to us or file for bankruptcy protection. If one of such customers or counterparties files for bankruptcy protection, we likely would be unable to collect all, or even a significant portion, of amounts owed to us. Significant customer and other counterparty defaults and bankruptcy filings could have a material adverse effect on our business, financial position, results of operations or cash flows.

The acquisition of additional businesses and assets is part of our growth strategy. We may experience difficulties completing acquisitions or integrating new businesses and properties, and we may be unable to achieve the benefits we expect from any future acquisitions.

Part of our business strategy includes acquiring additional businesses and assets. We evaluate and pursue assets and businesses that we believe will complement or expand our operations in accordance with our growth strategy. We cannot provide any assurance that we will be able to complete acquisitions in the future or achieve the desired results from any acquisitions we do complete. Any acquired business or assets will be subject to many of the same risks as our existing businesses and may not achieve the levels of performance that we anticipate.

If we do not successfully integrate acquisitions, we may not realize anticipated operating advantages and cost savings. Integration of acquired companies or assets involves a number of risks, including (i) the loss of key customers of the acquired business; (ii) demands on management related to the increase in our size; (iii) the diversion of management's attention from the management of daily operations; (iv) difficulties in implementing or unanticipated costs of accounting, budgeting, reporting, internal controls and other systems; and (v) difficulties in the retention and assimilation of necessary employees.

We may not be able to maintain the levels of operating efficiency that acquired companies have achieved or might achieve separately. Successful integration of each acquisition will depend upon our ability to manage those operations and to eliminate redundant and excess costs. Difficulties in integration may be magnified if we make multiple acquisitions over a relatively short period of time. Because of difficulties in combining and expanding operations, we may not be able to achieve the cost savings and other size-related benefits that we hoped to achieve after these acquisitions, which would harm our financial condition and results of operations.

We are subject to reputational risks and risks relating to public opinion.

Our business, operations or financial condition generally may be negatively impacted as a result of negative public opinion. Public opinion may be influenced by negative portrayals of the industry in which we operate as well as opposition to development projects. In addition, market events specific to us could result in the deterioration of our reputation with key stakeholders. Potential impacts of negative public opinion or reputational issues may include delays or stoppages in expansion projects, legal or regulatory actions or challenges, blockades, increased regulatory oversight, reduced support from regulatory

authorities, challenges to regulatory approvals, difficulty securing financing for and cost overruns affecting expansion projects and the degradation of our business generally.

Reputational risk cannot be managed in isolation from other forms of risk. Credit, market, operational, insurance, regulatory and legal risks, among others, must all be managed effectively to safeguard our reputation. Our reputation and public opinion could also be impacted by the actions and activities of other companies operating in the energy industry, particularly other energy infrastructure providers, over which we have no control. In particular, our reputation could be impacted by negative publicity related to pipeline incidents or unpopular expansion projects and due to opposition to development of hydrocarbons and energy infrastructure, particularly projects involving resources that are considered to increase GHG emissions and contribute to climate change. Negative impacts from a compromised reputation or changes in public opinion (including with respect to the production, transportation and use of hydrocarbons generally) could include revenue loss, reduction in customer base, delays in obtaining, or challenges to, regulatory approvals with respect to growth projects and decreased value of our securities and our business.

The future success of our oil and gas development and production operations depends in part upon our ability to develop additional oil and gas reserves that are economically recoverable.

The rate of production from oil and natural gas properties declines as reserves are depleted. Without successful development activities, the reserves, revenues and cash flows of the oil and gas producing assets within our CO_2 business segment will decline. We may not be able to develop or acquire additional reserves at an acceptable cost or have necessary financing for these activities in the future. Additionally, if we do not realize production volumes greater than, or equal to, our hedged volumes, we may suffer financial losses not offset by physical transactions.

The development of crude oil and gas properties involves risks that may result in a total loss of investment.

The business of developing and operating oil and gas properties involves a high degree of business and financial risk that even a combination of experience, knowledge and careful evaluation may not be able to overcome. Acquisition and development decisions generally are based on subjective judgments and assumptions that, while they may be reasonable, are by their nature speculative. It is impossible to predict with certainty the production potential of a particular property or well. Furthermore, the successful completion of a well does not ensure a profitable return on the investment. A variety of geological, operational and market-related factors, including, but not limited to, unusual or unexpected geological formations, pressures, equipment failures or accidents, fires, explosions, blowouts, cratering, pollution and other environmental risks, shortages or delays in the availability of drilling rigs and the delivery of equipment, loss of circulation of drilling fluids or other conditions, may substantially delay or prevent completion of any well or otherwise prevent a property or well from being profitable. A productive well may become uneconomic in the event water or other deleterious substances are encountered, which impair or prevent the production of oil and/or gas from the well. In addition, production from any well may be unmarketable if it is contaminated with water or other deleterious substances.

Our use of hedging arrangements does not eliminate our exposure to commodity price risks and could result in financial losses or volatility in our income.

We engage in hedging arrangements to reduce our exposure to fluctuations in the prices of crude oil, natural gas and NGL. These hedging arrangements expose us to risk of financial loss in some circumstances, including when production is less than expected, when the counterparty to the hedging contract defaults on its contract obligations, or when there is a change in the expected differential between the underlying price in the hedging agreement and the actual price received. In addition, these hedging arrangements may limit the benefit we would otherwise receive from increases in prices for crude oil and natural gas.

The markets for instruments we use to hedge our commodity price exposure generally reflect then-prevailing conditions in the underlying commodity markets. As our existing hedges expire, we will seek to replace them with new hedging arrangements. To the extent underlying market conditions are unfavorable, new hedging arrangements available to us will reflect such unfavorable conditions.

The accounting standards regarding hedge accounting are very complex, and even when we engage in hedging transactions (for example, to mitigate our exposure to fluctuations in commodity price or currency exchange rates or to balance our exposure to fixed and variable interest rates) that are effective economically, these transactions may not be considered effective for accounting purposes. Accordingly, our consolidated financial statements may reflect some volatility due to these hedges, even when there is no underlying economic impact at the dates of those statements. In addition, it may not be possible for us to engage in hedging transactions that completely eliminate our exposure to commodity prices; therefore, our consolidated financial statements may reflect a gain or loss arising from an exposure to commodity prices for which we are unable to enter

into a completely effective hedge. For more information about our hedging activities, see Item 7 "*Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates—Hedging Activities*" and Note 14 "*Risk Management*" to our consolidated financial statements.

A breach of information security or failure of one or more key information technology or operational (IT) systems, or those of third parties, may adversely affect our business, results of operations or business reputation.

Our business is dependent upon our operational systems to process a large amount of data and complex transactions. The various uses of these IT systems, networks and services include, but are not limited to, controlling our pipelines and terminals with industrial control systems, collecting and storing information and data, processing transactions, and handling other processing necessary to manage our business.

If any of our systems are damaged, fail to function properly or otherwise become unavailable, we may incur substantial costs to repair or replace them and may experience loss or corruption of critical data and interruptions or delays in our ability to perform critical functions, which could adversely affect our business and results of operations. A significant failure, compromise, breach or interruption in our systems could result in a disruption of our operations, customer dissatisfaction, damage to our reputation and a loss of customers or revenues. Efforts by us and our vendors to develop, implement and maintain security measures may not be successful in preventing these events from occurring, and any network and information systems-related events could require us to expend significant resources to remedy such event. In the future, we may be required to expend additional resources to continue to enhance our information security measures and/or to investigate and remediate information security vulnerabilities.

Attacks, including acts of terrorism or cyber sabotage, or the threat of such attacks, may adversely affect our business or reputation.

The U.S. government has issued public warnings that indicate that pipelines and other infrastructure assets might be specific targets of terrorist organizations or "cyber sabotage" events. For example, in 2018, a cyberattack on a shared data network forced four U.S. natural gas pipeline operators to temporarily shut down computer communications with their customers. Potential targets include our pipeline systems, terminals, processing plants or operating systems. The occurrence of an attack could cause a substantial decrease in revenues and cash flows, increased costs to respond or other financial loss, damage to our reputation, increased regulation or litigation or inaccurate information reported from our operations. There is no assurance that adequate cyber sabotage and terrorism insurance will be available at rates we believe are reasonable in the near future. These developments may subject our operations to increased risks, as well as increased costs, and, depending on their ultimate magnitude, could have a material adverse effect on our business, results of operations and financial condition or could harm our business reputation.

Hurricanes, earthquakes, flooding and other natural disasters, as well as subsidence and coastal erosion, could have an adverse effect on our business, financial condition and results of operations.

Some of our pipelines, terminals and other assets are located in, and our shipping vessels operate in, areas that are susceptible to hurricanes, earthquakes, flooding and other natural disasters or could be impacted by subsidence and coastal erosion. These natural disasters and phenomena could potentially damage or destroy our assets and disrupt the supply of the products we transport. In the third quarter of 2017, Hurricane Harvey caused disruptions in our operations and damage to our assets near the Texas Gulf Coast requiring approximately $45 million in repair costs, approximately $10 million of which was not recoverable through insurance. For more information regarding the impact of Hurricane Harvey on our assets and operating results, see Item 7 "*Management's Discussion and Analysis of Financial Condition and Results of Operations*." Many climate models indicate that global warming is likely to result in rising sea levels, increased intensity of weather, and increased frequency of extreme precipitation and flooding. These climate-related changes could damage physical assets, especially operations located in low-lying areas near coasts and river banks, and facilities situated in hurricane-prone and rain-susceptible regions. In addition, we may experience increased insurance premiums and deductibles, or a decrease in available coverage, for our assets in areas subject to severe weather. Natural disasters and phenomena can similarly affect the facilities of our customers. In either case, losses could exceed our insurance coverage and our business, financial condition and results of operations could be adversely affected, perhaps materially. See Items 1 and 2 "*Business and Properties—(c) Narrative Description of Business—Environmental Matters*."

Substantially all of the land on which our pipelines are located is owned by third parties. If we are unable to procure and maintain access to land owned by third parties, our revenue and operating costs, and our ability to complete construction projects, could be adversely affected.

We must obtain and maintain the rights to construct and operate pipelines on other owners' land, including private landowners, railroads, public utilities and others. While our interstate natural gas pipelines in the U.S. have federal eminent domain authority, the availability of eminent domain authority for our other pipelines varies from state to state depending upon the type of pipeline—petroleum liquids, natural gas, CO_2, or crude oil—and the laws of the particular state. In any case, we must compensate landowners for the use of their property, and in eminent domain actions, such compensation may be determined by a court. If we are unable to obtain rights-of-way on acceptable terms, our ability to complete construction projects on time, on budget, or at all, could be adversely affected. In addition, we are subject to the possibility of increased costs under our right-of-way or rental agreements with landowners, primarily through renewals of expiring agreements and rental increases. If we were to lose these rights, our operations could be disrupted or we could be required to relocate the affected pipelines, which could cause a substantial decrease in our revenues and cash flows and a substantial increase in our costs.

Our business requires the retention and recruitment of a skilled workforce, and difficulties recruiting and retaining our workforce could result in a failure to implement our business plans.

Our operations and management require the retention and recruitment of a skilled workforce, including engineers, technical personnel and other professionals. We and our affiliates compete with other companies in the energy industry for this skilled workforce. In addition, many of our current employees are retirement eligible and have significant institutional knowledge that must be transferred to other employees. If we are unable to (i) retain current employees; (ii) successfully complete the knowledge transfer; and/or (iii) recruit new employees of comparable knowledge and experience, our business could be negatively impacted. In addition, we could experience increased costs to retain and recruit these professionals.

The increased financial reporting and other obligations of management resulting from KML's obligations as a public company may divert management's attention away from other business operations.

KML, in which we own an approximate 70% interest, completed its IPO in Canada in May of 2017 and in 2018, completed the sale of its interest in the TMPL as described under Item 7 "*Management's Discussion and Analysis of Financial Condition and Results of Operations—General—KML—Sale of Trans Mountain Pipeline System and Its Expansion Project.*" Certain of our officers and directors also serve as officers and directors of KML, and we provide financial reporting support and other services as requested by KML and its controlled affiliates pursuant to a Services Agreement. The increased obligations associated with providing support to KML as a public company may divert our management's attention from other business concerns and may adversely affect our business, financial condition and results of operations. We are subject to financial reporting and other obligations that place significant demands on our management, administrative, operational, legal, internal audit and accounting resources. The demands on our personnel related to KML's obligations as a public company will be intensified as a result of the management and personnel departures and related transition following the sale of our interest in the TMPL.

If we are unable to retain our executive officers, our ability to execute our business strategy, including our growth strategy, may be hindered.

Our success depends in part on the performance of and our ability to retain our executive officers, particularly Richard D. Kinder, our Executive Chairman and one of our founders, Steve Kean, our Chief Executive Officer, and Kim Dang, our President. Along with the other members of our senior management, Mssrs. Kinder and Kean and Ms. Dang have been responsible for developing and executing our growth strategy. If we are not successful in retaining Mr. Kinder, Mr. Kean, Ms. Dang or our other executive officers, or replacing them, our business, financial condition or results of operations could be adversely affected. We do not maintain key personnel insurance.

Our Terminals business segment is subject to U.S. dollar/Canadian dollar exchange rate fluctuations as a result of operations in Canada.

We are a U.S. dollar reporting company. As a result of the operations of our Terminals business segment in Canada, a portion of our consolidated assets, liabilities, revenues, cash flows and expenses are denominated in Canadian dollars. Fluctuations in the exchange rate between U.S. and Canadian dollars could expose us to reductions in the U.S. dollar value of our earnings and cash flows and a reduction in our stockholders' equity under applicable accounting rules.

Our insurance policies do not cover all losses, costs or liabilities that we may experience, and insurance companies that currently insure companies in the energy industry may cease to do so or substantially increase premiums.

Our insurance program may not cover all operational risks and costs and may not provide sufficient coverage in the event of a claim. We do not maintain insurance coverage against all potential losses and could suffer losses for uninsurable or uninsured risks or in amounts in excess of existing insurance coverage. Losses in excess of our insurance coverage could have a material adverse effect on our business, financial condition and results of operations.

Changes in the insurance markets subsequent to certain hurricanes and natural disasters have made it more difficult and more expensive to obtain certain types of coverage. The occurrence of an event that is not fully covered by insurance, or failure by one or more of our insurers to honor its coverage commitments for an insured event, could have a material adverse effect on our business, financial condition and results of operations. Insurance companies may reduce the insurance capacity they are willing to offer or may demand significantly higher premiums or deductibles to cover our assets. If significant changes in the number or financial solvency of insurance underwriters for the energy industry occur, we may be unable to obtain and maintain adequate insurance at a reasonable cost. There is no assurance that our insurers will renew their insurance coverage on acceptable terms, if at all, or that we will be able to arrange for adequate alternative coverage in the event of non-renewal. The unavailability of full insurance coverage to cover events in which we suffer significant losses could have a material adverse effect on our business, financial condition and results of operations.

Risks Related to Financing Our Business

Our substantial debt could adversely affect our financial health and make us more vulnerable to adverse economic conditions.

As of December 31, 2018, we had approximately $36.6 billion of consolidated debt (excluding debt fair value adjustments). Additionally, we and substantially all of our wholly owned U.S. subsidiaries are parties to a cross guarantee agreement under which each party to the agreement unconditionally guarantees the indebtedness of each other party, which means that we are liable for the debt of each of such subsidiaries. This level of consolidated debt and the cross guarantee agreement could have important consequences, such as (i) limiting our ability to obtain additional financing to fund our working capital, capital expenditures, debt service requirements or potential growth, or for other purposes; (ii) increasing the cost of our future borrowings; (iii) limiting our ability to use operating cash flow in other areas of our business or to pay dividends because we must dedicate a substantial portion of these funds to make payments on our debt; (iv) placing us at a competitive disadvantage compared to competitors with less debt; and (v) increasing our vulnerability to adverse economic and industry conditions.

Our ability to service our consolidated debt, and our ability to meet our consolidated leverage targets, will depend upon, among other things, our future financial and operating performance, which will be affected by prevailing economic conditions and financial, business, regulatory and other factors, many of which are beyond our control. If our consolidated cash flow is not sufficient to service our consolidated debt, and any future indebtedness that we incur, we will be forced to take actions such as reducing dividends, reducing or delaying our business activities, acquisitions, investments or capital expenditures, selling assets or seeking additional equity capital. We may also take such actions to reduce our indebtedness if we determine that our earnings (or consolidated earnings before interest, taxes, depreciation and amortization, or EBITDA, as calculated in accordance with our revolving credit facility) may not be sufficient to meet our consolidated leverage targets, or to comply with consolidated leverage ratios required under certain of our debt agreements. We may not be able to effect any of these actions on satisfactory terms or at all. For more information about our debt, see Note 9 "*Debt*" to our consolidated financial statements.

Our business, financial condition and operating results may be affected adversely by increased costs of capital or a reduction in the availability of credit.

Adverse changes to the availability, terms and cost of capital, interest rates or our credit ratings (which would have a corresponding impact on the credit ratings of our subsidiaries that are party to the cross guarantee agreement) could cause our cost of doing business to increase by limiting our access to capital, including our ability to refinance maturities of existing indebtedness on similar terms, which could in turn reduce our cash flows and limit our ability to pursue acquisition or expansion opportunities. Our credit ratings may be impacted by our leverage, liquidity, credit profile and potential transactions. Although the ratings from credit agencies are not recommendations to buy, sell or hold our securities, our credit ratings will generally affect the market value of our and our subsidiaries' debt securities and the terms available to us for future issuances of debt securities.

Also, disruptions and volatility in the global financial markets may lead to an increase in interest rates or a contraction in credit availability, impacting our ability to finance our operations on favorable terms. A significant reduction in the availability of credit could materially and adversely affect our business, financial condition and results of operations.

Our large amount of variable rate debt makes us vulnerable to increases in interest rates.

As of December 31, 2018, approximately $11.4 billion of our approximately $36.6 billion of consolidated debt (excluding debt fair value adjustments) was subject to variable interest rates, either as short-term or long-term variable-rate debt obligations, or as long-term fixed-rate debt effectively converted to variable rates through the use of interest rate swaps. Should interest rates increase, the amount of cash required to service variable-rate debt would increase, as would our costs to refinance maturities of existing indebtedness, and our earnings and cash flows could be adversely affected. For more information about our interest rate risk, see Item 7A "*Quantitative and Qualitative Disclosures About Market Risk—Interest Rate Risk.*"

Acquisitions and growth capital expenditures may require access to external capital. Limitations on our access to external financing sources could impair our ability to grow.

We have limited amounts of internally generated cash flows to fund acquisitions and growth capital expenditures. If our internally generated cash flows are not sufficient to fund one or more capital projects or acquisitions, we may have to rely on external financing sources, including commercial borrowings and issuances of debt and equity securities, to fund our acquisitions and growth capital expenditures. Limitations on our access to external financing sources, whether due to tightened capital markets, more expensive capital or otherwise, could impair our ability to execute our growth strategy.

Our debt instruments may limit our financial flexibility and increase our financing costs.

The instruments governing our debt contain restrictive covenants that may prevent us from engaging in certain transactions that may be beneficial to us. Some of the agreements governing our debt generally require us to comply with various affirmative and negative covenants, including the maintenance of certain financial ratios and restrictions on (i) incurring additional debt; (ii) entering into mergers, consolidations and sales of assets; (iii) granting liens; and (iv) entering into sale-leaseback transactions. The instruments governing any future debt may contain similar or more limiting restrictions. Our ability to respond to changes in business and economic conditions and to obtain additional financing, if needed, may be restricted.

Our and our customer's access to capital could be affected by evolving financial institutions' policies concerning businesses linked to fossil fuels.

Our and our customer's access to capital could be affected by evolving financial institutions' policies concerning businesses linked to fossil fuels. Public opinion toward industries linked to fossil fuels continues to evolve. Concerns about the potential effects of climate change have caused some to direct their attention towards sources of funding for fossil-fuel energy companies, which has resulted in certain financial institutions, funds and other sources of capital restricting or eliminating their investment in energy-related activities. Ultimately, this could make it more difficult for our customers to secure funding for exploration and production activities, and consequently could both indirectly affect demand for our services and directly affect our ability to fund construction or other capital projects.

Risks Related to Ownership of Our Capital Stock

The guidance we provide for our anticipated dividends is based on estimates. Circumstances may arise that lead to conflicts between using funds to pay anticipated dividends or to invest in our business.

We disclose in this report and elsewhere the expected cash dividends on our common stock. These reflect our current judgment, but as with any estimate, they may be affected by inaccurate assumptions and other risks and uncertainties, many of which are beyond our control. See "*Information Regarding Forward-Looking Statements*" at the beginning of this report. If our board of directors elects to pay dividends at the anticipated level and that action would leave us with insufficient cash to take timely advantage of growth opportunities (including through acquisitions), to meet any large unanticipated liquidity requirements, to fund our operations, to maintain our leverage metrics or otherwise to address properly our business prospects, our business could be harmed.

Conversely, a decision to address such needs might lead to the payment of dividends below the anticipated levels. As events present themselves or become reasonably foreseeable, our board of directors, which determines our business strategy and our dividends, may decide to address those matters by reducing our anticipated dividends. Alternatively, because nothing in our governing documents or credit agreements prohibits us from borrowing to pay dividends, we could choose to incur debt to enable us to pay our anticipated dividends. This would add to our substantial debt discussed above under "*—Risks Related to Financing Our Business—Our substantial debt could adversely affect our financial health and make us more vulnerable to adverse economic conditions*."

Our certificate of incorporation restricts the ownership of our common stock by non-U.S. citizens within the meaning of the Jones Act. These restrictions may affect the liquidity of our common stock and may result in non-U.S. citizens being required to sell their shares at a loss.

The Jones Act requires, among other things, that at least 75% of our common stock be owned at all times by U.S. citizens, as defined under the Jones Act, in order for us to own and operate vessels in the U.S. coastwise trade. As a safeguard to help us maintain our status as a U.S. citizen, our certificate of incorporation provides that, if the number of shares of our common stock owned by non-U.S. citizens exceeds 22%, we have the ability to redeem shares owned by non-U.S. citizens to reduce the percentage of shares owned by non-U.S. citizens to 22%. These redemption provisions may adversely impact the marketability of our common stock, particularly in markets outside of the U.S. Further, those stockholders would not have control over the timing of such redemption, and may be subject to redemption at a time when the market price or timing of the redemption is disadvantageous. In addition, the redemption provisions might have the effect of impeding or discouraging a merger, tender offer or proxy contest by a non-U.S. citizen, even if it were favorable to the interests of some or all of our stockholders.

Risks Related to Regulation

The FERC, the CPUC, or the NEB may establish pipeline tariff rates that have a negative impact on us. In addition, the FERC, the CPUC, the NEB, or our customers could initiate proceedings or file complaints challenging the tariff rates charged by our pipelines, which could have an adverse impact on us.

The profitability of our regulated pipelines is influenced by fluctuations in costs and our ability to recover any increases in our costs in the rates charged to our shippers. To the extent that our costs increase in an amount greater than what we are permitted by the FERC, the CPUC, or the NEB to recover in our rates, or to the extent that there is a lag before we can file for and obtain rate increases, such events can have a negative impact on our operating results.

Our existing rates may also be challenged by complaint. Regulators and shippers on our pipelines have rights to challenge, and have challenged, the rates we charge under certain circumstances prescribed by applicable regulations. Some shippers on our pipelines have filed complaints with the regulators that seek substantial refunds for alleged overcharges during the years in question and prospective reductions in the tariff rates. Further, the FERC may continue to initiate investigations to determine whether interstate natural gas pipelines have over-collected on rates charged to shippers. We may face challenges, similar to those described in Note 18 "*Litigation, Environmental and Other Contingencies*" to our consolidated financial statements, to the rates we charge on our pipelines. In addition, following the 2017 Tax Reform, which reduced the corporate tax rate from 35% to 21%, the FERC initiated the Form 501-G process to review the estimated impact of the 2017 Tax Reform on interstate pipelines with respect to tax recovery in existing jurisdictional rates. See Note 18 "*Litigation, Environmental and Other Contingencies—FERC Proceedings*" to our consolidated financial statements. Any successful challenge to our rates could materially adversely affect our future earnings, cash flows and financial condition.

New laws, policies, regulations, rulemaking and oversight, as well as changes to those currently in effect, could adversely impact our earnings, cash flows and operations.

Our assets and operations are subject to regulation and oversight by federal, state, provincial and local regulatory authorities. Legislative changes, as well as regulatory actions taken by these agencies, have the potential to adversely affect our profitability. In addition, a certain degree of regulatory uncertainty is created by the current U.S. presidential administration because it remains unclear specifically what the current administration may do with respect to future policies and regulations that may affect us. Regulation affects almost every part of our business and extends to such matters as (i) federal, state, provincial and local taxation; (ii) rates (which include tax, reservation, commodity, surcharges, fuel and gas lost and unaccounted for), operating terms and conditions of service; (iii) the types of services we may offer to our customers; (iv) the contracts for service entered into with our customers; (v) the certification and construction of new facilities; (vi) the costs of raw materials, such as steel, which may be affected by tariffs or otherwise; (vii) the integrity, safety and security of facilities and operations; (viii) the acquisition of other businesses; (ix) the acquisition, extension, disposition or abandonment of services

or facilities; (x) reporting and information posting requirements; (xi) the maintenance of accounts and records; and (xii) relationships with affiliated companies involved in various aspects of the energy businesses.

Should we fail to comply with any applicable statutes, rules, regulations, and orders of regulatory authorities, we could be subject to substantial penalties and fines and potential loss of government contracts. Furthermore, new laws, regulations or policy changes sometimes arise from unexpected sources. New laws or regulations, unexpected policy changes or interpretations of existing laws or regulations, such as the 2017 Tax Reform and the resulting Form 501-G process initiated by FERC, applicable to our income, operations, assets or another aspect of our business, could have a material adverse impact on our earnings, cash flow, financial condition and results of operations. For more information, see Items 1 and 2 "*Business and Properties—(c) Narrative Description of Business—Regulation*."

Environmental, health and safety laws and regulations could expose us to significant costs and liabilities.

Our operations are subject to federal, state, provincial and local laws, regulations and potential liabilities arising under or relating to the protection or preservation of the environment, natural resources and human health and safety. Such laws and regulations affect many aspects of our present and future operations, and generally require us to obtain and comply with various environmental registrations, licenses, permits, inspections and other approvals. Liability under such laws and regulations may be incurred without regard to fault under CERCLA, the Resource Conservation and Recovery Act, the Federal Clean Water Act, the Oil Pollution Act or analogous state or provincial laws as a result of the presence or release of hydrocarbons and other hazardous substances into or through the environment, and these laws may require response actions and remediation and may impose liability for natural resource and other damages. Private parties, including the owners of properties through which our pipelines pass, also may have the right to pursue legal actions to enforce compliance as well as to seek damages for non-compliance with such laws and regulations or for personal injury or property damage. Our insurance may not cover all environmental risks and costs and/or may not provide sufficient coverage in the event an environmental claim is made against us.

Failure to comply with these laws and regulations including required permits and other approvals also may expose us to civil, criminal and administrative fines, penalties and/or interruptions in our operations that could harm our business, financial position, results of operations and prospects. For example, if an accidental leak, release or spill of liquid petroleum products, chemicals or other hazardous substances occurs at or from our pipelines, shipping vessels or storage or other facilities, we may experience significant operational disruptions and we may have to pay a significant amount to clean up or otherwise respond to the leak, release or spill, pay government penalties, address natural resource damage, compensate for human exposure or property damage, install costly pollution control equipment or undertake a combination of these and other measures. The resulting costs and liabilities could materially and negatively affect our earnings and cash flows.

We own and/or operate numerous properties that have been used for many years in connection with our business activities. While we believe we have utilized operating, handling, and disposal practices that were consistent with industry practices at the time, hydrocarbons or other hazardous substances may have been released at or from properties owned, operated or used by us or our predecessors, or at or from properties where our or our predecessors' wastes have been taken for disposal. In addition, many of these properties have been owned and/or operated by third parties whose management, handling and disposal of hydrocarbons or other hazardous substances were not under our control. These properties and the hazardous substances released and wastes disposed on them may be subject to laws in the U.S. such as CERCLA, which impose joint and several liability without regard to fault or the legality of the original conduct. Under the regulatory schemes of the various Canadian provinces, such as British Columbia's Environmental Management Act, Canada has similar laws with respect to properties owned, operated or used by us or our predecessors. Under such laws and implementing regulations, we could be required to remove or remediate previously disposed wastes or property contamination, including contamination caused by prior owners or operators. Imposition of such liability schemes could have a material adverse impact on our operations and financial position.

Further, we cannot ensure that such existing laws and regulations will not be revised or that new laws or regulations will not be adopted or become applicable to us. For example, the Federal Clean Air Act and other similar federal, state and provincial laws are subject to periodic review and amendment, which could result in more stringent emission control requirements obligating us to make significant capital expenditures at our facilities. There can be no assurance as to the amount or timing of future expenditures for environmental compliance or remediation, and actual future expenditures may be different from the amounts we currently anticipate. Revised or additional regulations that result in increased compliance costs or additional operating restrictions, particularly if those costs are not fully recoverable from our customers, could have a material adverse effect on our business, financial position, results of operations and prospects. For more information, see Items 1 and 2 "*Business and Properties—(c) Narrative Description of Business—Environmental Matters."*

Increased regulatory requirements relating to the integrity of our pipelines may require us to incur significant capital and operating expense outlays to comply.

We are subject to extensive laws and regulations related to pipeline integrity at the federal, state and provincial level. There are, for example, federal guidelines issued by the U.S. Department of Transportation (DOT) for pipeline companies in the areas of testing, education, training and communication. The ultimate costs of compliance with the integrity management rules are difficult to predict. The majority of compliance costs relate to pipeline integrity testing and repairs. Technological advances in in-line inspection tools, identification of additional threats to a pipeline's integrity and changes to the amount of pipeline determined to be located in "High Consequence Areas" can have a significant impact on integrity testing and repair costs. We plan to continue our integrity testing programs to assess and maintain the integrity of our existing and future pipelines as required by the DOT rules. The results of these tests could cause us to incur significant and unanticipated capital and operating expenditures for repairs or upgrades deemed necessary to ensure the continued safe and reliable operation of our pipelines.

Further, additional laws and regulations that may be enacted in the future or a new interpretation of existing laws and regulations could significantly increase the amount of these expenditures. There can be no assurance as to the amount or timing of future expenditures for pipeline integrity regulation, and actual future expenditures may be different from the amounts we currently anticipate. Revised or additional regulations that result in increased compliance costs or additional operating restrictions, particularly if those costs are not deemed by regulators to be fully recoverable from our customers, could have a material adverse effect on our business, financial position, results of operations and prospects.

Climate change and related regulation could result in significantly increased operating and capital costs for us and could reduce demand for our products and services.

Various laws and regulations exist or are under development that seek to regulate the emission of GHGs such as methane and CO_2, including the EPA programs to control GHG emissions and state actions to develop statewide or regional programs. Existing EPA regulations require us to report GHG emissions in the U.S. from sources such as our larger natural gas compressor stations, fractionated NGL, and production of naturally occurring CO_2 (for example, from our McElmo Dome CO_2 field), even when such production is not emitted to the atmosphere. Proposed approaches to further regulate GHG emissions include establishing GHG "cap and trade" programs, increased efficiency standards, and incentives or mandates for pollution reduction, use of renewable energy sources, or use of alternative fuels with lower carbon content. For more information about climate change regulation, see Items 1 and 2 "*Business and Properties—(c) Narrative Description of Business—Environmental Matters—Climate Change."*

Adoption of any such laws or regulations could increase our costs to operate and maintain our facilities and could require us to install new emission controls on our facilities, acquire allowances for our GHG emissions, pay taxes related to our GHG emissions and administer and manage a GHG emissions program, and such increased costs could be significant. Recovery of such increased costs from our customers is uncertain in all cases and may depend on events beyond our control, including the outcome of future rate proceedings before the FERC. Such laws or regulations could also lead to reduced demand for hydrocarbon products that are deemed to contribute to GHGs, or restrictions on their use, which in turn could adversely affect demand for our products and services.

Finally, many climate models indicate that global warming is likely to result in rising sea levels and increased frequency and severity of weather events, which may lead to higher insurance costs, or a decrease in available coverage, for our assets in areas subject to severe weather. These climate-related changes could damage our physical assets, especially operations located in low-lying areas near coasts and river banks, and facilities situated in hurricane-prone and rain-susceptible regions.

Any of the foregoing could have adverse effects on our business, financial position, results of operations or cash flows.

Increased regulation of exploration and production activities, including hydraulic fracturing, could result in reductions or delays in drilling and completing new oil and natural gas wells, as well as reductions in production from existing wells, which could adversely impact the volumes of natural gas transported on our natural gas pipelines and our own oil and gas development and production activities.

We gather, process or transport crude oil, natural gas or NGL from several areas in which the use of hydraulic fracturing is prevalent. Oil and gas development and production activities are subject to numerous federal, state, provincial and local laws and regulations relating to environmental quality and pollution control. The oil and gas industry is increasingly relying on supplies of hydrocarbons from unconventional sources, such as shale, tight sands and coal bed methane. The extraction of hydrocarbons from these sources frequently requires hydraulic fracturing. Hydraulic fracturing involves the pressurized

injection of water, sand, and chemicals into the geologic formation to stimulate gas production and is a commonly used stimulation process employed by oil and gas exploration and production operators in the completion of certain oil and gas wells. There have been initiatives at the federal and state levels to regulate or otherwise restrict the use of hydraulic fracturing. Adoption of legislation or regulations placing restrictions on hydraulic fracturing activities could impose operational delays, increased operating costs and additional regulatory burdens on exploration and production operators, which could reduce their production of crude oil, natural gas or NGL and, in turn, adversely affect our revenues, cash flows and results of operations by decreasing the volumes of these commodities that we handle.

In addition, many states are promulgating stricter requirements not only for wells but also compressor stations and other facilities in the oil and gas industry sector. These laws and regulations increase the costs of these activities and may prevent or delay the commencement or continuance of a given operation. Specifically, these activities are subject to laws and regulations regarding the acquisition of permits before drilling, restrictions on drilling activities and location, emissions into the environment, water discharges, transportation of hazardous materials, and storage and disposition of wastes. In addition, legislation has been enacted that requires well and facility sites to be abandoned and reclaimed to the satisfaction of state authorities. These laws and regulations may adversely affect our oil and gas development and production activities.

Derivatives regulation could have an adverse effect on our ability to hedge risks associated with our business.

The Dodd-Frank Act requires the U.S. Commodity Futures Trading Commission (CFTC) and the SEC to promulgate rules and regulations establishing federal oversight and regulation of the OTC derivatives market and entities that participate in that market. Those rules and regulations are largely complete; although in December 2016, the CFTC re-proposed new rules pursuant to the Dodd-Frank Act that would institute broad new aggregate position limits for OTC swaps and futures and options traded on regulated exchanges. Thus, we cannot predict how further rules and regulations will affect us.

If we reduce our use of derivatives as a result of the legislation and regulations, our results of operations may become more volatile and our cash flows may be less predictable, which could adversely affect our ability to plan for and fund capital expenditures. Increased volatility may make us less attractive to certain types of investors. Any of these consequences could have a material adverse effect on our financial condition and results of operations.

The Jones Act includes restrictions on ownership by non-U.S. citizens of our U.S. point to point maritime shipping vessels, and failure to comply with the Jones Act, or changes to or a repeal of the Jones Act, could limit our ability to operate our vessels in the U.S. coastwise trade, result in the forfeiture of our vessels or otherwise adversely impact our earnings, cash flows and operations.

We are subject to the Jones Act, which generally restricts U.S. point-to-point maritime shipping to vessels operating under the U.S. flag, built in the U.S., owned and operated by U.S.-organized companies that are controlled and at least 75% owned by U.S. citizens and crewed by predominately U.S. citizens. Our business would be adversely affected if we fail to comply with the Jones Act provisions on coastwise trade. If we do not comply with any of these requirements, we would be prohibited from operating our vessels in the U.S. coastwise trade and, under certain circumstances, we could be deemed to have undertaken an unapproved transfer to non-U.S. citizens that could result in severe penalties, including permanent loss of U.S. coastwise trading rights for our vessels, fines or forfeiture of vessels. Our business could be adversely affected if the Jones Act were to be modified or repealed so as to permit foreign competition that is not subject to the same U.S. government imposed burdens.

Item 1B. ***Unresolved Staff Comments.***

None.

Item 3. ***Legal Proceedings.***

See Note 18 "*Litigation, Environmental and Other Contingencies*" to our consolidated financial statements.

Item 4. ***Mine Safety Disclosures.***

We no longer own or operate mines for which reporting requirements apply under the mine safety disclosure requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank), except for one terminal that is in temporary idle status with the Mine Safety and Health Administration. We have not received any specified health and safety violations, orders or citations, related assessments or legal actions, mining-related fatalities, or similar events requiring disclosure pursuant to the mine safety disclosure requirements of Dodd-Frank for the year ended December 31, 2018.

PART II

Item 5. ***Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.***

Our Class P common stock is listed for trading on the NYSE under the symbol "KMI."

As of February 7, 2019, we had 11,434 holders of our Class P common stock, which does not include beneficial owners whose shares are held by a nominee, such as a broker or bank.

For information on our equity compensation plans, see Note 10 "*Share-based Compensation and Employee Benefits—Share-based Compensation*" to our consolidated financial statements.

Our Purchases of Our Class P Shares

Period	Total number of securities purchased(a)	Average price paid per security	Total number of securities purchased as part of publicly announced plans(a)	Maximum number (or approximate dollar value) of securities that may yet be purchased under the plans or programs
October 1 to October 31, 2018	—	$ —	—	$ 1,500,000,715
November 1 to November 30, 2018	—	$ —	—	$ 1,500,000,715
December 1 to December 31, 2018(b)	1,473,120	$ 15.56	1,473,120	$ 1,477,062,687
Total	1,473,120	$ 15.56	1,473,120	$ 1,477,062,687

(a) On July 19, 2017, our board of directors approved a $2 billion common share buy-back program that began in December 2017. After repurchase, the shares are cancelled and no longer outstanding.

(b) Excludes repurchases made in December 2018 of 0.1 million shares for approximately $2 million which settled on January 2, 2019.

Item 6. ***Selected Financial Data.***

The following table sets forth, for the periods and at the dates indicated, our summary historical financial data. The table is derived from our consolidated financial statements and notes thereto, and should be read in conjunction with those audited financial statements. See also Item 7 *"Management's Discussion and Analysis of Financial Condition and Results of Operations"* in this report for more information.

Five-Year Review
Kinder Morgan, Inc. and Subsidiaries

	As of or for the Year Ended December 31,				
	2018	**2017**	**2016**	**2015**	**2014**
	(In millions, except per share amounts)				
Income and Cash Flow Data:					
Revenues	$ 14,144	$ 13,705	$ 13,058	$ 14,403	$ 16,226
Operating income	3,794	3,529	3,538	2,378	4,387
Earnings from equity investments	887	578	497	414	406
Net income	1,919	223	721	208	2,443
Net income attributable to Kinder Morgan, Inc.	1,609	183	708	253	1,026
Net income available to common stockholders	1,481	27	552	227	1,026
Class P Shares					
Basic and Diluted Earnings Per Common Share From Continuing Operations	$ 0.66	$ 0.01	$ 0.25	$ 0.10	$ 0.89
Basic Weighted Average Common Shares Outstanding	2,216	2,230	2,230	2,187	1,137
Dividends per common share declared for the period(a)	$ 0.80	$ 0.50	$ 0.50	$ 1.61	$ 1.74
Dividends per common share paid in the period(a)	0.725	0.50	0.50	1.93	1.70
Balance Sheet Data (at end of period):					
Property, plant and equipment, net	$ 37,897	$ 40,155	$ 38,705	$ 40,547	$ 38,564
Total assets	78,866	79,055	80,305	84,104	83,049
Current portion of debt(b)	3,388	2,828	2,696	821	2,717
Long-term debt(c)	33,205	34,088	36,205	40,732	38,312

(a) Dividends for the fourth quarter of each year are declared and paid during the first quarter of the following year.
(b) Using part of our portion of proceeds from the TMPL Sale that KML distributed to us in January 2019, we immediately repaid our outstanding balance of commercial paper of $409 million and then repaid $500 million of maturing 9.00% senior notes and $800 million of maturing 2.65% senior notes in February 2019.
(c) Excludes debt fair value adjustments.

Item 7. ***Management's Discussion and Analysis of Financial Condition and Results of Operations.***

The following discussion and analysis should be read in conjunction with our consolidated financial statements and the notes thereto. We prepared our consolidated financial statements in accordance with GAAP. Additional sections in this report which should be helpful to the reading of our discussion and analysis include the following: (i) a description of our business strategy found in Items 1 and 2 "*Business and Properties—(c) Narrative Description of Business—Business Strategy;*" (ii) a description of developments during 2018, found in Items 1 and 2 "*Business and Properties—(a) General Development of Business—Recent Developments;*" and (iii) a description of risk factors affecting us and our business, found in Item 1A "*Risk Factors.*"

Inasmuch as the discussion below and the other sections to which we have referred you pertain to management's comments on financial resources, capital spending, our business strategy and the outlook for our business, such discussions contain forward-looking statements. These forward-looking statements reflect the expectations, beliefs, plans and objectives of management about future financial performance and assumptions underlying management's judgment concerning the matters discussed, and accordingly, involve estimates, assumptions, judgments and uncertainties. Our actual results could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to any differences

include, but are not limited to, those discussed below and elsewhere in this report, particularly in Item 1A "*Risk Factors*" and at the beginning of this report in "*Information Regarding Forward-Looking Statements.*"

General

Our reportable business segments are:

- Natural Gas Pipelines—the ownership and operation of (i) major interstate and intrastate natural gas pipeline and storage systems; (ii) natural gas and crude oil gathering systems and natural gas processing and treating facilities; (iii) NGL fractionation facilities and transportation systems; and (iv) LNG facilities;

- Products Pipelines—the ownership and operation of refined petroleum products, NGL and crude oil and condensate pipelines that primarily deliver, among other products, gasoline, diesel and jet fuel, propane, ethane, crude oil and condensate to various markets, plus the ownership and/or operation of associated product terminals and petroleum pipeline transmix facilities;

- Terminals—the ownership and/or operation of (i) liquids and bulk terminal facilities located throughout the U.S. and portions of Canada that transload and store refined petroleum products, crude oil, ethanol and chemicals, and bulk products, including petroleum coke, metals and ores; and (ii) Jones Act tankers;

- CO_2—(i) the production, transportation and marketing of CO_2 to oil fields that use CO_2 as a flooding medium to increase recovery and production of crude oil from mature oil fields; (ii) ownership interests in and/or operation of oil fields and gasoline processing plants in West Texas; and (iii) the ownership and operation of a crude oil pipeline system in West Texas; and

- Kinder Morgan Canada (prior to August 31, 2018)—the ownership and operation of the Trans Mountain pipeline system that transports crude oil and refined petroleum products from Edmonton, Alberta, Canada to marketing terminals and refineries in British Columbia, Canada and the state of Washington. As a result of the TMPL Sale, this segment does not have results of operations on a prospective basis.

As an energy infrastructure owner and operator in multiple facets of the various U.S. and Canadian energy industries and markets, we examine a number of variables and factors on a routine basis to evaluate our current performance and our prospects for the future.

With respect to our interstate natural gas pipelines, related storage facilities and LNG terminals, the revenues from these assets are primarily received under contracts with terms that are fixed for various and extended periods of time. To the extent practicable and economically feasible in light of our strategic plans and other factors, we generally attempt to mitigate risk of reduced volumes and prices by negotiating contracts with longer terms, with higher per-unit pricing and for a greater percentage of our available capacity. These long-term contracts are typically structured with a fixed fee reserving the right to transport or store natural gas and specify that we receive the majority of our fee for making the capacity available, whether or not the customer actually chooses to utilize the capacity. Similarly, the Texas Intrastate Natural Gas Pipeline operations, currently derives approximately 76% of its sales and transport margins from long-term transport and sales contracts. As contracts expire, we have additional exposure to the longer term trends in supply and demand for natural gas. As of December 31, 2018, the remaining weighted average contract life of our natural gas transportation contracts (including intrastate pipelines' sales portfolio) was approximately six years.

Our midstream assets provide gathering and processing services for natural gas and gathering services for crude oil. These assets are mostly fee-based and the revenues and earnings we realize from gathering natural gas, processing natural gas in order to remove NGL from the natural gas stream, and fractionating NGL into their base components, are affected by the volumes of natural gas made available to our systems. Such volumes are impacted by producer rig count and drilling activity. In addition to fee based arrangements, some of which may include minimum volume commitments, we also provide some services based on percent-of-proceeds, percent-of-index and keep-whole contracts. Our service contracts may rely solely on a single type of arrangement, but more often they combine elements of two or more of the above, which helps us and our counterparties manage the extent to which each shares in the potential risks and benefits of changing commodity prices.

The profitability of our refined petroleum products pipeline transportation and storage business generally is driven by the volume of refined petroleum products that we transport and the prices we receive for our services. We also have approximately 55 liquids terminals in this business segment that store fuels and offer blending services for ethanol and biofuels.
The transportation and storage volume levels are primarily driven by the demand for the refined petroleum products being

shipped or stored. Demand for refined petroleum products tends to track in large measure demographic and economic growth, and, with the exception of periods of time with very high product prices or recessionary conditions, demand tends to be relatively stable. Because of that, we seek to own refined petroleum products pipelines located in, or that transport to, stable or growing markets and population centers. The prices for shipping are generally based on regulated tariffs that are adjusted annually based on changes in the U.S. Producer Price Index.

Our crude and condensate transportation services are primarily provided either pursuant to (i) long-term contracts that normally contain minimum volume commitments or (ii) through terms prescribed by the toll settlements with shippers and approved by regulatory authorities. As a result of these contracts, our settlement volumes are generally not sensitive to changing market conditions in the shorter term; however, in the longer term the revenues and earnings we realize from our crude oil and condensate pipelines are affected by the volumes of crude oil and condensate available to our pipeline systems, which are impacted by the level of oil and gas drilling activity in the respective producing regions that we serve. Our petroleum condensate processing facility splits condensate into its various components, such as light and heavy naphtha, under a long-term fee-based agreement with a major integrated oil company.

The factors impacting our Terminals business segment generally differ between liquid and bulk terminals, and in the case of a bulk terminal, the type of product being handled or stored. Our liquids terminals business generally has long-term contracts that require the customer to pay regardless of whether they use the capacity. Thus, similar to our natural gas pipelines business, our liquids terminals business is less sensitive to short-term changes in supply and demand. Therefore, the extent to which changes in these variables affect our terminals business in the near term is a function of the length of the underlying service contracts (which on average is approximately four years), the extent to which revenues under the contracts are a function of the amount of product stored or transported, and the extent to which such contracts expire during any given period of time. As with our refined petroleum products pipelines transportation business, the revenues from our bulk terminals business are generally driven by the volumes we handle and/or store, as well as the prices we receive for our services, which in turn are driven by the demand for the products being shipped or stored. While we handle and store a large variety of products in our bulk terminals, the primary products are petroleum coke, metals and ores. For the most part, we have contracts for this business that contain minimum volume guarantees and/or service exclusivity arrangements under which customers are required to utilize our terminals for all or a specified percentage of their handling and storage needs. The profitability of our minimum volume contracts is generally unaffected by short-term variation in economic conditions; however, to the extent we expect volumes above the minimum and/or have contracts which are volume-based, we can be sensitive to changing market conditions. To the extent practicable and economically feasible in light of our strategic plans and other factors, we generally attempt to mitigate the risk of reduced volumes and pricing by negotiating contracts with longer terms, with higher per-unit pricing and for a greater percentage of our available capacity. In addition, weather-related factors such as hurricanes and other weather related events may impact our facilities and access to them and, thus, the profitability of certain terminals for limited periods of time or, in relatively rare cases of severe damage to facilities, for longer periods. In addition to liquid and bulk terminals, we also own Jones Act tankers in our Terminals business segment. As of December 31, 2018, we have sixteen Jones Act qualified tankers that operate in the marine transportation of crude oil, condensate and refined products in the U.S. and are currently operating pursuant to multi-year fixed price charters with major integrated oil companies, major refiners and the U.S. Military Sealift Command.

The CO_2 source and transportation business primarily has third-party contracts with minimum volume requirements, which as of December 31, 2018, had a remaining average contract life of approximately nine years. CO_2 sales contracts vary from customer to customer and have evolved over time as supply and demand conditions have changed. Our recent contracts have generally provided for a delivered price tied to the price of crude oil, but with a floor price. On a volume-weighted basis, for third-party contracts making deliveries in 2019, and utilizing the average oil price per barrel contained in our 2019 budget, approximately 97% of our revenue is based on a fixed fee or floor price, and 3% fluctuates with the price of oil. In the long-term, our success in this portion of the CO_2 business segment is driven by the demand for CO_2. However, short-term changes in the demand for CO_2 typically do not have a significant impact on us due to the required minimum sales volumes under many of our contracts. In the CO_2 business segment's oil and gas producing activities, we monitor the amount of capital we expend in relation to the amount of production that we expect to add. In that regard, our production during any period is an important measure. In addition, the revenues we receive from our crude oil and NGL sales are affected by the prices we realize from the sale of these products. Over the long-term, we will tend to receive prices that are dictated by the demand and overall market price for these products. In the shorter term, however, market prices are likely not indicative of the revenues we will receive due to our risk management, or hedging, program, in which the prices to be realized for certain of our future sales quantities are fixed, capped or bracketed through the use of financial derivative contracts, particularly for crude oil. The realized weighted average crude oil price per barrel, with the hedges allocated to oil, was $57.83 per barrel in 2018, $58.40 per barrel in 2017 and $61.52 per barrel in 2016. Had we not used energy derivative contracts to transfer commodity price risk, our crude oil sales prices would have averaged $58.63 per barrel in 2018, $49.61 per barrel in 2017 and $41.36 per barrel in 2016.

Also, see Note 16 "*Revenue Recognition*" to our consolidated financial statements for more information about the types of contracts and revenues recognized for each of our segments.

Investment in Ruby

In January 2019, Pacific Gas and Electric (PG&E) filed for Chapter 11 bankruptcy protection. Our exposure to PG&E is limited to our $750 million equity investment in Ruby and an approximate $55 million note receivable from Ruby, where PG&E is Ruby's largest customer. PG&E represents approximately $93 million of annual revenues on Ruby, and our partner's preferred equity interest in Ruby is senior to our interest. Despite the bankruptcy filing, Ruby continues to perform under its existing service contracts with PG&E, and PG&E has provided credit support on its trade payables to Ruby through a prepayment arrangement. While the ultimate outcome of the bankruptcy proceedings remains uncertain, there is the potential for Ruby's existing contracts with PG&E to be canceled in the bankruptcy process. Any cancellation of these contracts could negatively impact Ruby's future revenues and require us to evaluate our investment in Ruby for an other than temporary impairment. This could result in a material impairment of our investment in Ruby at the time such events become known.

KML

Sale of Trans Mountain Pipeline System and Its Expansion Project

On August 31, 2018, KML completed the sale of the TMPL, the TMEP, the Puget Sound pipeline system and Kinder Morgan Canada Inc., the Canadian employer of our staff that operate the business, which were indirectly acquired by the Government of Canada through Trans Mountain Corporation (a subsidiary of the Canada Development Investment Corporation) for cash consideration of C$4.43 billion (U.S.$3.4 billion), which is the contractual purchase price of C$4.5 billion net of a preliminary working capital adjustment (the "TMPL Sale"). These assets comprised our Kinder Morgan Canada business segment. We recognized a pre-tax gain from the TMPL Sale of $596 million within "Loss on impairments and divestitures, net" in our accompanying consolidated statement of income during the year ended December 31, 2018, including an incremental working capital adjustment of $26 million accrued as of December 31, 2018.

On January 3, 2019, pursuant to KML's shareholders' approval on November 29, 2018, KML distributed to its shareholders as a return of capital, the net proceeds from the TMPL Sale, after capital gains taxes, customary purchase price adjustments and the repayment of debt outstanding under a temporary KML credit facility (see Note 9 "*Debt—Credit Facilities and Restrictive Covenants—KML*"). KML's public owners of its restricted voting shares, reflected as noncontrolling interests by us, received approximately $0.9 billion (C$1.2 billion), and part of our approximate 70% portion of the net proceeds of $1.9 billion (C$2.5 billion) (after Canadian tax) were used to immediately repay our outstanding commercial paper borrowings of $0.4 billion, and in February 2019, to pay down approximately $1.3 billion of maturing long-term debt. To facilitate the return of capital and provide flexibility for KML's dividends going forward, KML's shareholders also approved a reduction in the stated capital of its restricted voting shares by C$1.45 billion, which was recorded in the fourth quarter of 2018, along with a "reverse stock split" of KML's restricted voting shares, and KML's special voting shares that we own, on a one-for-three basis (three shares consolidating to one share) which occurred on January 4, 2019.

KML continues to manage a portfolio of strategic infrastructure assets across Western Canada, including (i) the crude terminal facilities, which constitute the largest merchant terminal storage position in the Edmonton market and the largest origination crude by rail loading facility in North America; (ii) the Vancouver Wharves Terminal, the largest mineral concentrate export/import facility on the west coast of North America; (iii) the Jet Fuel pipeline system; and (iv) the Canadian portion of the U.S. and Canadian Cochin pipeline system. These KML assets are part of our Products Pipelines and Terminals business segments.

KML IPO

The interest in the Canadian business operations that we sold to the public on May 30, 2017 in KML's IPO represented an interest in all our operating assets in our Kinder Morgan Canada business segment and our operating Canadian assets in our Terminals and Products Pipelines business segments. These Canadian assets included the TMPL, TMEP and the Puget Sound pipeline system, all of which have been sold in the TMPL Sale, the Jet Fuel pipeline system, the Canadian portion of the Cochin pipeline system, the Vancouver Wharves Terminal and the North 40 Terminal; as well as three jointly controlled investments: the Edmonton Rail Terminal, the Alberta Crude Terminal and the Base Line Terminal.

Subsequent to the IPO, we retained control of KML, and as a result, it remains consolidated in our consolidated financial statements. The public ownership of the KML restricted voting shares is reflected within "Noncontrolling interests" in our

consolidated statements of stockholders' equity and consolidated balance sheets. Earnings attributable to the public ownership of KML are presented in "Net income attributable to noncontrolling interests" in our consolidated statements of income for the periods presented after May 30, 2017. KML transacts in and/or uses the Canadian dollar as the functional currency, which affects our segment results due to the variability in U.S. - Canadian dollar exchange rates.

Subsequent to its IPO, KML has obtained a credit facility and completed two preferred share offerings. KML continues to be a self-funding entity and we do not anticipate making contributions to fund its growth or operations.

2017 Tax Reform

While the 2017 Tax Reform will ultimately be moderately positive for us, the reduced corporate income tax rate caused certain of our deferred-tax assets to be revalued at 21% versus 35% at the end of 2017. Although there is no impact to the underlying related deductions, which can continue to be used to offset future taxable income, we took an estimated approximately $1.4 billion non-cash accounting charge in 2017. The positive impacts of the law include the reduced corporate income tax rate and the fact that several of our U.S. business units (essentially all but our interstate natural gas pipelines) will be able to deduct 100% of their capital expenditures through 2022. See Note 5 "*Income Taxes*" to our consolidated financial statements.

Critical Accounting Policies and Estimates

Accounting standards require information in financial statements about the risks and uncertainties inherent in significant estimates, and the application of GAAP involves the exercise of varying degrees of judgment. Certain amounts included in or affecting our consolidated financial statements and related disclosures must be estimated, requiring us to make certain assumptions with respect to values or conditions that cannot be known with certainty at the time our financial statements are prepared. These estimates and assumptions affect the amounts we report for our assets and liabilities, our revenues and expenses during the reporting period, and our disclosure of contingent assets and liabilities at the date of our financial statements. We routinely evaluate these estimates, utilizing historical experience, consultation with experts and other methods we consider reasonable in the particular circumstances. Nevertheless, actual results may differ significantly from our estimates, and any effects on our business, financial position or results of operations resulting from revisions to these estimates are recorded in the period in which the facts that give rise to the revision become known.

In preparing our consolidated financial statements and related disclosures, examples of certain areas that require more judgment relative to others include our use of estimates in determining: (i) revenue recognition; (ii) income taxes; (iii) the economic useful lives of our assets and related depletion rates; (iv) the fair values used to (a) assign purchase price from business combinations, (b) determine possible asset and equity investment impairment charges, and (c) calculate the annual goodwill impairment test; (v) reserves for environmental claims, legal fees, transportation rate cases and other litigation liabilities; (vi) provisions for uncollectible accounts receivables; (vii) computing the gain or loss, if any, on assets sold in whole or in part; and (viii) exposures under contractual indemnifications.

For a summary of our significant accounting policies, see Note 2 "*Summary of Significant Accounting Policies*" to our consolidated financial statements. We believe that certain accounting policies are of more significance in our consolidated financial statement preparation process than others, which policies are discussed as follows.

Environmental Matters

With respect to our environmental exposure, we utilize both internal staff and external experts to assist us in identifying environmental issues and in estimating the costs and timing of remediation efforts. We expense or capitalize, as appropriate, environmental expenditures that relate to current operations, and we record environmental liabilities when environmental assessments and/or remedial efforts are probable and we can reasonably estimate the costs. Generally, we do not discount environmental liabilities to a net present value, and we recognize receivables for anticipated associated insurance recoveries when such recoveries are deemed to be probable. We record at fair value, where appropriate, environmental liabilities assumed in a business combination.

Our recording of our environmental accruals often coincides with our completion of a feasibility study or our commitment to a formal plan of action, but generally, we recognize and/or adjust our environmental liabilities following routine reviews of potential environmental issues and claims that could impact our assets or operations. These adjustments may result in increases in environmental expenses and are primarily related to quarterly reviews of potential environmental issues and resulting environmental liability estimates. In making these liability estimations, we consider the effect of environmental compliance, pending legal actions against us, and potential third party liability claims. For more information on environmental matters, see

Part I, Items 1 and 2 "*Business and Properties—(c) Narrative Description of Business—Environmental Matters.*" For more information on our environmental disclosures, see Note 18 "*Litigation, Environmental and Other Contingencies*" to our consolidated financial statements.

Legal and Regulatory Matters

Many of our operations are regulated by various U.S. and Canadian regulatory bodies and we are subject to legal and regulatory matters as a result of our business operations and transactions. We utilize both internal and external counsel in evaluating our potential exposure to adverse outcomes from orders, judgments or settlements. In general, we expense legal costs as incurred. When we identify contingent liabilities, we identify a range of possible costs expected to be required to resolve the matter. Generally, if no amount within this range is a better estimate than any other amount, we record a liability equal to the low end of the range. Any such liability recorded is revised as better information becomes available. Accordingly, to the extent that actual outcomes differ from our estimates, or additional facts and circumstances cause us to revise our estimates, our earnings will be affected. For more information on legal proceedings, see Note 18 "*Litigation, Environmental and Other Contingencies*" to our consolidated financial statements.

Intangible Assets

Intangible assets are those assets which provide future economic benefit but have no physical substance. Identifiable intangible assets having indefinite useful economic lives, including goodwill, are not subject to regular periodic amortization, and such assets are not to be amortized until their lives are determined to be finite. Instead, the carrying amount of a recognized intangible asset with an indefinite useful life must be tested for impairment annually or on an interim basis if events or circumstances indicate that the fair value of the asset has decreased below its carrying value. We evaluate goodwill for impairment on May 31 of each year. At year end and during other interim periods we evaluate our reporting units for events and changes that could indicate that it is more likely than not that the fair value of a reporting unit could be less than its carrying amount.

Excluding goodwill, our other intangible assets include customer contracts, relationships and agreements, and technology-based assets. These intangible assets have definite lives, are being amortized in a systematic and rational manner over their estimated useful lives, and are reported separately as "Other intangibles, net" in our accompanying consolidated balance sheets.

Hedging Activities

We engage in a hedging program that utilizes derivative contracts to mitigate (offset) our exposure to fluctuations in energy commodity prices, foreign currency exposure on Euro denominated debt and net investments in foreign operations, and to balance our exposure to fixed and variable interest rates, and we believe that these hedges are generally effective in realizing these objectives. According to the provisions of GAAP, to be considered effective, changes in the value of a derivative contract or its resulting cash flows must substantially offset changes in the value or cash flows of the item being hedged, and any ineffective portion of the hedge gain or loss and any component excluded from the computation of the effectiveness of the derivative contract must be reported in earnings immediately.

All of our derivative contracts are recorded at estimated fair value. We utilize published prices, broker quotes, and estimates of market prices to estimate the fair value of these contracts; however, actual amounts could vary materially from estimated fair values as a result of changes in market prices. In addition, changes in the methods used to determine the fair value of these contracts could have a material effect on our results of operations. We do not anticipate future changes in the methods used to determine the fair value of these derivative contracts. For more information on our hedging activities, see Note 14 "*Risk Management*" to our consolidated financial statements.

Employee Benefit Plans

We reflect an asset or liability for our pension and other postretirement benefit plans based on their overfunded or underfunded status. As of December 31, 2018, our pension plans were underfunded by $702 million, and our other postretirement benefits plans were underfunded by $33 million. Our pension and other postretirement benefit obligations and net benefit costs are primarily based on actuarial calculations. We use various assumptions in performing these calculations, including those related to the return that we expect to earn on our plan assets, the rate at which we expect the compensation of our employees to increase over the plan term, the estimated cost of health care when benefits are provided under our plan and other factors. A significant assumption we utilize is the discount rate used in calculating our benefit obligations. We utilize a full yield curve approach in the estimation of the service and interest cost components of net periodic benefit cost (credit) for our pension and other postretirement benefit plans which applies the specific spot rates along the yield curve used in the

determination of the benefit obligation to their underlying projected cash flows. The selection of these assumptions is further discussed in Note 10 *"Share-based Compensation and Employee Benefits"* to our consolidated financial statements.

Actual results may differ from the assumptions included in these calculations, and as a result, our estimates associated with our pension and other postretirement benefits can be, and often are, revised in the future. The income statement impact of the changes in the assumptions on our related benefit obligations are deferred and amortized into income over either the period of expected future service of active participants, or over the expected future lives of inactive plan participants. As of December 31, 2018, we had deferred net losses of approximately $536 million in pre-tax accumulated other comprehensive loss related to our pension and other postretirement benefits.

The following table shows the impact of a 1% change in the primary assumptions used in our actuarial calculations associated with our pension and other postretirement benefits for the year ended December 31, 2018:

	Pension Benefits		Other Postretirement Benefits	
	Net benefit cost (income)	Change in funded status(a)	Net benefit cost (income)	Change in funded status(a)
	(In millions)			
One percent increase in:				
Discount rates	$ (11)	$ 183	$ (1)	$ 25
Expected return on plan assets	(21)	—	(3)	—
Rate of compensation increase	2	(7)	—	—
Health care cost trends	—	—	3	(16)
One percent decrease in:				
Discount rates	13	(214)	1	(29)
Expected return on plan assets	21	—	3	—
Rate of compensation increase	(2)	7	—	—
Health care cost trends	—	—	(3)	14

(a) Includes amounts deferred as either accumulated other comprehensive income (loss) or as a regulatory asset or liability for certain of our regulated operations.

Income Taxes

Income tax expense is recorded based on an estimate of the effective tax rate in effect or to be in effect during the relevant periods. Changes in tax legislation are included in the relevant computations in the period in which such changes are enacted. We do business in a number of states with differing laws concerning how income subject to each state's tax structure is measured and at what effective rate such income is taxed. Therefore, we must make estimates of how our income will be apportioned among the various states in order to arrive at an overall effective tax rate. Changes in our effective rate, including any effect on previously recorded deferred taxes, are recorded in the period in which the need for such change is identified.

Deferred income tax assets and liabilities are recognized for temporary differences between the basis of assets and liabilities for financial reporting and tax purposes. Deferred tax assets are reduced by a valuation allowance for the amount that is more likely than not to not be realized. While we have considered estimated future taxable income and prudent and feasible tax planning strategies in determining the amount of our valuation allowance, any change in the amount that we expect to ultimately realize will be included in income in the period in which such a determination is reached.

In determining the deferred income tax asset and liability balances attributable to our investments, we apply an accounting policy that looks through our investments. The application of this policy resulted in no deferred income taxes being provided on the difference between the book and tax basis on the non-tax-deductible goodwill portion of our investments, including KMI's investment in its wholly-owned subsidiary, KMP.

Results of Operations

Overview

Our management evaluates our performance primarily using the measures of Segment EBDA and, as discussed below under *"—Non-GAAP Financial Measures,"* DCF, and Segment EBDA before certain items. Segment EBDA is a useful measure of our operating performance because it measures the operating results of our segments before DD&A and certain expenses that are generally not controllable by our business segment operating managers, such as general and administrative expenses, interest expense, net, and income taxes. Our general and administrative expenses include such items as unallocated employee benefits, insurance, rentals, unallocated litigation and environmental expenses, and shared corporate services including accounting, information technology, human resources and legal services.

In our discussions of the operating results of individual businesses that follow, we generally identify the important fluctuations between periods that are attributable to dispositions and acquisitions separately from those that are attributable to businesses owned in both periods.

Effective January 1, 2019, certain assets were transferred between Natural Gas Pipelines, Products Pipelines and Terminals business segments, which are not reflected in the following business segment Management Discussion and Analysis tables below.

Consolidated Earnings Results

	Year Ended December 31,		
	2018	2017	2016
		(In millions)	
Segment EBDA(a)			
Natural Gas Pipelines	$ 3,580	$ 3,487	$ 3,211
Products Pipelines	1,173	1,231	1,067
Terminals	1,171	1,224	1,078
CO_2	759	847	827
Kinder Morgan Canada(b)	720	186	181
Total segment EBDA(c)	7,403	6,975	6,364
DD&A	(2,297)	(2,261)	(2,209)
Amortization of excess cost of equity investments	(95)	(61)	(59)
General and administrative and corporate charges(d)	(588)	(660)	(652)
Interest, net(e)	(1,917)	(1,832)	(1,806)
Income before income taxes	2,506	2,161	1,638
Income tax expense(f)	(587)	(1,938)	(917)
Net income	1,919	223	721
Net income attributable to noncontrolling interests	(310)	(40)	(13)
Net income attributable to Kinder Morgan, Inc.	1,609	183	708
Preferred stock dividends	(128)	(156)	(156)
Net income available to common stockholders	$ 1,481	$ 27	$ 552

(a) Includes revenues, earnings from equity investments, and other, net, less operating expenses, loss on impairments and divestitures, net, loss on impairments and divestitures of equity investments, net and other income, net. Operating expenses include costs of sales, operations and maintenance expenses, and taxes, other than income taxes.

(b) As a result of the TMPL Sale on August 31, 2018, this segment does not have results of operations on a prospective basis.

Certain items affecting Total Segment EBDA (see "*—Non-GAAP Measures*" below)

(c) 2018, 2017 and 2016 amounts include net decreases in earnings of $269 million, $384 million and $1,121 million, respectively, related to the combined net effect of the certain items impacting Total Segment EBDA. The extent to which these items affect each of our business segments is discussed below in the footnotes to the tables within "*—Segment Earnings Results.*"

(d) 2018, 2017 and 2016 amounts include net increases in expense of $24 million and $15 million and a net decrease in expense of $13 million, respectively, related to the combined net effect of the certain items related to general and administrative and corporate charges disclosed below in "—*General and Administrative and Corporate Charges, Interest, net and Noncontrolling Interests.*"

(e) 2018, 2017 and 2016 amounts include a net increase in expense of $26 million and net decreases in expense of $39 million and $193 million, respectively, related to the combined net effect of the certain items related to interest expense, net disclosed below in "—*General and Administrative and Corporate Charges, Interest, net and Noncontrolling Interests.*"

(f) 2018, 2017 and 2016 amounts include a net decrease of $58 million and net increases in expense of $1,085 million and $18 million, respectively, related to the combined net effect of the certain items related to income tax expense representing the income tax provision on certain items plus discrete income tax items.

Year Ended December 31, 2018 vs. 2017

The certain item totals reflected in footnotes (c) through (e) to the table above accounted for $41 million of the increase in income before income taxes in 2018 as compared to 2017 (representing the difference between decreases of $319 million and $360 million from certain items in income before income taxes for 2018 and 2017, respectively). After giving effect to these certain items, which are discussed in more detail in the discussion that follows, the remaining increase of $304 million (12%) from the prior year in income before income taxes is primarily attributable to increased performance from our Natural Gas Pipelines, Products Pipelines, and CO_2 business segments and decreased general and administrative expense partially offset by increased DD&A expense, interest expense, net and lower earnings from our Kinder Morgan Canada business segment as a result of the TMPL Sale and our Terminals business segment.

Year Ended December 31, 2017 vs. 2016

The certain item totals reflected in footnotes (c) through (e) to the table above accounted for $555 million of the increase in income before income taxes in 2017 as compared to 2016 (representing the difference between decreases of $360 million and $915 million from certain items in income before income taxes for 2017 and 2016, respectively). After giving effect to these certain items, which are discussed in more detail in the discussion that follows, the remaining decrease of $32 million (1%) from the prior year in income before income taxes is primarily attributable to decreased performance from our Natural Gas Pipelines business segment, largely associated with our sale of a 50% interest in SNG to The Southern Company (Southern Company) on September 1, 2016, and increased DD&A expense partially offset by decreased general and administrative expense and decreased interest expense.

Non-GAAP Financial Measures

Our non-GAAP performance measures are DCF, both in the aggregate and per share, and Segment EBDA before certain items. Certain items, as used to calculate our non-GAAP measures, are items that are required by GAAP to be reflected in net income, but typically either (i) do not have a cash impact (for example, asset impairments), or (ii) by their nature are separately identifiable from our normal business operations and in our view are likely to occur only sporadically (for example, certain legal settlements, enactment of new tax legislation and casualty losses).

Our non-GAAP performance measures described below should not be considered alternatives to GAAP net income or other GAAP measures and have important limitations as analytical tools. Our computations of DCF and Segment EBDA before certain items may differ from similarly titled measures used by others. You should not consider these non-GAAP performance measures in isolation or as substitutes for an analysis of our results as reported under GAAP. DCF should not be used as an alternative to net cash provided by operating activities computed under GAAP. Management compensates for the limitations of these non-GAAP performance measures by reviewing our comparable GAAP measures, understanding the differences between the measures and taking this information into account in its analysis and its decision making processes.

DCF

DCF is calculated by adjusting net income available to common stockholders before certain items for DD&A, total book and cash taxes, sustaining capital expenditures and other items. DCF is a significant performance measure useful to management and external users of our financial statements in evaluating our performance and in measuring and estimating the ability of our assets to generate cash earnings after servicing our debt and preferred stock dividends, paying cash taxes and expending sustaining capital that could be used for discretionary purposes such as common stock dividends, stock repurchases, retirement of debt, or expansion capital expenditures. We believe the GAAP measure most directly comparable to DCF is net income available to common stockholders. A reconciliation of DCF to net income available to common stockholders is provided in the table below. DCF per common share is DCF divided by average outstanding common shares, including restricted stock awards that participate in dividends.

Reconciliation of Net Income Available to Common Stockholders to DCF

	Year Ended December 31,		
	2018	2017	2016
		(In millions)	
Net Income Available to Common Stockholders	$ 1,481	$ 27	$ 552
Add/(Subtract):			
Certain items before book tax(a)	355	141	915
Noncontrolling interest certain items(b)	240	—	(8)
Book tax certain items(c)	(58)	(77)	18
Impact of 2017 Tax Reform(d)	(36)	1,381	—
Total certain items	501	1,445	925
Net income available to common stockholders before certain items	1,982	1,472	1,477
Add/(Subtract):			
DD&A expense(e)	2,752	2,684	2,617
Total book taxes(f)	710	957	993
Cash taxes(g)	(77)	(72)	(79)
Other items(h)	15	29	43
Sustaining capital expenditures(i)	(652)	(588)	(540)
DCF	$ 4,730	$ 4,482	$ 4,511
Weighted average common shares outstanding for dividends(j)	2,228	2,240	2,238
DCF per common share	$ 2.12	$ 2.00	$ 2.02
Declared dividend per common share	0.80	0.50	0.50

(a) Consists of certain items summarized in footnotes (c) through (e) to the "*—Results of Operations—Consolidated Earnings Results*" table included above, and described in more detail below in the footnotes to tables included in "*—Segment Earnings Results*" and "*—General and Administrative and Corporate Charges, Interest, net and Noncontrolling Interests.*"

(b) Represents noncontrolling interests share of certain items. 2018 includes KML shareholders' approximately 30% share of the gain on the TMPL Sale.

(c) Represents income tax provision on certain items plus discrete income tax items.

(d) 2018 amount represents 2017 Tax Reform provisional adjustments including our share of certain equity investees' 2017 Tax Reform provisional adjustments related to our FERC regulated business. 2017 amount includes book tax certain items and $219 million pre-tax certain items related to our FERC regulated business. See Note 5 "*Income Taxes*" to our consolidated financial statements.

(e) Includes DD&A and amortization of excess cost of equity investments. Also includes our share of certain equity investee's DD&A, net of the noncontrolling interests' portion of KML DD&A and consolidating joint venture partners' share of DD&A of $360 million, $362 million and $349 million in 2018, 2017 and 2016, respectively.

(f) Excludes book tax certain items of $58 million, $(1,085) million and $(18) million for 2018, 2017 and 2016, respectively. 2018, 2017 and 2016 amounts also include $65 million, $104 million and $94 million, respectively, of our share of taxable equity investees' book taxes, net of the noncontrolling interests' portion of KML book taxes.

(g) Includes our share of taxable equity investees' cash taxes of $(68) million, $(69) million and $(76) million in 2018, 2017 and 2016, respectively.

(h) Includes pension contributions and non-cash compensation associated with our restricted stock program.

(i) Includes our share of (i) certain equity investees'; (ii) KML's; and (iii) certain consolidating joint venture subsidiaries' sustaining capital expenditures of $(105) million, $(107) million and $(90) million in 2018, 2017 and 2016, respectively.

(j) Includes restricted stock awards that participate in common share dividends.

Segment EBDA Before Certain Items

Segment EBDA before certain items is used by management in its analysis of segment performance and management of our business. General and administrative expenses generally are not under the control of our segment operating managers, and therefore, are not included when we measure business segment operating performance. We believe Segment EBDA before certain items is a significant performance metric because it provides us and external users of our financial statements additional

insight into the ability of our business segments to generate segment cash earnings on an ongoing basis. We believe it is useful to investors because it is a performance measure that management uses to allocate resources to our segments and assess each segment's performance. We believe the GAAP measure most directly comparable to Segment EBDA before certain items is Segment EBDA.

In the tables for each of our business segments under *"— Segment Earnings Results"* below, Segment EBDA before certain items and Revenues before certain items are calculated by adjusting the Segment EBDA and Revenues for the applicable certain item amounts, which are totaled in the tables and described in the footnotes to those tables. Revenues before certain items is provided to further enhance our analysis of Segment EBDA before certain items and is not a performance measure.

Segment Earnings Results

Natural Gas Pipelines

	Year Ended December 31,		
	2018	2017	2016
	(In millions, except operating statistics)		
Revenues(a)	$ 9,015	$ 8,618	$ 8,005
Operating expenses(b)	(5,353)	(5,457)	(4,393)
Loss on impairments and divestitures, net(c)	(594)	(27)	(200)
Other income	1	1	1
Earnings (losses) from equity investments(d)	474	303	(221)
Other, net(e)	37	49	19
Segment EBDA(a)(b)(c)(d)(e)	3,580	3,487	3,211
Certain items(a)(b)(c)(d)(e)	622	392	825
Segment EBDA before certain items	$ 4,202	$ 3,879	$ 4,036
Change from prior period	Increase/(Decrease)		
Revenues before certain items	$ 363	$ 594	
Segment EBDA before certain items	$ 323	$ (157)	
Natural gas transport volumes (BBtu/d)(f)	32,821	29,108	28,095
Natural gas sales volumes (BBtu/d)	2,472	2,341	2,335
Natural gas gathering volumes (BBtu/d)(f)	2,972	2,647	2,963
Crude/condensate gathering volumes (MBbl/d)(f)	307	273	292

Certain items affecting Segment EBDA

(a) 2018 and 2017 amounts include an increases in revenues of $24 million and $8 million, respectively, and 2016 amount includes a decrease in revenues of $50 million, all related to non-cash mark-to-market derivative contracts used to hedge forecasted natural gas, NGL and crude oil sales. 2018 amount also includes increases in revenue of (i) $9 million related to a transportation contract refund; (ii) $5 million related to the early termination of a long-term natural gas transportation contract; and (iii) $4 million from other certain items. 2016 amount also includes an increase in revenue of $39 million associated with revenue collected on a customer's early buyout of a long-term natural gas storage contract.

(b) 2018 amount includes (i) an increase in earnings of $7 million as a result of a property tax refund; (ii) an increase in earnings of $6 million related to the release of certain sales and use tax reserves; and (iii) a decrease in earnings of $2 million related to other certain items. 2017 amount includes a decrease in earnings of (i) $166 million related to the impact of the 2017 Tax Reform; (ii) $3 million related to the non-cash impairment loss associated with the Colden storage field; and (iii) $3 million from other certain items. 2016 amount includes a decrease in earnings of $3 million from other certain items.

(c) 2018 amount includes a decrease in earnings of $600 million related to a non-cash loss on impairment of certain gathering and processing assets in Oklahoma and an increase in earnings of $1 million related to other certain item. 2017 amount includes a decrease in earnings of $27 million related to the non-cash impairment loss associated with the Colden storage field. 2016 amount includes (i) a decrease in earnings of $106 million of project write-offs; (ii) an $84 million pre-tax loss on the sale of a 50% interest in our SNG natural gas pipeline system; and (iii) an $11 million decrease in earnings from other certain items.

(d) 2018 amount includes (i) a net loss of $89 million in our equity investment in Gulf LNG Holdings Group, LLC (Gulf LNG), due to a ruling by an arbitration panel affecting a customer contract, which resulted in a non-cash impairment of our investment partially offset

by our share of earnings recognized by Gulf LNG on the respective customer contract; (ii) an increase in earnings of $41 million for our share of certain equity investees' 2017 Tax Reform provisional adjustments; and (iii) a decrease in earnings of $4 million related to other certain items. 2017 amount includes (i) a $150 million non-cash impairment loss related to our investment in FEP; (ii) a decrease in earnings of $58 million related to 2017 Tax Reform adjustments recorded by equity investees; (iii) an increase in earnings from an equity investment of $22 million on the sale of a claim related to the early termination of a long-term natural gas transportation contract; (iv) an increase in earnings from an equity investment of $12 million related to a customer contract settlement; (v) a decrease in earnings of $12 million related to early termination of debt at an equity investee; and (vi) a decrease in earnings of $10 million related to a non-cash impairment at an equity investee. 2016 amount includes (i) $606 million of non-cash impairment losses primarily related to our investments in MEP and Ruby; (ii) an increase in earnings of $18 million related to the early termination of a customer contract at an equity investee; and (iii) a decrease in earnings of $12 million related to other certain items at equity investees.

(e) 2018, 2017 and 2016 amounts include decreases in earnings of $24 million, $5 million and $10 million, respectively, related to certain litigation matters.

Other

(f) Joint venture throughput is reported at our ownership share.

Below are the changes in both Segment EBDA before certain items and revenues before certain items in 2018 and 2017, when compared with the respective prior year:

Year Ended December 31, 2018 versus Year Ended December 31, 2017

	Segment EBDA before certain items increase/(decrease)		Revenues before certain items increase/(decrease)	
	(In millions, except percentages)			
Midstream	$ 150	14%	$ 142	3%
West Region	100	11%	95	8%
North Region	43	4%	103	7%
South Region	33	5%	7	2%
Other	(3)	150%	(3)	150%
Intrasegment eliminations	—	—%	19	43%
Total Natural Gas Pipelines	$ 323	8%	$ 363	4%

The changes in Segment EBDA for our Natural Gas Pipelines business segment are further explained by the following discussion of the significant factors driving Segment EBDA before certain items in the comparable years of 2018 and 2017:

- Midstream's increase of $150 million (14%) was primarily due to increased earnings from Texas intrastate natural gas pipeline operations, KinderHawk, Hiland Midstream and South Texas Midstream. Texas intrastate natural gas pipeline operations were favorably impacted by higher volumes with new and existing customers serving the Mexico and Texas Gulf Coast industrial markets partially offset by lower park and loan revenues and storage margins. KinderHawk and South Texas Midstream benefited from increased drilling and production in the Haynesville and Eagle Ford basins, respectively. Hiland Midstream increased earnings were primarily due to higher gas and crude oil volumes and higher NGL sales prices. While these factors also drove an increase in revenue, these increases in revenues were partially offset by the effect of the January 1, 2018 adoption of Topic 606 which caused a corresponding decrease in cost of goods sold;
- West Region's increase of $100 million (11%) was primarily due to higher earnings from EPNG, CIG and CPGPL. EPNG experienced higher volumes in 2018 from increased Permian basin-related activity and associated capacity sales. CIG and CPGPL earnings were higher due to continued growing production in the Denver Julesburg basin;
- North Region's increase of $43 million (4%) was primarily due to an increase in equity earnings from NGPL, and higher earnings from TGP and KMLP. NGPL increase in earnings was due to increased Permian basin-related activity and lower interest expense resulting from a 2017 refinancing, partially offset by lower storage-related revenue. TGP and KMLP contributed increased earnings primarily from expansion projects recently placed in service; and
- South Region's increase of $33 million (5%) was primarily due to increases in equity earnings from Citrus and SNG, and an increase in earnings from SLNG, partially offset by a decrease in earnings from Southern Gulf LNG due to a loss of revenues from an arbitration ruling calling for a contract termination. Citrus had lower income tax expense due to the 2017 Tax Reform, and SNG increased earnings were from higher transportation revenues from increased system usage and non-recurring 2017 operating expenses. SLNG earnings were driven by higher capitalized AFUDC equity associated with the Elba Liquefaction project.

Year Ended December 31, 2017 versus Year Ended December 31, 2016

	Segment EBDA before certain items increase/(decrease)		Revenues before certain items increase/(decrease)	
	(In millions, except percentages)			
South Region	$ (143)	(18)%	$ (311)	(48)%
Midstream	(66)	(6)%	887	19%
West Region	(38)	(4)%	(39)	(3)%
North Region	84	7%	84	6%
Other	—	—%	(1)	50%
Intrasegment eliminations	6	100%	(26)	(144)%
Total Natural Gas Pipelines	$ (157)	(4)%	$ 594	7%

The changes in Segment EBDA for our Natural Gas Pipelines business segment are further explained by the following discussion of the significant factors driving Segment EBDA before certain items in the comparable years of 2017 and 2016:

- South Region's decrease of $143 million (18%) was primarily due to the sale of a 50% interest in SNG to Southern Company on September 1, 2016, partially offset by an increase in earnings from Elba Express primarily due to an expansion project placed in service in December 2016;
- Midstream's decrease of $66 million (6%) was primarily due to decreases in earnings from South Texas Midstream, KinderHawk and Oklahoma Midstream, partially offset by increased earnings from Texas intrastate natural gas pipeline operations and Altamont Midstream. South Texas Midstream lower earnings were primarily due to lower commodity based service revenues and residue gas sales as a result of lower volumes partially offset by higher NGL sales gross margin primarily due to rising NGL prices. KinderHawk experienced lower volumes, which lowered its earnings and Oklahoma Midstream's lower earnings were primarily due to lower volumes and unfavorable producer mix. Texas intrastate natural gas pipeline operations increased earnings were primarily due to higher transportation margins as a result of higher volumes and higher park and loan revenues partially offset by lower storage and sales margins. Altamont Midstream primarily increased earnings were due to higher natural gas and liquids revenues due to higher commodity prices and volumes. Texas intrastate natural gas pipeline operations, Hiland Midstream and Oklahoma Midstream had increases in revenues due to higher commodity prices which was largely offset by a corresponding increases in costs of sales;
- West Region's decrease of $38 million (4%) was primarily due to a decrease in earnings at CIG, partially offset by higher earnings at EPNG. CIG lower earnings were primarily due to a decrease in tariff rates effective January 1, 2017 as a result of a rate case settlement entered into in 2016. EPNG had higher earnings primarily due to higher transportation revenues driven by incremental Permian basin capacity sales and an increase in volumes due to the ramp up of existing customer volumes associated with an expansion project partially offset by increased operations and maintenance expense; and
- North Region's increase of $84 million (7%) was primarily due to higher earnings from TGP and an increase in equity earnings from NGPL. TGP's increase in earnings was primarily due to higher firm transportation revenues driven by incremental capacity sales and expansion projects recently placed in service. NGPL higher earnings were primarily due to lower interest expense due to a reduction in interest rates due to debt refinancing and the repayment of bank borrowings in 2017.

Products Pipelines

	Year Ended December 31,		
	2018	2017	2016
	(In millions, except operating statistics)		
Revenues	$ 1,713	$ 1,661	$ 1,649
Operating expenses(a)	(594)	(487)	(573)
Loss on impairments and divestitures, net(b)	(36)	—	(76)
Other income	2	—	—
Earnings from equity investments(c)	85	58	65
Other, net	3	(1)	2
Segment EBDA(a)(b)(c)	1,173	1,231	1,067
Certain items(a)(b)(c)	61	(38)	113
Segment EBDA before certain items	$ 1,234	$ 1,193	$ 1,180
Change from prior period	Increase/(Decrease)		
Revenues	$ 52	$ 12	
Segment EBDA before certain items	$ 41	$ 13	
Gasoline (MBbl/d)(d)	1,038	1,038	1,025
Diesel fuel (MBbl/d)	372	351	342
Jet fuel (MBbl/d)	302	297	288
Total refined product volumes (MBbl/d)(e)	1,712	1,686	1,655
NGL (MBbl/d)(e)	114	112	109
Crude and condensate (MBbl/d)(e)	345	327	324
Total delivery volumes (MBbl/d)	2,171	2,125	2,088
Ethanol (MBbl/d)(f)	126	117	115

Certain items affecting Segment EBDA

(a) 2018 amount includes (i) an increase in expense of $31 million associated with a certain Pacific operations litigation matter; (ii) an increase in earnings of $5 million as a result of a property tax refund; and (iii) a decrease in expense of $1 million related to other certain items. 2017 amount includes a decrease in expense of $34 million related to a right-of-way settlement and an increase in expense of $1 million related to hurricane repairs. 2016 amount includes increases in expense of $31 million of rate case liability estimate adjustments associated with prior periods and $20 million related to a legal settlement.

(b) 2018 amount includes a decrease in earnings of $36 million associated with a project write-off on the Utica Marcellus Texas pipeline. 2016 amount includes increases in expense of $65 million related to the Palmetto project write-off and $9 million of non-cash impairment charges related to the sale of a Transmix facility.

(c) 2017 amount includes an increase in equity earnings of $5 million related to the impact of the 2017 Tax Reform at an equity investee. 2016 amount includes a $12 million gain related to the sale of an equity investment.

Other

(d) Volumes include ethanol pipeline volumes.

(e) Joint Venture throughput is reported at our ownership share.

(f) Represents total ethanol volumes, including ethanol pipeline volumes included in gasoline volumes above.

Below are the changes in both Segment EBDA before certain items and revenues before certain items in 2018 and 2017, when compared with the respective prior year:

Year Ended December 31, 2018 versus Year Ended December 31, 2017

	Segment EBDA before certain items increase/(decrease)		Revenues before certain items increase/(decrease)	
	(In millions, except percentages)			
NGLs	$ 33	27%	$ 4	2%
Southeast Refined Products	26	11%	19	5%
Crude & Condensate	(15)	(4)%	15	4%
West Coast Refined Products	(3)	(1)%	14	2%
Total Products Pipelines	$ 41	3%	$ 52	3%

The changes in Segment EBDA for our Products Pipelines business segment are further explained by the following discussion of the significant factors driving Segment EBDA before certain items in the comparable years of 2018 and 2017:

- NGLs' increase of $33 million (27%) was primarily due to increases in earnings from Cochin pipeline and to a lesser extent an increase in earnings from equity earnings from Utopia, which went into service in 2018. Cochin's earnings were higher primarily due to foreign exchange transaction losses in 2017 primarily related to an intercompany note receivable, integrity work during 2017 and an expansion project placed in service during 2018;
- Southeast Refined Products' increase of $26 million (11%) was primarily due to increased equity earnings from Plantation pipeline and earnings from South East Terminals. Plantation pipeline earnings were higher primarily due to lower income tax expense due to the 2017 Tax Reform, lower operating expense attributable to a 2017 project write-off and product net gains as a result of higher product prices. South East Terminals earnings were favorably impacted primarily due to higher revenues as a result of expansion projects that were placed into service in the later part of 2017 and higher volumes with existing customers;
- Crude & Condensate's decrease of $15 million (4%) was primarily due to a decrease of earnings from Kinder Morgan Crude & Condensate Pipeline partially offset by an increase of Double H Pipeline earnings. The Kinder Morgan Crude & Condensate Pipeline lower earnings were primarily due to lower services revenues as a result of unfavorable rates on contract renewals partially offset by recognition of deficiency revenue. Double H Pipeline increase in earnings was primarily due to an increase in volumes and the recognition of deficiency revenue; and
- West Coast Refined Products' decrease of $3 million (1%) was primarily due to lower earnings from Pacific operations partially offset by an increase in Calnev earnings. Pacific operations earnings were lower primarily due to higher operating expenses driven by an unfavorable change in product gain/loss, an increase in 2018 environmental reserves and higher fuel and power costs. Calnev earnings were higher due to an increase in services revenues driven by an increase in volumes, the result of an interruption of service by a provider for a competing pipeline that also serves the Las Vegas market.

Year Ended December 31, 2017 versus Year Ended December 31, 2016

	Segment EBDA before certain items increase/(decrease)		Revenues before certain items increase/(decrease)	
	(In millions, except percentages)			
West Coast Refined Products	$ 7	1%	$ 11	2%
NGLs	4	3%	9	5%
Southeast Refined Products	3	1%	(9)	(2)%
Crude & Condensate	(1)	—%	1	—%
Total Products Pipelines	$ 13	1%	$ 12	1%

The changes in Segment EBDA for our Products Pipelines business segment are further explained by the following discussion of the significant factors driving Segment EBDA before certain items in the comparable years of 2017 and 2016:

- West Coast Refined Products' increase of $7 million (1%) was primarily due to improved earnings at both Pacific operations and Calnev. Pacific operations increase in earnings was primarily due to higher service revenues driven by an increase in volumes partially offset by a volume driven increase in power costs and an increase in right-of-way expense. Calnev earnings were higher primarily due to higher service revenues driven by higher volumes and a decrease in expense related to the reduction of a rate reserve;
- NGLs' increase of $4 million (3%) was primarily due to increased development fee revenues in 2017 for Utopia Pipeline ;
- Southeast Refined Products' increase of $3 million (1%) was primarily due to increased earnings at South East Terminals and to a lesser extent at Transmix processing operations, partially offset by our sale of a 50% interest in Parkway Pipeline on July 1, 2016. South East Terminals increased earnings were primarily due to higher revenues driven by higher volumes as a result of capital expansion projects being placed in service during 2017. The decrease in revenues was driven by lower sales volumes primarily due to the sale of our Indianola plant in August 2016 and lower brokered sales at the Dorsey plant due to an expired contract in May 2017; and
- Crude & Condensate's decrease of $1 million (—%) was primarily due a decrease in earnings on Kinder Morgan Crude & Condensate Pipeline resulting from higher cost of goods sold offset by an increase in earnings from Double Eagle primarily due to higher revenues driven by higher volumes and price.

Terminals

	Year Ended December 31,		
	2018	2017	2016
	(In millions, except operating statistics)		
Revenues(a)	$ 2,019	$ 1,966	$ 1,922
Operating expenses(b)	(818)	(788)	(768)
(Loss) gain on impairments and divestitures, net(c)	(54)	14	(99)
Earnings from equity investments(d)	22	24	19
Other, net	2	8	4
Segment EBDA(a)(b)(c)(d)	1,171	1,224	1,078
Certain items, net(a)(b)(c)(d)	34	(10)	91
Segment EBDA before certain items	$ 1,205	$ 1,214	$ 1,169
Change from prior period	Increase/(Decrease)		
Revenues before certain items	$ 55	$ 68	
Segment EBDA before certain items	$ (9)	$ 45	
Liquids tankage capacity available for service (MMBbl)	90.1	87.6	84.4
Liquids utilization %(e)	93.5%	93.6%	94.7%
Bulk transload tonnage (MMtons)	64.2	59.5	54.8
Ethanol (MMBbl)	61.7	68.1	66.7

Certain items affecting Segment EBDA

(a) 2018, 2017 and 2016 amounts include increases in revenues of $2 million, $9 million and $28 million, respectively, from the amortization of a fair value adjustment (associated with the below market contracts assumed upon acquisition) from our Jones Act tankers. 2017 amount also includes a decrease in revenues of $5 million related to other certain items.

(b) 2018 amount includes a decrease in expense of $18 million related to hurricane damage insurance recoveries, net of repair costs and an increase in expense of $1 million related to other certain item. 2017 amount includes (i) an increase in expense of $21 million related to hurricane repairs; (ii) a decrease in expense of $10 million related to accrued dredging costs; and (iii) a decrease in expense of $2 million related to other certain items. 2016 amount includes an increase in expense of $3 million related to other certain items.

(c) 2018 amount includes a net loss of $53 million on impairments and divestitures, net, primarily related to our Staten Island terminal. 2017 amount includes a gain of $23 million primarily related to the sale of a 40% membership interest in the Deeprock Development joint venture in July 2017 and losses of $8 million related to other divestitures and impairments, net. 2016 amount includes an expense of $109 million related to various losses on impairments and divestitures, net.

(d) 2016 amount includes an increase in earnings of $9 million related to our share of the settlement of a certain litigation matter at an equity investee and a decrease in earnings of $16 million related to various losses on impairments and divestitures of equity investments, net.

Other

(e) The ratio of our tankage capacity in service to tankage capacity available for service.

Below are the changes in both Segment EBDA before certain items and revenues before certain items in 2018 and 2017, when compared with the respective prior year:

Year Ended December 31, 2018 versus Year Ended December 31, 2017

	Segment EBDA before certain items increase/(decrease)		Revenues before certain items increase/(decrease)	
	(In millions, except percentages)			
Northeast	$ (19)	(15)%	$ (20)	(9)%
Gulf Central	(19)	(22)%	(19)	(15)%
Southeast	(8)	(13)%	(4)	(3)%
Alberta Canada	(1)	(1)%	21	13%
Gulf Liquids	31	11%	37	9%
Midwest	6	8%	7	5%
Marine Operations	3	2%	40	13%
All others (including intrasegment eliminations)	(2)	(1)%	(7)	(2)%
Total Terminals	$ (9)	(1)%	$ 55	3%

The changes in Segment EBDA for our Terminals business segment are further explained by the following discussion of the significant factors driving Segment EBDA before certain items in the comparable years of 2018 and 2017:

- decrease of $19 million (15%) from our Northeast terminals primarily due to low utilization at our Staten Island terminal;
- decrease of $19 million (22%) from our Gulf Central terminals primarily related to the sale of a 40% membership interest in the Deeprock Development joint venture in July 2017 and the expiration of a crude by rail terminaling contract in August 2018 at our Deer Park Rail Terminal;
- decrease of $8 million (13%) from our Southeast terminals primarily due to the sale of certain terminal assets in December 2017 and higher operating expenses at our steel handling operations;
- decrease of $1 million (1%) from our Alberta Canada terminals primarily due to an increase in operating expenses associated with tank lease fees at our Edmonton South Terminal following the TMPL Sale and the impact of the expiration of a third party crude-by-rail terminaling contract at our Edmonton Rail Terminal joint venture partially offset by an increase in earnings due to the commencement of operations at our Base Line Terminal joint venture;
- increase of $31 million (11%) from our Gulf Liquids terminals primarily driven by contributions from expansion projects at our Pasadena Terminal and the Kinder Morgan Export Terminal as well as organic volume growth at several of our Houston Ship Channel locations;
- increase of $6 million (8%) from our Midwest terminals primarily driven by increased ethanol storage revenues and new liquids customer contracts entered into in 2018; and
- increase of $3 million (2%) from our Marine Operations primarily due to the incremental earnings from the March 2017, June 2017, July 2017 and December 2017 deliveries of the Jones Act tankers, the *American Freedom*, *Palmetto State, American Liberty* and *American Pride,* respectively, partially offset by decreased contributions from existing Jones Act tankers driven by lower charter rates and a reduced operating cost credit attributable to capitalized overhead.

Year Ended December 31, 2017 versus Year Ended December 31, 2016

	Segment EBDA before certain items increase/(decrease)		Revenues before certain items increase/(decrease)	
	(In millions, except percentages)			
Marine Operations	$ 42	27%	$ 72	31%
Gulf Liquids	20	8%	38	11%
Alberta, Canada	8	6%	7	5%
Midwest	7	11%	15	11%
Held for sale operations	(19)	(100)%	(55)	(90)%
Gulf Central	(17)	(16)%	(11)	(8)%
All others (including intrasegment eliminations)	4	1%	2	—%
Total Terminals	$ 45	4%	$ 68	4%

The changes in Segment EBDA for our Terminals business segment are further explained by the following discussion of the significant factors driving Segment EBDA before certain items in the comparable years of 2017 and 2016:

- increase of $42 million (27%) from our Marine Operations related to the incremental earnings from the May 2016, July 2016, September 2016, December 2016, March 2017, June 2017, July 2017 and December 2017 deliveries of the Jones Act tankers, the *Magnolia State, Garden State, Bay State, American Endurance, American Freedom, Palmetto State, American Liberty and American Pride*, respectively, partially offset by decreased charter rates on the *Golden State, Pelican State, Sunshine State, Empire State and Pennsylvania* Jones Act tankers;
- increase of $20 million (8%) from our Gulf Liquids terminals primarily related to higher volumes as a result of various expansion projects, including the recently commissioned Kinder Morgan Export Terminal and North Docks terminal, partially offset by lost revenue associated with Hurricane Harvey-related operational disruptions;
- increase of $8 million (6%) from our Alberta, Canada terminals primarily due to escalations in predominantly fixed, take-or-pay terminaling contracts and a true-up in terminal fees in connection with a favorable arbitration ruling;
- increase of $7 million (11%) from our Midwest terminals primarily driven by increased ethanol throughput revenues in 2017 and a new bulk storage and handling contract entered into fourth quarter 2016;
- decrease of $19 million (100%) from our sale of certain bulk terminal facilities to an affiliate of Watco Companies, LLC in December 2016 and early 2017; and
- decrease of $17 million (16%) from our Gulf Central terminals primarily related to the sale of a 40% membership interest in the Deeprock Development joint venture in July 2017 and the subsequent change in accounting treatment of our retained 11% membership interest as well as lost revenue associated with Hurricane Harvey-related operational disruptions.

CO_2

	Year Ended December 31,		
	2018	2017	2016
	(In millions, except operating statistics)		
Revenues(a)	$ 1,255	$ 1,196	$ 1,221
Operating expenses(b)	(453)	(394)	(399)
(Loss) gain on impairments and divestitures, net(c)	(79)	1	(19)
Earnings from equity investments(d)	36	44	24
Segment EBDA(a)(b)(c)(d)	759	847	827
Certain items(a)(b)(c)(d)	148	40	92
Segment EBDA before certain items	$ 907	$ 887	$ 919
Change from prior period	Increase/(Decrease)		
Revenues before certain items	$ 104	$ (43)	
Segment EBDA before certain items	$ 20	$ (32)	
Southwest Colorado CO_2 production (gross) (Bcf/d)(e)	1.2	1.3	1.2
Southwest Colorado CO_2 production (net) (Bcf/d)(e)	0.6	0.6	0.6
SACROC oil production (gross)(MBbl/d)(f)	29.3	27.9	29.3
SACROC oil production (net)(MBbl/d)(g)	24.4	23.2	24.4
Yates oil production (gross)(MBbl/d)(f)	16.7	17.3	18.4
Yates oil production (net)(MBbl/d)(g)	7.4	7.7	8.2
Katz, Goldsmith, and Tall Cotton Oil Production - Gross (MBbl/d)(f)	8.2	8.1	7.0
Katz, Goldsmith, and Tall Cotton Oil Production - Net (MBbl/d)(g)	7.0	6.9	5.9
NGL sales volumes (net)(MBbl/d)(g)	10.0	9.9	10.3
Realized weighted-average oil price per Bbl(h)	$ 57.83	$ 58.40	$ 61.52
Realized weighted-average NGL price per Bbl(i)	$ 32.21	$ 25.15	$ 17.91

Certain items affecting Segment EBDA

(a) 2018, 2017 and 2016 amounts include unrealized losses of $90 million and $54 million, and $63 million, respectively, related to derivative contracts used to hedge forecasted commodity sales. 2017 amount also includes an increase in revenues of $9 million related to the settlement of a CO_2 customer sales contract.

(b) 2018 amount includes an increase in earnings of $21 million as a result of a severance tax refund.

(c) 2018 amount includes oil and gas property impairments of $79 million. 2017 and 2016 amounts include a decrease in expense of $1 million and an increase in expense of $20 million, respectively, related to source and transportation project write-offs.

(d) 2017 and 2016 amounts include an increase in equity earnings of $4 million and a decrease in equity earnings of $9 million, respectively, for our share of a project write-off recorded by an equity investee.

Other

(e) Includes McElmo Dome and Doe Canyon sales volumes.

(f) Represents 100% of the production from the field. We own an approximately 97% working interest in the SACROC unit, an approximately 50% working interest in the Yates unit, an approximately 99% working interest in the Katz unit and a 99% working interest in the Goldsmith Landreth unit and a 100% working interest in the Tall Cotton field.

(g) Net after royalties and outside working interests.

(h) Includes all crude oil production properties.

(i) Includes all NGL sales.

Below are the changes in both Segment EBDA before certain items and revenues before certain items in 2018 and 2017, when compared with the respective prior year:

Year Ended December 31, 2018 versus Year Ended December 31, 2017

	Segment EBDA before certain items increase/(decrease)		Revenues before certain items increase/(decrease)	
	(In millions, except percentages)			
Oil and Gas Producing activities	$ 27	5%	$ 45	5%
Source and Transportation activities	(7)	(2)%	52	16%
Intrasegment eliminations	—	—%	7	18%
Total CO_2	$ 20	2%	$ 104	8%

The changes in Segment EBDA for our CO_2 business segment are further explained by the following discussion of the significant factors driving Segment EBDA before certain items in the comparable years of 2018 and 2017:

- increase of $27 million (5%) from our Oil and Gas Producing activities primarily due to increased revenues of $45 million primarily driven by higher NGL prices of $23 million and higher volumes of $22 million partially offset by an increase of $16 million in operating expenses and higher severance tax expense of $2 million; and
- decrease of $7 million (2%) from our Source and Transportation activities primarily due to lower other revenues of $5 million, higher ad valorem tax expense of $4 million and decreased earnings from an equity investee of $3 million partially offset by higher CO_2 sales of $3 million driven by higher contract sales prices of $25 million offset by lower volumes of $22 million and lower operating expenses of $2 million. The increase in revenues of $52 million is primarily due to the effect of the January 1, 2018 adoption of Topic 606, which increased both revenues and operating expenses (costs of sales) by $54 million, as discussed in Note 16 "*Revenue Recognition*" to our consolidated financial statements.

Year Ended December 31, 2017 versus Year Ended December 31, 2016

	Segment EBDA before certain items increase/(decrease)		Revenues before certain items increase/(decrease)	
	(In millions, except percentages)			
Source and Transportation activities	$ 2	1%	$ (9)	(3)%
Oil and Gas Producing activities	(34)	(6)%	(33)	(3)%
Intrasegment eliminations	—	—%	(1)	(3)%
Total CO_2	$ (32)	(3)%	$ (43)	(3)%

The changes in Segment EBDA for our CO_2 business segment are further explained by the following discussion of the significant factors driving Segment EBDA before certain items in the comparable years of 2017 and 2016:

- increase of $2 million (1%) from our Source and Transportation activities primarily due to increased earnings from an equity investee of $6 million and lower operating expenses of $5 million partially offset by lower revenues of $9 million driven by lower contract sales prices of $7 million and decreased volumes of $2 million; and
- decrease of $34 million (6%) from our Oil and Gas Producing activities primarily due to decreased revenues of $33 million driven by lower volumes of $22 million and lower commodity prices of $11 million, and higher operating expenses of $1 million.

Kinder Morgan Canada

	Year Ended December 31,		
	2018	2017	2016
	(In millions, except operating statistics)		
Revenues	$ 170	$ 256	$ 253
Operating expenses	(72)	(95)	(87)
Gain on divestiture(a)	596	—	—
Other, net	26	25	15
Segment EBDA(a)	720	186	181
Certain items(a)	(596)	—	—
Segment EBDA before certain items	$ 124	$ 186	$ 181
Change from prior period	Increase/(Decrease)		
Revenues	$ (86)	$ 3	
Segment EBDA before certain items	$ (62)	$ 5	
Transport volumes (MBbl/d)(b)	291	308	316

Certain items affecting Segment EBDA

(a) 2018 amount includes a gain of $596 million on the TMPL Sale.

Other

(b) Represents TMPL average daily volumes reported until date of sale, August 31, 2018.

For the comparable years of 2018 and 2017, the Kinder Morgan Canada business segment had a decrease in Segment EBDA of $62 million (33%) primarily due to the TMPL Sale on August 31, 2018 sale. As a result of the TMPL Sale on August 31, 2018, this business segment does not have results of operations on a prospective basis.

For the comparable years of 2017 and 2016, the Kinder Morgan Canada business segment had an increase in Segment EBDA of $5 million (3%) and an increase in revenues of $3 million (1%) primarily due to (i) higher capitalized equity financing costs due to spending on the TMEP; (ii) currency translation gains due to the strengthening of the Canadian dollar; and (iii) higher incentive revenues partly offset by lower state of Washington volumes and operating expense timing changes.

General and Administrative and Corporate Charges, Interest, net and Noncontrolling Interests

	Year Ended December 31,		
	2018	2017	2016
		(In millions)	
General and administrative and corporate charges(a)	$ 588	$ 660	$ 652
Certain items(a)	(24)	(15)	13
General and administrative and corporate charges before certain items(a)	$ 564	$ 645	$ 665
Interest, net(b)	$ 1,917	$ 1,832	$ 1,806
Certain items(b)	(26)	39	193
Interest, net, before certain items(b)	$ 1,891	$ 1,871	$ 1,999
Net income attributable to noncontrolling interests(c)	$ 310	$ 40	$ 13
Noncontrolling interests associated with certain items(c)	(240)	—	8
Net income attributable to noncontrolling interests before certain items(c)	$ 70	$ 40	$ 21

Certain items

(a) 2018 amount includes: (i) an increase in expense of $10 million associated with an estimated environmental reserve adjustment; (ii) a decrease in expense of $12 million related to the release of certain sales and use tax reserves; (iii) an increase in expense of $10 million of asset sale related costs; (iv) an increase in expense of $9 million related to certain corporate litigation matters; and (v) an increase in expense of $7 million related to other certain items. 2017 amount includes: (i) an increase in expense of $10 million for acquisition and divestiture related costs; (ii) an increase in expense of $4 million related to certain corporate litigation matters; (iii) an increase in expense of $5 million related to a pension settlement; and (iv) a decrease in expense of $4 million related to other certain items. 2016 amount includes increases in expense of (i) $14 million related to severance costs; and (ii) $12 million related to acquisition and divestiture costs; offset by decreases in expense of (i) $34 million related to certain corporate litigation matters; and (ii) $5 million related to other certain items.

(b) 2018, 2017 and 2016 amounts include: (i) decreases in interest expense of $32 million, $44 million and $115 million, respectively, related to amortization of non-cash debt fair value adjustments associated with acquisitions and (ii) an increase of $9 million and decreases of $3 million and $44 million, respectively, in interest expense related to non-cash true-ups of our estimates of swap ineffectiveness. 2018 amount also includes increases in interest expense of $47 million related to the write-off of capitalized KML credit facility fees and $2 million related to other certain items. 2017 amount also includes an $8 million increase in interest expense related to other certain items. 2016 amount also includes a $34 million decrease in interest expense related to certain litigation matters.

(c) 2018 amount is primarily associated with the $596 million gain on the TMPL Sale and is disclosed above in "*—Kinder Morgan Canada.*" The 2016 amount is associated with Natural Gas Pipelines segment certain items and disclosed above in "*—Natural Gas Pipelines.*"

General and administrative expenses and corporate charges before certain items decreased $81 million in 2018 and $20 million in 2017 when compared with the respective prior year. The decrease in 2018 as compared to 2017 was primarily due to higher capitalized costs of $54 million driven by the 2018 construction of Elba Liquefaction, Gulf Coast and Hiland facilities offset by lower spending on TGP, lower vacation and labor accruals of $18 million and $7 million from the sale of TMPL. The decrease in 2017 as compared to 2016 was primarily driven by the sale of a 50% interest in our SNG natural gas pipeline system (effective September 1, 2016), higher capitalized costs, lower state franchise taxes, legal and insurance costs, partially offset by higher labor accruals and pension costs.

In the table above, we report our interest expense as "net," meaning that we have subtracted interest income and capitalized interest from our total interest expense to arrive at one interest amount. Our consolidated interest expense net of interest income before certain items, increased $20 million in 2018 and decreased $128 million in 2017 when compared with the respective prior year. The increase in interest expense in 2018 as compared to 2017 was primarily due to higher short-term interest rates and higher short-term debt balance partially offset by lower average long-term debt balance. The decrease in interest expense in 2017 as compared to 2016 was primarily due to lower weighted average debt balances as proceeds from the May 2017 KML IPO and our September 2016 sale of a 50% interest in SNG were used to pay down debt, partially offset by a slightly higher overall weighted average interest rate on our outstanding debt.

We use interest rate swap agreements to convert a portion of the underlying cash flows related to our long-term fixed rate debt securities (senior notes) into variable rate debt in order to achieve our desired mix of fixed and variable rate debt. As of December 31, 2018 and 2017, approximately 31% and 28%, respectively, of the principal amount of our debt balances were subject to variable interest rates—either as short-term or long-term variable rate debt obligations or as fixed-rate debt converted to variable rates through the use of interest rate swaps. For more information on our interest rate swaps, see Note 14 "*Risk Management—Interest Rate Risk Management*" to our consolidated financial statements.

Net income attributable to noncontrolling interests, represents the allocation of our consolidated net income attributable to all outstanding ownership interests in our consolidated subsidiaries that are not owned by us. Net income attributable to noncontrolling interests before certain items increased $30 million in 2018 and $19 million in 2017 when compared with the respective prior year. The increases were primarily due to the May 30, 2017 sale of approximately 30% of our Canadian business operations to the public in the KML IPO.

Income Taxes

Year Ended December 31, 2018 versus Year Ended December 31, 2017

Our tax expense for the year ended December 31, 2018 is approximately $587 million, as compared with 2017 tax expense of $1,938 million. The $1,351 million decrease in tax expense is primarily due to (i) the decrease in the federal income tax rate as a result of the 2017 Tax Reform; and (ii) the decrease in uncertain tax positions as a result of audit settlements; partially offset by (i) the tax impact on the TMPL Sale; and (ii) the decrease of enhanced oil recovery credits.

Year Ended December 31, 2017 versus Year Ended December 31, 2016

Our tax expense for the year ended December 31, 2017 is approximately $1,938 million, as compared with 2016 tax expense of $917 million. The $1,021 million increase in tax expense is primarily due to (i) an increase in year-over-year earnings as a result of fewer asset impairments and project write-offs in 2017; and (ii) higher tax expense as a result of the 2017 Tax Reform. These increases are partially offset by (i) the 2016 impact of our Regulated Natural Gas Pipelines business segment's $817 million non-tax-deductible goodwill as a result of the sale of a 50% interest in SNG; and (ii) the recognition of enhanced oil recovery credits.

Liquidity and Capital Resources

General

As of December 31, 2018, we had $3,280 million of "Cash and cash equivalents," an increase of $3,016 million (1,142%) from December 31, 2017. We believe our cash position, remaining borrowing capacity on our credit facility (discussed below in "*—Short-term Liquidity*"), and our cash flows from operating activities are adequate to allow us to manage our day-to-day cash requirements and anticipated obligations as discussed further below.

We have consistently generated substantial cash flow from operations, providing a source of funds of $5,043 million and $4,601 million in 2018 and 2017, respectively. The year-to-year increase is discussed below in "*—Cash Flows—Operating Activities.*" Generally, we primarily rely on cash provided from operations to fund our operations as well as our debt service, sustaining capital expenditures, dividend payments, and our growth capital expenditures. We also generally expect that our short-term liquidity needs will be met primarily through retained cash from operations, short-term borrowings or by issuing new long-term debt to refinance certain of our maturing long-term debt obligations. Moreover, as a result of our current common stock dividend policy and our continued focus on disciplined capital allocation, we do not expect the need to access the equity capital markets to fund our growth projects for the foreseeable future.

Additionally, during 2018 the TMPL Sale mentioned above in "*—General—KML—Sale of Trans Mountain Pipeline System and Its Expansion Project*" was a source of liquidity and the primary driver of cash on hand as of December 31, 2018.

On January 3, 2019, pursuant to KML's shareholders' approval on November 29, 2018, KML distributed to its shareholders as a return of capital, the net proceeds from the TMPL Sale, after capital gains taxes, customary purchase price adjustments and the repayment of debt outstanding under a temporary KML credit facility (see "*—KML 2018 Credit Facility*" following). KML's public owners of its restricted voting shares, reflected as noncontrolling interests by us, received approximately $0.9 billion (C$1.2 billion), and part of our approximately 70% portion of the net proceeds of $1.9 billion (C$2.5 billion) (after Canadian tax) were used to immediately repay our outstanding commercial paper borrowings of $0.4 million and in February 2019 to pay down approximately $1.3 billion of maturing long-term debt. To facilitate the return of capital and provide flexibility for KML's dividends going forward, KML's shareholders also approved a reduction in the stated capital of its restricted voting shares by C$1.45 billion, along with a "reverse stock split" of KML's restricted voting shares, and KML's special voting shares that we own, on a one-for-three basis (three shares consolidating to one share) which occurred on January 4, 2019.

KML 2018 Credit Facility

Upon the closing of the TMPL Sale on August 31, 2018, KML established a 4-year, C$500 million unsecured revolving credit facility (the "KML 2018 Credit Facility") for working capital purposes, replacing a temporary credit facility that was put in place following the announcement of the TMPL Sale on May 30, 2018 (the "KML Temporary Credit Facility"). The C$133 million (U.S.$102 million) of outstanding borrowings under the KML Temporary Credit Facility were paid off prior to its termination with a portion of the proceeds from the TMPL Sale. As of December 31, 2018, there were no outstanding borrowings under the KML 2018 Credit Facility.

Credit Ratings and Capital Market Liquidity

We believe that our capital structure will continue to allow us to achieve our business objectives. We expect that our short-term liquidity needs will be met primarily through retained cash from operations or short-term borrowings. Generally, we anticipate re-financing maturing long term debt obligations in the debt capital markets and are therefore subject to certain market conditions which could result in higher costs or negatively affect our and/or our subsidiaries' credit ratings.

As of December 31, 2018, our short-term corporate debt ratings were A-3 (upgraded to A-2 on January 7, 2019), Prime-2 and F3 at Standard and Poor's, Moody's Investor Services and Fitch Ratings, Inc., respectively. We are on a positive outlook for an upgrade by Fitch Ratings, Inc.

The following table represents KMI's and KMP's senior unsecured debt ratings as of December 31, 2018.

Rating agency	Senior debt rating	Outlook
Standard and Poor's(a)	BBB-	Positive
Moody's Investor Services	Baa2	Stable
Fitch Ratings, Inc.	BBB-	Positive

(a) Subsequently was upgraded to BBB on January 7, 2019 with a Stable outlook.

Short-term Liquidity

As of December 31, 2018, our principal sources of short-term liquidity are (i) our $4.5 billion revolving credit facilities and associated $4.0 billion commercial paper program; (ii) the KML 2018 Credit Facility (for the purposes described above); and (iii) cash from operations. The loan commitments under our revolving credit facility can be used for working capital and other general corporate purposes and as a backup to our commercial paper program. Borrowings under our commercial paper program and letters of credit reduce borrowings allowed under ours and KML's respective credit facilities. We provide for liquidity by maintaining a sizable amount of excess borrowing capacity under our credit facility (see Note 9 "*Debt—Credit Facilities and Restrictive Covenants—KMI*" to our consolidated financial statements) and, as previously discussed, we have consistently generated strong cash flows from operations.

As of December 31, 2018, our $3,388 million of short-term debt consisted primarily of (i) $433 million outstanding under our $4.0 billion commercial paper program; and (ii) $2,800 million of senior notes that mature in the next year. As previously discussed, we repaid $1.7 billion of this short-term debt in 2019 from a portion of the TMPL Sale proceeds. We intend to refinance our remaining short-term debt through credit facility borrowings, commercial paper borrowings, or by issuing new long-term debt or paying down short-term debt using cash retained from operations. Our short-term debt balance as of December 31, 2017 was $2,828 million.

We had working capital (defined as current assets less current liabilities) deficits of $1,835 million and $3,466 million as of December 31, 2018 and 2017, respectively. Our current liabilities may include short-term borrowings used to finance our expansion capital expenditures, which we may periodically replace with long-term financing and/or pay down using retained cash from operations. The overall $1,631 million (47%) favorable change from year-end 2017 was primarily due to: (i) the $2,998 million of proceeds from the TMPL Sale, net of cash disposed, partially offset by (i) the $890 million (C$1,195 million) distribution paid to our noncontrolling interests associated with KML on January 3, 2019 ($876 million was the accrued U.S.$ value as of December 31, 2018) and a $516 million increase in current maturities of our senior notes. Generally, our working capital balance varies due to factors such as the timing of scheduled debt payments, timing differences in the collection and payment of receivables and payables, the change in fair value of our derivative contracts, and changes in our cash and cash equivalent balances as a result of excess cash from operations after payments for investing and financing activities (discussed below in "*—Long-term Financing*" and "*—Capital Expenditures*").

We employ a centralized cash management program for our U.S.-based bank accounts that concentrates the cash assets of our wholly owned subsidiaries in joint accounts for the purpose of providing financial flexibility and lowering the cost of borrowing. These programs provide that funds in excess of the daily needs of our wholly owned subsidiaries are concentrated, consolidated or otherwise made available for use by other entities within the consolidated group. We place no material restrictions on the ability to move cash between entities, payment of intercompany balances or the ability to upstream dividends to KMI other than restrictions that may be contained in agreements governing the indebtedness of those entities.

Certain of our wholly owned subsidiaries are subject to FERC-enacted reporting requirements for oil and natural gas pipeline companies that participate in cash management programs. FERC-regulated entities subject to these rules must, among other things, place their cash management agreements in writing, maintain current copies of the documents authorizing and supporting their cash management agreements, and file documentation establishing the cash management program with the FERC.

Long-term Financing

Our equity consists of Class P common stock with a par value of $0.01 per share. We do not expect to need to access the equity capital markets to fund our growth projects for the foreseeable future. Furthermore, through January 2019, we have repurchased approximately 29 million shares of our Class P common stock under a $2 billion share buy-back program authorized by our board of directors in December 2017 that we funded through retained cash. For more information on our equity buy-back program and our equity distribution agreement, see Note 11 "*Stockholders' Equity*" to our consolidated financial statements.

From time to time, we issue long-term debt securities, often referred to as senior notes. All of our senior notes issued to date, other than those issued by certain of our subsidiaries, generally have very similar terms, except for interest rates, maturity dates and prepayment premiums. All of our fixed rate senior notes provide that the notes may be redeemed at any time at a price equal to 100% of the principal amount of the notes plus accrued interest to the redemption date, and, in most cases, plus a make-whole premium. In addition, from time to time our subsidiaries, have issued long-term debt securities. Furthermore, we and almost all of our direct and indirect wholly owned domestic subsidiaries are parties to a cross guaranty wherein we each guarantee the debt of each other. See Note 20 "*Guarantee of Securities of Subsidiaries*" to our consolidated financial statements. As of December 31, 2018 and 2017, the aggregate principal amount outstanding of our various long-term debt obligations (excluding current maturities) was $33,205 million and $34,088 million, respectively. For more information regarding our debt-related transactions in 2018, see Note 9 "*Debt*" to our consolidated financial statements.

We achieve our variable rate exposure primarily by issuing long-term fixed rate debt and then swapping the fixed rate interest payments for variable rate interest payments and through the issuance of commercial paper or credit facility borrowings.

For additional information about our outstanding senior notes and debt-related transactions in 2018 and early 2019, see Note 9 "*Debt*" to our consolidated financial statements. For information about our interest rate risk, see Item 7A "*Quantitative and Qualitative Disclosures About Market Risk—Interest Rate Risk.*"

Capital Expenditures

We account for our capital expenditures in accordance with GAAP. We also distinguish between capital expenditures that are maintenance/sustaining capital expenditures and those that are expansion capital expenditures (which we also refer to as discretionary capital expenditures). Expansion capital expenditures are those expenditures which increase throughput or capacity from that which existed immediately prior to the addition or improvement, and are not deducted in calculating DCF (see "*—Results of Operations—DCF*"). With respect to our oil and gas producing activities, we classify a capital expenditure as an expansion capital expenditure if it is expected to increase capacity or throughput (i.e., production capacity) from the capacity or throughput immediately prior to the making or acquisition of such additions or improvements. Maintenance capital expenditures are those which maintain throughput or capacity. The distinction between maintenance and expansion capital expenditures is a physical determination rather than an economic one, irrespective of the amount by which the throughput or capacity is increased.

Budgeting of maintenance capital expenditures is done annually on a bottom-up basis. For each of our assets, we budget for and make those maintenance capital expenditures that are necessary to maintain safe and efficient operations, meet customer needs and comply with our operating policies and applicable law. We may budget for and make additional maintenance capital expenditures that we expect to produce economic benefits such as increasing efficiency and/or lowering future expenses. Budgeting and approval of expansion capital expenditures are generally made periodically throughout the year on a project-by-project basis in response to specific investment opportunities identified by our business segments from which we generally expect to receive sufficient returns to justify the expenditures. Generally, the determination of whether a capital expenditure is classified as maintenance/sustaining or as expansion capital expenditures is made on a project level. The classification of our capital expenditures as expansion capital expenditures or as maintenance capital expenditures is made consistent with our accounting policies and is generally a straightforward process, but in certain circumstances can be a matter of management judgment and discretion. The classification has an impact on DCF because capital expenditures that are classified as expansion capital expenditures are not deducted from DCF, while those classified as maintenance capital expenditures are. See "*—Common Dividends" and "—Preferred Dividends.*"

Our capital expenditures for the year ended December 31, 2018, and the amount we expect to spend for 2019 to sustain and grow our business are as follows (in millions):

	2018	Expected 2019
Sustaining capital expenditures(a)(b)	$ 652	$ 715
KMI Discretionary capital investments(b)(c)(d)	$ 2,363	$ 3,085
KML Discretionary capital investments(b)(e)	$ 401	$ 24

(a) 2018 and Expected 2019 amounts include $105 million and $127 million, respectively, for our proportionate share of (i) certain equity investee's; (ii) KML's; and (iii) certain consolidating joint venture subsidiaries' sustaining capital expenditures.
(b) 2018 includes $128 million of net changes from accrued capital expenditures, contractor retainage, and other.
(c) 2018 amount includes $279 million of our contributions to certain unconsolidated joint ventures for capital investments and small acquisitions.
(d) Amounts include our actual or estimated contributions to certain unconsolidated joint ventures, net of actual or estimated contributions from certain partners in non-wholly owned consolidated subsidiaries for capital investments.
(e) 2018 amount includes TMEP capital investments for the period ending on August 31, 2018, the closing of the TMPL Sale.

Off Balance Sheet Arrangements

We have invested in entities that are not consolidated in our financial statements. For information on our obligations with respect to these investments, as well as our obligations with respect to related letters of credit, see Note 13 "*Commitments and Contingent Liabilities*" to our consolidated financial statements. Additional information regarding the nature and business purpose of our investments is included in Note 7 "*Investments*" to our consolidated financial statements.

Contractual Obligations and Commercial Commitments

	Payments due by period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
			(In millions)		
Contractual obligations:					
Debt borrowings-principal payments(a)	$ 36,593	$ 3,388	$ 4,627	$ 5,768	$ 22,810
Interest payments(b)	24,493	1,890	3,418	2,992	16,193
Leases and rights-of-way obligations(c)	862	122	209	178	353
Pension and postretirement welfare plans(d)	925	67	40	41	777
Transportation, volume and storage agreements(e)	928	168	307	205	248
Other obligations(f)	276	65	84	35	92
Total	$ 64,077	$ 5,700	$ 8,685	$ 9,219	$ 40,473
Other commercial commitments:					
Standby letters of credit(g)	$ 156	$ 83	$ 73	$ —	$ —
Capital expenditures(h)	$ 304	$ 304	$ —	$ —	$ —

(a) Less than 1 year amount primarily includes $3,277 million of current maturities on senior notes and $111 million associated with our Trust I Preferred Securities that are classified as current obligations because these securities have rights to convert into cash and/or KMI common stock. See Note 9 "*Debt*" to our consolidated financial statements.
(b) Interest payment obligations exclude adjustments for interest rate swap agreements and assume no change in variable interest rates from those in effect at December 31, 2018.
(c) Represents commitments pursuant to the terms of operating lease agreements and liabilities for rights-of-way.
(d) Represents the amount by which the benefit obligations exceeded the fair value of plan assets at year-end for pension and other postretirement benefit plans whose accumulated postretirement benefit obligations exceeded the fair value of plan assets. The payments by period include expected contributions to funded plans in 2019 and estimated benefit payments for unfunded plans in all years.
(e) Primarily represents transportation agreements of $374 million, volume agreements of $338 million and storage agreements for capacity of $183 million.

(f) Primarily includes environmental liabilities related to sites that we own or have a contractual or legal obligation with a regulatory agency or property owner upon which we will perform remediation activities. These liabilities are included within "Accrued contingencies" and "Other long-term liabilities and deferred credits" in our consolidated balance sheets.

(g) The $156 million in letters of credit outstanding as of December 31, 2018 consisted of the following (i) letters of credit totaling $46 million supporting our International Marine Terminals Partnership Plaquemines, Louisiana Port, Harbor, and Terminal Revenue Bonds; (ii) $33 million under nine letters of credit for insurance purposes; (iii) a $24 million letter of credit supporting our Kinder Morgan Operating L.P. "B" tax-exempt bonds; (iv) thirteen letters of credit totaling $8 million supporting our pipeline and terminal operations in Canada; and (v) a combined $45 million in twenty-five letters of credit supporting environmental and other obligations of us and our subsidiaries.

(h) Represents commitments for the purchase of plant, property and equipment as of December 31, 2018.

Cash Flows

Operating Activities

The net increase of $442 million (10%) in cash provided by operating activities in 2018 compared to 2017 was primarily attributable to:

- a $346 million increase in cash associated with net changes in working capital items and other non-current assets and liabilities, primarily driven, among other things, by a $137 income tax refund received in the 2018 period, and an increase in current income tax liabilities associated with the tax gain on the TMPL Sale in the 2018 period. These increases were partially offset by higher payments for litigation matters in the 2018 period compared with the 2017 period; and
- a $96 million increase in operating cash flow resulting from the combined effects of adjusting the $1,696 million increase in net income for the period-to-period net changes in non-cash items including the following: (i) loss on impairments and divestitures, net (see discussion above in "—Results of Operations"); (ii) loss on impairments and divestitures of equity investments, net (see discussion above in "—Results of Operations"); (iii) the change in fair market value of derivative contracts; (iv) DD&A expenses (including amortization of excess cost of equity investments); (v) deferred income taxes; (vi) earnings from equity investments; and (vii) loss on early extinguishment of debt.

Investing Activities

The $3,335 million net decrease in cash used in investing activities in 2018 compared to 2017 was primarily attributable to:

- a $2,998 million increase in cash reflecting proceeds received from the TMPL Sale, net of cash disposed in the 2018 period. See Note 3 "*Divestitures and Acquisition*" for further information regarding this transaction;
- a $284 million decrease in capital expenditures in the 2018 period over the comparative 2017 period primarily due to lower expenditures in our Terminals business segment, partially offset by higher expenditures related to construction projects in our Natural Gas Pipelines business segment;
- a $251 million decrease in cash used for contributions to equity investments primarily due to lower contributions we made to NGPL Holdings LLC, FEP and Utopia Holding LLC in the 2018 period compared to the 2017 period, partially offset by the contributions made to Gulf Coast Express Pipeline LLC in the 2018 period; and
- a $124 million increase in cash proceeds received from the sale of equity investments, primarily driven by a sale of our partial interest in Gulf Coast Express LLC in the 2018 period; partially offset by,
- a $138 million decrease in cash proceeds from sale of property, plant and equipment and other net assets in the 2018 period compared to the 2017 period; and
- a $137 million decrease in cash resulting from lower distributions received from equity investments in excess of cumulative earnings, primarily from MEP, SNG and Citrus Corporation in the 2018 period over the comparative 2017 period.

Financing Activities

The net increase of $143 million in cash used by financing activities in 2018 compared to 2017 was primarily attributable to:

- a combined $1,665 million decrease in cash reflecting $1,245 million net proceeds we received from the KML IPO in May 2017 and $420 million net proceeds received from the KML preferred share issuances in the 2017 period;
- a $498 million increase in dividend payments to our common shareholders;

- a $304 million decrease in cash due to lower contributions received from EIG in the 2018 period compared to the 2017 period as the 2017 period included $386 million we received from EIG Global Energy Partners for our sale of a 49% partnership interest in ELC;
- a $36 million increase in distributions to noncontrolling interests, primarily to KML restricted share holders and preferred shareholders; and
- a $23 million increase in cash used for common shares repurchased under our common share buy-back program in the 2018 period compared to the 2017 period; partially offset by,
- a $2,384 million net increase in cash related to debt activity as a result of $118 million of net debt issuances in the 2018 period compared to $2,266 million of net debt payments in the 2017 period. See Note 9 "*Debt*" for further information regarding our debt activity.

Mandatory Convertible Preferred Stock

As of October 26, 2018, all of our issued and outstanding 1,600,000 shares of 9.750% Series A mandatory convertible preferred stock, with a liquidating preference of $1,000 per share were converted into common stock either at the option of the holders before or automatically on October 26, 2018. Based on the current market price of our common stock at the time of conversion, our Series A Preferred Shares converted into 58 million common shares.

Dividends and Stock Buy-back Program

KMI Preferred Stock Dividends

Dividends on our mandatory convertible preferred stock were payable on a cumulative basis when, as and if declared by our board of directors (or an authorized committee thereof) at an annual rate of 9.750% of the liquidation preference of $1,000 per share on January 26, April 26, July 26 and October 26 of each year, commencing on January 26, 2016 to, and including, October 26, 2018. Prior to the October 26, 2018 conversion of our Series A Preferred Shares into common shares, we paid all dividends on our mandatory convertible preferred stock in cash.

Period	Total dividend per share for the period	Date of declaration	Date of record	Date of dividend
January 26, 2018 through April 25, 2018	$24.375	January 17, 2018	April 11, 2018	April 26, 2018
April 26, 2018 through July 25, 2018	24.375	April 18, 2018	July 11, 2018	July 26, 2018
July 26, 2018 through October 25, 2018	24.375	July 18, 2018	October 11, 2018	October 26, 2018

KMI Common Stock Dividends

The table below reflects the declaration of common stock dividends of $0.80 per common share for 2018.

Three months ended	Total quarterly dividend per share for the period	Date of declaration	Date of record	Date of dividend
March 31, 2018	$0.20	April 18, 2018	April 30, 2018	May 15, 2018
June 30, 2018	0.20	July 18, 2018	July 31, 2018	August 15, 2018
September 30, 2018	0.20	October 17, 2018	October 31, 2018	November 15, 2018
December 31, 2018	0.20	January 16, 2019	January 31, 2019	February 15, 2019

We will continue to return additional value to our shareholders in 2019 through our previously announced dividend increase. We plan to increase our dividend to $1.00 per common share in 2019 and $1.25 per common share in 2020, a growth rate of 25% annually.

The actual amount of common stock dividends to be paid on our capital stock will depend on many factors, including our financial condition and results of operations, liquidity requirements, business prospects, capital requirements, legal, regulatory and contractual constraints, tax laws, Delaware laws and other factors. See Item 1A "*Risk Factors—The guidance we provide for our anticipated dividends is based on estimates. Circumstances may arise that lead to conflicts between using funds to pay anticipated dividends or to invest in our business.*" All of these matters will be taken into consideration by our board of directors in declaring dividends.

Our common stock dividends are not cumulative. Consequently, if dividends on our common stock are not paid at the intended levels, our common stockholders are not entitled to receive those payments in the future. Our common stock dividends generally will be paid on or about the 15th day of each February, May, August and November.

Stock Buy-back Program

On July 19, 2017, our board of directors approved a $2 billion common share buy-back program that began in December 2017. During the years ended December 31, 2018 and 2017, we repurchased approximately 15 million and 14 million, respectively, of our Class P shares for approximately $273 million and $250 million, respectively. 2018 amounts exclude repurchases made in December 2018 of approximately 0.1 million of our Class P shares for approximately $2 million, which settled on January 2, 2019.

Noncontrolling Interests

The caption "Noncontrolling interests" in our accompanying consolidated balance sheets consists of interests that we do not own in the following subsidiaries (in millions):

	December 31,	
	2018	**2017**
KML(a)	$ 514	$ 1,163
Others	339	325
	$ 853	$ 1,488

(a) The reduction in the noncontrolling interests associated with KML is primarily attributable to the accrual of the return of capital distribution for the net proceeds from the TMPL Sale paid to KML's Restricted Voting Shareholders on January 3, 2019 of approximately $0.9 billion. For more information see "*—General—KML—Sale of Trans Mountain Pipeline System and Its Expansion Project*" above.

KML Distributions

KML has a dividend policy pursuant to which it may pay a quarterly dividend on its restricted voting shares in an amount based on a portion of its distributable cash flow. The payment of dividends is not guaranteed, and the amount and timing of any dividends payable will be at the discretion of KML's board of directors. KML intends to pay quarterly dividends, if any, on or about the 45th day (or next business day) following the end of each calendar quarter to holders of its restricted voting shares of record as of the close of business on or about the last business day of the month following the end of each calendar quarter. KML also established a Dividend Reinvestment Plan (DRIP) that allows holders (excluding holders not resident in Canada) of restricted voting shares to elect to have any or all cash dividends payable to such shareholder automatically reinvested in additional restricted voting shares at a price per share calculated by reference to the volume-weighted average of the closing price of the restricted voting shares on the stock exchange on which the restricted voting shares are then listed for the five trading days immediately preceding the relevant dividend payment date, less a discount of between 0% and 5% (as determined from time to time by KML's board of directors, in its sole discretion).

On January 16, 2019, KML's board of directors announced that it would suspend KML's DRIP, effective with the payment of the fourth quarter 2018 dividend on February 15, 2019, in light of KML's reduced need for capital.

For 2019, KML announced that it expects to pay an annual dividend of C$0.65 per split-adjusted restricted voting share.

KML also pays dividends on its 12,000,000 Series 1 Preferred Shares and 10,000,000 Series 3 Preferred Shares, which are fixed, cumulative, preferential, and payable quarterly in the annual amount of C$1.3125 per share and C$1.3000 per share, respectively, on the 15th day of February, May, August and November, as and when declared by KML's board of directors, for the initial fixed rate period to but excluding November 15, 2022 and February 15, 2023, respectively.

During the year ended December 31, 2018, KML paid dividends on its Restricted Voting Shares to the public valued at $52 million, of which $38 million was paid in cash. The remaining value of $14 million for the year ended December 31, 2018 was paid in 1,092,791 KML Restricted Voting Shares. KML also paid dividends to the public on its Series 1 and Series 3 Preferred Shares of $21 million for the year ended December 31, 2018.

Recent Accounting Pronouncements

Please refer to Note 19 "*Recent Accounting Pronouncements*" to our consolidated financial statements for information concerning recent accounting pronouncements.

Item 7A. *Quantitative and Qualitative Disclosures About Market Risk.*

Generally, our market risk sensitive instruments and positions have been determined to be "other than trading." Our exposure to market risk as discussed below includes forward-looking statements and represents an estimate of possible changes in fair value or future earnings that would occur assuming hypothetical future movements in energy commodity prices or interest rates. Our views on market risk are not necessarily indicative of actual results that may occur and do not represent the maximum possible gains and losses that may occur, since actual gains and losses will differ from those estimated based on actual fluctuations in energy commodity prices or interest rates and the timing of transactions.

Energy Commodity Market Risk

We are exposed to energy commodity market risk and other external risks in the ordinary course of business. However, we manage these risks by executing a hedging strategy that seeks to protect us financially against adverse price movements and serves to minimize potential losses. Our strategy involves the use of certain energy commodity derivative contracts to reduce and minimize the risks associated with unfavorable changes in the market price of natural gas, NGL and crude oil. The derivative contracts that we use include exchange-traded and OTC commodity financial instruments, including, but not limited to, futures and options contracts, fixed price swaps and basis swaps.

Our hedging strategy involves entering into a financial position intended to offset our physical position, or anticipated position, in order to minimize the risk of financial loss from an adverse price change. For example, as sellers of crude oil and natural gas, we often enter into fixed price swaps and/or futures contracts to guarantee or lock-in the sale price of our crude oil or the margin from the sale and purchase of our natural gas at the time of market delivery, thereby in whole or in part offsetting any change in prices, either positive or negative.

Our policies require that derivative contracts are only entered into with carefully selected major financial institutions or similar counterparties based upon their credit ratings and other factors, and we maintain strict dollar and term limits that correspond to our counterparties' credit ratings. While it is our policy to enter into derivative transactions principally with investment grade counterparties and actively monitor their credit ratings, it is nevertheless possible that losses will result from counterparty credit risk in the future.

The credit ratings of the primary parties from whom we transact in energy commodity derivative contracts (based on contract market values) are as follows (credit ratings per Standard & Poor's Rating Service):

	Credit Rating
ING	A+
Wells Fargo	A+
Bank of Nova Scotia	A+
Canadian Imperial Bank	A+
JP Morgan	A+

As discussed above, the principal use of energy commodity derivative contracts is to mitigate the market price risk associated with anticipated transactions for the purchase and sale of natural gas, NGL and crude oil. Using derivative contracts for this purpose helps provide increased certainty with regard to operating cash flows which helps us to undertake further capital improvement projects, attain budget results and meet dividend targets. We may categorize such use of energy commodity derivative contracts as cash flow hedges because the derivative contract is used to hedge the anticipated future cash flow of a transaction that is expected to occur but which value is uncertain.

We measure the risk of price changes in the crude oil, natural gas and NGL derivative instruments portfolios utilizing a sensitivity analysis model. The sensitivity analysis applied to each portfolio measures the potential income or loss (i.e., the change in fair value of the derivative instrument portfolio) based upon a hypothetical 10% movement in the underlying quoted market prices. In addition to these variables, the fair value of each portfolio is influenced by fluctuations in the notional amounts of the instruments and the discount rates used to determine the present values. A hypothetical 10% movement in the

underlying commodity prices would have the following effect on the associated derivative contracts' estimated fair value (in millions):

Commodity derivative	As of December 31, 2018	As of December 31, 2017
Crude oil	$ 97	$ 125
Natural gas	12	15
NGL	6	10
Total	$ 115	$ 150

As discussed above, we enter into derivative contracts largely for the purpose of mitigating the risks that accompany certain of our business activities and, therefore both in the sensitivity analysis model and in reality, the change in the market value of the derivative contracts' portfolio is offset largely by changes in the value of the underlying physical transactions.

Our sensitivity analysis represents an estimate of the reasonably possible gains and losses that would be recognized on the crude oil, natural gas and NGL portfolios of derivative contracts assuming hypothetical movements in future market rates and is not necessarily indicative of actual results that may occur. It does not represent the maximum possible loss or any expected loss that may occur, since actual future gains and losses will differ from those estimated. Actual gains and losses may differ from estimates due to actual fluctuations in market rates, operating exposures and the timing thereof, as well as changes in our portfolio of derivatives during the year.

Interest Rate Risk

In order to maintain a cost effective capital structure, it is our policy to borrow funds using a mix of fixed rate debt and variable rate debt. The market risk inherent in our debt instruments and positions is the potential change arising from increases or decreases in interest rates as discussed below.

For fixed rate debt, changes in interest rates generally affect the fair value of the debt instrument, but not our earnings or cash flows. Conversely, for variable rate debt, changes in interest rates generally do not impact the fair value of the debt instrument, but may affect our future earnings and cash flows. Generally, there is not an obligation to prepay fixed rate debt prior to maturity and, as a result, changes in fair value should not have a significant impact on the fixed rate debt. We are generally subject to interest rate risk upon refinancing maturing debt. Below are our debt balances, including debt fair value adjustments and the preferred interest in KMGP, and sensitivity to interest rates (in millions):

	December 31, 2018		December 31, 2017	
	Carrying value	Estimated fair value(c)	Carrying value	Estimated fair value(c)
Fixed rate debt(a)	$ 36,480	$ 36,647	$ 37,041	$ 39,255
Variable rate debt	$ 844	$ 822	$ 802	$ 795
Notional principal amount of fixed-to-variable interest rate swap agreements	10,575		9,575	
Debt balances subject to variable interest rates(b)	$ 11,419		$ 10,377	

(a) A hypothetical 10% change in the average interest rates applicable to such debt as of December 31, 2018 and 2017, would result in changes of approximately $1,638 million and $1,525 million, respectively, in the fair values of these instruments.

(b) A hypothetical 10% change in the weighted average interest rate on all of our borrowings (approximately 52 and 50 basis points, respectively, in 2018 and 2017) when applied to our outstanding balance of variable rate debt as of December 31, 2018 and 2017, including adjustments for the notional swap amounts described above, would result in changes of approximately $59 million and $52 million, respectively, in our 2018 and 2017 annual pre-tax earnings.

(c) Fair values were determined using quoted market prices, where applicable, or future cash flows discounted at market rates for similar types of borrowing arrangements.

Fixed-to-variable interest rate swap agreements are entered into for the purpose of converting a portion of the underlying cash flows related to long-term fixed rate debt securities into variable rate debt in order to achieve our desired mix of fixed and variable rate debt. Since the fair value of fixed rate debt varies with changes in the market rate of interest, swap agreements are

entered into to receive a fixed and pay a variable rate of interest. Such swap agreements result in future cash flows that vary with the market rate of interest, and therefore hedge against changes in the fair value of the fixed rate debt due to market rate changes.

We monitor the mix of fixed rate and variable rate debt obligations in light of changing market conditions and from time to time, may alter that mix by, for example, refinancing outstanding balances of variable rate debt with fixed rate debt (or vice versa) or by entering into interest rate swap agreements or other interest rate hedging agreements. As of December 31, 2018, including debt converted to variable rates through the use of interest rate swaps but excluding our debt fair value adjustments, approximately 31% of our debt balances were subject to variable interest rates.

For more information on our interest rate risk management and on our interest rate swap agreements, see Note 14 "*Risk Management*" to our consolidated financial statements.

Foreign Currency Risk

As of December 31, 2018, we had a notional principal amount of $1,358 million of cross-currency swap agreements that effectively convert all of our fixed-rate Euro denominated debt, including annual interest payments and the payment of principal at maturity, to U.S. dollar denominated debt at fixed rates. These swaps eliminate the foreign currency risk associated with our foreign currency denominated debt.

As of December 31, 2018, we had a notional principal amount of C$2,450 million (U.S.$1,888 million) of cross-currency swap agreements that result in our selling fixed C$ and receiving fixed U.S.$. These swaps effectively hedged the foreign currency risk associated with a substantial portion of our share of the TMPL Sale proceeds that KML distributed to us on January 3, 2019, at which time the cross-currency currency swaps also expired.

Item 8. ***Financial Statements and Supplementary Data.***

The information required in this Item 8 is in this report as set forth in the "Index to Financial Statements" on page 72.

Item 9. ***Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.***

None.

Item 9A. ***Controls and Procedures.***

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

As of December 31, 2018, our management, including our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Rule 13a-15(b) under the Securities Exchange Act of 1934. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives. Based upon and as of the date of the evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that the design and operation of our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed in the reports we file and submit under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported as and when required, and is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an assessment of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control – Integrated Framework (2013)* issued by the Committee of

Sponsoring Organizations of the Treadway Commission. Based on this assessment, our management concluded that our internal control over financial reporting was effective as of December 31, 2018.

The effectiveness of our internal control over financial reporting as of December 31, 2018, has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their audit report, which appears herein.

Changes in Internal Control Over Financial Reporting

There has been no change in our internal control over financial reporting during the fourth quarter of 2018 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. ***Other Information.***

None.

PART III

Item 10. ***Directors, Executive Officers and Corporate Governance.***

The information required by this item is incorporated by reference from KMI's definitive proxy statement for the 2019 Annual Meeting of Stockholders, which shall be filed no later than April 30, 2019.

Item 11. ***Executive Compensation.***

The information required by this item is incorporated by reference from KMI's definitive proxy statement for the 2019 Annual Meeting of Stockholders, which shall be filed no later than April 30, 2019.

Item 12. ***Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.***

The information required by this item is incorporated by reference from KMI's definitive proxy statement for the 2019 Annual Meeting of Stockholders, which shall be filed no later than April 30, 2019.

Item 13. ***Certain Relationships and Related Transactions, and Director Independence.***

The information required by this item is incorporated by reference from KMI's definitive proxy statement for the 2019 Annual Meeting of Stockholders, which shall be filed no later than April 30, 2019.

Item 14. ***Principal Accounting Fees and Services.***

The information required by this item is incorporated by reference from KMI's definitive proxy statement for the 2019 Annual Meeting of Stockholders, which shall be filed no later than April 30, 2019.

PART IV

Item 15. ***Exhibits, Financial Statement Schedules.***

(a) (1) Financial Statements and (2) Financial Statement Schedules

See "Index to Financial Statements" set forth on Page 72.

(3) Exhibits

Exhibit Number		Description
3.1	*	Amended and Restated Certificate of Incorporation of KMI (filed as Exhibit 3.1 to KMI's Quarterly Report on Form 10-Q for the three months ended June 30, 2015 (File No. 001-35081))
3.2	*	Amended and Restated Bylaws of KMI (filed as Exhibit 3.1 to KMI's Current Report on Form 8-K, filed October 20, 2017 (File No. 001-35081))

Exhibit Number		Description
3.3	*	Certificate of Elimination of 9.75% Series A Mandatory Convertible Preferred Stock of KMI (filed as Exhibit 3.1 to KMI's Current Report on Form 8-K filed January 22, 2019 (File No. 001-35081))
4.1	*	Form of certificate representing Class P common shares of KMI (filed as Exhibit 4.1 to KMI's Registration Statement on Form S-1 filed on January 18, 2011 (File No. 333-170773))
4.2	*	Shareholders Agreement among KMI and certain holders of common stock (filed as Exhibit 4.2 to KMI's Quarterly Report on Form 10-Q for the three Months ended March 31, 2011 (File No. 001-35081))
4.3	*	Amendment No. 1 to the Shareholders Agreement among KMI and certain holders of common stock (filed as Exhibit 4.3 to KMI's Current Report on Form 8-K filed on May 30, 2012 (File No. 001-35081))
4.4	*	Amendment No. 2 to the Shareholders Agreement among KMI and certain holders of common stock (filed as Exhibit 4.1 to KMI's Current Report on Form 8-K filed on December 3, 2014 (File No. 001-35081))
4.5	*	Form of Senior Indenture between Kinder Morgan Kansas, Inc. and Wachovia Bank, National Association, as Trustee (filed as Exhibit 4.2 to Kinder Morgan Kansas, Inc.'s Registration Statement on Form S-3 filed on February 4, 2003 (File No. 333-102963))
4.6	*	Form of Senior Note of Kinder Morgan Kansas, Inc. (included in the Form of Senior Indenture filed as Exhibit 4.2 to Kinder Morgan Kansas, Inc.'s Registration Statement on Form S-3 filed on February 4, 2003 (File No. 333-102963))
4.7	*	Indenture dated as of December 9, 2005, among Kinder Morgan Finance Company LLC (formerly Kinder Morgan Finance Company, ULC), Kinder Morgan Kansas, Inc. and Wachovia Bank, National Association, as Trustee (filed as Exhibit 4.1 to Kinder Morgan Kansas, Inc.'s Current Report on Form 8-K filed on December 15, 2005 (File No. 1-06446))
4.8	*	Forms of Kinder Morgan Finance Company LLC Notes (included in the Indenture filed as Exhibit 4.1 to Kinder Morgan Kansas, Inc.'s Current Report on Form 8-K filed on December 15, 2005 (File No. 1-06446))
4.9	*	Indenture dated January 2, 2001 between Kinder Morgan Energy Partners, L.P. and First Union National Bank, as trustee, relating to Senior Debt Securities (including form of Senior Debt Securities) (filed as Exhibit 4.11 to Kinder Morgan Energy Partners, L.P.'s Annual Report on Form 10-K for the year ended December 31, 2000 (File No. 1-11234))
4.10	*	Certificate of the Vice President and Chief Financial Officer of Kinder Morgan Energy Partners, L.P. establishing the terms of the 7.40% Notes due March 15, 2031 (filed as Exhibit 4.1 to Kinder Morgan Energy Partners, L.P.'s Current Report on Form 8-K filed on March 14, 2001 (File No. 1-11234))
4.11	*	Specimen of 7.40% Notes due March 15, 2031 in book-entry form (filed as Exhibit 4.3 to Kinder Morgan Energy Partners, L.P.'s Current Report on Form 8-K filed on March 14, 2001(File No. 1-11234))
4.12	*	Certificate of the Vice President and Chief Financial Officer of Kinder Morgan Energy Partners, L.P. establishing the terms of the 7.750% Notes due March 15, 2032 (filed as Exhibit 4.1 to Kinder Morgan Energy Partners, L.P.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2002 (File No. 1-11234))
4.13	*	Specimen of 7.750% Notes due March 15, 2032 in book-entry form (filed as Exhibit 4.3 to Kinder Morgan Energy Partners, L.P.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2002 (File No. 1-11234))
4.14	*	Indenture dated August 19, 2002 between Kinder Morgan Energy Partners, L.P. and Wachovia Bank, National Association, as Trustee (filed as Exhibit 4.1 to Kinder Morgan Energy Partners, L.P.'s Registration Statement on Form S-4 filed on October 4, 2002 (File No. 333-100346))
4.15	*	First Supplemental Indenture to Indenture dated August 19, 2002, dated August 23, 2002 between Kinder Morgan Energy Partners, L.P. and Wachovia Bank, National Association, as Trustee (filed as Exhibit 4.2 to Kinder Morgan Energy Partners, L.P.'s Registration Statement on Form S-4 filed on October 4, 2002 (File No. 333-100346))
4.16	*	Form of 7.30% Notes due 2033 (contained in the Indenture filed as Exhibit 4.1 to Kinder Morgan Energy Partners, L.P.'s Registration Statement on Form S-4 filed on October 4, 2002 (File No. 333-100346))
4.17	*	Senior Indenture dated January 31, 2003 between Kinder Morgan Energy Partners, L.P. and Wachovia Bank, National Association (filed as Exhibit 4.2 to Kinder Morgan Energy Partners, L.P.'s Registration Statement on Form S-3 filed on February 4, 2003 (File No. 333-102961))

Exhibit Number		Description
4.18	*	Form of Senior Note of Kinder Morgan Energy Partners, L.P. (included in the Form of Senior Indenture filed as Exhibit 4.2 to Kinder Morgan Energy Partners, L.P.'s Registration Statement on Form S-3 filed on February 4, 2003 (File No. 333-102961))
4.19	*	Certificate of the Vice President, Treasurer and Chief Financial Officer and the Vice President, General Counsel and Secretary of Kinder Morgan Management, LLC and Kinder Morgan G.P., Inc., on behalf of Kinder Morgan Energy Partners, L.P. establishing the terms of the 5.80% Notes due March 15, 2035 (filed as Exhibit 4.1 to Kinder Morgan Energy Partners, L.P.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2005 (File No. 1-11234))
4.20	*	Certificate of the Vice President and Chief Financial Officer of Kinder Morgan Management, LLC and Kinder Morgan G.P., Inc., on behalf of Kinder Morgan Energy Partners, L.P. establishing the terms of the 6.00% Senior Notes due 2017 and 6.50% Senior Notes due 2037 (filed as Exhibit 4.28 to Kinder Morgan Energy Partners, L.P.'s Annual Report on Form 10-K for the year ended December 31, 2006 (File No. 1-11234))
4.21	*	Certificate of the Vice President and Treasurer and the Vice President and Chief Financial Officer of Kinder Morgan Management, LLC and Kinder Morgan G.P., Inc., on behalf of Kinder Morgan Energy Partners, L.P., establishing the terms of the 6.95% Senior Notes due 2038 (filed as Exhibit 4.2 to Kinder Morgan Energy Partners, L.P.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2007 (File No. 1-11234))
4.22	*	Certificate of the Vice President and Treasurer and the Vice President and Chief Financial Officer of Kinder Morgan Management, LLC and Kinder Morgan G.P., Inc., on behalf of Kinder Morgan Energy Partners, L.P., establishing the terms of the 9.00% Senior Notes due 2019 (filed as Exhibit 4.29 to Kinder Morgan Energy Partners, L.P.'s Annual Report on Form 10-K for the year ended December 31, 2008 (File No. 1-11234))
4.23	*	Certificate of the Vice President and Chief Financial Officer and the Vice President and Treasurer of Kinder Morgan Management, LLC and Kinder Morgan G.P., Inc., on behalf of Kinder Morgan Energy Partners, L.P., establishing the terms of the 6.85% Senior Notes due 2020 (filed as Exhibit 4.2 to Kinder Morgan Energy Partners, L.P.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2009 (File No. 1-11234))
4.24	*	Certificate of the Vice President and Chief Financial Officer and the Vice President and Treasurer of Kinder Morgan Management, LLC and Kinder Morgan G.P., Inc., on behalf of Kinder Morgan Energy Partners, L.P., establishing the terms of the 5.80% Senior Notes due 2021, and the 6.50% Senior Notes due 2039 (filed as Exhibit 4.2 to Kinder Morgan Energy Partners, L.P.'s Quarterly Report on Form 10-Q for the quarter ended September 30, 2009 (File No. 1-11234))
4.25	*	Certificate of the Vice President and Chief Financial Officer and the Vice President and Treasurer of Kinder Morgan Management, LLC and Kinder Morgan G.P., Inc., on behalf of Kinder Morgan Energy Partners, L.P., establishing the terms of the 5.30% Senior Notes due 2020, and the 6.55% Senior Notes due 2040 (filed as Exhibit 4.2 to Kinder Morgan Energy Partners, L.P.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2010 (File No. 1-11234))
4.26	*	Certificate of the Vice President and Chief Financial Officer and the Vice President and Treasurer of Kinder Morgan Management, LLC and Kinder Morgan G.P., Inc., on behalf of Kinder Morgan Energy Partners, L.P., establishing the terms of the 6.375% Senior Notes due 2041 (filed as Exhibit 4.1 to Kinder Morgan Energy Partners, L.P.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2011 (File No. 1-11234))
4.27	*	Certificate of the Vice President and Chief Financial Officer and the Vice President and Treasurer of Kinder Morgan Management, LLC and Kinder Morgan G.P., Inc., on behalf of Kinder Morgan Energy Partners, L.P., establishing the terms of the 4.150% Senior Notes due 2022, and the 5.625% Senior Notes due 2041 (filed as Exhibit 4.1 to Kinder Morgan Energy Partners, L.P.'s Quarterly Report on Form 10-Q for the quarter ended September 30, 2011 (File No. 1-11234))
4.28	*	Certificate of the Vice President, Finance and Investor Relations and the Vice President and Secretary of Kinder Morgan Management, LLC and Kinder Morgan G.P., Inc., on behalf of Kinder Morgan Energy Partners, L.P., establishing the terms of the 3.500% Senior Notes due 2021 and the 5.500% Senior Notes due 2044 (filed as Exhibit 4.1 to Kinder Morgan Energy Partners, L.P.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2014 (File No. 1-11234))
4.29	*	Certificate of the Vice President and Treasurer and the Vice President and Secretary of Kinder Morgan Management, LLC and Kinder Morgan G.P., Inc., on behalf of Kinder Morgan Energy Partners, L.P., establishing the terms of the 4.250% Senior Notes due 2024 and the 5.400% Senior Notes due 2044 (filed as Exhibit 4.1 to Kinder Morgan Energy Partners, L.P.'s Quarterly Report on Form 10-Q for the quarter ended September 30, 2014 (File No. 1-11234))
4.30	*	Indenture, dated March 1, 2012, between KMI and U.S. Bank National Association, as Trustee (filed as Exhibit 4.1 to KMI's Registration Statement on Form S-3 filed on March 1, 2012 (File No. 001-35081))

Exhibit Number		Description
4.31	*	Certificate of the Vice President and Treasurer and the Vice President and Secretary of KMI establishing the terms of the 2.000% Senior Notes due 2017, the 3.050% Senior Notes due 2019, the 4.300% Senior Notes due 2025, the 5.300% Senior Notes due 2034 and the 5.550% Senior Notes due 2045 (filed as Exhibit 10.53 to KMI's Annual Report on Form 10-K for the year ended December 31, 2014 (File No. 001-35081))
4.32	*	Certificate of the Vice President and Treasurer and Vice President and Secretary of KMI establishing the terms of the 5.050% Senior Notes due 2046 (filed as Exhibit 4.1 to KMI's Quarterly Report on Form 10-Q for the three months ended March 31, 2015 (File No. 001-35081))
4.33	*	Certificate of the Vice President and Treasurer and Vice President and Secretary of KMI establishing the terms of the 1.500% Senior Notes due 2022 and 2.250% Senior Notes due 2027 (filed as Exhibit 4.2 to KMI's Form 8-A, filed March 16, 2015 (File No. 001-35081))
4.34	*	Certificate of the Vice President and Treasurer and the Vice President and Chief Financial Officer of KMI establishing the terms of the 3.150% Senior Notes due January 15, 2023 (filed as Exhibit 4.1 to KMI's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017 (File No. 001-35081))
4.35	*	Certificate of the Vice President and Treasurer and the Vice President and Chief Financial Officer of KMI establishing the terms of the Floating Rate Senior Notes due January 15, 2023 (filed as Exhibit 4.2 to KMI's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017 (File No. 001-35081))
4.36	*	Certificate of the Vice President and Treasurer and the Vice President and Chief Financial Officer of KMI establishing the terms of the 4.300% Senior Notes due 2028 and the 5.200% Senior Notes due 2048 (filed as Exhibit 4.1 to KMI's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018 (File No. 001-35081))
4.37		Certain instruments with respect to long-term debt of KMI and its consolidated subsidiaries which relate to debt that does not exceed 10% of the total assets of KMI and its consolidated subsidiaries are omitted pursuant to Item 601(b) (4) (iii) (A) of Regulation S-K, 17 C.F.R. sec. #229.601. KMI hereby agrees to furnish supplementally to the Securities and Exchange Commission a copy of each such instrument upon request.
10.1	*	KMI 2015 Amended and Restated Stock Incentive Plan (filed as Exhibit 4.5 to KMI's Registration Statement on Form S-8, filed on July 1, 2015 (File No. 333-205430))
10.2	*	Amendment No. 1 to KMI 2015 Amended and Restated Stock Incentive Plan (filed as Exhibit 10.2 to KMI's Current Report on Form 8-K filed on January 24, 2017 (File No. 001-35081))
10.3	*	Amendment No. 2 to KMI 2015 Amended and Restated Stock Incentive Plan (filed as Exhibit 10.2 to KMI's Quarterly Report on Form 10-Q for the three months ended June 30, 2018 (File No. 001-35081))
10.4	*	Amendment No. 3 to KMI 2015 Amended and Restated Stock Incentive Plan (filed as Exhibit 10.1 to KMI's Current Report on Form 8-K filed on January 22, 2019 (File No. 001-35081))
10.5	*	2015 Form of Employee Restricted Stock Unit Agreement (filed as Exhibit 4.6 to KMI's Registration Statement on Form S-8, filed on July 1, 2015 (File No. 333-205430))
10.6	*	2016 Form of Employee Restricted Stock Unit Agreement (filed as Exhibit 10.2 to KMI's Quarterly Report on Form 10-Q for the three months ended June 30, 2016 (File No. 001-35081))
10.7	*	2018 Form of Employee Restricted Stock Unit Agreement (filed as Exhibit 10.3 to KMI's Quarterly Report on Form 10-Q for the three months ended June 30, 2018 (File No. 001-35081))
10.8	*	Amended and Restated Stock Compensation Plan for Non-Employee Directors (filed as Exhibit 10.5 to KMI's Quarterly Report on Form 10-Q for the three months ended June 30, 2015 (File No. 001-35081))
10.9	*	2015 Form of Non-Employee Director Stock Compensation Agreement (filed as Exhibit 10.6 to KMI's Quarterly Report on Form 10-Q for the three months ended June 30, 2015 (File No. 001-35081))
10.10	*	2011 Form of Non-Employee Director Stock Compensation Agreement (filed as Exhibit 10.3 to KMI's Quarterly Report on Form 10-Q for the three months ended March 31, 2011 (File No. 001-35081))
10.11	*	KMI Employees Stock Purchase Plan (filed as Exhibit 10.5 to KMI's Quarterly Report on Form 10-Q for the three months ended March 31, 2011 (File No. 001-35081))
10.12	*	Amended and Restated Annual Incentive Plan of KMI (filed as Exhibit 10.4 to KMI's Quarterly Report on Form 10-Q for the three months ended June 30, 2015 (File No. 001-35081))
10.13	*	Amendment No. 1 to Amended and Restated Incentive Plan of KMI (filed as Exhibit 10.1 to KMI's Current Report on Form 8-K filed January 24, 2017 (File No. 001-35081))

Exhibit Number	Description
10.14	Revolving Credit Agreement, dated November 16, 2018 among KMI, as borrower, Barclays Bank PLC, as administrative agent, and the lenders and issuing banks party thereto
10.15	364-Day Revolving Credit Agreement, dated November 16, 2018 among KMI, as borrower, Barclays Bank PLC, as administrative agent, and the lenders party thereto
10.16	Cross Guarantee Agreement, dated as of November 26, 2014 among KMI and certain of its subsidiaries with schedules updated as of December 31, 2018
21.1	Subsidiaries of KMI
23.1	Consent of PricewaterhouseCoopers LLP
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101	Interactive data files pursuant to Rule 405 of Regulation S-T: (i) our Consolidated Statements of Income for the years ended December 31, 2018, 2017, and 2016; (ii) our Consolidated Statements of Comprehensive Income for the years ended December 31, 2018, 2017, and 2016; (iii) our Consolidated Balance Sheets as of December 31, 2018 and 2017; (iv) our Consolidated Statements of Cash Flows for the years ended December 31, 2018, 2017, and 2016; (v) our Consolidated Statement of Stockholders' Equity as of and for the years ended December 31, 2018, 2017, and 2016; and (vi) the notes to our Consolidated Financial Statements

*Asterisk indicates exhibits incorporated by reference as indicated; all other exhibits are filed herewith, except as noted otherwise.

KINDER MORGAN, INC. AND SUBSIDIARIES
INDEX TO FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Kinder Morgan, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Kinder Morgan, Inc. and its subsidiaries (the "Company") as of December 31, 2018 and 2017 and the related consolidated statements of income, comprehensive income, cash flows, and stockholders' equity for each of the three years in the period ended December 31, 2018, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017**,** and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2018 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and

expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/PricewaterhouseCoopers LLP

Houston, Texas
February 8, 2019

We have served as the Company's auditor since 1997.

KINDER MORGAN, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME
(In Millions, Except Per Share Amounts)

	Year Ended December 31,		
	2018	**2017**	**2016**
Revenues			
Natural gas sales	$ 3,281	$ 3,053	$ 2,454
Services	7,931	7,901	8,146
Product sales and other	2,932	2,751	2,458
Total Revenues	14,144	13,705	13,058
Operating Costs, Expenses and Other			
Costs of sales	4,421	4,345	3,429
Operations and maintenance	2,522	2,472	2,372
Depreciation, depletion and amortization	2,297	2,261	2,209
General and administrative	601	688	703
Taxes, other than income taxes	345	398	421
Loss on impairments and divestitures, net	167	13	387
Other income, net	(3)	(1)	(1)
Total Operating Costs, Expenses and Other	10,350	10,176	9,520
Operating Income	3,794	3,529	3,538
Other Income (Expense)			
Earnings from equity investments	887	578	497
Loss on impairments and divestitures of equity investments, net	(270)	(150)	(610)
Amortization of excess cost of equity investments	(95)	(61)	(59)
Interest, net	(1,917)	(1,832)	(1,806)
Other, net	107	97	78
Total Other Expense	(1,288)	(1,368)	(1,900)
Income Before Income Taxes	2,506	2,161	1,638
Income Tax Expense	(587)	(1,938)	(917)
Net Income	1,919	223	721
Net Income Attributable to Noncontrolling Interests	(310)	(40)	(13)
Net Income Attributable to Kinder Morgan, Inc.	1,609	183	708
Preferred Stock Dividends	(128)	(156)	(156)
Net Income Available to Common Stockholders	$ 1,481	$ 27	$ 552
Class P Shares			
Basic and Diluted Earnings Per Common Share	$ 0.66	$ 0.01	$ 0.25
Basic and Diluted Weighted Average Common Shares Outstanding	2,216	2,230	2,230
Dividends Per Common Share Declared for the Period	$ 0.80	$ 0.50	$ 0.50

The accompanying notes are an integral part of these consolidated financial statements.

KINDER MORGAN, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(In Millions)

	Year Ended December 31,		
	2018	**2017**	**2016**
Net income	$ 1,919	$ 223	$ 721
Other comprehensive income (loss), net of tax			
Change in fair value of hedge derivatives (net of tax (expense) benefit of $(34), $(82) and $60, respectively)	111	145	(104)
Reclassification of change in fair value of derivatives to net income (net of tax (expense) benefit of $(25), $97 and $67, respectively)	84	(171)	(116)
Foreign currency translation adjustments (net of tax expense of $16, $56 and $20, respectively)	141	101	34
Benefit plan adjustments (net of tax (expense) benefit of $(11), $(27) and $19, respectively)	2	40	(14)
Total other comprehensive income (loss)	338	115	(200)
Comprehensive income	2,257	338	521
Comprehensive income attributable to noncontrolling interests	(328)	(86)	(13)
Comprehensive income attributable to KMI	$ 1,929	$ 252	$ 508

The accompanying notes are an integral part of these consolidated financial statements.

KINDER MORGAN, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(In Millions, Except Share and Per Share Amounts)

	December 31,	
	2018	**2017**
ASSETS		
Current assets		
Cash and cash equivalents	$ 3,280	$ 264
Restricted deposits	51	62
Accounts receivable, net	1,498	1,448
Fair value of derivative contracts	260	114
Inventories	385	424
Income tax receivable	23	165
Other current assets	225	238
Total current assets	5,722	2,715
Property, plant and equipment, net	37,897	40,155
Investments	7,481	7,298
Goodwill	21,965	22,162
Other intangibles, net	2,880	3,099
Deferred income taxes	1,566	2,044
Deferred charges and other assets	1,355	1,582
Total Assets	$ 78,866	$ 79,055
LIABILITIES, REDEEMABLE NONCONTROLLING INTEREST AND STOCKHOLDERS' EQUITY		
Current liabilities		
Current portion of debt	$ 3,388	$ 2,828
Accounts payable	1,337	1,340
Distributions payable to KML noncontrolling interests	876	—
Accrued interest	579	621
Accrued taxes	483	256
Accrued contingencies	88	291
Other current liabilities	806	845
Total current liabilities	7,557	6,181
Long-term liabilities and deferred credits		
Long-term debt		
Outstanding	33,105	33,988
Preferred interest in general partner of KMP	100	100
Debt fair value adjustments	731	927
Total long-term debt	33,936	35,015
Other long-term liabilities and deferred credits	2,176	2,735
Total long-term liabilities and deferred credits	36,112	37,750
Total Liabilities	43,669	43,931
Commitments and contingencies (Notes 9, 13 and 18)		
Redeemable Noncontrolling Interest	666	—
Stockholders' Equity		
Preferred stock, $0.01 par value, 10,000,000 shares authorized, 9.75% Series A Mandatory Convertible, $1,000 per share liquidation preference, - and 1,600,000 shares, respectively, issued and outstanding	—	—
Class P shares, $0.01 par value, 4,000,000,000 shares authorized, 2,262,165,783 and 2,217,110,072 shares, respectively, issued and outstanding	23	22
Additional paid-in capital	41,701	41,909
Retained deficit	(7,716)	(7,754)
Accumulated other comprehensive loss	(330)	(541)
Total Kinder Morgan, Inc.'s stockholders' equity	33,678	33,636
Noncontrolling interests	853	1,488
Total Stockholders' Equity	34,531	35,124
Total Liabilities, Redeemable Noncontrolling Interest and Stockholders' Equity	$ 78,866	$ 79,055

The accompanying notes are an integral part of these consolidated financial statements.

KINDER MORGAN, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In Millions)

	Year Ended December 31,		
	2018	**2017**	**2016**
Cash Flows From Operating Activities			
Net income	$ 1,919	$ 223	$ 721
Adjustments to reconcile net income to net cash provided by operating activities			
Depreciation, depletion and amortization	2,297	2,261	2,209
Deferred income taxes	405	2,073	1,087
Amortization of excess cost of equity investments	95	61	59
Change in fair market value of derivative contracts	77	40	64
Loss (gain) on early extinguishment of debt	—	4	(45)
Loss on impairments and divestitures, net (Note 4)	167	13	387
Loss on impairments and divestitures of equity investments, net (Note 4)	270	150	610
Earnings from equity investments	(887)	(578)	(497)
Distributions of equity investment earnings	499	426	431
Changes in components of working capital, net of the effects of acquisitions and dispositions			
Accounts receivable, net	(50)	(78)	(107)
Income tax receivable	137	7	(148)
Inventories	15	(90)	49
Other current assets	(16)	(25)	(81)
Accounts payable	21	73	144
Accrued interest, net of interest rate swaps	(22)	10	(18)
Accrued taxes	241	(37)	31
Accrued contingencies and other current liabilities	73	138	11
Rate reparations, refunds and other litigation reserve adjustments	(202)	(100)	(32)
Other, net	4	30	(117)
Net Cash Provided by Operating Activities	5,043	4,601	4,758
Cash Flows From Investing Activities			
Proceeds from the TMPL Sale, net of cash disposed (Note 3)	2,998	—	—
Acquisitions of assets and investments	(39)	(4)	(333)
Capital expenditures	(2,904)	(3,188)	(2,882)
Proceeds from sale of equity interests in subsidiaries, net	—	—	1,401
Proceeds from sales of equity investments	124	—	—
Sales of property, plant and equipment, investments, and other net assets, net of removal costs	(20)	118	330
Contributions to investments	(433)	(684)	(408)
Distributions from equity investments in excess of cumulative earnings	237	374	231
Loans (to) from related parties	(31)	(23)	35
Other, net	—	4	1
Net Cash Used in Investing Activities	(68)	(3,403)	(1,625)
Cash Flows From Financing Activities			
Issuances of debt	14,751	8,868	8,629
Payments of debt	(14,591)	(11,064)	(10,060)
Debt issue costs	(42)	(70)	(19)
Cash dividends - common shares (Note 11)	(1,618)	(1,120)	(1,118)
Cash dividends - preferred shares (Note 11)	(156)	(156)	(154)
Repurchases of common shares (Note 11)	(273)	(250)	—
Contributions from investment partner	181	485	—
Contributions from noncontrolling interests - net proceeds from KML IPO (Note 3)	—	1,245	—
Contributions from noncontrolling interests - net proceeds from KML preferred share issuances (Note 11)	—	420	—
Contributions from noncontrolling interests - other	19	12	117
Distributions to noncontrolling interests	(78)	(42)	(24)
Other, net	(17)	(9)	(8)
Net Cash Used in Financing Activities	(1,824)	(1,681)	(2,637)
Effect of Exchange Rate Changes on Cash, Cash Equivalents and Restricted Deposits	(146)	22	2
Net increase (decrease) in Cash, Cash Equivalents and Restricted Deposits	3,005	(461)	498
Cash, Cash Equivalents, and Restricted Deposits, beginning of period	326	787	289
Cash, Cash Equivalents, and Restricted Deposits, end of period	$ 3,331	$ 326	$ 787

KINDER MORGAN, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS (continued)
(In Millions)

	Year Ended December 31,		
	2018	**2017**	**2016**
Cash and Cash Equivalents, beginning of period	$ 264	$ 684	$ 229
Restricted Deposits, beginning of period	62	103	60
Cash, Cash Equivalents, and Restricted Deposits, beginning of period	326	787	289
Cash and Cash Equivalents, end of period	3,280	264	684
Restricted Deposits, end of period	51	62	103
Cash, Cash Equivalents, and Restricted Deposits, end of period	3,331	326	787
Net increase (decrease) in Cash, Cash Equivalents and Restricted Deposits	$ 3,005	$ (461)	$ 498
Noncash Investing and Financing Activities			
Assets acquired by the assumption or incurrence of liabilities	$ —	$ —	$ 43
Net assets contributed to equity investments	—	—	37
Increase in property, plant and equipment from both accruals and contractor retainage	30	14	
Decrease in noncontrolling interests for distribution accrual	905	—	—
Supplemental Disclosures of Cash Flow Information			
Cash paid during the period for interest (net of capitalized interest)	1,879	1,854	2,050
Cash (refunded) paid during the period for income taxes, net	(109)	(140)	4

The accompanying notes are an integral part of these consolidated financial statements.

KINDER MORGAN, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In Millions)

	Common stock		Preferred stock							
	Issued shares	Par value	Issued shares	Par value	Additional paid-in capital	Retained deficit	Accumulated other comprehensive loss	Stockholders' equity attributable to KMI	Non-controlling interests	Total
Balance at December 31, 2015	2,229	$ 22	2	$ —	$ 41,661	$ (6,103)	$ (461)	$ 35,119	$ 284	$35,403
Restricted shares	1				66			66		66
Net income						708		708	13	721
Distributions								—	(24)	(24)
Contributions								—	117	117
Preferred stock dividends						(156)		(156)		(156)
Common stock dividends						(1,118)		(1,118)		(1,118)
Other					12			12	(19)	(7)
Other comprehensive loss							(200)	(200)		(200)
Balance at December 31, 2016	2,230	22	2	—	41,739	(6,669)	(661)	34,431	371	34,802
Repurchases of shares	(14)				(250)			(250)		(250)
Restricted shares	1				65			65		65
Net income						183		183	40	223
KML IPO					314		51	365	684	1,049
KML preferred share issuance								—	419	419
Reorganization of foreign subsidiaries					38			38		38
Distributions								—	(48)	(48)
Contributions								—	18	18
Preferred stock dividends						(156)		(156)		(156)
Common stock dividends						(1,120)		(1,120)		(1,120)
Sale and deconsolidation of interest in Deeprock Development, LLC								—	(30)	(30)
Other					3	8		11	(12)	(1)
Other comprehensive income							69	69	46	115
Balance at December 31, 2017	2,217	22	2	—	$ 41,909	$ (7,754)	$ (541)	$ 33,636	$ 1,488	35,124
Impact of adoption of ASUs (Note 2)						175	(109)	66		66
Balance at January 1, 2018	2,217	22	2	—	41,909	(7,579)	(650)	33,702	1,488	35,190
Repurchases of shares	(15)				(273)			(273)		(273)
Mandatory conversion of preferred shares	58	1	(2)		(1)			—		—
Restricted shares	2				65			65		65
Net income						1,609		1,609	310	1,919
Distributions								—	(997)	(997)
Contributions								—	33	33
Preferred stock dividends						(128)		(128)		(128)
Common stock dividends						(1,618)		(1,618)		(1,618)
Other					1			1	1	2
Other comprehensive income							320	320	18	338
Balance at December 31, 2018	2,262	$ 23	—	$ —	$ 41,701	$ (7,716)	$ (330)	$ 33,678	$ 853	$34,531

The accompanying notes are an integral part of these consolidated financial statements.

1. General

We are one of the largest energy infrastructure companies in North America and unless the context requires otherwise, references to "we," "us," "our," "the Company," or "KMI" are intended to mean Kinder Morgan, Inc. and its consolidated subsidiaries. Our pipelines transport natural gas, refined petroleum products, crude oil, condensate, CO_2 and other products, and our terminals transload and store liquid commodities including petroleum products, ethanol and chemicals, and bulk products, including petroleum coke, metals and ores.

Our common stock trades on the NYSE under the symbol "KMI."

2. Summary of Significant Accounting Policies

Basis of Presentation

Our reporting currency is U.S. dollars, and all references to dollars are U.S. dollars, unless stated otherwise. Our accompanying consolidated financial statements have been prepared under the rules and regulations of the SEC. These rules and regulations conform to the accounting principles contained in the FASB's Accounting Standards Codification (ASC), the single source of GAAP. Under such rules and regulations, all significant intercompany items have been eliminated in consolidation. Additionally, certain amounts from prior years have been reclassified to conform to the current presentation.

Adoption of New Accounting Pronouncements

On January 1, 2018, we adopted Accounting Standards Updates (ASU) No. 2014-09, "*Revenue from Contracts with Customers*" and a series of related accounting standard updates designed to create improved revenue recognition and disclosure comparability in financial statements. For more information, see "*—Revenue Recognition*" below and Note 16.

On January 1, 2018, we retroactively adopted ASU No. 2016-18, "*Statement of Cash Flows (Topic 230): Restricted Cash (a consensus of the FASB Emerging Issues Task Force).*" This ASU requires the statements of cash flows to present the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents are now included with cash and cash equivalents when reconciling the beginning of period and end of period amounts presented on the statements of cash flows. The retrospective application of this new accounting guidance resulted in an increase of $41 million and a decrease of $43 million in "Net increase (decrease) in Cash, Cash Equivalents and Restricted Deposits", no change and a decrease of $37 million in "Accrued contingencies and other current liabilities" in Cash Flows from Operating Activities, and a decrease of $41 million and an increase of $80 million in "Other, net" in Cash Flows from Investing Activities in our accompanying consolidated statement of cash flows for the years ended December 31, 2017 and 2016, respectively, from what was previously presented in our Annual Report on Form 10-K for the year ended December 31, 2017.

Amounts included in the restricted deposits in the accompanying consolidated financial statements represent a combination of restricted cash amounts required to be set aside by regulatory agencies to cover obligations for our captive and other insurance subsidiaries, and cash margin deposits posted by us with our counterparties associated with certain energy commodity contract positions.

On January 1, 2018, we adopted ASU No. 2017-05, "*Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets*." This ASU clarifies the scope and application of ASC 610-20 on contracts for the sale or transfer of nonfinancial assets and in substance nonfinancial assets to noncustomers, including partial sales. This ASU also clarifies that the derecognition of all businesses is in the scope of ASC 810 and defines an "in substance nonfinancial asset." We utilized the modified retrospective method to adopt the provisions of this ASU, which required us to apply the new standard to (i) all new contracts entered into after January 1, 2018, and (ii) to contracts that were not completed contracts as of January 1, 2018 through a cumulative adjustment to our "Retained deficit" balance. The cumulative effect of the adoption of this ASU was a $66 million, net of income taxes, adjustment to our "Retained deficit" balance as presented in our consolidated statement of stockholders' equity for the year ended December 31, 2018. This ASU also requires us to classify EIG Global Energy Partners' (EIG) cumulative contribution to ELC as mezzanine equity, which we have included as "Redeemable noncontrolling interest" on our consolidated balance sheet as of December 31, 2018, as EIG has the right under certain

conditions to redeem their interests for cash. The December 31, 2017 balance of $485 million is included in "Other long-term liabilities and deferred credits" on our consolidated balance sheet as of December 31, 2017.

On January 1, 2018, we adopted ASU No. 2017-07, "*Compensation - Retirement Benefits (Topic 715)*." This ASU requires an employer to disaggregate the service cost component from the other components of net benefit cost, allows only the service cost component of net benefit cost to be eligible for capitalization and establishes how to present the service cost component and the other components of net benefit cost in the income statement. Topic 715 required us to retrospectively reclassify $15 million and $34 million of other components of net benefit credits (excluding the service cost component) from "General and administrative" to "Other, net" in our accompanying consolidated statements of income for the years ended December 31, 2017 and 2016, respectively. We prospectively applied Topic 715 related to net benefit costs eligible for capitalization.

On January 1, 2018, we adopted ASU No. 2018-02, "*Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*." Our accounting policy for the release of stranded tax effects in accumulated other comprehensive income is on an aggregate portfolio basis. This ASU permits companies to reclassify the income tax effects of the 2017 Tax Reform on items within accumulated other comprehensive income to retained earnings. The FASB refers to these amounts as "stranded tax effects." Only the stranded tax effects resulting from the 2017 Tax Reform are eligible for reclassification. The adoption of this ASU resulted in a $109 million reclassification adjustment of stranded income tax effects from "Accumulated other comprehensive loss" to "Retained deficit" on our consolidated statement of stockholders' equity for the year ended December 31, 2018.

Use of Estimates

Certain amounts included in or affecting our financial statements and related disclosures must be estimated, requiring us to make certain assumptions with respect to values or conditions which cannot be known with certainty at the time our financial statements are prepared. These estimates and assumptions affect the amounts we report for assets and liabilities, our revenues and expenses during the reporting period, and our disclosures, including as it relates to contingent assets and liabilities at the date of our financial statements. We evaluate these estimates on an ongoing basis, utilizing historical experience, consultation with experts and other methods we consider reasonable in the particular circumstances. Nevertheless, actual results may differ significantly from our estimates. Any effects on our business, financial position or results of operations resulting from revisions to these estimates are recorded in the period in which the facts that give rise to the revision become known.

Certain accounting policies are of more significance in our financial statement preparation process than others, and set out below are the principal accounting policies we apply in the preparation of our consolidated financial statements.

Cash Equivalents and Restricted Deposits

We define cash equivalents as all highly liquid short-term investments with original maturities of three months or less.

Restricted deposits were $51 million and $62 million as of December 31, 2018 and 2017, respectively.

Accounts Receivable, net

The amounts reported as "Accounts receivable, net" on our accompanying consolidated balance sheets as of December 31, 2018 and 2017 primarily consist of amounts due from customers net of the allowance for doubtful accounts.

Our policy for determining an appropriate allowance for doubtful accounts varies according to the type of business being conducted and the customers being served. Generally, we make periodic reviews and evaluations of the appropriateness of the allowance for doubtful accounts based on a historical analysis of uncollected amounts, and we record adjustments as necessary for changed circumstances and customer-specific information. When specific receivables are determined to be uncollectible, the reserve and receivable are relieved.

The allowance for doubtful accounts was $3 million and $35 million as of December 31, 2018 and 2017, respectively.

Inventories

Our inventories consist of materials and supplies and products such as, NGL, crude oil, condensate, refined petroleum products, transmix and natural gas. We report products inventory at the lower of weighted-average cost or net realizable

value. We report materials and supplies inventories at cost, and periodically review for physical deterioration and obsolescence.

Property, Plant and Equipment, net

Capitalization, Depreciation and Depletion and Disposals

We report property, plant and equipment at its acquisition cost. We expense costs for routine maintenance and repairs in the period incurred.

We generally compute depreciation using either the straight-line method based on estimated economic lives or the composite depreciation method, which applies a single depreciation rate for a group of assets. Generally, we apply composite depreciation rates to functional groups of property having similar economic characteristics. The rates range from 1.01% to 23.0% excluding certain short-lived assets such as vehicles. For FERC-regulated entities, the FERC-accepted composite depreciation rate is applied to the total cost of the composite group until the net book value equals the salvage value. For other entities, depreciation estimates are based on various factors, including age (in the case of acquired assets), manufacturing specifications, technological advances, estimated production life of the oil or gas field served by the asset, contract term for assets on leased or customer property and historical data concerning useful lives of similar assets. Uncertainties that impact these estimates include changes in laws and regulations relating to restoration and abandonment requirements, economic conditions, and supply and demand in the area. When these assets are put into service, we make estimates with respect to useful lives (and salvage values where appropriate) that we believe are reasonable. Subsequent events could cause us to change our estimates, thus impacting the future calculation of depreciation and amortization expense. Historically, adjustments to useful lives have not had a material impact on our aggregate depreciation levels from year to year.

Our oil and gas producing activities are accounted for under the successful efforts method of accounting. Under this method costs that are incurred to acquire leasehold and subsequent development costs are capitalized. Costs that are associated with the drilling of successful exploration wells are capitalized if proved reserves are found. Costs associated with the drilling of exploratory wells that do not find proved reserves, geological and geophysical costs, and costs of certain non-producing leasehold costs are expensed as incurred. The capitalized costs of our producing oil and gas properties are depreciated and depleted by the units-of-production method. Other miscellaneous property, plant and equipment are depreciated over the estimated useful lives of the asset.

We engage in enhanced recovery techniques in which CO_2 is injected into certain producing oil reservoirs. In some cases, the cost of the CO_2 associated with enhanced recovery is capitalized as part of our development costs when it is injected. The cost of CO_2 associated with pressure maintenance operations for reservoir management is expensed when it is injected. When CO_2 is recovered in conjunction with oil production, it is extracted and re-injected, and all of the associated costs are expensed as incurred. Proved developed reserves are used in computing units of production rates for drilling and development costs, and total proved reserves are used for depletion of leasehold costs.

A gain on the sale of property, plant and equipment used in our oil and gas producing activities or in our bulk and liquids terminal activities is calculated as the difference between the cost of the asset disposed of, net of depreciation, and the sales proceeds received. A gain on an asset disposal is recognized in income in the period that the sale is closed. A loss on the sale of property, plant and equipment is calculated as the difference between the cost of the asset disposed of, net of depreciation, and the sales proceeds received or the market value if the asset is being held for sale. A loss is recognized when the asset is sold or when the net cost of an asset held for sale is greater than the market value of the asset. For our pipeline system assets under the composite method of depreciation, we generally charge the original cost of property sold or retired to accumulated depreciation and amortization, net of salvage and cost of removal. Gains and losses are booked for FERC-approved operating unit sales and land sales and are recorded to income or expense accounts in accordance with regulatory accounting guidelines. In those instances where we receive recovery in tariff rates related to losses on dispositions of operating units, we record a regulatory asset for the estimated recoverable amount.

Asset Retirement Obligations

We record liabilities for obligations related to the retirement and removal of long-lived assets used in our businesses. We record, as liabilities, the fair value of asset retirement obligations on a discounted basis when they are incurred and can be reasonably estimated, which is typically at the time the assets are installed or acquired. Amounts recorded for the related assets are increased by the amount of these obligations. Over time, the liabilities increase due to the

change in their present value, and the initial capitalized costs are depreciated over the useful lives of the related assets. The liabilities are eventually extinguished when the asset is taken out of service.

We have various other obligations throughout our businesses to remove facilities and equipment on rights-of-way and other leased facilities. We currently cannot reasonably estimate the fair value of these obligations because the associated assets have indeterminate lives. These assets include pipelines, certain processing plants and distribution facilities, and certain bulk and liquids terminal facilities. An asset retirement obligation, if any, will be recognized once sufficient information is available to reasonably estimate the fair value of the obligation.

Long-lived Asset and Other Intangibles Impairments

We evaluate long-lived assets and investments for impairment whenever events or changes in circumstances indicate that our carrying amount of an asset or investment may not be recoverable. We recognize impairment losses when estimated future cash flows expected to result from our use of the asset and its eventual disposition is less than its carrying amount.

In addition to our annual goodwill impairment test, to the extent triggering events exist, we complete a review of the carrying value of our long-lived assets, including property, plant and equipment as well as other intangibles, and record, as applicable, the appropriate impairments. Because the impairment test for long-lived assets held in use is based on undiscounted cash flows, there may be instances where an asset or asset group is not considered impaired, even when its fair value may be less than its carrying value, because the asset or asset group is recoverable based on the cash flows to be generated over the estimated life of the asset or asset group. If the carrying value of a long-lived asset or asset group is in excess of undiscounted cash flows, we typically use discounted cash flow analyses to determine if an impairment is required.

We evaluate our oil and gas producing properties for impairment of value on a field-by-field basis or, in certain instances, by logical grouping of assets if there is significant shared infrastructure, using undiscounted future cash flows based on total proved and risk-adjusted probable reserves.

Oil and gas producing properties deemed to be impaired are written down to their fair value, as determined by discounted future cash flows based on total proved and risk-adjusted probable and possible reserves or, if available, comparable market values. Unproved oil and gas properties that are individually significant are periodically assessed for impairment of value, and a loss is recognized at the time of impairment.

Equity Method of Accounting and Excess Investment Cost

We account for investments which we do not control, but do have the ability to exercise significant influence using the equity method of accounting. Under this method, our equity investments are carried originally at our acquisition cost, increased by our proportionate share of the investee's net income and by contributions made, and decreased by our proportionate share of the investee's net losses and by distributions received.

With regard to our equity investments in unconsolidated affiliates, in almost all cases, either (i) the price we paid to acquire our share of the net assets of such equity investees or (ii) the revaluation of our share of the net assets of any retained noncontrolling equity investment (from the sale of a portion of our ownership interest in a consolidated subsidiary, thereby losing our controlling financial interest in the subsidiary) differed from the underlying carrying value of such net assets. This differential consists of two pieces. First, an amount related to the difference between the investee's recognized net assets at book value and at current fair values (representing the appreciated value in plant and other net assets), and secondly, to any premium in excess of fair value (referred to as equity method goodwill) we paid to acquire the investment. We include both amounts within "Investments" on our accompanying consolidated balance sheets.

The first differential, representing the excess of the fair market value of our investees' plant and other net assets over its underlying book value at either the date of acquisition or the date of the loss of control totaled $470 million and $732 million as of December 31, 2018 and 2017, respectively. Generally, this basis difference relates to our share of the underlying depreciable assets, and, as such, we amortize this portion of our investment cost against our share of investee earnings. As of December 31, 2018, this excess investment cost is being amortized over a weighted average life of approximately twelve years.

The second differential, representing equity method goodwill, totaled $1,967 million for both periods as of December 31, 2018 and 2017. This differential is not subject to amortization but rather to impairment testing as part of our periodic evaluation of the recoverability of our investment as compared to the fair value of net assets accounted for under the

equity method. Our impairment test considers whether the fair value of the equity investment as a whole has declined and whether that decline is other than temporary.

Goodwill

Goodwill is the cost of an acquisition in excess of the fair value of acquired assets and liabilities and is recorded as an asset on our balance sheet. Goodwill is not subject to amortization but must be tested for impairment at least annually. This test requires us to assign goodwill to an appropriate reporting unit and to determine if the implied fair value of the reporting unit's goodwill is less than its carrying amount.

We evaluate goodwill for impairment on May 31 of each year. For this purpose, prior to the TMPL Sale we had seven reporting units as follows: (i) Products Pipelines (excluding associated terminals); (ii) Products Pipelines Terminals (evaluated separately from Products Pipelines for goodwill purposes); (iii) Natural Gas Pipelines Regulated; (iv) Natural Gas Pipelines Non-Regulated; (v) CO_2; (vi) Terminals; and (vii) Kinder Morgan Canada. Subsequent to the TMPL Sale, Kinder Morgan Canada is no longer a reporting unit. We also evaluate goodwill for impairment to the extent events or conditions indicate a risk of possible impairment during the interim periods subsequent to our annual impairment test. Generally, the evaluation of goodwill for impairment involves a two-step test, although under certain circumstance an initial qualitative evaluation may be sufficient to conclude that goodwill is not impaired without conducting the quantitative test.

Step 1 involves comparing the estimated fair value of each respective reporting unit to its carrying value, including goodwill. If the estimated fair value exceeds the carrying value, the reporting unit's goodwill is not considered impaired. If the carrying value exceeds the estimated fair value, step 2 must be performed to determine whether goodwill is impaired and, if so, the amount of the impairment. Step 2 involves calculating an implied fair value of goodwill by performing a hypothetical allocation of the estimated fair value of the reporting unit determined in step 1 to the respective tangible and intangible net assets of the reporting unit. The remaining implied goodwill is then compared to the actual carrying amount of the goodwill for the reporting unit. To the extent the carrying amount of goodwill exceeds the implied goodwill, the difference is the amount of the goodwill impairment.

A large portion of our goodwill is non-deductible for tax purposes, and as such, to the extent there are impairments, all or a portion of the impairment may not result in a corresponding tax benefit.

Refer to Note 8 for further information.

Other Intangibles

Excluding goodwill, our other intangible assets include customer contracts, relationships and agreements, and technology-based assets. As of both December 31, 2018 and 2017, the gross carrying amounts of these intangible assets was $4,305 million and the accumulated amortization was $1,425 million and $1,206 million, respectively, resulting in net carrying amounts of $2,880 million and $3,099 million, respectively. These intangible assets primarily consisted of customer contracts, relationships and agreements associated with our Natural Gas Pipelines and Terminals business segments.

Primarily, these contracts, relationships and agreements relate to the gathering of natural gas, and the handling and storage of petroleum, chemical, and dry-bulk materials, including oil, gasoline and other refined petroleum products, petroleum coke, metals and ores. We determined the values of these intangible assets by first, estimating the revenues derived from a customer contract or relationship (offset by the cost and expenses of supporting assets to fulfill the contract), and second, discounting the revenues at a risk adjusted discount rate.

We amortize the costs of our intangible assets to expense in a systematic and rational manner over their estimated useful lives. The life of each intangible asset is based either on the life of the corresponding customer contract or agreement or, in the case of a customer relationship intangible (the life of which was determined by an analysis of all available data on that business relationship), the length of time used in the discounted cash flow analysis to determine the value of the customer relationship. Among the factors we weigh, depending on the nature of the asset, are the effect of obsolescence, new technology, and competition.

For the years ended December 31, 2018, 2017 and 2016, the amortization expense on our intangibles totaled $219 million, $220 million and $223 million, respectively. Our estimated amortization expense for our intangible assets for each of the next five fiscal years (2019 – 2023) is approximately $213 million, $209 million, $209 million, $207 million, and $203 million, respectively. As of December 31, 2018, the weighted average amortization period for our intangible assets was approximately fifteen years.

Revenue Recognition

Revenue from Contracts with Customers

Beginning in 2018, we account for revenue from contracts with customers in accordance with Accounting Standards Updates ASU No. 2014-09, "*Revenue from Contracts with Customers*" and a series of related accounting standard updates (Topic 606). The unit of account in Topic 606 is a performance obligation, which is a promise in a contract to transfer to a customer either a distinct good or service (or bundle of goods or services) or a series of distinct goods or services provided over a period of time. Topic 606 requires that a contract's transaction price, which is the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer, is to be allocated to each performance obligation in the contract based on relative standalone selling prices and recognized as revenue when (point in time) or as (over time) control of the goods or services transfers to the customer and the performance obligation is satisfied.

Our customer sales contracts primarily include natural gas sales, NGL sales, crude oil sales, CO_2 sales, and transmix sales contracts, as described below. Generally, for the majority of these contracts: (i) each unit (Mcf, gallon, barrel, etc.) of commodity is a separate performance obligation, as our promise is to sell multiple distinct units of commodity at a point in time; (ii) the transaction price principally consists of variable consideration, which amount is determinable each month end based on our right to invoice at month end for the value of commodity sold to the customer that month; and (iii) the transaction price is allocated to each performance obligation based on the commodity's standalone selling price and recognized as revenue upon delivery of the commodity, which is the point in time when the customer obtains control of the commodity and our performance obligation is satisfied.

Our customer services contracts primarily include transportation service, storage service, gathering and processing service, and terminaling service contracts, as described below. Generally, for the majority of these contracts: (i) our promise is to transfer (or stand ready to transfer) a series of distinct integrated services over a period of time, which is a single performance obligation; (ii) the transaction price includes fixed and/or variable consideration, which amount is determinable at contract inception and/or at each month end based on our right to invoice at month end for the value of services provided to the customer that month; and (iii) the transaction price is recognized as revenue over the service period specified in the contract (which can be a day, including each day in a series of promised daily services, a month, a year, or other time increment, including a deficiency makeup period) as the services are rendered using a time-based (passage of time) or units-based (units of service transferred) output method for measuring the transfer of control of the services and satisfaction of our performance obligation over the service period, based on the nature of the promised service (e.g., firm or non-firm) and the terms and conditions of the contract (e.g., contracts with or without makeup rights).

Firm Services

Firm services (also called uninterruptible services) are services that are promised to be available to the customer at all times during the period(s) covered by the contract, with limited exceptions. Our firm service contracts are typically structured with take-or-pay or minimum volume provisions, which specify minimum service quantities a customer will pay for even if it chooses not to receive or use them in the specified service period (referred to as "deficiency quantities"). We typically recognize the portion of the transaction price associated with such provisions, including any deficiency quantities, as revenue depending on whether the contract prohibits the customer from making up deficiency quantities in subsequent periods, or the contract permits this practice, as follows:

- *Contracts without Makeup Rights.* If contractually the customer cannot make up deficiency quantities in future periods, our performance obligation is satisfied, and revenue associated with any deficiency quantities is generally recognized as each service period expires. Because a service period may exceed a reporting period, we determine at inception of the contract and at the beginning of each subsequent reporting period if we expect the customer to take the minimum volume associated with the service period. If we expect the customer to make up all deficiencies in the specified service period (i.e., we expect the customer to take the minimum service quantities), the minimum volume provision is deemed not substantive and we will recognize the transaction price as revenue in the specified service period as the promised units of service are transferred to the customer. Alternatively, if we expect that there will be any deficiency quantities that the customer cannot or will not make up in the specified service period (referred to as "breakage"), we will recognize the estimated breakage amount (subject to the constraint on variable consideration) as revenue ratably over such service period in proportion to the revenue that we will recognize for actual units of service transferred to the customer in the service period. For certain take-or-pay contracts where we make the service, or a part of the service (e.g., reservation), continuously available over the service period, we typically recognize the take-or-pay amount as revenue ratably over such period based on the passage of time.

- *Contracts with Makeup Rights.* If contractually the customer can acquire the promised service in a future period and make up the deficiency quantities in such future period (the "deficiency makeup period"), we have a performance obligation to deliver those services at the customer's request (subject to contractual and/or capacity constraints) in the deficiency makeup period. At inception of the contract, and at the beginning of each subsequent reporting period, we estimate if we expect that there will be deficiency quantities that the customer will or will not make up. If we expect the customer will make up all deficiencies it is contractually entitled to, any non-refundable consideration received relating to temporary deficiencies that will be made up in the deficiency makeup period will be deferred as a contract liability, and we will recognize that amount as revenue in the deficiency makeup period when either of the following occurs: (i) the customer makes up the volumes or (ii) the likelihood that the customer will exercise its right for deficiency volumes then becomes remote (e.g., there is insufficient capacity to make up the volumes, the deficiency makeup period expires). Alternatively, if we expect at inception of the contract, or at the beginning of any subsequent reporting period, that there will be any deficiency quantities that the customer cannot or will not make up (i.e., breakage), we will recognize the estimated breakage amount (subject to the constraint on variable consideration) as revenue ratably over the specified service periods in proportion to the revenue that we will recognize for actual units of service transferred to the customer in those service periods.

Non-Firm Services

Non-firm services (also called interruptible services) are the opposite of firm services in that such services are provided to a customer on an "as available" basis. Generally, we do not have an obligation to perform these services until we accept a customer's periodic request for service. For the majority of our non-firm service contracts, the customer will pay only for the actual quantities of services it chooses to receive or use, and we typically recognize the transaction price as revenue as those units of service are transferred to the customer in the specified service period (typically a daily or monthly period).

Refer to Note 16 for further information.

Revenue Recognition Policy prior to January 1, 2018

Prior to the implementation of Topic 606, we recognized revenue as services were rendered or goods were delivered and, if applicable, risk of loss had passed. We recognized natural gas, crude and NGL sales revenue when the commodity was sold to a purchaser at a fixed or determinable price, delivery had occurred and risk of loss had transferred, and collectability of the revenue was reasonably assured. Our sales and purchases of natural gas, crude and NGL were primarily accounted for on a gross basis as natural gas sales or product sales, as applicable, and cost of sales, except in circumstances where we solely acted as an agent and did not have price and related risk of ownership, in which case we recognized revenue on a net basis.

For revenues associated with our firm services as previously described, the fixed-fee component of the overall rate was recognized as revenue in the period the service was provided. The per-unit charge was recognized as revenue when the volumes were delivered to the customers' agreed upon delivery point, or when the volumes were injected into/withdrawn from our storage facilities.

Revenues associated with our non-firm services as previously described, were recognized in the same manner utilized for the per-unit rate for volumes actually transported under firm service agreements.

Revenues associated with our crude oil and refined petroleum products transportation and storage services were recorded when products were delivered and services had been provided, and adjusted according to terms prescribed by the toll settlements with shippers and approved by regulatory authorities.

We recognized bulk terminal transfer service revenues based on volumes loaded and unloaded. We recognized liquids terminal tank rental revenue ratably over the contract period. We recognized liquids terminal throughput revenue based on volumes received and volumes delivered. We recognized transmix processing revenues based on volumes processed or sold, and if applicable, when risk of loss had passed. We recognized energy-related product sales revenues based on delivered quantities of product.

Revenues from the sale of crude oil, NGL, CO2 and natural gas production within the CO2 business segment were recorded using the entitlement method, under which revenue was recorded when title passed based on our net interest. We recorded our entitled share of revenues based on entitled volumes and contracted sales prices. Since there was a ready

market for oil and gas production, we sold the majority of our products soon after production at various locations, at which time title and risk of loss had passed to the buyer.

Cost of Sales

Cost of sales primarily includes the cost of energy commodities sold, including natural gas, NGL and other refined petroleum products, adjusted for the effects of our energy commodity activities, as applicable, other than production from our CO_2 business segment.

Operations and Maintenance

Operations and maintenance include costs of services and is primarily comprised of (i) operational labor costs and (ii) operations, maintenance and asset integrity, regulatory and environmental costs. Costs associated with our oil, gas and CO_2 producing activities included within operations and maintenance totaled $363 million, $342 million and $349 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Environmental Matters

We capitalize or expense, as appropriate, environmental expenditures. We capitalize certain environmental expenditures required in obtaining rights-of-way, regulatory approvals or permitting as part of the construction. We accrue and expense environmental costs that relate to an existing condition caused by past operations, which do not contribute to current or future revenue generation. We generally do not discount environmental liabilities to a net present value, and we record environmental liabilities when environmental assessments and/or remedial efforts are probable and we can reasonably estimate the costs. Generally, our recording of these accruals coincides with our completion of a feasibility study or our commitment to a formal plan of action. We recognize receivables for anticipated associated insurance recoveries when such recoveries are deemed to be probable. We record at estimated fair value, where appropriate, environmental liabilities assumed in a business combination.

We routinely conduct reviews of potential environmental issues and claims that could impact our assets or operations. These reviews assist us in identifying environmental issues and estimating the costs and timing of remediation efforts. We also routinely adjust our environmental liabilities to reflect changes in previous estimates. In making environmental liability estimations, we consider the material effect of environmental compliance, pending legal actions against us, and potential third-party liability claims. Often, as the remediation evaluation and effort progresses, additional information is obtained, requiring revisions to estimated costs. These revisions are reflected in our income in the period in which they are reasonably determinable.

Pensions and Other Postretirement Benefits

We recognize the differences between the fair value of each of our and our consolidated subsidiaries' pension and other postretirement benefit plans' assets and the benefit obligations as either assets or liabilities on our consolidated balance sheet. We record deferred plan costs and income—unrecognized losses and gains, unrecognized prior service costs and credits, and any remaining unamortized transition obligations—in "Accumulated other comprehensive loss," with the proportionate share associated with less than wholly owned consolidated subsidiaries allocated and included within "Noncontrolling interests," or as a regulatory asset or liability for certain of our regulated operations, until they are amortized as a component of benefit expense.

Noncontrolling Interests

Noncontrolling interests represents the interests in our consolidated subsidiaries that are not owned by us. In our accompanying consolidated income statements, the noncontrolling interest in the net income of our consolidated subsidiaries is shown as an allocation of our consolidated net income and is presented separately as "Net Income Attributable to Noncontrolling Interests." In our accompanying consolidated balance sheets, noncontrolling interests is presented separately as "Noncontrolling interests" within "Stockholders' Equity."

Income Taxes

Income tax expense is recorded based on an estimate of the effective tax rate in effect or to be in effect during the relevant periods. Changes in tax legislation are included in the relevant computations in the period in which such changes are enacted. We do business in a number of states with differing laws concerning how income subject to each state's tax

structure is measured and at what effective rate such income is taxed. Therefore, we must make estimates of how our income will be apportioned among the various states in order to arrive at an overall effective tax rate. Changes in our effective rate, including any effect on previously recorded deferred taxes, are recorded in the period in which the need for such change is identified.

Deferred income tax assets and liabilities are recognized for temporary differences between the basis of assets and liabilities for financial reporting and tax purposes. Deferred tax assets are reduced by a valuation allowance for the amount that is, more likely than not, to not be realized. While we have considered estimated future taxable income and prudent and feasible tax planning strategies in determining the amount of our valuation allowance, any change in the amount that we expect to ultimately realize will be included in income in the period in which such a determination is reached.

In determining the deferred income tax asset and liability balances attributable to our investments, we apply an accounting policy that looks through our investments. The application of this policy resulted in no deferred income taxes being provided on the difference between the book and tax basis on the non-tax-deductible goodwill portion of our investments, including KMI's investment in its wholly-owned subsidiary, KMP.

Foreign Currency Transactions and Translation

Foreign currency transaction gains or losses result from a change in exchange rates between (i) the functional currency, for example the Canadian dollar for a Canadian subsidiary and (ii) the currency in which a foreign currency transaction is denominated, for example the U.S. dollar for a Canadian subsidiary. In our accompanying consolidated statements of income, gains and losses from our foreign currency transactions are included within "Other Income (Expense)—Other, net."

Foreign currency translation is the process of expressing, in U.S. dollars, amounts recorded in a local functional currency other than U.S. dollars, for example the Canadian dollar for a Canadian subsidiary. We translate the assets and liabilities of each of our consolidated foreign subsidiaries that have a local functional currency to U.S. dollars at year-end exchange rates. Income and expense items are translated at weighted-average rates of exchange prevailing during the year and stockholders' equity accounts are translated by using historical exchange rates. The cumulative translation adjustments balance is reported as a component of "Accumulated other comprehensive loss."

Risk Management Activities

We utilize energy commodity derivative contracts for the purpose of mitigating our risk resulting from fluctuations in the market price of commodities including natural gas, NGL and crude oil. In addition, we enter into interest rate swap agreements for the purpose of hedging the interest rate risk associated with our debt obligations. We also enter into cross-currency swap agreements to manage our foreign currency risk with certain debt obligations and net investments in foreign operations. We measure our derivative contracts at fair value and we report them on our balance sheet as either an asset or liability. For certain physical forward commodity derivatives contracts, we apply the normal purchase/normal sale exception, whereby the revenues and expenses associated with such transactions are recognized during the period when the commodities are physically delivered or received.

For qualifying accounting hedges, we formally document the relationship between the hedging instrument and the hedged item, the risk management objectives and the methods used for assessing and testing effectiveness, and how any ineffectiveness will be measured and recorded. If we designate a derivative contract as a cash flow accounting hedge, the effective portion of the change in fair value of the derivative is deferred in "Accumulated other comprehensive loss" and reclassified into earnings in the period in which the hedged item affects earnings. Any ineffective portion of the derivative's change in fair value or amount excluded from the assessment of hedge effectiveness is recognized currently in earnings. If we designate a derivative contract as a fair value accounting hedge, the effective portion of the change in fair value of the derivative is recorded as an adjustment to the item being hedged. Any ineffective portion of the derivative's change in fair value is recognized currently in earnings. If we designate a derivative contract as a net investment accounting hedge, the effective portion of the change in fair value of the derivative is reflected in the Cumulative Translation Adjustment (CTA) section of Other Comprehensive Income (OCI) on our consolidated statements of comprehensive income.

For derivative instruments that are not designated as accounting hedges, or for which we have not elected the normal purchase/normal sales exception, changes in fair value are recognized currently in earnings.

Regulatory Assets and Liabilities

Regulatory assets and liabilities represent probable future revenues or expenses associated with certain charges and credits that will be recovered from or refunded to customers through the ratemaking process. We included the amounts of our regulatory assets and liabilities within "Other current assets," "Deferred charges and other assets," "Other current liabilities" and "Other long-term liabilities and deferred credits," respectively, in our accompanying consolidated balance sheets.

The following table summarizes our regulatory asset and liability balances as of December 31, 2018 and 2017 (in millions):

	December 31,	
	2018	2017
Current regulatory assets	$ 66	$ 60
Non-current regulatory assets	245	288
Total regulatory assets(a)	$ 311	$ 348
Current regulatory liabilities	$ 29	$ 107
Non-current regulatory liabilities	206	236
Total regulatory liabilities(b)	$ 235	$ 343

(a) Regulatory assets as of December 31, 2018 include (i) $176 million of unamortized losses on disposal of assets; (ii) $53 million income tax gross up on equity AFUDC; and (iii) $82 million of other assets including amounts related to fuel tracker arrangements. Approximately $98 million of the regulatory assets, with a weighted average remaining recovery period of 23 years, are recoverable without earning a return, including the income tax gross up on equity AFUDC for which there is an offsetting deferred income tax balance for FERC rate base purposes; therefore, it does not earn a return.

(b) Regulatory liabilities as of December 31, 2018 are comprised of customer prepayments to be credited to shippers or other over-collections that are expected to be returned to shippers or netted against under-collections over time. Approximately $136 million of the $206 million classified as non-current is expected to be credited to shippers over a remaining weighted average period of 18 years, while the remaining $70 million is not subject to a defined period.

Earnings per Share

We calculate earnings per share using the two-class method. Earnings were allocated to Class P shares and participating securities based on the amount of dividends paid in the current period plus an allocation of the undistributed earnings or excess distributions over earnings to the extent that each security participates in earnings or excess distributions over earnings. Our unvested restricted stock awards, which may be restricted stock or restricted stock units issued to employees and non-employee directors and include dividend equivalent payments, do not participate in excess distributions over earnings.

The following table sets forth the allocation of net income available to shareholders of Class P shares and participating securities (in millions):

	Year Ended December 31,		
	2018	2017	2016
Net Income Available to Common Stockholders	$ 1,481	$ 27	$ 552
Participating securities:			
Less: Net Income Allocated to Restricted stock awards(a)	(8)	(5)	(4)
Net Income Allocated to Class P Stockholders	$ 1,473	$ 22	$ 548
Basic Weighted Average Common Shares Outstanding	2,216	2,230	2,230
Basic Earnings Per Common Share	$ 0.66	$ 0.01	$ 0.25

(a) As of December 31, 2018, there were approximately 13 million such restricted stock awards.

The following maximum number of potential common stock equivalents are antidilutive and, accordingly, are excluded from the determination of diluted earnings per share (in millions on a weighted average basis):

	Year Ended December 31,		
	2018	2017	2016
Unvested restricted stock awards	12	10	8
Warrants to purchase our Class P shares(a)		116	293
Convertible trust preferred securities	3	3	8
Mandatory convertible preferred stock(b)	48	58	58

(a) On May 25, 2017, approximately 293 million of unexercised warrants expired without the issuance of Class P common stock. Prior to expiration, each warrant entitled the holder to purchase one share of our common stock for an exercise price of $40 per share. The potential dilutive effect of the warrants did not consider the assumed proceeds to KMI upon exercise.

(b) The holder of each convertible preferred share participated in our earnings by receiving preferred stock dividends through the mandatory conversion date of October 26, 2018 at which time our convertible preferred shares were converted to common shares.

3. Divestitures and Acquisition

Sale of Trans Mountain Pipeline System and Its Expansion Project

On August 31, 2018, KML completed the sale of the TMPL, the TMEP, the Puget Sound pipeline system and Kinder Morgan Canada Inc., the Canadian employer of our staff that operate the business, which were indirectly acquired by the Government of Canada through Trans Mountain Corporation (a subsidiary of the Canada Development Investment Corporation) for cash consideration of C$4.43 billion (U.S.$3.4 billion), which is the contractual purchase price of C$4.5 billion net of a preliminary working capital adjustment (the "TMPL Sale"). These assets comprised our Kinder Morgan Canada business segment. We recognized a pre-tax gain from the TMPL Sale of $596 million within "Loss on impairments and divestitures, net" in our accompanying consolidated statement of income during the year ended December 31, 2018, including an incremental working capital adjustment of $26 million accrued as of December 31, 2018.

On January 3, 2019, pursuant to KML's shareholders' approval on November 29, 2018, KML distributed to its shareholders as a return of capital, the net proceeds from the TMPL Sale, after capital gains taxes, customary purchase price adjustments and the repayment of debt outstanding under a temporary KML credit facility (see Note 9, "*Debt—Credit Facilities and Restrictive Covenants—KML*"). KML's public owners of its restricted voting shares, reflected as noncontrolling interests by us, received approximately $0.9 billion (C$1.2 billion), and part of our approximate 70% portion of the net proceeds of $1.9 billion (C$2.5 billion) (after Canadian tax) were used to immediately repay our outstanding commercial paper borrowings of $0.4 billion and in February 2019, to pay down approximately $1.3 billion of maturing long-term debt. To facilitate the return of capital and provide flexibility for KML's dividends going forward, KML's shareholders also approved a reduction in the stated capital of its restricted voting shares by C$1.45 billion, which was recorded in the fourth quarter of 2018, along with a "reverse stock split" of KML's restricted voting shares, and KML's special voting shares that we own, on a one-for-three basis (three shares consolidating to one share) which occurred on January 4, 2019.

May 2017 Sale of Approximate 30% Interest in Canadian Business

On May 30, 2017, KML completed an IPO of 102,942,000 restricted voting shares listed on the Toronto Stock Exchange at a price to the public of C$17.00 per restricted voting share for total gross proceeds of approximately C$1,750 million (US $1,299 million). The net proceeds from the IPO were used by KML to indirectly acquire from us an approximate 30% interest in a limited partnership that holds our Canadian business while we retained the remaining 70% interest. We used the proceeds from KML's IPO to pay down debt.

Subsequent to the IPO, we retained control of KML and the limited partnership, and as a result, they remain consolidated in our consolidated financial statements. The public ownership of the KML restricted voting shares is reflected within "Noncontrolling interests" in our consolidated statements of stockholders' equity and consolidated balance sheets. Earnings attributable to the public ownership of KML are presented in "Net income attributable to noncontrolling interests" in our consolidated statements of income for the periods presented after May 30, 2017.

The net proceeds received of $1,245 million are presented as "Contributions from noncontrolling interests - net proceeds from KML IPO" on our consolidated statement of cash flows for the year ended December 31, 2017. Because we retained control of KML subsequent to the IPO, the $314 million adjustment made to "Additional paid-in capital" on our consolidated statement of stockholders equity for the year ended December 31, 2017 represents the difference between our book value prior

to the sale and our share of book value in KML's net assets after the sale. The impact of the IPO resulted in a $166 million deferred income tax adjustment. At the date of the IPO, $765 million was attributed to the KML public shareholders to reflect their proportionate ownership percentage in the net assets of KML acquired from us and is included in "Noncontrolling interests" on our consolidated statement of stockholders equity. The above amounts recorded to "Additional paid-in capital" and "Noncontrolling interests" are net of IPO fees.

In addition, the amount recorded to "Noncontrolling interests" at the date of the IPO was reduced by $81 million primarily associated with the allocation of currency translation adjustments from "Accumulated other comprehensive loss" to "Noncontrolling interests."

The portion of the Canadian business operations that we sold to the public on May 30, 2017 represented Canadian assets that were included in our Kinder Morgan Canada, Terminals and Product Pipelines business segments and include (i) the Trans Mountain pipeline system; (ii) the Canadian Cochin pipeline system; (iii) the Puget Sound pipeline system; (iv) the Jet Fuel pipeline system; and (v) terminal facilities located in Western Canada. In January 2018, KML completed the registration of its restricted voting shares pursuant to Section 12(g) of the United States Securities Exchange Act of 1934 (the "Exchange Act") and subsequently is subject to the reporting requirements of Section 13(a) of the Exchange Act.

In conjunction with the IPO, Kinder Morgan Canada Limited Partnership (KMC LP) and Kinder Morgan Canada GP Inc. (KMC GP) were formed to hold our Canadian business. We have determined that KMC LP is a variable interest entity because a simple majority or lower threshold of the limited partnership interests do not possess substantive "kick-out rights" (i.e., the right to remove the general partner or to dissolve (liquidate) the entity without cause) or substantive participation rights. We have also determined KMC GP is the primary beneficiary because it has the power to direct the activities that most significantly impact KMC LP's performance, the right to receive benefits and the obligation to absorb losses, that could be significant to KMC LP. As a result, KMC GP consolidates KMC LP. KMC GP is a wholly owned subsidiary of KML, which is indirectly controlled by us through our 100% interest in KML's special voting shares that represent approximately 70% of KML's total voting shares (comprised of restricted voting shares and special voting shares). Consequently, we consolidate KML and the variable interest entity, KMC LP, in our consolidated financial statements.

The following table shows the carrying amount and classification of KMC LP's assets and liabilities in our consolidated balance sheet (in millions):

	December 31,	
	2018	2017
Assets		
Total current assets	$ 3,204	$ 270
Property, plant and equipment, net	719	2,956
Total goodwill, deferred charges and other assets	8	322
Total assets	$ 3,931	$ 3,548
Liabilities		
Current portion of debt	$ —	$ —
Total other current liabilities	2,353	236
Long-term debt, excluding current maturities	—	—
Total other long-term liabilities and deferred credits	52	414
Total liabilities	$ 2,405	$ 650

We receive distributions from KMC LP through our indirectly owned limited partnership interests in KMC LP, but otherwise the assets of KMC LP cannot be used to settle our obligations other than those of KML. We do not guarantee the debt, commercial paper or other similar commitments of KMC LP or any of its subsidiaries, and the obligations of KMC LP may only be settled using the assets of KMC LP. KMC LP does not guarantee the debt or other similar commitments of KMI.

Sale of Noncontrolling Interest in ELC

Effective February 28, 2017, we sold a 49% partnership interest in ELC to investment funds managed by EIG. We continue to own a 51% controlling interest in and operate ELC. Under the terms of ELC's limited liability company agreement, we are responsible for placing in service and operating certain supply pipelines and terminal facilities that support the operations of ELC and that are wholly owned by us. In certain limited circumstances that are not expected to occur, EIG has the right to relinquish its interest in ELC and redeem its capital account. The sale proceeds of $386 million, and subsequent

EIG contributions, have been reflected as of December 31, 2018 within "Redeemable Noncontrolling Interest" and as of December 31, 2017, as a deferred credit within "Other long-term liabilities and deferred credits" on our consolidated balance sheets. Once these contingencies expire, EIG's capital account will be reflected in Noncontrolling interests on our consolidated balance sheet.

Terminals Asset Sale

In October 2016, we entered into a definitive agreement to sell several bulk terminals to an affiliate of Watco Companies, LLC for approximately $100 million. The terminals are predominantly located along the inland river system and handle mostly coal and steel products, and are included within our Terminals business segment. The sale of eight of the locations closed in the fourth quarter of 2016, for which we received $37 million of the total consideration, and the balance of this transaction, which included an additional eleven locations, closed in the second quarter of 2017 as certain conditions were satisfied. As a result of this transaction, we recognized a pre-tax loss of $81 million, including a $7 million reduction of goodwill, which is included within "Loss on impairments and divestitures, net" on our accompanying consolidated statement of income for the year ended December 31, 2016.

Sale of Equity Interest in SNG

On September 1, 2016, we completed the sale of a 50% interest in our SNG natural gas pipeline system to The Southern Company (Southern Company), receiving proceeds of $1.4 billion, and the formation of a joint venture, which includes our remaining 50% interest in SNG. We used the proceeds from the sale to reduce outstanding debt. We recognized a pre-tax loss of $84 million on the sale of our interest in SNG which is included within "Loss on impairments and divestitures, net" on the accompanying consolidated statement of income for the year ended December 31, 2016. As a result of this transaction, we no longer hold a controlling interest in SNG or Bear Creek Storage Company, LLC (Bear Creek) (50% of which is owned by SNG) and, as such, we now account for our remaining equity interests in SNG and Bear Creek as equity investments.

Acquisition of BP Products North America Inc. (BP) Terminal Assets

On February 1, 2016, we completed the acquisition of 15 products terminals and associated infrastructure from BP for $349 million, including a transaction deposit paid in 2015 and working capital adjustments paid in 2016. The purchase price consisted of $396 million of property, plant and equipment, $2 million of current assets, and assumed liabilities of $49 million. In conjunction with this transaction, we and BP formed a joint venture with an equity ownership interest of 75% and 25%, respectively. Subsequent to the acquisition, we contributed 14 of the acquired terminals to the joint venture, which we operate, and the remaining terminal is solely owned by us. BP acquired its 25% interest in the joint venture for $84 million, which we reported as "Contributions from noncontrolling interests - other" within our accompanying consolidated statement of cash flows for the year ended December 31, 2016. These terminals are included in our Terminals and Products Pipelines business segments.

4. Impairments and Losses (Gains) on Divestitures

During the years ended December 31, 2018, 2017, and 2016, we recorded impairments of certain equity investments, long-lived assets, and intangible assets, and net gains and losses on divestitures totaling $437 million, $172 million, and $1,013 million, respectively. During 2016, and to a lesser degree in 2017 and 2018, a sustained lower commodity price environment, and negative outlook for certain long-term transportation contracts, led us to cancel certain construction projects, divest of certain assets, write-down certain assets and investments to fair value.

These impairments were driven by market conditions that existed at the time and required management to estimate the fair value of these assets. The estimates of fair value are based on Level 3 valuation estimates using industry standard income approach valuation methodologies which include assumptions primarily involving management's significant judgments and estimates with respect to general economic conditions and the related demand for products handled or transported by our assets as well as assumptions regarding commodity prices, future cash flows based on rate and volume assumptions, terminal values and discount rates. We typically use discounted cash flow analyses to determine the fair value of our assets. We may probability weight various forecasted cash flow scenarios utilized in the analysis as we consider the possible outcomes. We use discount rates representing our estimate of the risk-adjusted discount rates that would be used by market participants specific to the particular asset.

In January 2019, Pacific Gas and Electric (PG&E) filed for Chapter 11 bankruptcy protection. Our exposure to PG&E is limited to our $750 million equity investment in Ruby and an approximate $55 million note receivable from Ruby, where PG&E is Ruby's largest customer. PG&E represents approximately $93 million of annual revenues on Ruby, and our partner's

preferred equity interest in Ruby is senior to our interest. Despite the bankruptcy filing, Ruby continues to perform under its existing service contracts with PG&E and PG&E has provided credit support on its trade payables to Ruby through a prepayment arrangement. While the ultimate outcome of the bankruptcy proceedings remains uncertain, there is the potential for Ruby's existing contracts with PG&E to be canceled in the bankruptcy process. Any cancellation of these contracts could negatively impact Ruby's future revenues and require us to evaluate our investment in Ruby for an other than temporary impairment. This could result in a material impairment of our investment in Ruby at the time such events become known.

We may identify additional triggering events requiring future evaluations of the recoverability of the carrying value of our long-lived assets, investments and goodwill. Because certain assets and investments have been written down to fair value in the last few years, any deterioration in fair value relative to our carrying value increases the likelihood of further impairments. Such non-cash impairments could have a significant effect on our results of operations, which would be recognized in the period in which the carrying value is determined to be not fully recoverable.

We recognized the following non-cash pre-tax impairment charges and losses (gains) on divestitures of assets (in millions):

	Year Ended December 31,		
	2018	2017	2016
Natural Gas Pipelines			
Impairments of long-lived assets(a)	$ 600	$ 30	$ 106
(Gains) losses on divestitures of long-lived assets(b)	(6)	—	94
Impairment of equity investments(c)	270	150	606
Impairment at equity investee(d)	—	10	7
Products Pipelines			
Impairments of long-lived assets(e)	36	—	66
Losses on divestitures of long-lived assets	—	—	10
Gain on divestiture of equity investment	—	—	(12)
Terminals			
Impairments of long-lived assets(f)	59	3	19
(Gains) losses on divestitures of long-lived assets(g)	(6)	(18)	80
Losses on impairments and divestitures of equity investments, net	—	—	16
CO_2			
Impairments of long-lived assets(h)	79	(1)	20
Gain on divestitures of long-lived assets	—	—	(1)
Impairment at equity investee	—	(4)	9
Kinder Morgan Canada			
Gain on divestiture of long-lived assets(i)	(595)	—	—
Other losses (gains) on divestitures of long-lived assets	—	2	(7)
Pre-tax losses on impairments and divestitures, net	$ 437	$ 172	$ 1,013

(a) 2018 amount represents the non-cash impairment associated with certain gathering and processing assets in Oklahoma. 2017 amount represents the impairment of our Colden storage facility, of which $3 million is included in "Costs of sales" on our accompanying consolidated statement of income. 2016 amount represents the project write-off of our portion of the Northeast Energy Direct Market project.

(b) 2016 amount primarily relates to our sale of a 50% interest in SNG.

(c) 2018 amount represents the non-cash impairment of our investment in Gulf LNG Holdings Group, LLC (Gulf LNG) which was driven by a ruling by an arbitration panel affecting a customer contract. Our share of earnings recognized by Gulf LNG on the respective customer contract is included in "Earnings from equity investments" on our accompanying consolidated statement of income for the year ended December 31, 2018. 2017 amount represents the non-cash impairment of our investment in FEP. 2016 amount includes a $350 million non-cash impairment of our investment in MEP and a $250 million non-cash impairment of our investment in Ruby.

(d) 2017 and 2016 amounts represent losses on impairments recorded by equity investees and are included in "Earnings from equity investments" on our accompanying consolidated statements of income.

(e) 2018 amount represents a project write-off associated with the Utica Marcellus Texas pipeline. 2016 amount represents project write-offs associated with the canceled Palmetto project.

(f) 2018 amount primarily relates to non-cash impairments of certain Northeast terminal assets.
(g) 2017 amount includes a $23 million gain related to the sale of a 40% membership interest in the Deeprock Development joint venture. 2016 amount primarily relates to the sale of 20 bulk terminals that handle mostly coal and steel products, predominately located along the inland river system.
(h) 2018 amount represents impairments of oil and gas properties.
(i) 2018 amount represents the gain on the TMPL Sale.

Our largest impairment for the year ended December 31, 2018 was a $600 million non-cash impairment in our Natural Gas Pipelines business segment driven by reduced cash flow estimates for some of our gathering and processing assets in Oklahoma identified during the period as a result of our decision to redirect our focus to other areas of our portfolio. These reduced estimates triggered an impairment analysis as we determined that our carrying value may no longer be recoverable. The impairment analysis for long-lived assets was based upon a two-step process as prescribed in the accounting standards. Step 1 involved comparing the undiscounted future cash flows to be derived from the asset group to the carrying value of the asset group. Based on the results of our step 1 test, we determined that the undiscounted future cash flows were less than the carrying value of the asset group. Step 2 involved using the income approach to calculate the fair value of the asset group and comparing it to the carrying value. The impairment that we recorded represented the difference between the fair and carrying values.

5. Income Taxes

The components of "Income Before Income Taxes" are as follows (in millions):

	Year Ended December 31,		
	2018	2017	2016
U.S.	$ 1,739	$ 1,976	$ 1,466
Foreign	767	185	172
Total Income Before Income Taxes	$ 2,506	$ 2,161	$ 1,638

Components of the income tax provision applicable for federal, foreign and state taxes are as follows (in millions):

	Year Ended December 31,		
	2018	2017	2016
Current tax expense (benefit)			
Federal	$ (22)	$ (137)	$ (148)
State	(45)	(16)	(28)
Foreign	249	18	6
Total	182	(135)	(170)
Deferred tax expense (benefit)			
Federal	425	2,022	998
State	55	4	51
Foreign	(75)	47	38
Total	405	2,073	1,087
Total tax provision	$ 587	$ 1,938	$ 917

We are subject to taxation in Canada and Mexico. In Canada we recognized income tax expense of $168 million, $58 million and $38 million at December 31, 2018, 2017, and 2016, respectively. In Mexico we recognized income tax expense of $6 million, $7 million and $6 million at December 31, 2018, 2017, and 2016, respectively.

The difference between the statutory federal income tax rate and our effective income tax rate is summarized as follows (in millions, except percentages):

	Year Ended December 31,					
	2018		2017		2016	
Federal income tax	$ 526	21.0 %	$ 756	35.0 %	$ 573	35.0 %
Increase (decrease) as a result of:						
State deferred tax rate change	(7)	(0.3)%	10	0.5 %	11	0.7 %
Taxes on foreign earnings, net of federal benefit	131	5.2 %	42	1.9 %	28	1.7 %
Net effects of noncontrolling interests	(65)	(2.6)%	(14)	(0.7)%	(4)	(0.3)%
State income tax, net of federal benefit	46	1.8 %	38	1.8 %	26	1.6 %
Dividend received deduction	(31)	(1.2)%	(56)	(2.6)%	(48)	(2.9)%
Adjustments to uncertain tax positions	(47)	(1.9)%	(12)	(0.6)%	(23)	(1.4)%
Valuation allowance on investment and tax credits	14	0.5 %	13	0.6 %	34	2.1 %
Impact of the 2017 Tax Reform	—	— %	1,240	57.4 %	—	— %
Nondeductible goodwill	58	2.3 %	—	— %	301	18.5 %
General business credit	(64)	(2.6)%	(95)	(4.4)%	—	— %
Other	26	1.2 %	16	0.8 %	19	1.1 %
Total	$ 587	23.4 %	$ 1,938	89.7 %	$ 917	56.1 %

Deferred tax assets and liabilities result from the following (in millions):

	December 31,	
	2018	2017
Deferred tax assets		
Employee benefits	$ 238	$ 251
Accrued expenses	76	73
Net operating loss, capital loss and tax credit carryforwards	1,526	1,113
Derivative instruments and interest rate and currency swaps	9	12
Debt fair value adjustment	33	37
Investments	177	968
Other	—	6
Valuation allowances	(178)	(171)
Total deferred tax assets	1,881	2,289
Deferred tax liabilities		
Property, plant and equipment	270	225
Other	45	20
Total deferred tax liabilities	315	245
Net deferred tax assets	$ 1,566	$ 2,044

Deferred Tax Assets and Valuation Allowances: The step-up in tax basis from the merger transactions that occurred in November 2014 resulted in a deferred tax asset, primarily related to our investment in KMP. As book earnings from our investment in KMP are projected to exceed taxable income (primarily as a result of the partnership's tax depreciation in excess of book depreciation), the deferred tax asset related to our investment in KMP is expected to be fully realized.

We increased our valuation allowances in 2018 by $7 million, primarily due to a $17 million increase for capital loss carryover as a result of the TMPL Sale, a $6 million decrease for foreign operating losses and a $4 million utilization of foreign tax credits.

We have deferred tax assets of $1,249 million related to net operating loss carryovers, $260 million related to general business, alternative minimum, and foreign tax credits, $17 million related to capital losses, and $140 million of valuation allowances related to these deferred tax assets at December 31, 2018. As of December 31, 2017, we had deferred tax assets of $935 million related to net operating loss carryovers, $178 million related to general business, alternative minimum and foreign tax credits and $133 million of valuation allowances related to these deferred tax assets. We expect to generate taxable income and begin to utilize federal net operating loss carryforwards and tax credits in 2022.

Our alternative minimum tax credit carryforwards decreased by $8 million in 2018 as a result of a federal audit settlement. In 2017, our decision to elect to forgo bonus depreciation on property placed in service in that year allowed us to utilize $137 million of minimum tax credits. Section 168(k)(4) of the Internal Revenue Code allows for corporate taxpayers with minimum tax credit carryforwards to forgo bonus depreciation and accelerate their use of the credits to reduce tax liability in that same tax year if the amount of the allowable credit exceeds the taxpayer's tax liability. We received an income tax refund of $145 million in 2018 related to the 2017 credit utilization and 2018 audit settlement.

Expiration Periods for Deferred Tax Assets: As of December 31, 2018, we have U.S. federal net operating loss carryforwards of $1.4 billion that will be carried forward indefinitely and $3.4 billion that will expire from 2019 - 2037; state losses of $3.7 billion which will expire from 2019 - 2038; and foreign losses of $112 million which will expire from 2029 - 2038. We also have $241 million of general business credits which will expire from 2019 - 2028; a capital loss carryover of $17 million which will expire in 2023; and approximately $17 million of foreign tax credits, which will expire from 2020 - 2023. Use of a portion of our U.S. federal carryforwards is subject to the limitations provided under Sections 382 and 383 of the Internal Revenue Code as well as the separate return limitation rules of Internal Revenue Service regulations. If certain substantial changes in our ownership occur, there would be an annual limitation on the amount of carryforwards that could be utilized.

Unrecognized Tax Benefits: We recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based not only on the technical merits of the tax position based on tax law, but also the past administrative practices and precedents of the taxing authority. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate resolution.

A reconciliation of our gross unrecognized tax benefit excluding interest and penalties is as follows (in millions):

	Year Ended December 31,		
	2018	2017	2016
Balance at beginning of period	$ 97	$ 122	$ 148
Additions based on current year tax positions	3	3	3
Additions based on prior year tax positions	7	—	7
Reductions based on prior year tax positions	—	—	(1)
Reductions based on settlements with taxing authority	(73)	(22)	(26)
Reductions due to lapse in statute of limitations	—	(2)	(9)
Impact of the 2017 Tax Reform	—	(4)	—
Balance at end of period	$ 34	$ 97	$ 122

We recognize interest and/or penalties related to income tax matters in income tax expense. We recognized tax benefits of $15 million, $9 million and an expense of $2 million at December 31, 2018, 2017 and 2016, respectively. As of December 31, 2018, 2017 and 2016, we had $2 million, $19 million and $28 million, respectively, of accrued interest. We had less than $1 million of accrued penalties as of December 31, 2018 and no accrued penalties as of December 31, 2017. All of the $34 million of unrecognized tax benefits, if recognized, would affect our effective tax rate in future periods. In addition, we believe it is reasonably possible that our liability for unrecognized tax benefits will decrease by approximately $21 million during the next year to approximately $13 million, primarily due to settlements with taxing authorities, partially offset by additions for state filing positions taken in prior years.

We are subject to taxation, and have tax years open to examination for the periods 2015-2017 in the U.S., 2005-2017 in various states and 2007-2017 in various foreign jurisdictions.

Impact of 2017 Tax Reform

On December 22, 2017, the U.S. enacted the 2017 Tax Reform. Among the many provisions included in the 2017 Tax Reform is a provision to reduce the U.S. federal corporate income tax rate from 35% to 21% effective January 1, 2018.

As of December 31, 2017, we had deferred tax assets related to our net operating loss carryforwards and tax credits, in addition to tax basis in excess of accounting basis primarily related to our investment in KMP. Prior to the 2017 Tax Reform, the value of these deferred tax assets was recorded at the previous income tax rate of 35%, which represented their expected future benefit to us. As a result of the 2017 Tax Reform, the future benefit of these deferred tax assets was re-measured at the new income tax rate of 21% and we recorded an approximate $1,240 million provisional non-cash adjustment for the year ended December 31, 2017. We determined the effects of the rate change using our best estimate of temporary book-to-tax differences. Upon final analysis and remeasurement of our deferred tax balances, the December 31, 2017 adjustment recorded accurately reflected the change in corporate income tax rates and has not been materially adjusted in subsequent periods.

In addition, the 2017 Tax Reform required a mandatory deemed repatriation of post-1986 undistributed foreign earnings and profits. As of December 31, 2017, we recorded a provisional amount for this 2017 Tax Reform provision and as of December 31, 2018, completed our analysis on this provision. The 2017 Tax Reform transition tax was $2 million.

The income tax rate change in the 2017 Tax Reform had an impact not only on our corporate income taxes but also resulted in us recording an approximate $144 million after-tax ($219 million pre-tax) provisional non-cash adjustment, including our share of equity investee provisional adjustments, related to our FERC regulated business for the year ended December 31, 2017. As a result of the completion of our assessment of the 2017 Tax Reform's effect on our FERC regulated business, we decreased this non-cash provisional adjustment by approximately $27 million after-tax ($36 million pre-tax) during the year ended December 31, 2018.

The 2017 Tax Reform requires a U.S. corporation to record taxes on global intangible low-tax income (GILTI) and elect an accounting policy to either recognize GILTI as a current period expense when incurred or to record deferred taxes for the temporary basis differences expected to reverse in the future as GILTI. Though we did not generate any GILTI during 2018, we have elected to recognize the GILTI tax as a period cost in the future, as applicable.

6. Property, Plant and Equipment, net

Classes and Depreciation

As of December 31, 2018 and 2017, our property, plant and equipment, net consisted of the following (in millions):

	December 31,	
	2018	2017
Pipelines (Natural gas, liquids, crude oil and CO_2)	$ 19,727	$ 20,157
Equipment (Natural gas, liquids, crude oil, CO_2, and terminals)	24,392	24,152
Other(a)	5,447	5,570
Accumulated depreciation, depletion and amortization	(15,359)	(14,175)
	34,207	35,704
Land and land rights-of-way	1,378	1,456
Construction work in process	2,312	2,995
Property, plant and equipment, net	$ 37,897	$ 40,155

(a) Includes general plant, general structures and buildings, computer and communication equipment, intangibles, vessels, transmix products, linefill and miscellaneous property, plant and equipment.

As of December 31, 2018 and 2017, property, plant and equipment, net included $12,349 million and $14,055 million, respectively, of assets which were regulated by either the FERC or the NEB. Depreciation, depletion, and amortization expense

charged against property, plant and equipment was $2,057 million, $2,022 million, and $1,970 million for the years ended December 31, 2018, 2017, and 2016, respectively.

Asset Retirement Obligations

As of December 31, 2018 and 2017, we recognized asset retirement obligations in the aggregate amount of $213 million and $208 million, respectively, of which $4 million were classified as current for both periods. The majority of our asset retirement obligations are associated with our CO_2 business segment, where we are required to plug and abandon oil and gas wells that have been removed from service and to remove the surface wellhead equipment and compressors.

7. Investments

Our investments primarily consist of equity investments where we hold significant influence over investee actions and for which we apply the equity method of accounting. As of December 31, 2018 and 2017, our investments consisted of the following (in millions):

	December 31,	
	2018	2017
Citrus Corporation	$ 1,708	$ 1,698
SNG	1,536	1,495
Ruby	750	774
NGPL Holdings LLC	733	687
Gulf LNG Holdings Group, LLC	361	461
Plantation Pipe Line Company	344	331
Utopia Holding LLC	333	276
EagleHawk	299	314
Gulf Coast Express Pipeline LLC	240	—
MEP	235	253
Red Cedar Gathering Company	191	187
Watco Companies, LLC	185	182
Double Eagle Pipeline LLC	140	149
Liberty Pipeline Group LLC	66	71
Bear Creek Storage	65	63
Sierrita Gas Pipeline LLC	55	55
Permian Highway Pipeline	45	—
FEP	44	112
All others	151	190
Total investments	$ 7,481	$ 7,298

As shown in the investment balance table above and the earnings from equity investments table below, our significant equity investments, as of December 31, 2018 consisted of the following:

- Citrus Corporation—We own a 50% interest in Citrus Corporation, the sole owner of Florida Gas Transmission Company, L.L.C. (Florida Gas). Florida Gas transports natural gas to cogeneration facilities, electric utilities, independent power producers, municipal generators, and local distribution companies through a 5,300-mile natural gas pipeline. Energy Transfer Partners L.P. operates Florida Gas and owns the remaining 50% interest in Citrus;
- SNG—We operate SNG and own a 50% interest in SNG; and Evergreen Enterprise Holdings, LLC, a subsidiary of Southern Company, owns the remaining 50% interest;
- Ruby—We operate Ruby and own the common interest in Ruby, the sole owner of the Ruby Pipeline natural gas transmission system. Pembina Pipeline Corporation (Pembina) owns the remaining interest in Ruby in the form of a convertible preferred interest. If Pembina converted its preferred interest into common interest, we and Pembina would each own a 50% common interest in Ruby;

- NGPL Holdings LLC— We operate NGPL Holdings LLC and own a 50% interest in NGPL Holdings LLC, the indirect owner of NGPL and certain affiliates, collectively referred to in this report as NGPL, a major interstate natural gas pipeline and storage system. The remaining 50% interest is owned by Brookfield;
- Gulf LNG Holdings Group, LLC—We operate Gulf LNG Holdings Group, LLC and own a 50% interest in Gulf LNG Holdings Group, LLC, the owner of a LNG receiving, storage and regasification terminal near Pascagoula, Mississippi, as well as pipeline facilities to deliver vaporized natural gas into third party pipelines for delivery into various markets around the country. The remaining 50% interest is owned by a variety of investment entities, including subsidiaries of The Blackstone Group, LP; Warburg Pincus, LLC; Kelso and Company; and Chatham Asset Management, LLC, which is directed by Chatham Asset GP, LLC;
- Plantation—We operate Plantation and own a 51.17% interest in Plantation, the sole owner of the Plantation refined petroleum products pipeline system. A subsidiary of Exxon Mobil Corporation owns the remaining interest. Each investor has an equal number of directors on Plantation's board of directors, and board approval is required for certain corporate actions that are considered substantive participating rights; therefore, we do not control Plantation, and account for the investment under the equity method;
- Utopia Holding L.L.C. — We operate Utopia Holding L.L.C. and own a 50% interest in Utopia Holding L.L.C. Riverstone Investment Group LLC owns the remaining 50% interest;
- BHP Billiton Petroleum (Eagle Ford Gathering) LLC, (EagleHawk)—We own a 25% interest in EagleHawk, the sole owner of natural gas and condensate gathering systems serving the producers of the Eagle Ford shale formation. A subsidiary of BHP Billiton Petroleum (Tx Gathering), LLC operates EagleHawk and owns the remaining 75% ownership interest;
- Gulf Coast Express Pipeline LLC — We operate Gulf Coast Express Pipeline LLC and own 35% interest of Gulf Coast Express Pipeline LLC indirectly through Kinder Morgan Texas Pipeline LLC, our 100% subsidiary. DCP GCX Pipeline LLC, an indirect subsidiary of DCP Midstream, owns 25% interest; Targa GCX Pipeline LLC, an indirect subsidiary of Targa Resources Corp., owns 25% interest and Altus Midstream Company, an indirect subsidiary of Apache Corporation, owns 15% interest;
- MEP—We operate MEP and own a 50% interest in MEP, the sole owner of the MEP natural gas pipeline system. The remaining 50% ownership interest is owned by subsidiaries of Energy Transfer Partners L.P.;
- Red Cedar Gathering Company—We own a 49% interest in Red Cedar Gathering Company, the sole owner of the Red Cedar natural gas gathering, compression and treating system. The Southern Ute Indian Tribe owns the remaining 51% interest and serves as operator of Red Cedar;
- Watco Companies, LLC—We hold a preferred and common equity investment in Watco Companies, LLC, the largest privately held short line railroad company in the U.S. We own 100,000 Class A and 50,000 Class B preferred shares and pursuant to the terms of the investment, receive priority, cumulative cash and stock distributions from the preferred shares at a rate of 3.25% and 3.00% per quarter, respectively, and participate partially in additional profit distributions at a rate equal to 0.4%. Neither class holds any voting powers, but do provide us certain approval rights, including the right to appoint one of the members to Watco's board of managers. In addition to the senior interests, we also hold approximately 13,000 common equity units, which represents a 3.2% common ownership;
- Double Eagle Pipeline LLC - We own a 50% equity interest in Double Eagle Pipeline LLC. The remaining 50% interest is owned by Magellan Midstream Partners;
- Liberty Pipeline Group, LLC (Liberty) —We own a 50% interest in Liberty. ETC NGL Transport, LLC, a subsidiary of Energy Transfer Partners, L.P. owns the remaining 50% interest and serves as operator of Liberty;
- Bear Creek Storage—We own a combined 75% interest in Bear Creek through: our wholly owned subsidiary's (TGP) 50% interest and an additional 25% indirect interest through our 50% equity interest in SNG, which owns the remaining 50% interest;
- Sierrita Gas Pipeline LLC — We operate Sierrita Gas Pipeline LLC and own a 35% interest in Sierrita Gas Pipeline LLC. MGI Enterprises U.S. LLC, a subsidiary of PEMEX, owns 35%; and MIT Pipeline Investment Americas, Inc., a subsidiary of Mitsui & Co., Ltd, owns 30%;
- Permian Highway Pipeline — We operate Permian Highway Pipeline and own a 50% interest of Permian Highway Pipeline indirectly through KMTP, our wholly owned subsidiary. BCP PHP, LLC (BCP), a portfolio company of Blackstone Energy Partners, owns the remaining 50% interest. An affiliate of an anchor shipper exercised its option in January 2019 to acquire a 20% equity interest in the project, bringing KMTP's and BCP's ownership interest to 40% each. Altus Midstream Company (Altus Midstream) (a gas gathering, processing and transportation company formed

by shipper Apache Corporation) has an option to acquire an equity interest in the project from the initial partners by September 2019. If Altus Midstream exercises its option, KMTP, BCP and Altus Midstream will each hold a 26.67% ownership interest in the project. KMTP will build and operate the pipeline;

- FEP —We own a 50% interest in FEP, the sole owner of the Fayetteville Express natural gas pipeline system. Energy Transfer Partners, L.P. owns the remaining 50% interest and serves as operator of FEP;
- Cortez Pipeline Company—We operate the Cortez CO_2 pipeline system, and own a 52.98% interest in the Cortez Pipeline Company, the sole owner of the Cortez CO_2 pipeline system. Mobil Cortez Pipeline Inc. owns 33.25%; and Cortez Vickers Pipeline Company owns the remaining 13.77%.

Our earnings from equity investments were as follows (in millions):

	Year Ended December 31,		
	2018	2017	2016
Gulf LNG Holdings Group, LLC(a)	$ 209	$ 47	$ 48
Citrus Corporation	169	108	102
SNG	141	77	58
NGPL Holdings LLC	66	10	12
FEP	55	53	51
Plantation Pipe Line Company	55	46	37
Cortez Pipeline Company(b)	36	44	24
MEP	31	38	40
Ruby	26	44	15
Watco Companies, LLC	21	19	25
Red Cedar Gathering Company(c)	18	14	24
Utopia Holding LLC	14	—	—
Double Eagle Pipeline LLC	10	7	5
Bear Creek Storage	9	8	2
EagleHawk	7	24	10
Liberty Pipeline Group LLC	7	9	11
Sierrita Gas Pipeline LLC	7	7	7
Gulf Coast Express LLC	2	—	—
All others	4	23	26
Total earnings from equity investments	$ 887	$ 578	$ 497
Amortization of excess costs	(95)	(61)	(59)

(a) 2018 amount includes our share of earnings recognized due to a ruling by an arbitration panel affecting a customer contract.
(b) 2017 and 2016 amounts include $(4) million and $9 million, respectively, representing our share of a non-cash impairment charge (pre-tax) recorded by Cortez Pipeline Company.
(c) 2017 amount includes non-cash impairment charges of $10 million (pre-tax) related to our investment.

Summarized combined financial information for our significant equity investments (listed or described above) is reported below (in millions; amounts represent 100% of investee financial information):

	Year Ended December 31,		
Income Statement	2018	2017	2016
Revenues	$ 5,129	$ 4,703	$ 4,084
Costs and expenses	3,371	3,398	3,056
Net income	$ 1,758	$ 1,305	$ 1,028

Balance Sheet	December 31, 2018	2017
Current assets	$ 1,496	$ 956
Non-current assets	23,396	22,344
Current liabilities	2,715	1,241
Non-current liabilities	9,555	10,605
Partners'/owners' equity	12,622	11,454

8. Goodwill

Changes in the amounts of our goodwill for each of the years ended December 31, 2018 and 2017 are summarized by reporting unit as follows (in millions):

	Natural Gas Pipelines Regulated	Natural Gas Pipelines Non-Regulated	CO_2	Products Pipelines	Products Pipelines Terminals	Terminals	Kinder Morgan Canada	Total
Historical Goodwill	$ 15,892	$ 5,812	$ 1,528	$ 2,125	$ 221	$ 1,575	$ 562	$ 27,715
Accumulated impairment losses	(1,643)	(1,597)	—	(1,197)	(70)	(679)	(377)	(5,563)
December 31, 2016	14,249	4,215	1,528	928	151	896	185	22,152
Currency translation	—	—	—	—	—	—	13	13
Divestitures(a)	—	—	—	—	—	(3)	—	(3)
December 31, 2017	14,249	4,215	1,528	928	151	893	198	22,162
Currency translation	—	—	—	—	—	—	(8)	(8)
Divestitures(b)	—	—	—	—	—	—	(190)	(190)
Other	—	—	—	—	—	1	—	1
December 31, 2018	$ 14,249	$ 4,215	$ 1,528	$ 928	$ 151	$ 894	$ —	$ 21,965

(a) 2017 includes $3 million related to certain terminal divestitures.
(b) 2018 includes $190 million related to the TMPL Sale.

Refer to Note 2 "*Summary of Significant Accounting Policies—Goodwill*" for a description of our accounting for goodwill.

We determine the fair value of each reporting unit as of May 31 of each year based primarily on a market approach utilizing enterprise value to estimated earning before interest, taxes, depreciation and amortization (EBITDA) multiples of comparable companies. The value of each reporting unit is determined on a stand-alone basis from the perspective of a market participant representing the price estimated to be received in a sale of the reporting unit in an orderly transaction between market participants at the measurement date. For our Natural Gas Pipelines Non-Regulated reporting unit, our May 31, 2018 annual test included a discounted cash flow analysis (income approach) to evaluate the fair value of this reporting unit to provide additional indication of fair value based on the present value of cash flows this reporting unit is expected to generate in the future. We weighted the market and income approaches for this reporting unit to arrive at an estimated fair value of this reporting unit giving more weighting on the income approach and less on the market approach as we believed the value indicated using the income approach is more representative of the value that could be received from a market participant. As of May 31, 2018, each of our reporting units indicated a fair value in excess of their respective carrying values (by at least 10%) and step 2 was not required. The results of our Step 1 analysis did not indicate an impairment of goodwill and we did not identify any triggers for further impairment analysis during the remainder of the year.

A continued period of volatile commodity prices could result in deterioration of market multiples, comparable sales transactions prices, weighted average costs of capital, and our cash flow estimates. A significant unfavorable change to any one or combination of these factors would result in a change to the reporting unit fair values discussed above potentially resulting in future impairments of long-lived assets, equity method investments, and/or goodwill. Such non-cash impairments could have a significant effect on our results of operations.

9. Debt

We classify our debt based on the contractual maturity dates of the underlying debt instruments. We defer costs associated with debt issuance over the applicable term. These costs are then amortized as interest expense in our accompanying consolidated statements of income.

The following table provides detail on the principal amount of our outstanding debt balances. The table amounts exclude all debt fair value adjustments, including debt discounts, premiums and issuance costs (in millions):

	December 31,	
	2018	2017
Credit facility and commercial paper borrowings(a)	$ 433	$ 365
Corporate senior notes(b)		
6.00%, due January 2018	—	750
7.00%, due February 2018	—	82
5.95%, due February 2018	—	975
7.25%, due June 2018	—	477
9.00%, due February 2019	500	500
2.65%, due February 2019	800	800
3.05%, due December 2019	1,500	1,500
6.85%, due February 2020	700	700
6.50%, due April 2020	535	535
5.30%, due September 2020	600	600
6.50%, due September 2020	349	349
5.00%, due February 2021	750	750
3.50%, due March 2021	750	750
5.80%, due March 2021	400	400
5.00%, due October 2021	500	500
4.15%, due March 2022	375	375
1.50%, due March 2022(c)	860	900
3.95%, due September 2022	1,000	1,000
3.15%, due January 2023	1,000	1,000
Floating rate, due January 2023	250	250
3.45%, due February 2023	625	625
3.50%, due September 2023	600	600
5.625%, due November 2023	750	750
4.15%, due February 2024	650	650
4.30%, due May 2024	600	600
4.25%, due September 2024	650	650
4.30%, due June 2025	1,500	1,500
6.70%, due February 2027	7	7
2.25%, due March 2027(c)	573	600
6.67%, due November 2027	7	7
4.30%, due March 2028	1,250	—
7.25%, due March 2028	32	32
6.95%, due June 2028	31	31
8.05%, due October 2030	234	234
7.40%, due March 2031	300	300
7.80%, due August 2031	537	537
7.75%, due January 2032	1,005	1,005
7.75%, due March 2032	300	300
7.30%, due August 2033	500	500
5.30%, due December 2034	750	750
5.80%, due March 2035	500	500
7.75%, due October 2035	1	1
6.40%, due January 2036	36	36
6.50%, due February 2037	400	400
7.42%, due February 2037	47	47
6.95%, due January 2038	1,175	1,175
6.50%, due September 2039	600	600
6.55%, due September 2040	400	400
7.50%, due November 2040	375	375
6.375%, due March 2041	600	600

	December 31,	
	2018	2017
5.625%, due September 2041	375	375
5.00%, due August 2042	625	625
4.70%, due November 2042	475	475
5.00%, due March 2043	700	700
5.50%, due March 2044	750	750
5.40%, due September 2044	550	550
5.55%, due June 2045	1,750	1,750
5.05%, due February 2046	800	800
5.20%, due March 2048	750	—
7.45%, due March 2098	26	26
TGP senior notes(b)		
7.00%, due March 2027	300	300
7.00%, due October 2028	400	400
8.375%, due June 2032	240	240
7.625%, due April 2037	300	300
EPNG senior notes(b)		
8.625%, due January 2022	260	260
7.50%, due November 2026	200	200
8.375%, due June 2032	300	300
CIG senior notes(b)		
4.15%, due August 2026	375	375
6.85%, due June 2037	100	100
EPC Building, LLC, promissory note, 3.967%, due December 2035	409	421
Trust I Preferred Securities, 4.75%, due March 2028(d)	221	221
KMGP, $1,000 Liquidation Value Series A Fixed-to-Floating Rate Term Cumulative Preferred Stock, due August 2057(e)	100	100
Other miscellaneous debt(f)	250	278
Total debt – KMI and Subsidiaries	36,593	36,916
Less: Current portion of debt(g)	3,388	2,828
Total long-term debt – KMI and Subsidiaries(h)	$ 33,205	$ 34,088

(a) See "—Current portion of debt" below for further details regarding the outstanding credit facility and commercial paper borrowings.

(b) Notes provide for the redemption at any time at a price equal to 100% of the principal amount of the notes plus accrued interest to the redemption date plus a make whole premium and are subject to a number of restrictions and covenants. The most restrictive of these include limitations on the incurrence of liens and limitations on sale-leaseback transactions.

(c) Consists of senior notes denominated in Euros that have been converted to U.S. dollars and are respectively reported above at the December 31, 2018 exchange rate of 1.1467 U.S. dollars per Euro and at the December 31, 2017 exchange rate of 1.2005 U.S. dollars per Euro. As of December 31, 2018 and 2017, the cumulative changes in the exchange rate of U.S. dollars per Euro since issuance had resulted in increases to our debt balance of $46 million and $86 million, respectively, related to the 1.50% series and increases of $30 million and $57 million, respectively, related to the 2.25% series. The cumulative increase in debt due to the changes in exchange rates is offset by a corresponding change in the value of cross-currency swaps reflected in "Deferred charges and other assets" and " Other long-term liabilities and deferred credits" on our consolidated balance sheets. At the time of issuance, we entered into cross-currency swap agreements associated with these senior notes, effectively converting these Euro-denominated senior notes to U.S. dollars (see Note 14 "*Risk Management—Foreign Currency Risk Management*").

(d) Capital Trust I (Trust I), is a 100%-owned business trust that as of December 31, 2018, had 4.4 million of 4.75% trust convertible preferred securities outstanding (referred to as the Trust I Preferred Securities). Trust I exists for the sole purpose of issuing preferred securities and investing the proceeds in 4.75% convertible subordinated debentures, which are due 2028. Trust I's sole source of income is interest earned on these debentures. This interest income is used to pay distributions on the preferred securities. We provide a full and unconditional guarantee of the Trust I Preferred Securities. There are no significant restrictions from these securities on our ability to obtain funds from our subsidiaries by distribution, dividend or loan. The Trust I Preferred Securities are non-voting (except in limited circumstances), pay quarterly distributions at an annual rate of 4.75%, carry a liquidation value of $50 per security plus accrued and unpaid distributions. The Trust I Preferred Securities outstanding as of December 31, 2018 are convertible at any time prior to the close of business on March 31, 2028, at the option of the holder, into the following mixed consideration: (i) 0.7197 of a share of our Class P common stock; and (ii) $25.18 in cash without interest. We have the right to redeem these Trust I Preferred Securities at any time.

(e) As of December 31, 2018 and 2017, KMGP had outstanding, 100,000 shares of its $1,000 Liquidation Value Series A Fixed-to-Floating Rate Term Cumulative Preferred Stock due 2057. Since August 18, 2012, dividends on the preferred stock accumulate at a floating rate of the 3-month LIBOR plus 3.8975% and are payable quarterly in arrears, when and if declared by KMGP's board of directors, on February 18, May 18, August 18 and November 18 of each year, beginning November 18, 2012. The preferred stock has approval rights over a commencement of or filing of voluntary bankruptcy by KMP or its SFPP or Calnev subsidiaries.

(f) Includes capital lease obligations with monthly installments. The lease terms expire between 2024 and 2061.

(g) Amounts include KMI and KML outstanding credit facility borrowings, commercial paper borrowings and other debt maturing within 12 months. See "—Current Portion of Debt" below.

(h) Excludes our "Debt fair value adjustments" which, as of December 31, 2018 and 2017, increased our combined debt balances by $731 million and $927 million, respectively. In addition to all unamortized debt discount/premium amounts, debt issuance costs and purchase accounting on our debt balances, our debt fair value adjustments also include amounts associated with the offsetting entry for hedged debt and any unamortized portion of proceeds received from the early termination of interest rate swap agreements. For further information about our debt fair value adjustments, see "—Debt Fair Value Adjustments" below.

Current Portion of Debt

The following table details the components of our "Current portion of debt" reported on our consolidated balance sheets.

	December 31,	
	2018	2017
$500 million, 364-day credit facility due November 15, 2019(a)	$ —	$ —
$4 billion credit facility due November 16, 2023(a)	—	—
$5 billion, five-year credit facility due November 26, 2019, -% and 2.99%, respectively(a)(b)	—	125
Commercial paper notes, 3.10% and 2.02%, respectively(b)	433	240
KML 2018 Credit Facility(c)	—	—
Current portion of senior notes		
6.00%, due January 2018	—	750
7.00%, due February 2018	—	82
5.95%, due February 2018	—	975
7.25%, due June 2018	—	477
9.00%, due February 2019	500	—
2.65%, due February 2019	800	—
3.05%, due December 2019	1,500	—
Trust I Preferred Securities, 4.75%, due March 2028	111	111
Current portion - Other debt	44	68
Total current portion of debt	$ 3,388	$ 2,828

(a) On November 16, 2018, we replaced our $5 billion, five-year credit facility with two new credit facilities discussed further in "—Credit Facilities and Restrictive Covenants" following.
(b) Interest rates are weighted average rates at December 31, 2018 and 2017, respectively.
(c) Borrowings under the KML 2018 Credit Facility are denominated in C$ and are converted to U.S. dollars. The exchange rate was 0.7330 U.S. dollars per C$ at December 31, 2018 and 0.7971 U.S. dollars per C$ at December 31, 2017. See "—Credit Facilities" below.

We and substantially all of our wholly owned domestic subsidiaries are a party to a cross guarantee agreement whereby each party to the agreement unconditionally guarantees, jointly and severally, the payment of specified indebtedness of each other party to the agreement. Also, see Note 20.

Subsequent Event—Debt Repayments

Using part of our portion of proceeds from the TMPL Sale that KML distributed to us in January 2019, we immediately repaid our outstanding balance of commercial paper borrowings, and then in February 2019, repaid $500 million of maturing 9.00% senior notes and $800 million of maturing 2.65% senior notes which were included in "Current portion of debt" on the accompanying consolidated balance sheet as of December 31, 2018.

Credit Facilities and Restrictive Covenants

KMI

On November 16, 2018, we replaced our five-year, $5 billion revolving credit facility with (i) a new five-year, $4 billion revolving credit facility (Five-year Credit Facility); and (ii) a new 364-day, $500 million revolving credit facility (364-day Credit Facility) with a syndicate of lenders, together, "KMI's New Credit Facilities."

We also continue to maintain a $4 billion commercial paper program through the private placement of short-term notes. The notes mature up to 270 days from the date of issue and are not redeemable or subject to voluntary prepayment by us prior to maturity. The notes are sold at par value less a discount representing an interest factor or if interest bearing, at par.

Borrowings under our revolving credit facility can be used for working capital and other general corporate purposes and as a backup to our commercial paper program. Borrowings under our commercial paper program reduce the borrowings allowed under our Five-year Credit Facility.

Depending on the type of loan request, our credit facility borrowings under either of our credit facilities bear interest at either (i) LIBOR adjusted for a eurocurrency funding reserve plus an applicable margin ranging from 1.000% to 2.000% per annum based on our credit ratings or (ii) the greatest of (1) the Federal Funds Rate plus 0.5%; (2) the Prime Rate; or (3) LIBOR for a one-month eurodollar loan adjusted for a eurocurrency funding reserve, plus 1%, plus, in each case, an applicable margin ranging from 0.100% to 1.000% per annum based on our credit rating. Standby fees for the unused portion of the credit facility will be calculated at a rate ranging from 0.100% to 0.300%for the Five-year Credit Facility and 0.090% to 0.275% for the 364-day Credit Facility based upon our debt credit rating.

KMI's New Credit Facilities contain financial and various other covenants that apply to the Company and its subsidiaries and are common in such agreements, including a maximum ratio of Consolidated Net Indebtedness to Consolidated EBITDA (each as defined in the Five-Year Credit Facility and 364-day Credit Facility, as applicable) of 5.50 to 1.00, for any four-fiscal-quarter period. Other negative covenants include restrictions on the Company's and certain of its subsidiaries' ability to incur debt, grant liens, make fundamental changes or engage in certain transactions with affiliates, or in the case of certain material subsidiaries, permit restrictions on dividends, distributions or making or prepayments of loans to the Company or any guarantor. KMI's New Credit Facilities also restrict the Company's ability to make certain restricted payments if an event of default (as defined in the Five-Year Credit Facility and the 364-Day Credit Facility) has occurred and is continuing or would occur and be continuing.

As of December 31, 2018, we had no borrowings outstanding under our Five-year Credit Facility or our 364-day Credit Facility, $433 million outstanding under our commercial paper program and $99 million in letters of credit. Our availability under these facilities as of December 31, 2018 was $3,968 million. As of December 31, 2018, we were in compliance with all required covenants.

KML

Upon the closing of the TMPL Sale on August 31, 2018, KML's prior credit facility was replaced with a new 4-year, C $500 million unsecured revolving credit facility for working capital purposes ("KML 2018 Credit Facility") under a credit agreement with the Royal Bank of Canada (the "KML Credit Agreement") as agent. In addition, the C$133 million (U.S.$102 million) of outstanding borrowings under KML's prior credit facility were paid off prior to its termination with a portion of the proceeds from the TMPL Sale.

Depending on the type of loan requested, interest on borrowings outstanding are calculated based on: (i) a Canadian prime rate of interest; (ii) a U.S. base rate; (iii) LIBOR; or (iv) bankers' acceptance fees, plus (i) in the case of Canadian prime rate or U.S. base rate loans, an applicable margin of up to 1.25%; or (ii) in the case of LIBOR or bankers' acceptance loans, an applicable margin ranging from 1.00% to 2.25%, with such margin in any case determined by KML's debt credit rating. Standby fees for the unused portion of the KML 2018 Credit Facility will be calculated at a rate ranging from 0.20% to 0.45% based upon KML's debt credit rating.

The KML Credit Agreement contains various financial and other covenants that apply to KML and its subsidiaries and that are common in such agreements, including a maximum ratio of KML's consolidated total funded debt to its consolidated earnings before interest, income taxes, DD&A, and non-cash adjustments as defined in the KML Credit Agreement, of 5.00:1.00 and restrictions on KML's ability to incur debt, grant liens, make dispositions, engage in transactions with affiliates, make restricted payments, make investments, enter into sale leaseback transactions, amend organizational documents and engage in corporate reorganization transactions.

In addition, the KML Credit Agreement contains customary events of default, including non-payment; non-compliance with covenants (in some cases, subject to grace periods); payment default under, or acceleration events affecting, certain other indebtedness; bankruptcy or insolvency events involving KML or guarantors; and changes of control. If an event of default under the KML Credit Agreement exists and is continuing, the lenders could terminate their commitments and accelerate the maturity of the outstanding obligations under the KML Credit Agreement.

On May 30, 2018, in conjunction with the announcement of the TMPL Sale approximately C$100 million of borrowings outstanding under KML's June 16, 2017 revolving credit facilities (the "KML 2017 Credit Facility") were repaid, the underlying credit facilities were terminated, and approximately $46 million of deferred costs associated with the KML 2017 Credit Facility that were being amortized as interest expense over its term were written off.

As of December 31, 2018, KML had no borrowings outstanding under the KML 2018 Credit Facility, and had C$489 million (U.S. $359 million) available under the KML 2018 Credit Facility, after reducing the C$500 million (U.S.$367 million) capacity for the C$11 million (U.S.$8 million) in letters of credit. Of the total C$11 million of letters of credit issued, approximately C$8 million are related to Trans Mountain for which it has issued a backstop letter of credit to KML. As of December 31, 2018, KML was in compliance with all required covenants. As of December 31, 2017, KML had no borrowings outstanding under the KML 2017 Credit Facility.

Maturities of Debt

The scheduled maturities of the outstanding debt balances, excluding debt fair value adjustments as of December 31, 2018, are summarized as follows (in millions):

Year	Total
2019	$ 3,388
2020	2,205
2021	2,422
2022	2,518
2023	3,250
Thereafter	22,810
Total	$ 36,593

Debt Fair Value Adjustments

The carrying value adjustment to debt securities whose fair value is being hedged is included within "Debt fair value adjustments" on our accompanying consolidated balance sheets. "Debt fair value adjustments" also include unamortized debt discount/premiums, purchase accounting debt fair value adjustments, unamortized portion of proceeds received from the early termination of interest rate swap agreements, and debt issuance costs. As of December 31, 2018, the weighted-average amortization period of the unamortized premium from the termination of interest rate swaps was approximately 16 years. The following table summarizes the "Debt fair value adjustments" included on our accompanying consolidated balance sheets (in millions):

	December 31,	
Debt Fair Value Adjustments	2018	2017
Purchase accounting debt fair value adjustments	$ 658	$ 719
Carrying value adjustment to hedged debt	2	115
Unamortized portion of proceeds received from the early termination of interest rate swap agreements	275	297
Unamortized debt discounts, net	(74)	(74)
Unamortized debt issuance costs	(130)	(130)
Total debt fair value adjustments	$ 731	$ 927

Interest Rates, Interest Rate Swaps and Contingent Debt

The weighted average interest rate on all of our borrowings was 5.15% during 2018 and 5.02% during 2017. Information on our interest rate swaps is contained in Note 14. For information about our contingent debt agreements, see Note 13 "*Commitments and Contingent Liabilities—Contingent Debt*").

10. Share-based Compensation and Employee Benefits

Share-based Compensation

Class P Shares

Kinder Morgan, Inc. Amended and Restated Stock Compensation Plan for Non-Employee Directors

We have a Kinder Morgan, Inc. Amended and Restated Stock Compensation Plan for Non-Employee Directors, in which our eligible non-employee directors participate. The plan recognizes that the compensation paid to each eligible non-employee director is fixed by our board, generally annually, and that the compensation is payable in cash. Pursuant to the plan, in lieu of receiving some or all of the cash compensation, each eligible non-employee director may elect to receive shares of Class P common stock. Each election will be generally at or around the first board meeting in January of each calendar year and will be effective for the entire calendar year. An eligible director may make a new election each calendar year. The total number of shares of Class P common stock authorized under the plan is 250,000. During 2018, 2017 and 2016, we made restricted Class P common stock grants to our non-employee directors of 25,800, 17,740 and 31,880, respectively. These grants were valued at time of issuance at $500,000, $400,000 and $400,000, respectively. All of the restricted stock awards made to non-employee directors vest during a six-month period.

Kinder Morgan, Inc. 2015 Amended and Restated Stock Incentive Plan

The Kinder Morgan, Inc. 2015 Amended and Restated Stock Incentive Plan is an equity awards plan available to eligible employees. The total number of shares of Class P common stock authorized under the plan is 33,000,000. The following table sets forth a summary of activity and related balances of our restricted stock awards excluding that issued to non-employee directors (in millions, except share and per share amounts):

	Year Ended December 31, 2018		Year Ended December 31, 2017		Year Ended December 31, 2016	
	Shares	Weighted Average Grant Date Fair Value per Share	Shares	Weighted Average Grant Date Fair Value per Share	Shares	Weighted Average Grant Date Fair Value per Share
Outstanding at beginning of period	10,518,344	$ 28.21	9,038,137	$ 32.72	7,645,105	$ 37.91
Granted	5,389,476	17.73	3,221,691	19.52	2,816,599	21.36
Vested	(2,371,193)	36.34	(1,501,939)	36.67	(1,226,652)	38.53
Forfeited	(382,022)	23.26	(239,545)	28.34	(196,915)	35.74
Outstanding at end of period	13,154,605	22.59	10,518,344	28.21	9,038,137	32.72

The intrinsic value of restricted stock awards vested during the years ended December 31, 2018, 2017 and 2016 was $42 million, $30 million and $25 million, respectively. Restricted stock awards made to employees have vesting periods ranging from 1 year with variable vesting dates to 10 years. Following is a summary of the future vesting of our outstanding restricted stock awards:

Year	Vesting of Restricted Shares
2019	4,048,963
2020	3,537,544
2021	4,814,403
2022	152,104
2023	121,093
Thereafter	480,498
Total Outstanding	13,154,605

The related compensation costs less estimated forfeitures is generally recognized ratably over the vesting period of the restricted stock awards. Upon vesting, the grants will be paid in our Class P common shares.

During 2018, 2017 and 2016, we recorded $63 million, $65 million and $66 million, respectively, in expense related to restricted stock awards and capitalized approximately $13 million, $9 million and $9 million, respectively. At December 31, 2018 and 2017, unrecognized restricted stock awards compensation costs, less estimated forfeitures, was approximately $127 million with a weighted average remaining amortization period of 2.32 years.

KML Restricted Shares

KML adopted the 2017 Restricted Share Unit Plan for Employees, an equity awards plan, for its eligible employees, and the 2017 Restricted Share Unit Plan for Non-Employee Directors, in which its eligible non-employee directors participate. During the year ended December 31, 2018 and 2017, we recognized $6 million and $1 million, respectively, of expense and capitalized $2 million and $1 million, respectively, related to these compensation programs. At December 31, 2018, unrecognized compensation costs, less estimated forfeitures associated with KML's restricted share unit awards, was approximately $3 million, with a weighted average remaining amortization period of 2.1 years.

Pension and Other Postretirement Benefit Plans

Savings Plan

We maintain a defined contribution plan covering eligible U.S. employees. We contribute 5% of eligible compensation for most of the plan participants. Certain collectively bargained participants receive Company contributions in accordance with collective bargaining agreements. The total cost for our savings plan was approximately $48 million, $47 million, and $47 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Pension Plans

Our pension plans are defined benefit plans that cover substantially all of our U.S. employees and provide benefits under a cash balance formula. A participant in the cash balance formula accrues benefits through contribution credits based on a combination of age and years of service, multiplied by eligible compensation. Interest is also credited to the participant's plan account. A participant becomes fully vested in the plan after three years and may take a lump sum distribution upon termination of employment or retirement. Certain collectively bargained and grandfathered employees accrue benefits through career pay or final pay formulas.

Other Postretirement Benefit Plans

We and certain of our subsidiaries provide other postretirement benefits (OPEB), including medical benefits for closed groups of retired employees and certain grandfathered employees and their dependents, and limited postretirement life insurance benefits for retired employees. These plans provide a fixed subsidy to post-age 65 Medicare eligible participants to purchase coverage through a retiree Medicare exchange. Medical benefits under these OPEB plans may be subject to deductibles, co-payment provisions, dollar caps and other limitations on the amount of employer costs, and we reserve the right to change these benefits.

Additionally, our subsidiary SFPP has incurred certain liabilities for postretirement benefits to certain current and former employees, their covered dependents, and their beneficiaries. However, the net periodic benefit costs, contributions and liability amounts associated with the SFPP postretirement benefit plan are not material to our consolidated income statements or balance sheets.

Plans Associated with Foreign Operations

Two of our former subsidiaries, Kinder Morgan Canada Inc. and Trans Mountain Pipeline ULC (as general partner of Trans Mountain Pipeline L.P.), were sponsors of pension and OPEB plans for eligible Canadian and Trans Mountain pipeline employees. These subsidiaries, along with the plan assets of the Canadian pension and OPEB plans, were sold on August 31, 2018 (see Note 3). Prior to 2018, we included the net periodic benefit costs, contributions and liability amounts associated with our Canadian pension plans within our consolidated financial statements. In conjunction with the sale, Kinder Morgan Canada Services was formed and became the Canadian employer of the staff that operates our remaining Canadian assets. Kinder Morgan Canada Services subsequently established a defined contribution pension plan and an OPEB plan for eligible Canadian employees which are not material to our consolidated income statements and balance sheets, and therefore are excluded from the following disclosures.

Benefit Obligation, Plan Assets and Funded Status. The following table provides information about our pension and OPEB plans as of and for each of the years ended December 31, 2018 and 2017 (in millions):

	Pension Benefits		OPEB	
	2018	2017	2018	2017
Change in benefit obligation:				
Benefit obligation at beginning of period	$ 2,982	$ 2,884	$ 425	$ 473
Service cost	52	40	1	1
Interest cost	84	88	12	13
Actuarial (gain) loss	(172)	155	(53)	(16)
Benefits paid	(175)	(180)	(33)	(38)
Participant contributions	—	3	1	2
Medicare Part D subsidy receipts	—	—	1	1
Exchange rate changes	—	13	—	1
Settlements	—	(21)	—	—
Other(a)	(205)	—	(15)	(12)
Benefit obligation at end of period	2,566	2,982	339	425
Change in plan assets:				
Fair value of plan assets at beginning of period	2,296	2,160	335	332
Actual return on plan assets	(128)	292	(5)	29
Employer contributions	30	32	7	9
Participant contributions	—	3	1	2
Medicare Part D subsidy receipts	—	—	1	1
Benefits paid	(175)	(180)	(33)	(38)
Exchange rate changes	—	10	—	—
Settlements	—	(21)	—	—
Other(a)	(159)	—	—	—
Fair value of plan assets at end of period	1,864	2,296	306	335
Funded status - net liability at December 31,	$ (702)	$ (686)	$ (33)	$ (90)

(a) 2018 amounts represent December 31, 2017 balances associated with Canadian pension and OPEB plans that were included in the TMPL Sale. 2017 amounts represent December 31, 2016 balances associated with our Plantation Pipeline OPEB plan that are no longer included in these disclosures.

Components of Funded Status. The following table details the amounts recognized in our balance sheets at December 31, 2018 and 2017 related to our pension and OPEB plans (in millions):

	Pension Benefits		OPEB	
	2018	2017	2018	2017
Non-current benefit asset(a)	$ —	$ —	$ 190	$ 198
Current benefit liability	—	—	(13)	(15)
Non-current benefit liability	(702)	(686)	(210)	(273)
Funded status - net liability at December 31,	$ (702)	$ (686)	$ (33)	$ (90)

(a) 2018 and 2017 OPEB amounts include $32 million and $33 million, respectively, of non-current benefit assets related to a plan we sponsor which is associated with employee services provided to an unconsolidated joint venture, and for which we have recorded an offsetting related party deferred credit.

Components of Accumulated Other Comprehensive (Loss) Income. The following table details the amounts of pre-tax accumulated other comprehensive (loss) income at December 31, 2018 and 2017 related to our pension and OPEB plans which are included on our accompanying consolidated balance sheets, including the portion attributable to our noncontrolling interests, (in millions):

	Pension Benefits		OPEB	
	2018	2017	2018	2017
Unrecognized net actuarial (loss) gain	$ (653)	$ (635)	$ 117	$ 88
Unrecognized prior service (cost) credit	(3)	(4)	14	17
Accumulated other comprehensive (loss) income	$ (656)	$ (639)	$ 131	$ 105

We anticipate that approximately $40 million of pre-tax accumulated other comprehensive loss, inclusive of amounts reported as noncontrolling interests, will be recognized as part of our net periodic benefit cost in 2019, including approximately $42 million of unrecognized net actuarial loss and approximately $2 million of unrecognized prior service credit.

Our accumulated benefit obligation for our pension plans was $2,535 million and $2,840 million at December 31, 2018 and 2017, respectively.

Our accumulated postretirement benefit obligation for our OPEB plans, whose accumulated postretirement benefit obligations exceeded the fair value of plan assets, was $293 million and $373 million at December 31, 2018 and 2017, respectively. The fair value of these plans' assets was approximately $70 million and $84 million at December 31, 2018 and 2017, respectively.

Plan Assets. The investment policies and strategies are established by the Fiduciary Committee for the assets of each of the pension and OPEB plans, which are responsible for investment decisions and management oversight of the plans. The stated philosophy of the Fiduciary Committee is to manage these assets in a manner consistent with the purpose for which the plans were established and the time frame over which the plans' obligations need to be met. The objectives of the investment management program are to (1) meet or exceed plan actuarial earnings assumptions over the long term and (2) provide a reasonable return on assets within established risk tolerance guidelines and to maintain the liquidity needs of the plans with the goal of paying benefit and expense obligations when due. In seeking to meet these objectives, the Fiduciary Committee recognizes that prudent investing requires taking reasonable risks in order to raise the likelihood of achieving the targeted investment returns. In order to reduce portfolio risk and volatility, the Fiduciary Committee has adopted a strategy of using multiple asset classes.

As of December 31, 2018, the allowable range for asset allocations in effect for our pension plan were 34% to 59% equity, 37% to 57% fixed income, 0% to 5% cash, 0% to 2% alternative investments and 0% to 10% company securities (KMI Class P common stock and/or debt securities). As of December 31, 2018, the allowable range for asset allocations in effect for our OPEB plans were 42% to 67% equity, 25% to 51% fixed income and 0% to 20% cash.

Below are the details of our pension and OPEB plan assets by class and a description of the valuation methodologies used for assets measured at fair value.

- Level 1 assets' fair values are based on quoted market prices for the instruments in actively traded markets. Included in this level are cash, equities, exchange traded mutual funds and MLPs. These investments are valued at the closing price reported on the active market on which the individual securities are traded.

- Level 2 assets' fair values are primarily based on pricing data representative of quoted prices for similar assets in active markets (or identical assets in less active markets). Included in this level are short-term investment funds, fixed income securities and derivatives. Short-term investment funds are valued at amortized cost, which approximates fair value. The fixed income securities' fair values are primarily based on an evaluated price which is based on a compilation of primarily observable market information or a broker quote in a non-active market. Derivatives are exchange-traded through clearinghouses and are valued based on these prices.

- Level 3 assets' fair values are calculated using valuation techniques that require inputs that are both significant to the fair value measurement and are unobservable, or are similar to Level 2 assets. Included in this level are guaranteed insurance contracts and immediate participation guarantee contracts. These contracts are valued at contract value, which approximates fair value.

- Plan assets with fair values that are based on the net asset value per share, or its equivalent (NAV), as reported by the issuers are determined based on the fair value of the underlying securities as of the valuation date and include common/collective trust funds, private investment funds, limited partnerships, and fixed income trusts. The plan assets measured at NAV are not categorized within the fair value hierarchy described above, but are separately identified in the following tables.

Listed below are the fair values of our pension and OPEB plans' assets that are recorded at fair value by class and categorized by fair value measurement used at December 31, 2018 and 2017 (in millions):

	Pension Assets							
	2018				2017			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Measured within fair value hierarchy								
Cash	$ —	$ —	$ —	$ —	$ 6	$ —	$ —	$ 6
Short-term investment funds	—	7	—	7	—	65	—	65
Mutual funds(a)	81	—	—	81	245	—	—	245
Equities(b)	227	—	—	227	278	—	—	278
Fixed income securities	—	422	—	422	—	416	—	416
Derivatives	—	6	—	6	—	5	—	5
Subtotal	$ 308	$ 435	$ —	$ 743	$ 529	$ 486	$ —	$ 1,015
Measured at NAV(c)								
Common/collective trusts(d)				857				895
Private investment funds(e)				215				337
Private limited partnerships(f)				49				49
Subtotal				1,121				1,281
Total plan assets fair value				$ 1,864				$ 2,296

(a) Includes mutual funds which are invested in equity.
(b) Plan assets include $94 million and $110 million of KMI Class P common stock for 2018 and 2017, respectively.
(c) Plan assets for which fair value was measured using NAV as a practical expedient.
(d) Common/collective trust funds were invested in approximately 37% fixed income and 63% equity in 2018 and 36% fixed income and 64% equity in 2017.
(e) Private investment funds were invested in approximately 71% fixed income and 29% equity in 2018 and 52% fixed income and 48% equity in 2017.
(f) Includes assets invested in real estate, venture and buyout funds.

	OPEB Assets							
	2018				2017			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Measured within fair value hierarchy								
Short-term investment funds	$ —	$ 4	$ —	$ 4	$ —	$ 7	$ —	$ 7
Equities(a)	—	—	—	—	16	—	—	16
MLPs	—	—	—	—	50	—	—	50
Guaranteed insurance contracts	—	—	51	51	—	—	49	49
Mutual funds	1	—	—	1	1	—	—	1
Subtotal	$ 1	$ 4	$ 51	$ 56	$ 67	$ 7	$ 49	$ 123
Measured at NAV(b)								
Common/collective trusts(c)				250				68
Fixed income trusts				—				66
Limited partnerships(d)				—				78
Subtotal				250				212
Total plan assets fair value				$ 306				$ 335

(a) Plan assets include $2 million of KMI Class P common stock for 2017.
(b) Plan assets for which fair value was measured using NAV as a practical expedient.
(c) Common/collective trust funds were invested in approximately 60% equity and 40% fixed income securities for 2018 and 71% equity and 29% fixed income securities for 2017.
(d) Limited partnerships were invested in global equity securities.

The following tables present the changes in our pension and OPEB plans' assets included in Level 3 for the years ended December 31, 2018 and 2017 (in millions):

	Pension Assets				
	Balance at Beginning of Period	Transfers In (Out)	Realized and Unrealized Gains (Losses), net	Purchases (Sales), net	Balance at End of Period
2017					
Insurance contracts	$ 16	$ —	$ —	$ (16)	$ —

	OPEB Assets				
	Balance at Beginning of Period	Transfers In (Out)	Realized and Unrealized Gains (Losses), net	Purchases (Sales), net	Balance at End of Period
2018					
Insurance contracts	$ 49	$ —	$ 4	$ (2)	$ 51
2017					
Insurance contracts	$ 47	$ —	$ 5	$ (3)	$ 49

Changes in the underlying value of Level 3 assets due to the effect of changes of fair value were immaterial for the years ended December 31, 2018 and 2017.

Expected Payment of Future Benefits and Employer Contributions. As of December 31, 2018, we expect to make the following benefit payments under our plans (in millions):

Fiscal year	Pension Benefits	OPEB(a)
2019	$ 234	$ 33
2020	233	32
2021	225	32
2022	223	31
2023	214	29
2024 - 2028	969	127

(a) Includes a reduction of approximately $2 million in each of the years 2019 - 2023 and approximately $13 million in aggregate for 2024 - 2028 for an expected subsidy related to the Medicare Prescription Drug, Improvement and Modernization Act of 2003.

In 2019, we expect to contribute approximately $60 million to our pension plans and $7 million, net of anticipated subsidies, to our OPEB plans.

Actuarial Assumptions and Sensitivity Analysis. Benefit obligations and net benefit cost are based on actuarial estimates and assumptions. The following table details the weighted-average actuarial assumptions used in determining our benefit obligation and net benefit costs of our pension and OPEB plans for 2018, 2017 and 2016:

	Pension Benefits			OPEB		
	2018	2017	2016	2018	2017	2016
Assumptions related to benefit obligations:						
Discount rate	4.26%	3.56%	3.83%	4.16%	3.48%	3.69%
Rate of compensation increase	3.50%	3.53%	3.52%	n/a	n/a	n/a
Assumptions related to benefit costs:						
Discount rate for benefit obligations	3.56%	3.83%	4.05%	3.48%	3.69%	3.91%
Discount rate for interest on benefit obligations	3.13%	3.09%	3.24%	3.08%	3.05%	3.18%
Discount rate for service cost	3.56%	3.88%	4.15%	3.82%	4.15%	4.36%
Discount rate for interest on service cost	3.14%	3.24%	3.50%	3.76%	3.95%	4.17%
Expected return on plan assets(a)	7.25%	7.07%	7.31%	7.08%	6.84%	7.07%
Rate of compensation increase	3.50%	3.52%	3.51%	n/a	n/a	n/a

(a) The expected return on plan assets listed in the table above is a pre-tax rate of return based on our targeted portfolio of investments. For the OPEB assets subject to unrelated business income taxes (UBIT), we utilize an after-tax expected return on plan assets to determine our benefit costs, which is based on a UBIT rate of 21% for 2018, 2017 and 2016.

We utilize a full yield curve approach in the estimation of the service and interest cost components of net periodic benefit cost (credit) for our retirement benefit plans by applying the specific spot rates along the yield curve used in the determination of the benefit obligation to their underlying projected cash flows. The expected long-term rates of return on plan assets were determined by combining a review of the historical returns realized within the portfolio, the investment strategy included in the plans' investment policy, and capital market projections for the asset classes in which the portfolio is invested and the target weightings of each asset class.

Actuarial estimates for our OPEB plans assumed a weighted-average annual rate of increase in the per capita cost of covered health care benefits of 7.26%, gradually decreasing to 4.54% by the year 2038. Assumed health care cost trends have a significant effect on the amounts reported for OPEB plans. A one-percentage point change in assumed health care cost trends would have the following effects as of December 31, 2018 and 2017 (in millions):

	2018	2017
One-percentage point increase:		
Aggregate of service cost and interest cost	$ 1	$ 1
Accumulated postretirement benefit obligation	16	22
One-percentage point decrease:		
Aggregate of service cost and interest cost	$ (1)	$ (1)
Accumulated postretirement benefit obligation	(14)	(19)

Components of Net Benefit Cost and Other Amounts Recognized in Other Comprehensive Income. For each of the years ended December 31, the components of net benefit cost and other amounts recognized in pre-tax other comprehensive income related to our pension and OPEB plans are as follows (in millions):

	Pension Benefits			OPEB		
	2018	2017	2016	2018	2017	2016
Components of net benefit cost:						
Service cost	$ 52	$ 40	$ 36	$ 1	$ 1	$ 1
Interest cost	84	88	89	12	13	16
Expected return on assets	(149)	(147)	(151)	(20)	(19)	(19)
Amortization of prior service cost (credit)	—	1	1	(4)	(3)	(3)
Amortization of net actuarial loss (gain)	40	52	35	(6)	(6)	—
Curtailment and settlement loss	—	5	—	—	—	—
Net benefit (credit) cost(a)	27	39	10	(17)	(14)	(5)
Other changes in plan assets and benefit obligations recognized in other comprehensive (income) loss:						
Net loss (gain) arising during period	105	17	116	(32)	(25)	(48)
Prior service cost (credit) arising during period	—	—	—	—	—	—
Amortization or settlement recognition of net actuarial (loss) gain	(87)	(64)	(34)	3	6	—
Amortization of prior service (cost) credit	(1)	(1)	—	3	1	1
Exchange rate changes	—	—	1	—	—	—
Total recognized in total other comprehensive (income) loss	17	(48)	83	(26)	(18)	(47)
Total recognized in net benefit cost (credit) and other comprehensive (income) loss	$ 44	$ (9)	$ 93	$ (43)	$ (32)	$ (52)

(a) 2018 and 2017 OPEB amounts each include $4 million of net benefit credits related to a plan that we sponsor that is associated with employee services provided to an unconsolidated joint venture. We charge or refund these costs or credits associated with this plan to the joint venture as an offset to our net benefit cost or credit and receive our proportionate share of these costs or credits through our share of the equity investee's earnings.

Multiemployer Plans

We participate in several multi-employer pension plans for the benefit of employees who are union members. We do not administer these plans and contribute to them in accordance with the provisions of negotiated labor contracts. Other benefits include a self-insured health and welfare insurance plan and an employee health plan where employees may contribute for their dependents' health care costs. Amounts charged to expense for these plans were approximately $8 million for each of the years ended December 31, 2018, 2017 and 2016. We consider the overall multi-employer pension plan liability exposure to be minimal in relation to the value of its total consolidated assets and net income.

11. Stockholders' Equity

Mandatory Convertible Preferred Stock

As of October 26, 2018, all of our issued and outstanding 1,600,000 shares of 9.75% Series A mandatory convertible preferred stock, with a liquidating preference of $1,000 per share were converted into common stock either at the option of the holders before or automatically on October 26, 2018. Based on the current market price of our common stock at the time of conversion, our Series A Preferred Shares converted into approximately 58 million common shares.

Preferred Stock Dividends

Dividends on our mandatory convertible preferred stock were payable on a cumulative basis when, as and if declared by our board of directors (or an authorized committee thereof) at an annual rate of 9.75% of the liquidation preference of $1,000 per share on January 26, April 26, July 26 and October 26 of each year, commencing on January 26, 2016 to, and including, October 26, 2018. Prior to the October 26, 2018 conversion of our Series A Preferred Shares into common shares, we paid all dividends on our mandatory convertible preferred stock in cash. The following table provides information regarding our preferred stock dividends:

Period	Total dividend per share for the period	Date of declaration	Date of record	Date of dividend
January 26, 2018 through April 25, 2018	$24.375	January 17, 2018	April 11, 2018	April 26, 2018
April 26, 2018 through July 25, 2018	24.375	April 18, 2018	July 11, 2018	July 26, 2018
July 26, 2018 through October 25, 2018	24.375	July 18, 2018	October 11, 2018	October 26, 2018

Common Equity

As of December 31, 2018, our common equity consisted of our Class P common stock.

On July 19, 2017, our board of directors approved a $2 billion common share buy-back program that began in December 2017. During the years ended December 31, 2018 and 2017, we repurchased approximately 15 million and 14 million, respectively, of our Class P shares for approximately $273 million and $250 million, respectively. 2018 amounts exclude repurchases made in December 2018 of approximately 0.1 million of our Class P shares for approximately $2 million which settled on January 2, 2019.

On December 19, 2014, we entered into an equity distribution agreement authorizing us to issue and sell through or to the managers party thereto, as sales agents and/or principals, shares of our Class P common stock having an aggregate offering of up to $5.0 billion from time to time during the term of this agreement. During the years ended December 31, 2018, 2017 and 2016 we did not issue any Class P common stock under this agreement.

KMI Common Stock Dividends

Holders of our common stock participate in any dividend declared by our board of directors, subject to the rights of the holders of any outstanding preferred stock. The following table provides information about our per share dividends:

	Year Ended December 31,		
	2018	2017	2016
Per common share cash dividend declared for the period	$ 0.80	$ 0.50	$ 0.50
Per common share cash dividend paid in the period	0.725	0.50	0.50

On January 16, 2019, our board of directors declared a cash dividend of $0.20 per common share for the quarterly period ended December 31, 2018, which is payable on February 15, 2019 to shareholders of record as of January 31, 2019.

Warrants

The warrant repurchase program dated June 12, 2015, which authorized us to repurchase up to $100 million of warrants, expired along with the warrants on May 25, 2017, at which time 293 million of unexercised warrants to buy KMI common stock expired without the issuance of Class P common stock. Prior to expiration, each of the warrants entitled the holder to purchase one share of our common stock for an exercise price of $40 per share, payable in cash or by cashless exercise.

Noncontrolling Interests

The caption "Noncontrolling interests" in our accompanying consolidated balance sheets consists of interests that we do not own in the following subsidiaries (in millions):

	December 31,	
	2018	2017
KML(a)	$ 514	$ 1,163
Others	339	325
	$ 853	$ 1,488

(a) The reduction in the noncontrolling interests associated with KML is primarily attributable to the accrual of the return of capital distribution for the net proceeds from the TMPL Sale paid to KML's Restricted Voting Shareholders on January 3, 2019 of approximately $0.9 billion.

KML Contributions

KML Restricted Voting Shares

As discussed in Note 3, on May 30, 2017 our indirect subsidiary, KML, issued 102,942,000 restricted voting shares in a public offering listed on the Toronto Stock Exchange. The public ownership of the KML restricted voting shares represents an approximate 30% interest in our Canadian operations and is reflected within "Noncontrolling interests" in our consolidated financial statements as of and for the period presented after May 30, 2017.

KML Preferred Share Offerings

On August 15, 2017, KML completed an offering of 12,000,000 cumulative redeemable minimum rate reset preferred shares, Series 1 (Series 1 Preferred Shares) on the Toronto Stock Exchange at a price to the public of C$25.00 per Series 1 Preferred Share for total gross proceeds of C$300 million (U.S.$235 million). On December 15, 2017, KML completed an offering of 10,000,000 cumulative redeemable minimum rate reset preferred shares, Series 3 (Series 3 Preferred Shares) on the Toronto Stock Exchange at a price to the public of C$25.00 per Series 3 Preferred Share for total gross proceeds of C$250 million (U.S.$195 million). The net proceeds from the Series 1 and Series 3 Preferred Share offerings of C$293 million (U.S. $230 million) and C$243 million (U.S.$189 million), respectively, were used by KML to indirectly subscribe for preferred units in KMC LP, which in turn were used by KMC LP to repay the KML Credit Facility indebtedness recently incurred to, directly or indirectly, finance the development, construction and completion of the TMEP and Base Line Terminal project, and for its general corporate purposes.

KML Distributions

KML has a dividend policy pursuant to which it may pay a quarterly dividend on its restricted voting shares in an amount based on a portion of its DCF. The payment of dividends is not guaranteed and the amount and timing of any dividends payable will be at the discretion of KML's board of directors. If declared by KML's board of directors, KML will pay quarterly dividends, on or about the 45th day (or next business day) following the end of each calendar quarter to holders of its restricted voting shares of record as of the close of business on or about the last business day of the month following the end of each calendar quarter. KML also established a Dividend Reinvestment Plan (DRIP) which allows holders (excluding holders not resident in Canada) of restricted voting shares to elect to have any or all cash dividends payable to such shareholder automatically reinvested in additional restricted voting shares at a price per share calculated by reference to the volume-weighted average of the closing price of the restricted voting shares on the stock exchange on which the restricted voting shares are then listed for the five trading days immediately preceding the relevant dividend payment date, less a discount of between 0% and 5% (as determined from time to time by KML's board of directors, in its sole discretion).

Subsequent Event

On January 16, 2019, KML's board of directors announced that it would suspend KML's DRIP, effective with the payment of the fourth quarter 2018 dividend noted above, in light of KML's reduced need for capital.

KML also pays dividends on its Series 1 Preferred Shares and Series 3 Preferred Shares, which are fixed, cumulative, preferential, and payable quarterly in the annual amount of C$1.3125 per share and C$1.3000 per share, respectively, on the 15th day of February, May, August and November, as and when declared by KML's board of directors, for the initial fixed rate period to but excluding November 15, 2022 and February 15, 2023, respectively.

During the years ended December 31, 2018 and 2017, KML paid dividends on its Restricted Voting Shares to the public valued at $52 million and $18 million, respectively, of which $38 million and $13 million, respectively, was paid in cash. The remaining value of $14 million and $5 million for the years ended December 31, 2018 and 2017, respectively, was paid in 1,092,791 and 418,989, respectively, KML Restricted Voting Shares. KML also paid dividends to the public on its Series 1 and Series 3 Preferred Shares of $21 million for the year ended December 31, 2018 and on its Series 1 Preferred Shares of $3 million for the year ended December 31, 2017.

12. Related Party Transactions

Affiliate Balances

We have transactions with affiliates which consist of (i) unconsolidated affiliates in which we hold an investment accounted for under the equity method of accounting (see Note 7 for additional information related to these investments); and (ii) external joint venture partners of our joint ventures we consolidate, and our proportional method joint ventures, for which we include our proportionate share of balances and activity in our financial statements. The following tables summarize our affiliate balance sheet balances and income statement activity (in millions):

	December 31,	
	2018	2017
Balance sheet location		
Accounts receivable, net	$ 48	$ 34
Other current assets	2	8
Deferred charges and other assets	55	23
	$ 105	$ 65
Current portion of debt	$ 6	$ 6
Accounts payable	26	18
Other current liabilities	7	4
Long-term debt	148	155
Other long-term liabilities and deferred credits	34	35
	$ 221	$ 218

	Year Ended December 31,		
	2018	2017	2016
Income statement location			
Revenues			
Services	$ 171	$ 73	$ 71
Product sales and other	94	89	71
	$ 265	$ 162	$ 142
Operating Costs, Expenses and Other			
Costs of sales	$ 63	$ 20	$ 38
Other operating expenses	91	100	75

13. Commitments and Contingent Liabilities

Leases and Rights-of-Way Obligations

The table below depicts future gross minimum rental commitments under our operating leases and rights-of-way obligations as of December 31, 2018 (in millions):

Year	Commitment
2019	$ 122
2020	107
2021	102
2022	97
2023	81
Thereafter	353
Total minimum payments	$ 862

The remaining terms on our operating leases, including probable elections to exercise renewal options, range from one to thirty-five years. Total lease and rental expenses were $155 million**,** $140 million and $138 million for the years ended December 31, 2018, 2017 and 2016, respectively. The amount of capital leases included within “Property, plant and equipment, net” in our accompanying consolidated balance sheets as of December 31, 2018 and 2017 is not material to our consolidated balance sheets.

Contingent Debt

Our contingent debt disclosures pertain to certain types of guarantees or indemnifications we have made and cover certain types of guarantees included within debt agreements, even if the likelihood of requiring our performance under such guarantee is remote.

As of December 31, 2018 and 2017, our contingent debt obligations, as well as our obligations with respect to related letters of credit, totaled $714 million and $1,070 million, respectively. December 31, 2018 and 2017 amounts are represented by our proportional share of the debt obligations of four and three equity investees, respectively. Under such guarantees we are severally liable for our percentage ownership share of these equity investees' debt issued in the event of their non-performance. Also included in our contingent debt obligations is a guarantee of a throughput and deficiency agreement supporting certain debt obligations of a subsidiary of our investee, Cortez Pipeline Company. Through this guarantee, we are severally liable for approximately 50% of a Cortez Pipeline Company subsidiary's debt obligations with respect to a $50 million credit facility and $100 million in bonds. In addition, we have guaranteed approximately 100% of the debt issued by another Cortez Pipeline Company subsidiary to fund an expansion project, of which debt consists of a $27 million credit facility and a $120 million private placement note.

Guarantees and Indemnifications

We are involved in joint ventures and other ownership arrangements that sometimes require financial and performance guarantees. In a financial guarantee, we are obligated to make payments if the guaranteed party fails to make payments under, or violates the terms of, the financial arrangement. In a performance guarantee, we provide assurance that the guaranteed party will execute on the terms of the contract. If they do not, we are required to perform on their behalf. We also periodically provide indemnification arrangements related to assets or businesses we have sold. These arrangements include, but are not limited to, indemnifications for income taxes, the resolution of existing disputes and environmental matters.

While many of these agreements may specify a maximum potential exposure, or a specified duration to the indemnification obligation, there are also circumstances where the amount and duration are unlimited. Currently, we are not subject to any material requirements to perform under quantifiable arrangements. We are unable to estimate a maximum exposure for our guarantee and indemnification agreements that do not provide for limits on the amount of future payments due to the uncertainty of these exposures.

See Note 18 for a description of matters that we have identified as contingencies requiring accrual of liabilities and/or disclosure, including any such matters arising under guarantee or indemnification agreements.

14. Risk Management

Certain of our business activities expose us to risks associated with unfavorable changes in the market price of natural gas, NGL and crude oil. We also have exposure to interest rate and foreign currency risk as a result of the issuance of our debt obligations and net investments in foreign operations. Pursuant to our management's approved risk management policy, we use derivative contracts to hedge or reduce our exposure to some of these risks.

During the year ended December 31, 2018, due to volatility in certain basis differentials, we discontinued hedge accounting on certain of our crude oil derivative contracts as we did not expect them to be highly effective, for accounting purposes, in offsetting the variability in cash flows. As of December 31, 2018, these hedging relationships had been re-designated as the effectiveness improved to required levels. As the forecasted transactions were still probable, accumulated gains and losses prior to the discontinuance remained in "Accumulated other comprehensive loss" unless earnings were impacted by the forecasted transactions; however, changes in the derivative contracts' fair value subsequent to the discontinuance of hedge accounting and prior to the re-designation were reported in earnings. Upon re-designation, we resumed reporting changes in the derivative contracts' fair value in "Accumulated other comprehensive income."

Energy Commodity Price Risk Management

As of December 31, 2018, we had the following outstanding commodity forward contracts to hedge our forecasted energy commodity purchases and sales:

	Net open position long/(short)
Derivatives designated as hedging contracts	
Crude oil fixed price	(21.6) MMBbl
Crude oil basis	(13.7) MMBbl
Natural gas fixed price	(33.3) Bcf
Natural gas basis	(26.1) Bcf
Derivatives not designated as hedging contracts	
Crude oil fixed price	(0.5) MMBbl
Crude oil basis	(4.5) MMBbl
Natural gas fixed price	(4.5) Bcf
Natural gas basis	(26.9) Bcf
NGL fixed price	(3.2) MMBbl

As of December 31, 2018, the maximum length of time over which we have hedged, for accounting purposes, our exposure to the variability in future cash flows associated with energy commodity price risk is through December 2022.

Interest Rate Risk Management

As of December 31, 2018 and 2017, we had a combined notional principal amount of $10,575 million and $9,575 million, respectively, of fixed-to-variable interest rate swap agreements, all of which were designated as fair value hedges. All of our swap agreements effectively convert the interest expense associated with certain series of senior notes from fixed rates to variable rates based on an interest rate of LIBOR plus a spread and have termination dates that correspond to the maturity dates of the related series of senior notes. As of December 31, 2018, the maximum length of time over which we have hedged a portion of our exposure to the variability in the value of debt due to interest rate risk is through March 15, 2035.

Foreign Currency Risk Management

As of both December 31, 2018 and 2017, we had a notional principal amount of $1,358 million of cross-currency swap agreements to manage the foreign currency risk related to our Euro denominated senior notes by effectively converting all of the fixed-rate Euro denominated debt, including annual interest payments and the payment of principal at maturity, to U.S. dollar denominated debt at fixed rates equivalent to approximately 3.79% and 4.67% for the 7-year and 12-year senior notes, respectively. These cross-currency swaps are accounted for as cash flow hedges. The terms of the cross-currency swap agreements correspond to the related hedged senior notes, and such agreements have the same maturities as the hedged senior notes.

During the year ended December 31, 2018, we entered into foreign currency swap agreements with a combined notional principal amount of C$2,450 million (U.S.$1,888 million). These swaps result in our selling fixed C$ and receiving fixed U.S.$, effectively hedging the foreign currency risk associated with a substantial portion of our share of the TMPL Sale proceeds which KML distributed on January 3, 2019, at which time the foreign currency swaps expired. These foreign currency swaps were accounted for as net investment hedges as the foreign currency risk was related to our investment in Canadian dollar denominated foreign operations, and the critical risks of the forward contracts coincided with those of the net investment. As a result, the change in fair value of the foreign currency swaps while outstanding were reflected in the CTA section of OCI.

Fair Value of Derivative Contracts

The following table summarizes the fair values of our derivative contracts included in our accompanying consolidated balance sheets (in millions):

Fair Value of Derivative Contracts

		Asset derivatives		Liability derivatives	
		December 31,		December 31,	
		2018	2017	2018	2017
	Location	Fair value		Fair value	
Derivatives designated as hedging contracts					
Energy commodity derivative contracts	Fair value of derivative contracts/ (Other current liabilities)	$ 135	$ 65	$ (45)	$ (53)
	Deferred charges and other assets/ (Other long-term liabilities and deferred credits)	64	14	—	(24)
Subtotal		199	79	(45)	(77)
Interest rate contracts	Fair value of derivative contracts/ (Other current liabilities)	12	41	(37)	(3)
	Deferred charges and other assets/ (Other long-term liabilities and deferred credits)	121	164	(78)	(62)
Subtotal		133	205	(115)	(65)
Foreign currency contracts	Fair value of derivative contracts/ (Other current liabilities)	91	—	(6)	(6)
	Deferred charges and other assets/ (Other long-term liabilities and deferred credits)	106	166	—	—
Subtotal		197	166	(6)	(6)
Total		529	450	(166)	(148)
Derivatives not designated as hedging contracts					
Energy commodity derivative contracts	Fair value of derivative contracts/ (Other current liabilities)	22	8	(5)	(22)
	Deferred charges and other assets/ (Other long-term liabilities and deferred credits)	—	—	—	(2)
Total		22	8	(5)	(24)
Total derivatives		$ 551	$ 458	$ (171)	$ (172)

Effect of Derivative Contracts on the Income Statement

The following tables summarize the pre-tax impact of our derivative contracts in our accompanying consolidated statements of income (in millions):

Derivatives in fair value hedging relationships	Location	Gain/(loss) recognized in income on derivatives and related hedged item		
		Year Ended December 31,		
		2018	2017	2016
Interest rate contracts	Interest, net	$ (122)	$ (103)	$ (180)
Hedged fixed rate debt	Interest, net	$ 113	$ 105	$ 160

Derivatives in cash flow hedging relationships	Gain/(loss) recognized in OCI on derivative (effective portion)(a)			Location	Gain/(loss) reclassified from Accumulated OCI into income (effective portion)(b)			Location	Gain/(loss) recognized in income on derivative (ineffective portion and amount excluded from effectiveness testing)		
	Year Ended December 31,				Year Ended December 31,				Year Ended December 31,		
	2018	2017	2016		2018	2017	2016		2018	2017	2016
Energy commodity derivative contracts	$ 201	$ 37	$(182)	Revenues—Natural gas sales	$ (29)	$ 18	$ 23	Revenues—Natural gas sales	$ —	$ —	$ —
				Revenues—Product sales and other	(30)	55	233	Revenues—Product sales and other	(65)	11	(12)
				Costs of sales	21	14	(26)	Costs of sales	—	—	—
Interest rate contracts(c)	3	—	(3)	Interest, net	(4)	(5)	(4)	Interest, net	—	—	—
Foreign currency contracts	(59)	190	21	Other, net	(67)	186	(43)	Other, net	—	—	—
Total	$ 145	$ 227	$(164)	Total	$(109)	$ 268	$ 183	Total	$ (65)	$ 11	$ (12)

(a) We expect to reclassify an approximate $165 million gain associated with cash flow hedge price risk management activities included in our accumulated other comprehensive loss balance as of December 31, 2018 into earnings during the next twelve months (when the associated forecasted transactions are also expected to occur); however, actual amounts reclassified into earnings could vary materially as a result of changes in market prices.

(b) During the year ended December 31, 2018, we recognized a $3 million loss as a result of our equity investment's forecasted transactions being probable of not occurring and a $21 million gain associated with a write-down of hedged inventory. All other amounts reclassified were the result of the hedged forecasted transactions actually affecting earnings (i.e., when the forecasted sales and purchases actually occurred).

(c) Amounts represent our share of an equity investee's accumulated other comprehensive income (loss).

Derivatives in net investment hedging relationships	Gain/(loss) recognized in OCI on derivative (effective portion)			Location	Gain/(loss) reclassified from Accumulated OCI into income (effective portion)(a)			Location	Gain/(loss) recognized in income on derivative (ineffective portion and amount excluded from effectiveness testing)		
	Year Ended December 31,				Year Ended December 31,				Year Ended December 31,		
	2018	2017	2016		2018	2017	2016		2018	2017	2016
Foreign currency contracts	$ 91	$ —	$ —	Loss on impairments and divestitures, net	$ 26	$ —	$ —	Other, net	$ —	$ —	$ —
Total	$ 91	$ —	$ —	Total	$ 26	$ —	$ —	Total	$ —	$ —	$ —

(a) During the year ended December 31, 2018, we recognized a $26 million gain from our accumulated other comprehensive loss balance related to the TMPL Sale. See Note 3.

Derivatives not designated as accounting hedges	Location	Gain/(loss) recognized in income on derivatives		
		Year Ended December 31,		
		2018	2017	2016
Energy commodity derivative contracts	Revenues—Natural gas sales	$ 3	$ 20	$ (10)
	Revenues—Product sales and other	(12)	(16)	(26)
	Costs of sales	2	—	3
Interest rate contracts	Interest, net	—	—	63
Total(a)		$ (7)	$ 4	$ 30

(a) For the years ended December 31, 2018, 2017 and 2016 includes approximate losses of $4 million and gains of $57 million and $73 million, respectively, associated with natural gas, crude and NGL derivative contract settlements.

Credit Risks

In conjunction with certain derivative contracts, we are required to provide collateral to our counterparties, which may include posting letters of credit or placing cash in margin accounts. As of December 31, 2018 and 2017, we had no outstanding letters of credit supporting our commodity price risk management program. As of December 31, 2018, we had cash margins of $16 million posted by our counterparties with us as collateral and reported within "Other Current Liabilities" on our accompanying consolidated balance sheet. As of December 31, 2017, we had cash margins of $1 million posted by us with our counterparties as collateral and reported within "Restricted deposits" on our accompanying consolidated balance sheet. The balance at December 31, 2018 consisted of initial margin requirements of $9 million offset by variation margin requirements of $25 million. We also use industry standard commercial agreements that allow for the netting of exposures associated with transactions executed under a single commercial agreement. Additionally, we generally utilize master netting agreements to offset credit exposure across multiple commercial agreements with a single counterparty.

We also have agreements with certain counterparties to our derivative contracts that contain provisions requiring the posting of additional collateral upon a decrease in our credit rating. As of December 31, 2018, based on our current mark to market positions and posted collateral, we estimate that if our credit rating were downgraded one or two notches we would not be required to post additional collateral.

Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Loss

Cumulative revenues, expenses, gains and losses that under GAAP are included within our comprehensive income but excluded from our earnings are reported as "Accumulated other comprehensive loss" within "Stockholders' Equity" in our consolidated balance sheets. Changes in the components of our "Accumulated other comprehensive loss" not including non-controlling interests are summarized as follows (in millions):

	Net unrealized gains/(losses) on cash flow hedge derivatives	Foreign currency translation adjustments	Pension and other postretirement liability adjustments	Total Accumulated other comprehensive loss
Balance at December 31, 2015	$ 219	$ (322)	$ (358)	$ (461)
Other comprehensive (loss) gain before reclassifications	(104)	34	(14)	(84)
Gains reclassified from accumulated other comprehensive loss	(116)	—	—	(116)
Net current-period other comprehensive (loss) income	(220)	34	(14)	(200)
Balance at December 31, 2016	(1)	(288)	(372)	(661)
Other comprehensive gain before reclassifications	145	55	40	240
Gains reclassified from accumulated other comprehensive loss	(171)	—	—	(171)
KML IPO	—	44	7	51
Net current-period other comprehensive (loss) income	(26)	99	47	120
Balance at December 31, 2017	(27)	(189)	(325)	(541)
Other comprehensive gain (loss) before reclassifications	111	(89)	(31)	(9)
Losses reclassified from accumulated other comprehensive loss(a)	84	223	22	329
Impact of adoption of ASU 2018-02 (Note 1)	(4)	(36)	(69)	(109)
Net current-period other comprehensive income (loss)	191	98	(78)	211
Balance at December 31, 2018	$ 164	$ (91)	$ (403)	$ (330)

(a) Amounts for foreign currency translation adjustments and pension and other postretirement liability adjustments reflect the deferred losses recognized in income during the year ended December 31, 2018 related to the TMPL Sale.

15. Fair Value

The fair values of our financial instruments are separated into three broad levels (Levels 1, 2 and 3) based on our assessment of the availability of observable market data and the significance of non-observable data used to determine fair value. Each fair value measurement must be assigned to a level corresponding to the lowest level input that is significant to the fair value measurement in its entirety.

The three broad levels of inputs defined by the fair value hierarchy are as follows:

- Level 1 Inputs—quoted prices (unadjusted) in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date;
- Level 2 Inputs—inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. If the asset or liability has a specified (contractual) term, a Level 2 input must be observable for substantially the full term of the asset or liability; and
- Level 3 Inputs—unobservable inputs for the asset or liability. These unobservable inputs reflect the entity's own assumptions about the assumptions that market participants would use in pricing the asset or liability, and are developed based on the best information available in the circumstances (which might include the reporting entity's own data).

Fair Value of Derivative Contracts

The following two tables summarize the fair value measurements of our (i) energy commodity derivative contracts; (ii) interest rate swap agreements; and (iii) cross-currency swap agreements, based on the three levels established by the Codification (in millions). The tables also identify the impact of derivative contracts which we have elected to present on our accompanying consolidated balance sheets on a gross basis that are eligible for netting under master netting agreements.

	Balance sheet asset fair value measurements by level						
	Level 1	Level 2	Level 3	Gross amount	Contracts available for netting	Cash collateral held(b)	Net amount
As of December 31, 2018							
Energy commodity derivative contracts(a)	$ 28	$ 193	$ —	$ 221	$ (39)	$ (25)	$ 157
Interest rate contracts	$ —	$ 133	$ —	$ 133	$ (7)	$ —	$ 126
Foreign currency contracts	$ —	$ 197	$ —	$ 197	$ (6)	$ —	$ 191
As of December 31, 2017							
Energy commodity derivative contracts(a)	$ 17	$ 70	$ —	$ 87	$ (42)	$ (12)	$ 33
Interest rate contracts	$ —	$ 205	$ —	$ 205	$ (15)	$ —	$ 190
Foreign currency contracts	$ —	$ 166	$ —	$ 166	$ (6)	$ —	$ 160

	Balance sheet liability fair value measurements by level						
	Level 1	Level 2	Level 3	Gross amount	Contracts available for netting	Collateral posted(b)	Net amount
As of December 31, 2018							
Energy commodity derivative contracts(a)	$ (11)	$ (39)	$ —	$ (50)	$ 39	$ —	$ (11)
Interest rate contracts	$ —	$ (115)	$ —	$ (115)	$ 7	$ —	$ (108)
Foreign currency contracts	$ —	$ (6)	$ —	$ (6)	$ 6	$ —	$ —
As of December 31, 2017							
Energy commodity derivative contracts(a)	$ (3)	$ (98)	$ —	$ (101)	$ 42	$ —	$ (59)
Interest rate contracts	$ —	$ (65)	$ —	$ (65)	$ 15	$ —	$ (50)
Foreign currency contracts	$ —	$ (6)	$ —	$ (6)	$ 6	$ —	$ —

(a) Level 1 consists primarily of NYMEX natural gas futures. Level 2 consists primarily of OTC WTI swaps and NGL swaps.

(b) Any cash collateral paid or received is reflected in this table, but only to the extent that it represents variation margins. Any amount associated with derivative prepayments or initial margins that are not influenced by the derivative asset or liability amounts or those that are determined solely on their volumetric notional amounts are excluded from this table.

Fair Value of Financial Instruments

The carrying value and estimated fair value of our outstanding debt balances is disclosed below (in millions):

	December 31, 2018		December 31, 2017	
	Carrying value	Estimated fair value	Carrying value	Estimated fair value
Total debt	$ 37,324	$ 37,469	$ 37,843	$ 40,050

We used Level 2 input values to measure the estimated fair value of our outstanding debt balance as of both December 31, 2018 and 2017.

16. Revenue Recognition

Adoption of Topic 606

Effective January 1, 2018, we adopted ASU No. 2014-09, "Revenue from Contracts with Customers" and the series of related accounting standard updates that followed (collectively referred to as "Topic 606"). We utilized the modified retrospective method to adopt Topic 606, which required us to apply the new revenue standard to (i) all new revenue contracts entered into after January 1, 2018 and (ii) revenue contracts that were not completed as of January 1, 2018. In accordance with this approach, our consolidated revenues for periods prior to January 1, 2018 were not revised. The cumulative effect of this adoption of Topic 606 as of January 1, 2018 was not material.

The impact to our consolidated financial statement line items from the adoption of Topic 606 for these changes was as follows (in millions):

	Year ended December 31, 2018		
Line Item	**As Reported**	**Amounts Without Adoption of Topic 606**	**Effect of Change Increase/ (Decrease)**
Consolidated Statement of Income			
Natural gas sales	$ 3,281	$ 3,339	$ (58)
Services	7,931	8,134	(203)
Product sales and other	2,932	3,270	(338)
Total Revenues	14,144	14,743	(599)
Cost of sales	4,421	5,020	(599)
Operating Income	3,794	3,794	—

The effect-of-change amounts in the table above are attributable to the non-FERC-regulated portion of our Natural Gas Pipelines business segment, which provides gathering, processing and processed commodity sales services for various producers.

In those instances where we purchase and obtain control of the entire natural gas stream in our producer arrangements, we have determined these are contracts with suppliers rather than contracts with customers, and therefore, these arrangements are not included in the scope of Topic 606. These supplier arrangements are subject to updated guidance in ASC 705, Cost of Sales and Services, whereby any embedded fees within such contracts, which historically have been reported as Services revenue, are now reported as a reduction to Cost of sales upon adoption of Topic 606.

In our natural gas processing arrangements where we extract and sell the commodities derived from the processed natural gas stream (i.e., residue gas or NGLs), we may take control of: (i) none of the commodities we sell, (ii) a portion of the commodities we sell, or (iii) all of the commodities we sell.

In those instances where we remit all of the cash proceeds received from third parties for selling the extracted commodities, less the fees attributable to these arrangements, we have determined that the producer has control over these commodities. Upon adoption of Topic 606, we eliminated recording both sales revenue (Natural gas and Product) and Cost of sales amounts and now only record fees attributable to these arrangements to Service revenues.

In other instances where we do not obtain control of the extracted commodities we sell, we are acting as an agent for the producer and, upon adoption of Topic 606, we have continued to recognize Services revenue for the net amount of consideration we retain in exchange for our service.

When we purchase and obtain control of a portion of the residue gas or NGLs we sell, we have determined these arrangements contain both a supply and a service revenue element and therefore are partially in the scope of Topic 606. In these arrangements, the producer is a supplier for the cash settled portion of the commodity we purchase and a customer with regards to the service provided to gather and redeliver the other component. Upon adoption of Topic 606, fees attributable to the supply element are recorded as a reduction to Cost of sales and fees attributable to the service element are recorded as Services revenue. Previously, we recognized Services revenue for both elements.

Nature of Revenue by Segment

Natural Gas Pipelines Segment

We provide various types of natural gas transportation and storage services, natural gas and NGL sales contracts, and various types of gathering and processing services for producers, including receiving, compressing, transporting and re-delivering quantities of natural gas and/or NGLs made available to us by producers to a specified delivery location.

Natural Gas Transportation and Storage Contracts

The natural gas we receive under our transportation and storage contracts remains under the control of our customers. Under firm service contracts, the customer generally pays a two-part transaction price that includes (i) a fixed fee reserving the right to transport or store natural gas in our facilities up to contractually specified capacity levels (referred to as "reservation") and (ii) a per-unit rate for quantities of natural gas actually transported or injected into/withdrawn from storage. In our firm service contracts we generally promise to provide a single integrated service each day over the life of the contract, which is fundamentally a stand-ready obligation to provide services up to the customer's reservation capacity prescribed in the contract. Our customers have a take-or-pay payment obligation with respect to the fixed reservation fee component, regardless of the quantities they actually transport or store. In other cases, generally described as interruptible service, there is no fixed fee associated with these transportation and storage services because the customer accepts the possibility that service may be interrupted at our discretion in order to serve customers who have firm service contracts. We do not have an obligation to perform under interruptible customer arrangements until we accept and schedule the customer's request for periodic service. The customer pays a transaction price based on a per-unit rate for the quantities actually transported or injected into/withdrawn from storage.

Natural Gas and NGL Sales Contracts

Our sales and purchases of natural gas and NGL are primarily accounted for on a gross basis as natural gas sales or product sales, as applicable, and cost of sales. These customer contracts generally provide for the customer to nominate a specified quantity of commodity products to be delivered and sold to the customers at specified delivery points. The customer pays a transaction price typically based on a market indexed per-unit rate for the quantities sold.

Gathering and Processing Contracts

We provide various types of gathering and processing services for producers, including receiving, processing, compressing, transporting and re-delivering quantities of natural gas made available to us by producers to a specified delivery location. This integrated service can be firm if subject to a minimum volume commitment or acreage dedication or non-firm when offered on an as requested, non-guaranteed basis. In our gathering contracts we generally promise to provide the contracted integrated services each day over the life of the contract. The customer pays a transaction price typically based on a per-unit rate for the quantities actually gathered and/or processed, including amounts attributable to deficiency quantities associated with minimum volume contracts.

Products Pipelines Segment

We provide crude oil and refined petroleum transportation and storage services on a firm or non-firm basis. For our firm transportation service, we typically promise to transport on a stand-ready basis the customer's minimum volume commitment amount. The customer is obligated to pay for its volume commitment amount, regardless of whether or not it flows volumes into our pipeline. The customer pays a transaction price typically based on a per-unit rate for quantities transported, including amounts attributable to deficiency quantities. Our firm storage service generally includes a fixed monthly fee for the portion of storage capacity reserved by the customer and a per-unit rate for actual quantities injected into/withdrawn from storage. The customer is obligated to pay the fixed monthly reservation fee, regardless of whether or not it uses our storage facility (i.e., take-or-pay payment obligation). Non-firm transportation and storage service is provided to our customers when and to the extent we determine the requested capacity is available in our pipeline system and/or terminal storage facility. The customer typically pays a per-unit rate for actual quantities of product injected into/withdrawn from storage and/or transported.

We sell transmix, crude oil or other commodity products. The customer's contracts generally include a specified quantity of commodity products to be delivered and sold to the customers at specified delivery points. The customer pays a transaction price typically based on a market indexed per-unit rate for the quantities sold.

Terminals Segment

We provide various types of liquid tank and bulk terminal services. These services are generally comprised of inbound, storage and outbound handling of customer products.

Liquids Tank Services

Firm Storage and Handling Contracts: We have liquids tank storage and handling service contracts that include a promised tank storage capacity provision and prepaid volume throughput of the stored product. In these contracts, we have a stand-ready obligation to perform this contracted service each day over the life of the contract. The customer pays a transaction price typically in the form of a fixed monthly charge and is obligated to pay whether or not it uses the storage capacity and throughput service (i.e., a take-or-pay payment obligation). These contracts generally include a per-unit rate for any quantities we handle at the request of the customer in excess of the prepaid volume throughput amount and also typically include per-unit rates for additional, ancillary services that may be periodically requested by the customer.

Firm Handling Contracts: For our firm handling service contracts, we typically promise to handle on a stand-ready basis throughput volumes up to the customer's minimum volume commitment amount. The customer is obligated to pay for its minimum volume commitment amount, regardless of whether or not it used the handling service. The customer pays a transaction price typically based on a per-unit rate for volumes handled, including amounts attributable to deficiency quantities.

Bulk Services

Our bulk storage and handling contracts generally include inbound handling of our customers' dry bulk material product (e.g. petcoke, metals, ores) into our storage facility and outbound handling of these products from our storage facility. These services are provided on both a firm and non-firm basis. In our firm bulk storage and handling contracts, we are committed to handle and store on a stand-ready basis the minimum throughput quantity of bulk materials contracted by the customer. In some cases, the customer is obligated to pay for its minimum volume commitment amount, regardless of whether or not it uses the storage and handling service. The customer pays a transaction price typically based on a per-unit rate for quantities handled, including amounts attributable to deficiency quantities. For non-firm storage and handling services, the customer pays a transaction price typically based on a per-unit rate for quantities handled on an as requested, non-guaranteed basis.

CO_2 Segment

Our crude oil, NGL, CO_2 and natural gas production customer sales contracts typically include a specified quantity and quality of commodity product to be delivered and sold to the customer at a specified delivery point. The customer pays a transaction price typically based on a market indexed per-unit rate for the quantities sold.

Kinder Morgan Canada Segment

On August 31, 2018, the assets comprising the Kinder Morgan Canada business segment were sold; therefore, this segment will not have revenues on a prospective basis (see Note 3). Prior to the sale of these assets, we provided crude oil and refined petroleum transportation services generally as described above for non-firm, interruptible transportation services in our Products Pipelines business segment. The TMPL regulated tariff was designed to provide revenues sufficient to recover the costs of providing transportation services to shippers, including a return on invested capital. TMPL's revenue was adjusted according to terms prescribed in our toll settlement with shippers as approved by the National Energy Board (NEB). Differences between transportation revenue recognized pursuant to our toll settlement and actual toll receipts were recognized as regulatory assets or liabilities and settled through future tolls.

Disaggregation of Revenues

The following tables present our revenues disaggregated by revenue source and type of revenue for each revenue source (in millions):

	Year ended December 31, 2018						
	Natural Gas Pipelines	Products Pipelines	Terminals	CO_2	Kinder Morgan Canada	Corporate and Eliminations	Total
Revenues from contracts with customers(a)							
Services							
Firm services(b)	$ 3,215	$ 566	$ 976	$ 2	$ —	$ (13)	$ 4,746
Fee-based services	860	791	581	67	167	—	2,466
Total services revenues	4,075	1,357	1,557	69	167	(13)	7,212
Sales							
Natural gas sales	3,319	—	—	2	—	(11)	3,310
Product sales	1,333	216	18	1,222	—	(1)	2,788
Other sales	8	—	—	—	—	—	8
Total sales revenues	4,660	216	18	1,224	—	(12)	6,106
Total revenues from contracts with customers	8,735	1,573	1,575	1,293	167	(25)	13,318
Other revenues(c)	280	140	444	(38)	3	(3)	826
Total revenues	$ 9,015	$ 1,713	$ 2,019	$ 1,255	$ 170	$ (28)	$ 14,144

(a) Differences between the revenue classifications presented on the consolidated statements of income and the categories for the disaggregated revenues by type of revenue above are primarily attributable to revenues reflected in the "Other revenues" category above (see note (c) below).

(b) Includes non-cancellable firm service customer contracts with take-or-pay or minimum volume commitment elements, including those contracts where both the price and quantity amount are fixed. Excludes service contracts with indexed-based pricing, which along with revenues from other customer service contracts are reported as Fee-based services.

(c) Amounts recognized as revenue under guidance prescribed in Topics of the Accounting Standards Codification other than in Topic 606 and primarily include leases and derivatives. The majority of our lease revenues are from certain firm service contracts that are accounted for as operating leases. See Note 14 for additional information related to our derivative contracts.

Contract Balances

Contract assets and contract liabilities are the result of timing differences between revenue recognition, billings and cash collections. We recognize contract assets in those instances where billing occurs subsequent to revenue recognition, and our right to invoice the customer is conditioned on something other than the passage of time. Our contract assets are substantially related to breakage revenue associated with our firm service contracts with minimum volume commitment payment obligations and contracts where we apply revenue levelization (i.e., contracts with fixed rates per volume that increase over the life of the contract for which we record revenue ratably per unit over the life of the contract based on our performance obligations that are generally unchanged over the life of the contract). Our contract liabilities are substantially related to (i) capital improvements paid for in advance by certain customers generally in our non-regulated businesses, which we subsequently recognize as revenue on a straight-line basis over the initial term of the related customer contracts; (ii) consideration received from customers for temporary deficiency quantities under minimum volume contracts that we expect will be made up in a future period, which we subsequently recognize as revenue when the customer makes up the volumes or the likelihood that the customer will exercise its right for deficiency volumes becomes remote (e.g., there is insufficient capacity to make up the volumes, the deficiency makeup period expires); and (iii) contracts with fixed rates per volume that decrease over the life of the contract where we apply revenue levelization for amounts received for our future performance obligations.

The following table presents the activity in our contract assets and liabilities (in millions):

	Year ended December 31, 2018
Contract Assets	
Balance at January 1, 2018	$ 32
Additions	59
Transfer to Accounts receivable	(67)
Balance at December 31, 2018(a)	$ 24
Contract Liabilities	
Balance at January 1, 2018	$ 206
Additions	453
Transfer to Revenues	(360)
Other(b)	(7)
Balance at December 31, 2018(c)	$ 292

(a) Includes current and non-current balances of $14 million and $10 million reported within "Other current assets" and "Deferred charges and other assets," respectively, in our accompanying consolidated balance sheet at December 31, 2018.
(b) Includes 2018 foreign currency translation adjustments associated with the balances at December 31, 2017.
(c) Includes current and non-current balances of $80 million and $212 million reported within "Other current liabilities" and "Other long-term liabilities and deferred credits," respectively, in our accompanying consolidated balance sheet at December 31, 2018.

Revenue Allocated to Remaining Performance Obligations

The following table presents our estimated revenue allocated to remaining performance obligations for contracted revenue that has not yet been recognized, representing our "contractually committed" revenue as of December 31, 2018 that we will invoice or transfer from contract liabilities and recognize in future periods (in millions):

Year	Estimated Revenue
2019	$ 4,881
2020	4,182
2021	3,528
2022	3,011
2023	2,497
Thereafter	14,138
Total	$ 32,237

Our contractually committed revenue, for purposes of the tabular presentation above, is generally limited to service or commodity sale customer contracts which have fixed pricing and fixed volume terms and conditions, generally including contracts with take-or-pay or minimum volume commitment payment obligations. Our contractually committed revenue amounts generally exclude, based on the following practical expedients that we elected to apply, remaining performance obligations for: (i) contracts with index-based pricing or variable volume attributes in which such variable consideration is allocated entirely to a wholly unsatisfied performance obligation or to a wholly unsatisfied promise to transfer a distinct service that forms part of a series of distinct services; (ii) contracts with an original expected duration of one year or less; and (iii) contracts for which we recognize revenue at the amount for which we have the right to invoice for services performed.

17. Reportable Segments

Our reportable business segments are:

- Natural Gas Pipelines—the ownership and operation of (i) major interstate and intrastate natural gas pipeline and storage systems; (ii) natural gas and crude oil gathering systems and natural gas processing and treating facilities; (iii) NGL fractionation facilities and transportation systems; and (iv) LNG facilities;

- Products Pipelines—the ownership and operation of refined petroleum products, NGL and crude oil and condensate pipelines that primarily deliver, among other products, gasoline, diesel and jet fuel, propane, ethane, crude oil and

condensate to various markets, plus the ownership and/or operation of associated product terminals and petroleum pipeline transmix facilities;

- Terminals—the ownership and/or operation of (i) liquids and bulk terminal facilities located throughout the U.S. and portions of Canada that transload and store refined petroleum products, crude oil, ethanol and chemicals, and bulk products, including petroleum coke, metals and ores; and (ii) Jones Act tankers;

- CO_2—(i) the production, transportation and marketing of CO_2 to oil fields that use CO_2 as a flooding medium to increase recovery and production of crude oil from mature oil fields; (ii) ownership interests in and/or operation of oil fields and gas processing plants in West Texas; and (iii) the ownership and operation of a crude oil pipeline system in West Texas; and

- Kinder Morgan Canada (prior to August 31, 2018)—the ownership and operation of the Trans Mountain pipeline system that transports crude oil and refined petroleum products from Edmonton, Alberta, Canada to marketing terminals and refineries in British Columbia, Canada and the state of Washington. As a result of the TMPL Sale, this segment does not have results of operations on a prospective basis.

We evaluate performance principally based on each segment's EBDA, which excludes general and administrative expenses, interest expense, net, and income tax expense. Our reportable segments are strategic business units that offer different products and services, and they are structured based on how our chief operating decision makers organize their operations for optimal performance and resource allocation. Each segment is managed separately because each segment involves different products and marketing strategies.

We consider each period's earnings before all non-cash DD&A expenses to be an important measure of business segment performance for our reporting segments. We account for intersegment sales at market prices, while we account for asset transfers at either market value or, in some instances, book value.

During 2018, 2017 and 2016, we did not have revenues from any single external customer that exceeded 10% of our consolidated revenues.

Financial information by segment follows (in millions):

	Year Ended December 31,		
	2018	2017	2016
Revenues			
Natural Gas Pipelines			
Revenues from external customers	$ 9,004	$ 8,608	$ 7,998
Intersegment revenues	11	10	7
Products Pipelines			
Revenues from external customers	1699	1645	1631
Intersegment revenues	14	16	18
Terminals			
Revenues from external customers	2,017	1,965	1,921
Intersegment revenues	2	1	1
CO2	1,255	1,196	1,221
Kinder Morgan Canada	170	256	253
Corporate and intersegment eliminations(a)	(28)	8	8
Total consolidated revenues	$ 14,144	$ 13,705	$ 13,058

	Year Ended December 31,		
	2018	2017	2016
Operating expenses(b)			
Natural Gas Pipelines	$ 5,353	$ 5,457	$ 4,393
Products Pipelines	594	487	573
Terminals	818	788	768
CO_2	453	394	399
Kinder Morgan Canada	72	95	87
Corporate and intersegment eliminations	(2)	(6)	2
Total consolidated operating expenses	$ 7,288	$ 7,215	$ 6,222

	Year Ended December 31,		
	2018	2017	2016
Other expense (income)(c)			
Natural Gas Pipelines	$ 593	$ 26	$ 199
Products Pipelines	34	—	76
Terminals	54	(14)	99
CO_2	79	(1)	19
Kinder Morgan Canada	(596)	—	—
Corporate	—	1	(7)
Total consolidated other expense (income)	$ 164	$ 12	$ 386

	Year Ended December 31,		
	2018	2017	2016
DD&A			
Natural Gas Pipelines	$ 1,058	$ 1,011	$ 1,041
Products Pipelines	228	216	221
Terminals	484	472	435
CO_2	473	493	446
Kinder Morgan Canada	29	46	44
Corporate	25	23	22
Total consolidated DD&A	$ 2,297	$ 2,261	$ 2,209

	Year Ended December 31,		
	2018	2017	2016
Earnings from equity investments and amortization of excess cost of equity investments, including loss on impairments			
Natural Gas Pipelines	$ 391	$ 253	$ (269)
Products Pipelines	75	48	56
Terminals	22	24	19
CO_2	34	42	22
Total consolidated equity earnings	$ 522	$ 367	$ (172)

	Year Ended December 31,		
	2018	2017	2016
Other, net-income (expense)			
Natural Gas Pipelines	$ 37	$ 49	$ 19
Products Pipelines	3	(1)	2
Terminals	2	8	4
Kinder Morgan Canada	26	25	15
Corporate	39	16	38
Total consolidated other, net-income (expense)	$ 107	$ 97	$ 78

	Year Ended December 31,		
	2018	2017	2016
Segment EBDA(d)			
Natural Gas Pipelines	$ 3,580	$ 3,487	$ 3,211
Products Pipelines	1,173	1,231	1,067
Terminals	1,171	1,224	1,078
CO_2	759	847	827
Kinder Morgan Canada	720	186	181
Total segment EBDA	7,403	6,975	6,364
DD&A	(2,297)	(2,261)	(2,209)
Amortization of excess cost of equity investments	(95)	(61)	(59)
General and administrative and corporate charges	(588)	(660)	(652)
Interest, net	(1,917)	(1,832)	(1,806)
Income tax expense	(587)	(1,938)	(917)
Total consolidated net income	$ 1,919	$ 223	$ 721

	Year Ended December 31,		
	2018	2017	2016
Capital expenditures			
Natural Gas Pipelines	$ 1,620	$ 1,376	$ 1,227
Products Pipelines	150	127	244
Terminals	380	888	983
CO_2	397	436	276
Kinder Morgan Canada	332	338	124
Corporate	25	23	28
Total consolidated capital expenditures	$ 2,904	$ 3,188	$ 2,882

	2018	2017
Investments at December 31		
Natural Gas Pipelines	$ 6,358	$ 6,218
Products Pipelines	839	777
Terminals	268	263
CO_2	16	6
Kinder Morgan Canada	—	34
Total consolidated investments	$ 7,481	$ 7,298

	2018	2017
Assets at December 31		
Natural Gas Pipelines	$ 51,562	$ 51,173
Products Pipelines	8,429	8,539
Terminals	9,283	9,935
CO_2	3,928	3,946
Kinder Morgan Canada	—	2,080
Corporate assets(e)	5,664	3,382
Total consolidated assets	$ 78,866	$ 79,055

(a) 2017 and 2016 amounts include a management fee of $35 million and $34 million, respectively, for services we perform as operator of an equity investee.
(b) Includes costs of sales, operations and maintenance expenses, and taxes, other than income taxes.
(c) Includes loss on impairments and divestitures, net and other income, net.
(d) Includes revenues, earnings from equity investments, other, net, less operating expenses, loss on impairments and divestitures, net, loss on impairments and divestitures of equity investments, net and other income, net.
(e) Includes cash and cash equivalents, margin and restricted deposits, certain prepaid assets and deferred charges, including income tax related assets, risk management assets related to debt fair value adjustments, corporate headquarters in Houston, Texas and miscellaneous corporate assets (such as information technology, telecommunications equipment and legacy activity) not allocated to our reportable segments.

We do not attribute interest and debt expense to any of our reportable business segments.

Following is geographic information regarding the revenues and long-lived assets of our business (in millions):

	Year Ended December 31,		
	2018	2017	2016
Revenues from external customers			
U.S.	$ 13,596	$ 13,073	$ 12,459
Canada	447	503	483
Mexico and other foreign	101	129	116
Total consolidated revenues from external customers	$ 14,144	$ 13,705	$ 13,058

	December 31,		
	2018	2017	2016
Long-term assets, excluding goodwill and other intangibles			
U.S.	$ 47,468	$ 47,928	$ 49,125
Canada	748	3,071	2,399
Mexico and other foreign	83	80	82
Total consolidated long-lived assets	$ 48,299	$ 51,079	$ 51,606

18. Litigation, Environmental and Other Contingencies

We and our subsidiaries are parties to various legal, regulatory and other matters arising from the day-to-day operations of our businesses or certain predecessor operations that may result in claims against the Company. Although no assurance can be given, we believe, based on our experiences to date and taking into account established reserves and insurance, that the ultimate resolution of such items will not have a material adverse impact on our business, financial position, results of operations or dividends to our shareholders. We believe we have meritorious defenses to the matters to which we are a party and intend to vigorously defend the Company. When we determine a loss is probable of occurring and is reasonably estimable, we accrue an undiscounted liability for such contingencies based on our best estimate using information available at that time. If the estimated loss is a range of potential outcomes and there is no better estimate within the range, we accrue the amount at the low end of the range. We disclose contingencies where an adverse outcome may be material or, in the judgment of management, we conclude the matter should otherwise be disclosed.

FERC Proceedings

FERC Rulemaking on Tax Cuts and Jobs Act for Jurisdictional Natural Gas Pipelines

On March 15, 2018, FERC issued a notice of proposed rule-making (NOPR) which proposed a process to implement for ratemaking purposes the 2017 Tax Reform. The NOPR proposed that each regulated interstate natural gas pipeline make a mandatory filing (Form 501-G) to reflect, based upon certain required assumptions, the rate impact of the reduced statutory corporate tax rate, and in the case of master limited partnerships and other pass-through entities, the elimination of an income tax allowance and unspecified resulting treatment of accumulated deferred income tax (ADIT) in the cost of service. The NOPR also provided four options for regulated entities to consider: (1) make a limited filing under section 4 of the NGA to reduce rates for the impact of the 2017 Tax Reform; (2) commit to file a general section 4 rate case in the near future; (3) file an explanation why no rate change is needed, or (4) take no further action other than filing the required Form 501-G report. On July 18, 2018, FERC issued Order No. 849 (Final Rule) promulgating a final rule to implement the 2017 Tax Reform for jurisdictional natural gas pipelines. The Final Rule continues to require the regulated interstate pipelines to file the Form 501-G reflecting certain mandatory assumptions. The Final Rule also maintains substantially the same four options for regulated entities to implement the reduced corporate tax rate. The Final Rule clarifies that pass-through entities whose income consolidates up to a federal income tax paying entity are eligible for a tax allowance. It also clarifies that the required filing is a one-time informational filing and that FERC is not mandating any adjustment in rates as a function of complying with the Final Rule. Companies are also allowed to file an addendum which may reflect an income tax allowance, alternative capital structure and alternative equity returns. The Final Rule establishes a presumption that negotiated rate contracts should not be disturbed. Kinder Morgan filed for rehearing of the Final Rule, but also filed the required Form 501-G filings. We continue to believe any initial, downward rate pressure will be mitigated and spread out over multiple years given the procedural options presented in the Final Rule, the prospective nature of rate changes under section 5 of the NGA and the fact that the FERC affirmed its intention to respect negotiated rate contracts. Many of our transportation and storage services are rendered pursuant to negotiated rate agreements that, consistent with the Final Rule, will not be subject to adjustment due to changes in tax law. Also, many of our current transactions are provided at discounted rates that are below maximum tariff rates, many of which would not be impacted by a change in the maximum tariff rate. Further, on many of our pipelines we are operating under settlements that preclude customers from requesting rate changes at the FERC during the life of the settlement.

SFPP

The tariffs and rates charged by SFPP are subject to a number of ongoing proceedings at the FERC, including the complaints and protests of various shippers, the most recent of which was filed in 2015 (docketed at OR16-6) challenging SFPP's filed East Line rates. In general, these complaints and protests allege the rates and tariffs charged by SFPP are not just and reasonable under the Interstate Commerce Act (ICA). In some of these proceedings shippers have challenged the overall rate being charged by SFPP, and in others the shippers have challenged SFPP's index-based rate increases. If the shippers prevail on their arguments or claims, they are entitled to seek reparations (which may reach back up to two years prior to the filing date of their complaints) or refunds of any excess rates paid, and SFPP may be required to reduce its rates going forward. These proceedings tend to be protracted, with decisions of the FERC often appealed to the federal courts. The issues involved in these proceedings include, among others, whether indexed rate increases are justified, and the appropriate level of return and income tax allowance SFPP may include in its rates. On March 22, 2016, the D.C. Circuit issued a decision in *United Airlines, Inc. v. FERC* remanding to FERC for further consideration of two issues: (1) the appropriate data to be used to determine the return on equity for SFPP in the underlying docket, and (2) the just and reasonable return to be provided to a tax pass-through entity that includes an income tax allowance in its underlying cost of service. On July 21, 2017, an initial decision by the Administrative Law Judge (ALJ) in OR16-6 concluded that the Complainants are due reparations, with appropriate interest, equal to the difference between what SFPP collected from the Complainants for service on the East Line and the amounts SFPP would have collected had it charged just and reasonable rates for that line. The ALJ ruled that an income tax allowance should be included in the cost of service both to determine reparations and to set going forward rates, and found that the new just and reasonable rates are not knowable until the FERC reviews the initial decision and orders a compliance filing. The FERC will determine which portions of the initial decision to affirm, reject or amend. On March 15, 2018, the FERC announced certain policy changes including a Revised Policy Statement on Treatment of Income Taxes (Revised Policy Statement) and, that same day, the FERC issued orders in a series of pending SFPP proceedings which combined to deny income tax allowance to SFPP, direct SFPP to make compliance filings in its 2008 and 2009 rate filing dockets, and restart the 2011 SFPP complaint proceeding which had been abated. Requests for rehearing were filed in the Revised Policy Statement docket as well as the SFPP dockets in which the Revised Policy Statement was applied. The requests for rehearing in the SFPP dockets remain pending at the FERC. On July 18, 2018, the FERC issued an Order on Rehearing in the Revised Policy Statement docket in which it denied the rehearing petitions and clarified that the issue of entitlement to an income tax allowance will continue to be resolved in individual proceedings, including proceedings involving income tax pass-through entities. The FERC also clarified

that when an income tax allowance is eliminated from cost of service, previously ADIT balances associated with such income tax allowance may also be eliminated. SFPP along with another pipeline entity appealed the Revised Policy Statement along with the Order on Rehearing to the D.C. Circuit. With respect to the various SFPP related complaints and protest proceedings at the FERC, we estimate that the shippers are seeking approximately $30 million in annual rate reductions and approximately $330 million in refunds. Management believes SFPP has meritorious arguments supporting SFPP's rates and intends to vigorously defend SFPP against these complaints and protests. However, to the extent the shippers are successful in one or more of the complaints or protest proceedings, SFPP estimates that applying the principles of FERC precedent, as applicable, to pending SFPP cases would result in rate reductions and refunds substantially lower than those sought by the shippers.

EPNG

The tariffs and rates charged by EPNG are subject to two ongoing FERC proceedings (the "2008 rate case" and the "2010 rate case"). With respect to the 2008 rate case, the FERC issued its decision (Opinion 517-A) in July 2015. The FERC generally upheld its prior determinations, ordered refunds to be paid within 60 days, and stated that it will apply its findings in Opinion 517-A to the same issues in the 2010 rate case. All refund obligations related to the 2008 rate case were satisfied during calendar year 2015. EPNG sought federal appellate review of Opinion 517-A and oral arguments were held on February 15, 2017. On February 21, 2017, the reviewing court delayed the case until the FERC rules on the rehearing requests pending in the 2010 Rate Case. With respect to the 2010 rate case, the FERC issued its decision (Opinion 528-A) on February 18, 2016. The FERC generally upheld its prior determinations, affirmed prior findings of an Administrative Law Judge that certain shippers qualify for lower rates and required EPNG to file revised pro forma recalculated rates consistent with the terms of Opinions 517-A and 528-A. On May 3, 2018, the FERC issued Opinion 528-B upholding its decisions in Opinion 528-A and requiring EPNG to implement the rates required by its rulings and provide refunds within 60 days. On July 2, 2018, EPNG reported to the FERC the refund calculations, and that the refunds had been provided as ordered. Also on July 2, 2018, EPNG initiated appellate review of Opinions 528, 528-A and 528-B. On August 23, 2018, the reviewing court established a briefing schedule and consolidated EPNG's delayed appeal from the 2008 rate case, EPNG's appeal from the 2010 rate case, and the intervenors' delayed appeal in the 2010 case. In accordance with that schedule, EPNG and the intervenors filed their initial briefs on January 8, 2019.

Other Commercial Matters

Union Pacific Railroad Company Easements Landowner Litigation

A purported class action lawsuit was filed in 2015 in a U.S. District Court in California against Union Pacific Railroad Company (UPRR), SFPP, KMGP and Kinder Morgan Operating L.P. "D" by private landowners who claimed to be the lawful owners of subsurface real property allegedly used or occupied by UPRR or SFPP for pipeline easements on rights-of-way held by UPRR. Substantially similar follow-on lawsuits were filed in federal courts by landowners in Nevada, Arizona and New Mexico. These suits, which were brought purportedly as class actions on behalf of all landowners who own land in fee adjacent to and underlying the railroad easement under which the SFPP pipeline is located in those respective states, asserted claims alleging that the defendants' occupation and use of the subsurface real property was improper. Plaintiffs' motions for class certification were denied by the federal courts in Arizona and California. The Ninth Circuit Court of Appeals denied interlocutory review of the class certification decisions, and the New Mexico and Nevada lawsuits were stayed. All pending lawsuits have now been settled or dismissed on terms that are not material to KMI's results of operations, cash flows or dividends to shareholders.

Gulf LNG Facility Arbitration

On March 1, 2016, Gulf LNG Energy, LLC and Gulf LNG Pipeline, LLC (GLNG) received a Notice of Disagreement and Disputed Statements and a Notice of Arbitration from Eni USA Gas Marketing LLC (Eni USA), one of two companies that entered into a terminal use agreement for capacity of the Gulf LNG Facility in Mississippi for an initial term that was not scheduled to expire until the year 2031. Eni USA is an indirect subsidiary of Eni S.p.A., a multi-national integrated energy company headquartered in Milan, Italy. Pursuant to its Notice of Arbitration, Eni USA sought declaratory and monetary relief based upon its assertion that (i) the terminal use agreement should be terminated because changes in the U.S. natural gas market since the execution of the agreement in December 2007 have "frustrated the essential purpose" of the agreement and (ii) activities allegedly undertaken by affiliates of Gulf LNG Holdings Group LLC "in connection with a plan to convert the LNG Facility into a liquefaction/export facility have given rise to a contractual right on the part of Eni USA to terminate" the agreement. A three-member arbitration panel conducted an arbitration hearing in January 2017. On June 29, 2018, the arbitration panel delivered its Award, and the panel's ruling calls for the termination of the agreement and Eni USA's payment of compensation to GLNG. The Award resulted in our recording a net loss in the second quarter of 2018 of our equity investment in GLNG due to a non-cash impairment of our investment in GLNG partially offset by our share of earnings

recognized by GLNG. On September 25, 2018, GLNG filed a lawsuit against Eni USA in the Delaware Court of Chancery to enforce the Award. On February 1, 2019, the Delaware Court of Chancery issued a Final Order and Judgment confirming the Award. On September 28, 2018, GLNG filed a lawsuit against Eni S.p.A. in the Supreme Court of the State of New York in New York County to enforce a Guarantee Agreement entered by Eni S.p.A. in connection with the terminal use agreement. On December 12, 2018, Eni S.p.A. filed a counterclaim seeking unspecified damages from GLNG. GLNG intends to vigorously prosecute and defend both lawsuits.

Brinckerhoff Merger Litigation

In April 2017, a purported class action suit was filed in the Delaware Court of Chancery by Peter Brinckerhoff, a former EPB unitholder on behalf of a class of former unaffiliated unitholders of EPB, seeking to challenge the $9.2 billion merger of EPB into a subsidiary of KMI as part of a series of transactions in November 2014 whereby KMI acquired all of the outstanding equity interests in KMP, Kinder Morgan Management, LLC and EPB that KMI and its subsidiaries did not already own. The suit alleged that the merger consideration did not sufficiently compensate EPB unitholders for the value of three derivative suits concerning drop down transactions which the derivative plaintiff lost standing to pursue after the merger. The suit claimed that the alleged failure to obtain sufficient merger consideration for the drop down lawsuits constituted a breach of the EPB limited partnership agreement and the implied covenant of good faith and fair dealing. The suit also asserted claims against KMI and certain individual defendants for allegedly tortiously interfering with and/or aiding and abetting the alleged breach of the limited partnership agreement. In November 2017, the Court dismissed the suit in its entirety. On June 8, 2018, the Delaware Supreme Court affirmed the dismissal. Also in November 2017, counsel for Brinckerhoff filed a separate lawsuit against KMEP and KMI seeking to recover up to $44 million in attorneys' fees allegedly incurred in connection with the assertion of derivative claims that Brinckerhoff lost standing to pursue. On April 9, 2018, the Court dismissed the suit in its entirety, and that dismissal is final.

Price Reporting Litigation

Beginning in 2003, several lawsuits were filed by purchasers of natural gas against El Paso Corporation, El Paso Marketing L.P. and numerous other energy companies based on a claim under state antitrust law that such defendants conspired to manipulate the price of natural gas by providing false price information to industry trade publications that published gas indices. Several of the cases were previously settled or dismissed, except for two cases pending in a U.S. District Court in Nevada, including a lawsuit brought by an industrial consumer in Kansas in which approximately $500 million in damages plus interest was alleged against all defendants, and a Wisconsin class action in which approximately $300 million in damages plus interest has been alleged against all defendants. The Kansas case has now been settled, and a settlement in principal has been reached in the Wisconsin class action that will require class notice and court approval in 2019. The amount to be paid in settlement of these matters is not material to our results of operations, cash flows or dividends to shareholders.

Pipeline Integrity and Releases

From time to time, despite our best efforts, our pipelines experience leaks and ruptures. These leaks and ruptures may cause explosions, fire, and damage to the environment, damage to property and/or personal injury or death. In connection with these incidents, we may be sued for damages caused by an alleged failure to properly mark the locations of our pipelines and/or to properly maintain our pipelines. Depending upon the facts and circumstances of a particular incident, state and federal regulatory authorities may seek civil and/or criminal fines and penalties.

General

As of December 31, 2018 and 2017, our total reserve for legal matters was $207 million and $350 million, respectively. The reduction in the reserve primarily resulted from the payment of refunds in the EPNG rate case matter discussed above in "*—FERC Proceedings—EPNG."* The remaining reserve primarily relates to various claims from regulatory proceedings arising in our Products Pipelines business segment.

Environmental Matters

We and our subsidiaries are subject to environmental cleanup and enforcement actions from time to time. In particular, CERCLA generally imposes joint and several liability for cleanup and enforcement costs on current and predecessor owners and operators of a site, among others, without regard to fault or the legality of the original conduct, subject to the right of a liable party to establish a "reasonable basis" for apportionment of costs. Our operations are also subject to federal, state and local laws and regulations relating to protection of the environment. Although we believe our operations are in substantial compliance with applicable environmental laws and regulations, risks of additional costs and liabilities are inherent in pipeline,

terminal and CO_2 field and oil field operations, and there can be no assurance that we will not incur significant costs and liabilities. Moreover, it is possible that other developments, such as increasingly stringent environmental laws, regulations and enforcement policies under the terms of authority of those laws, and claims for damages to property or persons resulting from our operations, could result in substantial costs and liabilities to us.

We are currently involved in several governmental proceedings involving alleged violations of environmental and safety regulations, including alleged violations of the Risk Management Program and leak detection and repair requirements of the Clean Air Act. As we receive notices of non-compliance, we attempt to negotiate and settle such matters where appropriate. These alleged violations may result in fines and penalties, but we do not believe any such fines and penalties, individually or in the aggregate, will be material. We are also currently involved in several governmental proceedings involving groundwater and soil remediation efforts under administrative orders or related state remediation programs. We have established a reserve to address the costs associated with the remediation.

In addition, we are involved with and have been identified as a potentially responsible party in several federal and state superfund sites. Environmental reserves have been established for those sites where our contribution is probable and reasonably estimable. In addition, we are from time to time involved in civil proceedings relating to damages alleged to have occurred as a result of accidental leaks or spills of refined petroleum products, NGL, natural gas and CO_2.

Portland Harbor Superfund Site, Willamette River, Portland, Oregon

In December 2000, the EPA issued General Notice letters to potentially responsible parties including GATX Terminals Corporation (n/k/a KMLT). At that time, GATX owned two liquids terminals along the lower reach of the Willamette River, an industrialized area known as Portland Harbor. Portland Harbor is listed on the National Priorities List and is designated as a Superfund Site under CERCLA. A group of potentially responsible parties formed what is known as the Lower Willamette Group (LWG), of which KMLT is a non-voting member. The LWG agreed to conduct the remedial investigation and feasibility study (RI/FS) leading to the proposed remedy for cleanup of the Portland Harbor site. The EPA issued the FS and the Proposed Plan on June 8, 2016 which included a proposed combination of dredging, capping, and enhanced natural recovery. On January 6, 2017, the EPA issued its Record of Decision (ROD) for the final cleanup plan. The final remedy is more stringent than the remedy proposed in the EPA's Proposed Plan. The estimated cost increased from approximately $750 million to approximately $1.1 billion, and active cleanup is now expected to take as long as 13 years to complete. KMLT and 90 other parties are involved in a non-judicial allocation process to determine each party's respective share of the cleanup costs. We are participating in the allocation process on behalf of KMLT and KMBT in connection with their current or former ownership or operation of four facilities located in Portland Harbor. Our share of responsibility for Portland Harbor Superfund Site costs will not be determined until the ongoing non-judicial allocation process is concluded in several years or a lawsuit is filed that results in a judicial decision allocating responsibility. Until the allocation process is completed, we are unable to reasonably estimate the extent of our liability for the costs related to the design of the proposed remedy and cleanup of the site. In addition to CERCLA cleanup costs, we are reviewing and will attempt to settle, if possible, natural resource damage (NRD) claims asserted by state and federal trustees following their natural resource assessment of the site. At this time, we are unable to reasonably estimate the extent of our potential NRD liability.

Roosevelt Irrigation District v. Kinder Morgan G.P., Inc., Kinder Morgan Energy Partners, L.P., U.S. District Court, Arizona

The Roosevelt Irrigation District filed a lawsuit in 2010 against KMGP, KMEP and others under CERCLA for alleged contamination of the water purveyor's wells. The First Amended Complaint sought $175 million in damages from approximately 70 defendants. KMGP was dismissed from the suit. On August 6, 2013, plaintiffs filed their Second Amended Complaint seeking monetary damages in unspecified amounts and reducing the number of defendants to 26 including KMEP and SFPP. The claims against KMEP and SFPP were related to alleged releases from a specific parcel within the SFPP Phoenix Terminal and the alleged impact of such releases on water wells owned by the plaintiffs and located in the vicinity of the Terminal. During the first quarter of 2018, KMEP and SFPP settled all claims made by the Roosevelt Irrigation District on terms that are not material to KMI's results of operations, cash flows or dividends to shareholders.

Uranium Mines in Vicinity of Cameron, Arizona

In the 1950s and 1960s, Rare Metals Inc., a historical subsidiary of EPNG, mined approximately twenty uranium mines in the vicinity of Cameron, Arizona, many of which are located on the Navajo Indian Reservation. The mining activities were in response to numerous incentives provided to industry by the U.S. to locate and produce domestic sources of uranium to support the Cold War-era nuclear weapons program. In May 2012, EPNG received a general notice letter from the EPA notifying EPNG of the EPA's investigation of certain sites and its determination that the EPA considers EPNG to be a potentially

responsible party within the meaning of CERCLA. In August 2013, EPNG and the EPA entered into an Administrative Order on Consent and Scope of Work pursuant to which EPNG is conducting a radiological assessment of the surface of the mines and the immediate vicinity. On September 3, 2014, EPNG filed a complaint in the U.S. District Court for the District of Arizona seeking cost recovery and contribution from the applicable federal government agencies toward the cost of environmental activities associated with the mines, given the U.S. is the owner of the Navajo Reservation, the U.S.'s exploration and reclamation activities at the mines, and the pervasive control of such federal agencies over all aspects of the nuclear weapons program. Defendants filed an answer and counterclaims seeking contribution and recovery of response costs allegedly incurred by the federal agencies in investigating uranium impacts on the Navajo Reservation. The counterclaim of defendant EPA has been settled, and no viable claims for reimbursement by the other defendants are known to exist. In August 2017, the District Court found the U.S. liable under CERCLA as owner of the Navajo Reservation. The matter seeking cost recovery and contribution from federal government agencies is set for trial in February 2019. We intend to continue to prosecute and defend this case vigorously.

Lower Passaic River Study Area of the Diamond Alkali Superfund Site, Essex, Hudson, Bergen and Passaic Counties, New Jersey

EPEC Polymers, Inc. (EPEC Polymers) and EPEC Oil Company Liquidating Trust (EPEC Oil Trust), former El Paso Corporation entities now owned by KMI, are involved in an administrative action under CERCLA known as the Lower Passaic River Study Area Superfund Site (Site) concerning the lower 17-mile stretch of the Passaic River. It has been alleged that EPEC Polymers and EPEC Oil Trust may be potentially responsible parties (PRPs) under CERCLA based on prior ownership and/or operation of properties located along the relevant section of the Passaic River. EPEC Polymers and EPEC Oil Trust entered into two Administrative Orders on Consent (AOCs) which obligate them to investigate and characterize contamination at the Site. They are also part of a joint defense group of approximately 44 cooperating parties, referred to as the Cooperating Parties Group (CPG), which has entered into AOCs and is directing and funding the work required by the EPA. Under the first AOC, draft remedial investigation and feasibility studies (RI/FS) of the Site were submitted to the EPA in 2015, and EPA approval remains pending. Under the second AOC, the CPG members conducted a CERCLA removal action at the Passaic River Mile 10.9, and the group is currently conducting EPA-directed post-remedy monitoring in the removal area. We have established a reserve for the anticipated cost of compliance with the AOCs.

On April 11, 2014, the EPA announced the issuance of its Focused Feasibility Study (FFS) for the lower eight miles of the Passaic River Study Area, and its proposed plan for remedial alternatives to address the dioxin sediment contamination from the mouth of Newark Bay to River Mile 8.3. The EPA estimates the cost for the alternatives will range from $365 million to $3.2 billion. The EPA's preferred alternative would involve dredging the river bank-to-bank and installing an engineered cap at an estimated cost of $1.7 billion. On March 4, 2016, the EPA issued its Record of Decision (ROD) for the lower eight miles of the Passaic River Study area. The final cleanup plan in the ROD is substantially similar to the EPA's preferred alternative announced on April 11, 2014. On October 5, 2016, the EPA entered into an AOC with Occidental Chemical Company (OCC), a member of the PRP group requiring OCC to spend an estimated $165 million to perform engineering and design work necessary to begin the cleanup of the lower eight miles of the Passaic River. The design work is expected to take four years to complete and the cleanup is expected to take six years to complete. On June 30, 2018 and July 13, 2018, respectively, OCC filed two separate lawsuits in the U.S. District Court for the District of New Jersey seeking cost recovery and contribution under CERCLA from more than 120 defendants, including EPEC Polymers. OCC alleges that each defendant is responsible to reimburse OCC for a proportionate share of the $165 million OCC is required to spend pursuant to its AOC. EPEC Polymers was dismissed without prejudice from the lawsuit on August 8, 2018.

In addition, the EPA and numerous PRPs, including EPEC Polymers, are engaged in an allocation process for the implementation of the remedy for the lower eight miles of the Passaic River Study area. There remains significant uncertainty as to the implementation and associated costs of the remedy set forth in the FFS and ROD. There is also uncertainty as to the impact of the recent EPA FS directive for the upper nine mile segment not subject to the lower eight mile FFS and ROD. In a letter dated October 10, 2018, the EPA directed the CPG to prepare a streamlined FS for the Site that evaluates interim remedy alternatives for sediments in the upper nine miles of the Site. Until this FS is completed and the RI/FS is finalized and allocations are determined, the scope of potential EPA claims for the Site and liability therefor are not reasonably estimable.

Plaquemines Parish Louisiana Coastal Zone Litigation

On November 8, 2013, the Parish of Plaquemines, Louisiana filed a petition for damages in the state district court for Plaquemines Parish, Louisiana against TGP and 17 other energy companies, alleging that defendants' oil and gas exploration, production and transportation operations in the Bastian Bay, Buras, Empire and Fort Jackson oil and gas fields of Plaquemines Parish caused substantial damage to the coastal waters and nearby lands (Coastal Zone) within the Parish, including the erosion of marshes and the discharge of oil waste and other pollutants which detrimentally affected the quality of state waters and plant

and animal life, in violation of the State and Local Coastal Resources Management Act of 1978 (Coastal Zone Management Act). The case is one of numerous similar cases pending in Louisiana. As a result of such alleged violations of the Coastal Zone Management Act, Plaquemines Parish seeks, among other relief, unspecified monetary relief, attorney fees, interest, and payment of costs necessary to restore the allegedly affected Coastal Zone to its original condition, including costs to clear, vegetate and detoxify the Coastal Zone. In connection with this suit, TGP made two tenders for defense and indemnity: (1) to Anadarko, as successor to the entity that purchased TGP's oil and gas assets in Bastian Bay, and (2) to Kinetica, which purchased TGP's pipeline assets in Bastian Bay in 2013. Anadarko accepted TGP's tender (limited to oil and gas assets), and Kinetica rejected TGP's tender. The Louisiana Department of Natural Resources (LDNR) and the Louisiana Attorney General (LAG) intervened in the lawsuit. The Court separated the defendants into several trial groups and set trials to begin in 2019. The case involving TGP was set for trial in 2020. During May 2018, the defendants removed numerous cases which allege violations under the Coastal Zone Management Act to federal court in Louisiana; the case involving TGP was removed to the U.S. District Court for the Eastern District of Louisiana. Thereafter, the defendants moved the U.S. Judicial Panel on Multidistrict Litigation to transfer all such cases, including the case involving TGP, to the U.S. District Court for the Eastern District of Louisiana for coordinated proceedings. On July 31, 2018, the Panel denied the motion. The plaintiffs and intervenors moved to remand all of the cases, including the case involving TGP, to the state district courts. Those motions are pending. All of the cases, including the case involving TGP, remain effectively stayed pending resolution of the removal and remand issues. We will continue to vigorously defend the lawsuit.

Vintage Assets, Inc. Coastal Erosion Litigation

On December 18, 2015, Vintage Assets, Inc. and several individual landowners filed a lawsuit in the State District Court for Plaquemines Parish, Louisiana alleging that its 5,000 acre property is composed of coastal wetlands, and that SNG and TGP failed to maintain pipeline canals and banks, causing widening of the canals, land loss, and damage to the ecology and hydrology of the marsh, in breach of right of way agreements, prudent operating practices, and Louisiana law. The suit also claims that defendants' alleged failure to maintain pipeline canals and banks constitutes negligence and has resulted in encroachment of the canals, constituting trespass. The suit seeks in excess of $80 million in money damages, including recovery of litigation costs, damages for trespass, and money damages associated with an alleged loss of natural resources and projected reconstruction cost of replacing or restoring wetlands. The suit was removed to the U.S. District Court for the Eastern District of Louisiana. The SNG assets at issue were sold to Highpoint Gas Transmission, LLC in 2011, which was subsequently purchased by American Midstream Partners, LP. In response to SNG's demand for defense and indemnity, American Midstream Partners agreed to pay 50% of joint defense costs and expenses, with a percentage of indemnity to be determined upon final resolution of the suit. On October 20, 2016, plaintiffs filed an amended complaint naming Highpoint Gas Transmission, LLC as an additional defendant. A non-jury trial was held during September 2017. On May 4, 2018, the District Court entered a judgment dismissing the tort and negligence claims against all of the defendants, and dismissing certain of the contract claims against TGP. In ruling in favor of plaintiffs on the remaining contract claims, the District Court ordered the Defendants to pay $1,104 in money damages, and issued a permanent injunction ordering the Defendants to restore a total of 9.6 acres of land and maintain certain canals at widths designated by the right of way agreements in effect. The Court stayed the judgment and the injunction pending appeal. The parties each filed a separate appeal to the U.S. Court of Appeals for the Fifth Circuit. On September 13, 2018, Highpoint Gas Transmission, LLC filed a motion to vacate the judgment and dismiss all of the appeals for lack of subject matter jurisdiction. On October 2, 2018, the Court of Appeals dismissed the appeals and remanded the suit to the U.S. District Court for the Eastern District of Louisiana. In doing so, the Court of Appeals ordered the District Court to remand the suit to the State District Court of Plaquemines Parish, Louisiana for further proceedings. The District Court has not yet done so. We will continue to vigorously defend the suit.

General

Although it is not possible to predict the ultimate outcomes, we believe that the resolution of the environmental matters set forth in this note, and other matters to which we and our subsidiaries are a party, will not have a material adverse effect on our business, financial position, results of operations or cash flows. As of December 31, 2018 and 2017, we have accrued a total reserve for environmental liabilities in the amount of $271 million and $279 million, respectively. In addition, as of both December 31, 2018 and 2017, we have recorded a receivable of $13 million for expected cost recoveries that have been deemed probable.

Other Contingencies

In 2017, in order to demonstrate to the NEB that Trans Mountain has sufficient financial resources to meet its responsibilities under Canada's Pipeline Safety Act (the "Act"), we entered into a loan facility with Trans Mountain pursuant to which it may borrow up to C$500 million from us in the event that a TMPL environmental incident occurs giving rise to a liability on the part of Trans Mountain under the Act. Upon the closing of the TMPL Sale on August 31, 2018, the government

of Canada delivered to us a C$500 million cash-collateralized letter of credit to fully backstop our obligation under the loan facility, which will continue until the NEB approves a replacement arrangement with which Trans Mountain may satisfy its financial resources requirement.

19. Recent Accounting Pronouncements

Accounting Standards Updates

Topic 842

On February 25, 2016, the FASB issued ASU No. 2016-02, "*Leases*" followed by a series of related accounting standard updates (collectively referred to as "Topic 842"). Topic 842 establishes a new lease accounting model for leases. The most significant changes include the clarification of the definition of a lease, the requirement for lessees to recognize for all leases a right-of-use asset and a lease liability in the consolidated balance sheet, and additional quantitative and qualitative disclosures which are designed to give financial statement users information on the amount, timing, and uncertainty of cash flows arising from leases. Expenses are recognized in the consolidated statement of income in a manner similar to current accounting guidance. Lessor accounting under the new standard is substantially unchanged. The new standard will become effective for us beginning with the first quarter 2019. We will adopt the accounting standard using a prospective transition approach, which applies the provisions of the new guidance at the effective date without adjusting the comparative periods presented. We have elected the package of practical expedients permitted under the transition guidance within the new standard, which among other things, allows us to carry forward the historical accounting relating to lease identification and classification for existing leases upon adoption. We have also elected the optional practical expedient permitted under the transition guidance within the new standard related to land easements that allows us to carry forward our historical accounting treatment for land easements on existing agreements upon adoption. We have made an accounting policy election to keep leases with an initial term of 12 months or less off of the consolidated balance sheet. We are finalizing our evaluation of the impacts that the adoption of this accounting guidance will have on the consolidated financial statements, and estimate approximately $500 million of additional right-of-use assets and liabilities will be recognized in our consolidated balance sheet upon adoption.

ASU No. 2016-13

On June 16, 2016, the FASB issued ASU No. 2016-13, "*Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*." This ASU modifies the impairment model to utilize an expected loss methodology in place of the currently used incurred loss methodology, which will result in the more timely recognition of losses. ASU No. 2016-13 will be effective for us as of January 1, 2020, and earlier adoption is permitted. We are currently reviewing the effect of this ASU to our financial statements.

ASU No. 2017-04

On January 26, 2017, the FASB issued ASU No. 2017-04, "*Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment.*" This ASU simplifies the accounting for goodwill impairment by removing Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. Goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. ASU No. 2017-04 will be effective for us as of January 1, 2020, and earlier adoption is permitted. We are currently reviewing the effect of this ASU to our financial statements.

ASU No. 2017-12

On August 28, 2017, the FASB issued ASU No. 2017-12, "*Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities*." This ASU better aligns an entity's risk management activities and financial reporting for hedging relationships through changes to both the designation and measurement guidance for qualifying hedging relationships and the presentation of hedge results. The guidance expands the ability to hedge nonfinancial and financial risk components, reduces complexity in fair value hedges of interest rate risk, eliminates the requirement to separately measure and report hedge ineffectiveness, and eases certain hedge effectiveness assessment requirements. ASU No. 2017-12 was effective January 1, 2019. We adopted ASU No. 2017-12 with no material impact to our financial statements.

ASU No. 2018-13

On August 28, 2018, the FASB issued ASU No. 2018-13, "*Fair Value Measurement (Topic 820): Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement."* This ASU amends existing fair value measurement

disclosure requirements by adding, changing, or removing certain disclosures. ASU No. 2018-13 will be effective for us as of January 1, 2020, and earlier adoption is permitted. We are currently reviewing the effect of this ASU to our financial statements.

ASU No. 2018-14

On August 28, 2018, the FASB issued ASU No. 2018-14, "*Compensation - Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20): Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans*." This ASU amends existing annual disclosure requirements applicable to all employers that sponsor defined benefit pension and other postretirement plans by adding, removing, and clarifying certain disclosures. ASU No. 2018-14 will be effective for us for the fiscal year ending December 31, 2020, and earlier adoption is permitted. We are currently reviewing the effect of this ASU to our financial statements.

20. Guarantee of Securities of Subsidiaries

KMI, along with its direct subsidiary KMP, are issuers of certain public debt securities. KMI, KMP and substantially all of KMI's wholly owned domestic subsidiaries, are parties to a cross guarantee agreement whereby each party to the agreement unconditionally guarantees, jointly and severally, the payment of specified indebtedness of each other party to the agreement. Accordingly, with the exception of certain subsidiaries identified as Subsidiary Non-Guarantors, the parent issuer, subsidiary issuer and other subsidiaries are all guarantors of each series of public debt. As a result of the cross guarantee agreement, a holder of any of the guaranteed public debt securities issued by KMI or KMP are in the same position with respect to the net assets, income and cash flows of KMI and the Subsidiary Issuer and Guarantors. The only amounts that are not available to the holders of each of the guaranteed public debt securities to satisfy the repayment of such securities are the net assets, income and cash flows of the Subsidiary Non-Guarantors.

In lieu of providing separate financial statements for subsidiary issuer and guarantor, we have included the accompanying condensed consolidating financial statements based on Rule 3-10 of the SEC's Regulation S-X. We have presented each of the parent and subsidiary issuer in separate columns in this single set of condensed consolidating financial statements.

Excluding fair value adjustments, as of December 31, 2018, Parent Issuer and Guarantor, Subsidiary Issuer and Guarantor-KMP, and Subsidiary Guarantors had $15,192 million, $17,910 million, and $2,535 million of Guaranteed Notes outstanding, respectively. Included in the Subsidiary Guarantors debt balance as presented in the accompanying December 31, 2018 condensed consolidating balance sheet are approximately $159 million of capitalized lease debt that is not subject to the cross guarantee agreement.

The accounts within the Parent Issuer and Guarantor, Subsidiary Issuer and Guarantor-KMP, Subsidiary Guarantors and Subsidiary Non-Guarantors are presented using the equity method of accounting for investments in subsidiaries, including subsidiaries that are guarantors and non-guarantors, for purposes of these condensed consolidating financial statements only. These intercompany investments and related activity eliminate in consolidation and are presented separately in the accompanying condensed consolidating balance sheets and statements of income and cash flows.

A significant amount of each Issuers' income and cash flow is generated by its respective subsidiaries. As a result, the funds necessary to meet its debt service and/or guarantee obligations are provided in large part by distributions or advances it receives from its respective subsidiaries. We utilize a centralized cash pooling program among our majority-owned and consolidated subsidiaries, including the Subsidiary Issuers and Guarantors and Subsidiary Non-Guarantors. The following Condensed Consolidating Statements of Cash Flows present the intercompany loan and distribution activity, as well as cash collection and payments made on behalf of our subsidiaries, as cash activities.

Condensed Consolidating Statements of Income and Comprehensive Income
for the Year Ended December 31, 2018
(In Millions)

	Parent Issuer and Guarantor	Subsidiary Issuer and Guarantor - KMP	Subsidiary Guarantors	Subsidiary Non-Guarantors	Consolidating Adjustments	Consolidated KMI
Total Revenues	$ —	$ —	$ 12,767	$ 1,526	$ (149)	$ 14,144
Operating Costs, Expenses and Other						
Costs of sales	—	—	4,247	277	(103)	4,421
Depreciation, depletion and amortization	19	—	1,971	307	—	2,297
Other operating expenses	(39)	1	3,693	23	(46)	3,632
Total Operating Costs, Expenses and Other	(20)	1	9,911	607	(149)	10,350
Operating Income (Loss)	20	(1)	2,856	919	—	3,794
Other Income (Expense)						
Earnings from consolidated subsidiaries	2,760	2,533	599	62	(5,954)	—
Earnings from equity investments	—	—	617	—	—	617
Interest, net	(780)	(8)	(1,090)	(39)	—	(1,917)
Amortization of excess cost of equity investments and other, net	27	—	(18)	3	—	12
Income Before Income Taxes	2,027	2,524	2,964	945	(5,954)	2,506
Income Tax (Expense) Benefit	(418)	68	(61)	(176)	—	(587)
Net Income	1,609	2,592	2,903	769	(5,954)	1,919
Net Income Attributable to Noncontrolling Interests	—	—	—	—	(310)	(310)
Net Income Attributable to Controlling Interests	1,609	2,592	2,903	769	(6,264)	1,609
Preferred Stock Dividends	(128)	—	—	—	—	(128)
Net Income Available to Common Stockholders	$ 1,481	$ 2,592	$ 2,903	$ 769	$ (6,264)	$ 1,481
Net Income	$ 1,609	$ 2,592	$ 2,903	$ 769	$ (5,954)	$ 1,919
Total other comprehensive income	320	290	280	136	(688)	338
Comprehensive income	1,929	2,882	3,183	905	(6,642)	2,257
Comprehensive income attributable to noncontrolling interests	—	—	—	—	(328)	(328)
Comprehensive income attributable to controlling interests	$ 1,929	$ 2,882	$ 3,183	$ 905	$ (6,970)	$ 1,929

Condensed Consolidating Statements of Income and Comprehensive Income
for the Year Ended December 31, 2017
(In Millions)

	Parent Issuer and Guarantor	Subsidiary Issuer and Guarantor - KMP	Subsidiary Guarantors	Subsidiary Non-Guarantors	Consolidating Adjustments	Consolidated KMI
Total Revenues	$ 35	$ —	$ 12,202	$ 1,614	$ (146)	$ 13,705
Operating Costs, Expenses and Other						
Costs of sales	—	—	4,124	322	(101)	4,345
Depreciation, depletion and amortization	16	—	1,933	312	—	2,261
Other operating expenses	78	1	3,014	522	(45)	3,570
Total Operating Costs, Expenses and Other	94	1	9,071	1,156	(146)	10,176
Operating (Loss) Income	(59)	(1)	3,131	458	—	3,529
Other Income (Expense)						
Earnings from consolidated subsidiaries	3,575	2,681	419	59	(6,734)	—
Earnings from equity investments	—	—	428	—	—	428
Interest, net	(701)	7	(1,104)	(34)	—	(1,832)
Amortization of excess cost of equity investments and other, net	2	—	13	21	—	36
Income Before Income Taxes	2,817	2,687	2,887	504	(6,734)	2,161
Income Tax (Expense) Benefit	(2,634)	(5)	237	464	—	(1,938)
Net Income	183	2,682	3,124	968	(6,734)	223
Net Income Attributable to Noncontrolling Interests	—	—	—	—	(40)	(40)
Net Income Attributable to Controlling Interests	183	2,682	3,124	968	(6,774)	183
Preferred Stock Dividends	(156)	—	—	—	—	(156)
Net Income Available to Common Stockholders	$ 27	$ 2,682	$ 3,124	$ 968	$ (6,774)	$ 27
Net Income	$ 183	$ 2,682	$ 3,124	$ 968	$ (6,734)	$ 223
Total other comprehensive income	69	194	217	160	(525)	115
Comprehensive income	252	2,876	3,341	1,128	(7,259)	338
Comprehensive income attributable to noncontrolling interests	—	—	—	—	(86)	(86)
Comprehensive income attributable to controlling interests	$ 252	$ 2,876	$ 3,341	$ 1,128	$ (7,345)	$ 252

Condensed Consolidating Statements of Income and Comprehensive Income
for the Year Ended December 31, 2016
(In Millions)

	Parent Issuer and Guarantor	Subsidiary Issuer and Guarantor - KMP	Subsidiary Guarantors	Subsidiary Non-Guarantors	Consolidating Adjustments	Consolidated KMI
Total Revenues	$ 34	$ —	$ 11,572	$ 1,511	$ (59)	$ 13,058
Operating Costs, Expenses and Other						
Costs of sales	—	—	3,176	266	(13)	3,429
Depreciation, depletion and amortization	18	—	1,872	319	—	2,209
Other operating expenses	758	(36)	2,461	745	(46)	3,882
Total Operating Costs, Expenses and Other	776	(36)	7,509	1,330	(59)	9,520
Operating (Loss) Income	(742)	36	4,063	181	—	3,538
Other Income (Expense)						
Earnings from consolidated subsidiaries	2,948	2,802	245	58	(6,053)	—
Losses from equity investments	—	—	(113)	—	—	(113)
Interest, net	(696)	90	(1,149)	(51)	—	(1,806)
Amortization of excess cost of equity investments and other, net	33	—	(18)	4	—	19
Income Before Income Taxes	1,543	2,928	3,028	192	(6,053)	1,638
Income Tax Expense	(835)	(5)	(33)	(44)	—	(917)
Net Income	708	2,923	2,995	148	(6,053)	721
Net Income Attributable to Noncontrolling Interests	—	—	—	—	(13)	(13)
Net Income Attributable to Controlling Interests	708	2,923	2,995	148	(6,066)	708
Preferred Stock Dividends	(156)	—	—	—	—	(156)
Net Income Available to Common Stockholders	$ 552	$ 2,923	$ 2,995	$ 148	$ (6,066)	$ 552
Net Income	$ 708	$ 2,923	$ 2,995	$ 148	$ (6,053)	$ 721
Total other comprehensive (loss) income	(200)	(341)	(352)	55	638	(200)
Comprehensive income	508	2,582	2,643	203	(5,415)	521
Comprehensive income attributable to noncontrolling interests	—	—	—	—	(13)	(13)
Comprehensive income attributable to controlling interests	$ 508	$ 2,582	$ 2,643	$ 203	$ (5,428)	$ 508

Condensed Consolidating Balance Sheet as of December 31, 2018
(In Millions)

	Parent Issuer and Guarantor	Subsidiary Issuer and Guarantor - KMP	Subsidiary Guarantors	Subsidiary Non-Guarantors	Consolidating Adjustments	Consolidated KMI
ASSETS						
Cash and cash equivalents	$ 8	$ —	$ —	$ 3,277	$ (5)	$ 3,280
Other current assets - affiliates	4,465	4,788	23,851	1,031	(34,135)	—
All other current assets	171	17	2,056	212	(14)	2,442
Property, plant and equipment, net	231	—	30,750	6,916	—	37,897
Investments	664	—	6,718	99	—	7,481
Investments in subsidiaries	42,096	40,049	6,077	4,324	(92,546)	—
Goodwill	13,789	22	5,166	2,988	—	21,965
Notes receivable from affiliates	945	20,345	247	1,043	(22,580)	—
Deferred income taxes	3,137	—	—	—	(1,571)	1,566
Other non-current assets	233	105	3,823	74	—	4,235
Total assets	$ 65,739	$ 65,326	$ 78,688	$ 19,964	$ (150,851)	$ 78,866
LIABILITIES, REDEEMABLE NONCONTROLLING INTEREST AND STOCKHOLDERS' EQUITY						
Liabilities						
Current portion of debt	$ 1,933	$ 1,300	$ 30	$ 125	$ —	$ 3,388
Other current liabilities - affiliates	14,189	14,087	4,898	961	(34,135)	—
All other current liabilities	486	354	1,838	1,510	(19)	4,169
Long-term debt	13,474	16,799	3,020	643	—	33,936
Notes payable to affiliates	1,234	448	20,543	355	(22,580)	—
Deferred income taxes	—	—	503	1,068	(1,571)	—
Other long-term liabilities and deferred credits	745	59	944	428	—	2,176
Total liabilities	32,061	33,047	31,776	5,090	(58,305)	43,669
Redeemable noncontrolling interest	—	—	666	—	—	666
Stockholders' equity						
Total KMI equity	33,678	32,279	46,246	14,874	(93,399)	33,678
Noncontrolling interests	—	—	—	—	853	853
Total stockholders' equity	33,678	32,279	46,246	14,874	(92,546)	34,531
Total Liabilities, Redeemable Noncontrolling Interest and Stockholders' Equity	$ 65,739	$ 65,326	$ 78,688	$ 19,964	$ (150,851)	$ 78,866

Condensed Consolidating Balance Sheet as of December 31, 2017
(In Millions)

	Parent Issuer and Guarantor	Subsidiary Issuer and Guarantor - KMP	Subsidiary Guarantors	Subsidiary Non-Guarantors	Consolidating Adjustments	Consolidated KMI
ASSETS						
Cash and cash equivalents	$ 3	$ —	$ —	$ 262	$ (1)	$ 264
Other current assets - affiliates	6,214	5,201	22,402	858	(34,675)	—
All other current assets	243	59	1,938	235	(24)	2,451
Property, plant and equipment, net	236	—	31,093	8,826	—	40,155
Investments	665	—	6,498	135	—	7,298
Investments in subsidiaries	37,983	36,728	5,417	4,232	(84,360)	—
Goodwill	13,789	22	5,166	3,185	—	22,162
Notes receivable from affiliates	1,033	20,363	1,233	776	(23,405)	—
Deferred income taxes	3,635	—	—	—	(1,591)	2,044
Other non-current assets	254	164	4,080	183	—	4,681
Total assets	$ 64,055	$ 62,537	$ 77,827	$ 18,692	$ (144,056)	$ 79,055
LIABILITIES AND STOCKHOLDERS' EQUITY						
Liabilities						
Current portion of debt	$ 924	$ 975	$ 805	$ 124	$ —	$ 2,828
Other current liabilities - affiliates	13,225	14,188	6,512	750	(34,675)	—
All other current liabilities	468	347	2,055	508	(25)	3,353
Long-term debt	13,104	18,206	3,052	653	—	35,015
Notes payable to affiliates	2,009	448	20,593	355	(23,405)	—
Deferred income taxes	—	—	449	1,142	(1,591)	—
Other long-term liabilities and deferred credits	689	117	1,462	467	—	2,735
Total liabilities	30,419	34,281	34,928	3,999	(59,696)	43,931
Stockholders' equity						
Total KMI equity	33,636	28,256	42,899	14,693	(85,848)	33,636
Noncontrolling interests	—	—	—	—	1,488	1,488
Total stockholders' equity	33,636	28,256	42,899	14,693	(84,360)	35,124
Total liabilities and stockholders' equity	$ 64,055	$ 62,537	$ 77,827	$ 18,692	$ (144,056)	$ 79,055

Condensed Consolidating Statements of Cash Flows
for the Year Ended December 31, 2018
(In Millions)

	Parent Issuer and Guarantor	Subsidiary Issuer and Guarantor - KMP	Subsidiary Guarantors	Subsidiary Non-Guarantors	Consolidating Adjustments	Consolidated KMI
Net cash (used in) provided by operating activities	$ (2,758)	$ 3,879	$ 11,129	$ 1,117	$ (8,324)	$ 5,043
Cash flows from investing activities						
Proceeds from the TMPL Sale, net of cash disposed	—	—	—	2,998	—	2,998
Acquisitions of investments	—	—	(39)	—	—	(39)
Capital expenditures	(24)	—	(1,995)	(885)	—	(2,904)
Proceeds from sales of equity investments	—	—	124	—	—	124
Sales of property, plant and equipment, investments and other net assets, net of removal costs	9	—	(34)	5	—	(20)
Contributions to investments	(12)	—	(413)	(8)	—	(433)
Distributions from equity investments in excess of cumulative earnings	2,342	—	234	1	(2,340)	237
Funding to affiliates	(6,521)	(26)	(7,419)	(1,003)	14,969	—
Loans to related parties	—	—	(31)	—	—	(31)
Net cash (used in) provided by investing activities	(4,206)	(26)	(9,573)	1,108	12,629	(68)
Cash flows from financing activities						
Issuances of debt	14,143	—	—	608	—	14,751
Payments of debt	(12,640)	(975)	(784)	(192)	—	(14,591)
Debt issue costs	(35)	—	—	(7)	—	(42)
Cash dividends - common shares	(1,618)	—	—	—	—	(1,618)
Cash dividends - preferred shares	(156)	—	—	—	—	(156)
Repurchases of common shares	(273)	—	—	—	—	(273)
Funding from affiliates	7,560	2,028	4,542	839	(14,969)	—
Contributions from investment partner	—	—	181	—	—	181
Contributions from parents	—	—	19	—	(19)	—
Contributions from noncontrolling interests	—	—	—	—	19	19
Distributions to parents	—	(4,907)	(5,514)	(317)	10,738	—
Distributions to noncontrolling interests	—	—	—	—	(78)	(78)
Other, net	(12)	—	—	(5)	—	(17)
Net cash provided by (used in) financing activities	6,969	(3,854)	(1,556)	926	(4,309)	(1,824)
Effect of Exchange Rate Changes on Cash, Cash Equivalents and Restricted Deposits	—	—	—	(146)	—	(146)
Net increase (decrease) in Cash, Cash Equivalents and Restricted Deposits	5	(1)	—	3,005	(4)	3,005
Cash, Cash Equivalents, and Restricted Deposits, beginning of period	3	1	—	323	(1)	326
Cash, Cash Equivalents, and Restricted Deposits, end of period	$ 8	$ —	$ —	$ 3,328	$ (5)	$ 3,331

Condensed Consolidating Statements of Cash Flows
for the Year Ended December 31, 2017
(In Millions)

	Parent Issuer and Guarantor	Subsidiary Issuer and Guarantor - KMP	Subsidiary Guarantors	Subsidiary Non-Guarantors	Consolidating Adjustments	Consolidated KMI
Net cash (used in) provided by operating activities	$ (3,184)	$ 3,911	$ 11,523	$ 1,121	$ (8,770)	$ 4,601
Cash flows from investing activities						
Acquisitions of investments	—	—	(4)	—	—	(4)
Capital expenditures	(23)	—	(2,390)	(775)	—	(3,188)
Sales of property, plant and equipment, investments and other net assets, net of removal costs	16	—	94	8	—	118
Contributions to investments	(237)	—	(435)	(12)	—	(684)
Distributions from equity investments in excess of cumulative earnings	2,297	—	326	—	(2,249)	374
Funding (to) from affiliates	(4,419)	779	(7,040)	(1,028)	11,708	—
Loans to related party	(23)	—	—	—	—	(23)
Other, net	—	1	4	(1)	—	4
Net cash (used in) provided by investing activities	(2,389)	780	(9,445)	(1,808)	9,459	(3,403)
Cash flows from financing activities						
Issuances of debt	8,609	—	—	259	—	8,868
Payments of debt	(9,288)	(600)	(897)	(279)	—	(11,064)
Debt issue costs	(12)	—	—	(58)	—	(70)
Cash dividends - common shares	(1,120)	—	—	—	—	(1,120)
Cash dividends - preferred shares	(156)	—	—	—	—	(156)
Repurchases of common shares	(250)	—	—	—	—	(250)
Funding from (to) affiliates	7,327	776	3,797	(192)	(11,708)	—
Contributions from investment partner	—	—	485	—	—	485
Contributions from parents, including net proceeds from KML IPO and preferred share issuance	—	—	—	1,673	(1,673)	—
Contributions from noncontrolling interests - net proceeds from KML IPO	4	—	—	—	1,241	1,245
Contributions from noncontrolling interests - net proceeds from KML preferred share issuances	—	—	—	—	420	420
Contributions from noncontrolling interests - other	—	—	—	—	12	12
Distributions to parents	—	(4,902)	(5,472)	(687)	11,061	—
Distributions to noncontrolling interests	—	—	—	—	(42)	(42)
Other, net	(9)	—	—	—	—	(9)
Net cash provided by (used in) financing activities	5,105	(4,726)	(2,087)	716	(689)	(1,681)
Effect of Exchange Rate Changes on Cash, Cash Equivalents and Restricted Deposits	—	—	—	22	—	22
Net (decrease) increase in Cash, Cash Equivalents and Restricted Deposits	(468)	(35)	(9)	51	—	(461)
Cash, Cash Equivalents, and Restricted Deposits, beginning of period	471	36	9	272	(1)	787
Cash, Cash Equivalents, and Restricted Deposits, end of period	$ 3	$ 1	$ —	$ 323	$ (1)	$ 326

Condensed Consolidating Statements of Cash Flows
for the Year Ended December 31, 2016
(In Millions)

	Parent Issuer and Guarantor	Subsidiary Issuer and Guarantor - KMP	Subsidiary Guarantors	Subsidiary Non-Guarantors	Consolidating Adjustments	Consolidated KMI
Net cash (used in) provided by operating activities	$ (3,981)	$ 4,943	$ 11,641	$ 885	$ (8,730)	$ 4,758
Cash flows from investing activities						
Acquisitions of assets and investments	(2)	—	(331)	—	—	(333)
Capital expenditures	(27)	—	(2,258)	(597)	—	(2,882)
Proceeds from sale of equity interests in subsidiaries, net	—	—	1,401	—	—	1,401
Sales of property, plant and equipment, investments, and other net assets, net of removal costs	6	—	326	(2)	—	330
Contributions to investments	(343)	—	(54)	(11)	—	(408)
Distributions from equity investments in excess of cumulative earnings	2,417	298	190	—	(2,674)	231
Funding to affiliates	(2,820)	(535)	(5,062)	(727)	9,144	—
Loan repayments from related party	—	—	35	—	—	35
Other, net	—	—	3	(2)	—	1
Net cash used in investing activities	(769)	(237)	(5,750)	(1,339)	6,470	(1,625)
Cash flows from financing activities						
Issuances of debt	8,255	—	374	—	—	8,629
Payments of debt	(7,322)	(500)	(2,227)	(11)	—	(10,060)
Debt issue costs	(16)	—	(2)	(1)	—	(19)
Cash dividends - common shares	(1,118)	—	—	—	—	(1,118)
Cash dividends - preferred shares	(154)	—	—	—	—	(154)
Funding from affiliates	5,461	1,116	1,959	608	(9,144)	—
Contributions from parents	—	—	117	—	(117)	—
Contributions from noncontrolling interests	—	—	—	—	117	117
Distributions to parents	—	(5,286)	(6,116)	(73)	11,475	—
Distributions to noncontrolling interests	—	—	—	—	(24)	(24)
Other, net	(8)	—	—	—	—	(8)
Net cash provided by (used in) financing activities	5,098	(4,670)	(5,895)	523	2,307	(2,637)
Effect of Exchange Rate Changes on Cash, Cash Equivalents and Restricted Deposits	—	—	—	2	—	2
Net increase (decrease) in Cash, Cash Equivalents and Restricted Deposits	348	36	(4)	71	47	498
Cash, Cash Equivalents, and Restricted Deposits, beginning of period	123	—	13	201	(48)	289
Cash, Cash Equivalents, and Restricted Deposits, end of period	$ 471	$ 36	$ 9	$ 272	$ (1)	$ 787

Supplemental Selected Quarterly Financial Data (Unaudited)

	Quarters Ended			
	March 31	June 30	September 30	December 31
	(In millions, except per share amounts)			
2018				
Revenues	$ 3,418	$ 3,428	$ 3,517	$ 3,781
Operating Income	949	272	1,515	1,058
Net Income (Loss)	542	(130)	1,005	502
Net Income (Loss) Attributable to Kinder Morgan, Inc.	524	(141)	732	494
Net Income (Loss) Available to Common Stockholders	485	(180)	693	483
Basic and Diluted Earnings (Loss) Per Common Share	0.22	(0.08)	0.31	0.21
2017				
Revenues	$ 3,424	$ 3,368	$ 3,281	$ 3,632
Operating Income	977	918	826	808
Net Income (Loss)	445	383	387	(992)
Net Income (Loss) Attributable to Kinder Morgan, Inc.	440	376	373	(1,006)
Net Income (Loss) Available to Common Stockholders	401	337	334	(1,045)
Basic and Diluted Earnings (Loss) Per Common Share	0.18	0.15	0.15	(0.47)

Item 16. ***Form 10-K Summary.***

Not Applicable.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

KINDER MORGAN, INC.
Registrant

/s/ David P. Michels

David P. Michels
Vice President and Chief Financial Officer
(principal financial and accounting officer)

Date: February 8, 2019

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ DAVID P. MICHELS David P. Michels	Vice President and Chief Financial Officer (principal financial officer and principal accounting officer)	February 8, 2019
/s/ STEVEN J. KEAN Steven J. Kean	Chief Executive Officer (principal executive officer); Director	February 8, 2019
/s/ RICHARD D. KINDER Richard D. Kinder	Executive Chairman	February 8, 2019
/s/ KIMBERLY A. DANG Kimberly A. Dang	President; Director	February 8, 2019
/s/ TED A. GARDNER Ted A. Gardner	Director	February 8, 2019
/s/ ANTHONY W. HALL, JR. Anthony W. Hall, Jr.	Director	February 8, 2019
/s/ GARY L. HULTQUIST Gary L. Hultquist	Director	February 8, 2019
/s/ RONALD L. KUEHN, JR. Ronald L. Kuehn, Jr.	Director	February 8, 2019
/s/ DEBORAH A. MACDONALD Deborah A. Macdonald	Director	February 8, 2019
/s/ MICHAEL C. MORGAN Michael C. Morgan	Director	February 8, 2019
/s/ ARTHUR C. REICHSTETTER Arthur C. Reichstetter	Director	February 8, 2019
/s/ FAYEZ SAROFIM Fayez Sarofim	Director	February 8, 2019
/s/ C. PARK SHAPER C. Park Shaper	Director	February 8, 2019
/s/ WILLIAM A. SMITH William A. Smith	Director	February 8, 2019
/s/ JOEL V. STAFF Joel V. Staff	Director	February 8, 2019
/s/ ROBERT F. VAGT Robert F. Vagt	Director	February 8, 2019
/s/ PERRY M. WAUGHTAL Perry M. Waughtal	Director	February 8, 2019

EXHIBIT 10.14

$4,000,000,000

REVOLVING CREDIT AGREEMENT

dated as of
November 16, 2018

among

KINDER MORGAN, INC.,
as the Borrower,

THE LENDERS PARTY HERETO

and

BARCLAYS BANK PLC,
as the Administrative Agent

JPMORGAN CHASE BANK, N.A.,
as the Syndication Agent,

and

BARCLAYS BANK PLC,
JPMORGAN CHASE BANK, N.A.,
BANK OF AMERICA, N.A.,
BMO HARRIS BANK N.A.,
CITIGROUP GLOBAL MARKETS INC.,
CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH,
MIZUHO BANK, LTD.,
MUFG BANK, LTD.,
ROYAL BANK OF CANADA,
THE BANK OF NOVA SCOTIA, HOUSTON BRANCH and
WELLS FARGO BANK, NATIONAL ASSOCIATION,
as the Documentation Agents,

BARCLAYS BANK PLC,
JPMORGAN SECURITIES LLC,
BMO CAPITAL MARKETS CORP.,
CITIGROUP GLOBAL MARKETS INC.,
CREDIT SUISSE SECURITIES (USA) LLC,
MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED,
MIZUHO BANK, LTD.,
MUFG BANK, LTD.,
RBC CAPITAL MARKETS,
THE BANK OF NOVA SCOTIA, HOUSTON BRANCH and
WELLS FARGO SECURITIES, LLC,

as the Joint Lead Arrangers and the Joint Book Runners

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SCHEDULES:

EXHIBITS:

REVOLVING CREDIT AGREEMENT

THIS REVOLVING CREDIT AGREEMENT, dated as of November 16, 2018 (this "Agreement") is among:

(a) Kinder Morgan, Inc., a Delaware corporation (the "Borrower");

(b) the banks, financial institutions and other lenders listed on the signature pages hereof under the caption "Lenders" (the "Lenders" and together with each other Person that becomes a Lender pursuant to Section 2.21(b), Section 2.22(c) or Section 9.05, collectively, the "Lenders"); and

(c) Barclays Bank PLC, individually as a Lender and as the administrative agent for the Lenders (in such latter capacity together with any other Person that becomes Administrative Agent pursuant to Section 8.08, the "Administrative Agent").

PRELIMINARY STATEMENTS

The Borrower has requested that the Lenders extend credit to the Borrower in the form of Loans (as defined below) in an aggregate principal amount of $4,000,000,000 (the "Transactions") to be used by Borrower and its subsidiaries for working capital and general corporate purposes, and the Lenders have indicated their willingness to lend on the terms and subject to the conditions set forth herein.

NOW, THEREFORE, the parties hereto agree as follows:

ARTICLE I
DEFINITIONS

SECTION 1.01 Defined Terms. As used in this Agreement, the following terms have the meanings specified below:

"ABR", when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, bear interest at a rate determined by reference to the Alternate Base Rate.

"Adjusted LIBO Rate" means, with respect to any Eurodollar Loan for any Interest Period for such Loan, a rate per annum (rounded upwards, if necessary, to the nearest 1/100 of 1%) determined by the Administrative Agent to be equal to the product of (i) the Eurodollar Rate for such Loan for such Interest Period multiplied by (ii) the Reserve Requirement for such Loan for such Interest Period. In no case shall the Adjusted LIBO Rate be less than zero.

"Administrative Agent" has the meaning specified in the introduction to this Agreement.

"Administrative Agent Fee Letter" has the meaning specified in Section 2.11(c).

"Administrative Questionnaire" means an Administrative Questionnaire in the form supplied by the Administrative Agent.

"Affiliate" of any Person means (i) any Person directly or indirectly controlled by, controlling or under common control with such first Person, (ii) any director or officer of such first Person or of any Person referred to in clause (i) above and (iii) if any Person in clause (i) above is an individual, any member of the immediate family (including parents, siblings, spouse and children) of such individual and any trust

whose principal beneficiary is such individual or one or more members of such immediate family and any Person who is controlled by any such member or trust. For purposes of this definition, any Person that owns directly or indirectly 25% or more of the securities having ordinary voting power for the election of directors or other governing body of a corporation or 25% or more of the partnership or other ownership interests of any other Person (other than as a limited partner of such other Person) will be deemed to *"control"* (including, with its correlative meanings, *"controlled by"* and *"under common control with"*) such corporation or other Person. In no event shall the Administrative Agent or any Lender be deemed to an Affiliate of the Borrower of any of its Subsidiaries.

"Affiliated Entities" means unconsolidated Subsidiaries of the Borrower and Persons not otherwise constituting Subsidiaries of the Borrower in which the Borrower has an equity investment.

"Agreement" has the meaning specified in the introduction to this Agreement (*subject, however*, to Section 1.04(e) hereof).

"Alternate Base Rate" means, for any day, a fluctuating rate per annum equal to the greatest of (a) the Federal Funds Effective Rate in effect on such day *plus* ½ of 1%, (b) the Prime Rate in effect for such day, and (c) the Adjusted LIBO Rate for a Eurodollar Loan with a one month Interest Period that begins on such day (and if such day is not a Business Day, the immediately preceding Business Day) *plus* 1%. Any change in the Alternate Base Rate due to a change in the Prime Rate, the Federal Funds Effective Rate or the Adjusted LIBO Rate shall be effective from the effective date of such change in the Prime Rate, the Federal Funds Effective Rate or the Adjusted LIBO Rate, respectively.

"Anti-Corruption Laws" means all laws, rules, and regulations of any jurisdiction applicable to the Borrower or any of its Subsidiaries from time to time concerning or relating to bribery or corruption.

"Applicable Commitment Fee Rate" means, at any time and from time to time, the percentage per annum equal to the applicable percentage set forth below for the corresponding Performance Level at such time:

Performance Level	Applicable Commitment Fee Rate
I	0.100%
II	0.125%
III	0.150%
IV	0.200%
V	0.250%
VI	0.300%

The Applicable Commitment Fee Rate shall be determined by reference to the Performance Level in effect from time to time and any change in the Applicable Commitment Fee Rate shall be effective from the effective date of the change in the applicable Performance Level giving rise thereto.

"Applicable Margin" means, as to any ABR Borrowing or any Eurodollar Borrowing, as the case may be, at any time and from time to time, a percentage per annum equal to the applicable percentage set forth below for the corresponding Performance Level at such time:

Performance Level	Eurodollar Borrowings Applicable Margin Percentage	ABR Borrowings Applicable Margin Percentage
I	1.000%	0.100%
II	1.125%	0.125%
III	1.250%	0.250%
IV	1.500%	0.500%
V	1.750%	0.750%
VI	2.000%	1.000%

The Applicable Margin shall be determined by reference to the Performance Level in effect from time to time, and any change in the Applicable Margin shall be effective from the effective date of any change in the applicable Performance Level giving rise thereto.

"Applicable Anniversary" has the meaning specified in Section 2.22(a).

"Applicable Percentage" means at any time, for each Lender, the percentage obtained by dividing (a) such Lender's Commitment by (b) the amount of the Total Commitment, *provided* that at any time when the Total Commitment shall have been terminated, each Lender's Applicable Percentage shall be the percentage obtained by dividing (a) such Lender's Credit Exposure by (b) the aggregate Credit Exposure of all Lenders.

"Application" has the meaning specified in Section 2.05(e).

"Approved Fund" means any Fund that is administered or managed by (a) a Lender, (b) an Affiliate of a Lender or (c) an entity or an Affiliate of an entity that administers or manages a Lender.

"Arrangers" means Barclays Bank PLC, J.P. Morgan Securities LLC, Merrill Lynch, Pierce, Fenner & Smith Incorporated (or any other registered broker-dealer wholly-owned by Bank of America Corporation to which all or substantially all of Bank of America Corporation's or any of its subsidiaries' investment banking, commercial lending services or related businesses may be transferred following the date of this Agreement), BMO Capital Markets Corp., Citigroup Global Markets Inc., Credit Suisse Securities (USA) LLC, Mizuho Bank, Ltd., MUFG Bank, Ltd., RBC Capital Markets, The Bank of Nova Scotia, Houston Branch and Wells Fargo Securities LLC, as joint lead arrangers and joint book runners.

"Assignment and Acceptance" means an assignment and acceptance entered into by a Lender and an assignee (with the consent of any party whose consent is required by Section 9.05), and accepted by the Administrative Agent, in the form of Exhibit 1.01-A or any other form approved by the Administrative Agent.

"Auto-Extension Letter of Credit" has the meaning specified in Section 2.05(f).

"Availability Period" means the period from the Closing Date to the earlier of (i) the Maturity Date or (ii) the date of termination of the Total Commitment.

"Bail-In Action" means the exercise of any Write-Down and Conversion Powers by the applicable EEA Resolution Authority in respect of any liability of an EEA Financial Institution.

"Bail-In Legislation" means, with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule.

"Beneficial Ownership Certification" means a certification regarding beneficial ownership or control as required by the Beneficial Ownership Regulation, which certification shall be substantially similar in form and substance to the form of Certification Regarding Beneficial Owners of Legal Entity Customers published jointly, in May 2018, by the Loan Syndications and Trading Association and Securities Industry and Financial Markets Association.

"Beneficial Ownership Regulation" means 31 C.F.R. § 1010.230.

"Benefit Arrangement" means at any time an employee benefit plan within the meaning of Section 3(3) of ERISA which is not a Plan or a Multiemployer Plan and which is maintained or otherwise contributed to by any member of the ERISA Group.

"Benefit Plan" means any of (a) an "employee benefit plan" (as defined in Section 3(3) of ERISA) that is subject to Title I of ERISA, (b) a "plan" as defined in Section 4975 of the Code to which Section 4975 of the Code applies, and (c) any Person whose assets include (for purposes of the Plan Asset Regulations or otherwise for purposes of Title I of ERISA or Section 4975 of the Code) the assets of any such "employee benefit plan" or "plan".

"Board" means the Board of Governors of the Federal Reserve System of the United States of America.

"Board of Directors" means, with respect to any Person, the Board of Directors of such Person or any committee of the Board of Directors of such Person duly authorized to act on behalf of the Board of Directors of such Person.

"Bond Letter of Credit" means irrevocable letter of credit No. S113181 issued by First Union National Bank (now Wells Fargo) in the original face amount of $24,128,548 for the account of the OLP "B" and for the benefit of Trustee.

"Bonds" means the Port Facility Refunding Revenue Bonds (Enron Transportation Services, L.P. Project) Series 1994 in the original aggregate principal amount of $23,700,000, as issued by the Jackson-Union Regional Port District.

"Borrower" has the meaning specified in the introduction to this Agreement.

"Borrower Debt Rating" means, with respect to the Borrower as of any date of determination, the rating that has been most recently announced by each of S&P or Moody's for any non-credit

enhanced, unsecured long-term senior debt issued or to be issued by the Borrower. For purposes of the foregoing:

(a) if, at any time, neither S&P nor Moody's shall have in effect a Borrower Debt Rating, the Applicable Margin or the Applicable Commitment Fee Rate, as the case may be, shall be set in accordance with Performance Level VI under the definition of "*Applicable Margin*" or "*Applicable Commitment Fee Rate*", as the case may be;

(b) if the ratings established by S&P and Moody's shall fall within different Performance Levels, the Applicable Margin or the Applicable Commitment Fee Rate, as the case may be, shall be based upon the higher rating; *provided, however*, that, if the lower of such ratings is two or more Performance Levels below the higher of such ratings, the Applicable Margin or the Applicable Commitment Fee Rate, as the case may be, shall be based upon the rating that is one Performance Level higher than the lower rating;

(c) if any rating established by S&P or Moody's shall be changed, such change shall be effective as of the date on which such change is announced publicly by the rating agency making such change;

(d) if S&P or Moody's shall change the basis on which ratings are established by it, each reference to the Borrower Debt Rating announced by S&P or Moody's shall refer to the then equivalent rating by S&P or Moody's, as the case may be.

"Borrowing" means (a) a borrowing comprised of Committed Loans of the same Type, made, converted or continued on the same date and, in the case of Eurodollar Loans, as to which a single Interest Period is in effect or (b) a Swingline Loan.

"Borrowing Date" means the Business Day upon which any Letter of Credit is to be issued or any Loans are to be made available to the Borrower.

"Borrowing Request" has the meaning specified in Section 2.03(a).

"Business Day" means any day that is not a Saturday, Sunday or other day on which commercial banks in Houston, Texas or New York, New York are authorized or required by law to remain closed; *provided* that, when used in connection with a rate of interest determined by reference to the Eurodollar Rate, the term *"Business Day"* shall also exclude any day on which banks are not open for dealings in dollar deposits in the London interbank market.

"Capital Lease Obligations" of any Person means the obligations of such Person to pay rent or other amounts under any lease of (or other arrangement conveying the right to use) real or personal property, or a combination thereof, which obligations are required to be classified and accounted for as capital leases on a balance sheet of such Person under GAAP, and the amount of such obligations shall be the capitalized amount thereof determined in accordance with GAAP.

"Capital Stock" means, with respect to any Person, any and all shares, interests, rights to purchase, warrants, options, participations or other equivalents (however designated) of such Person's equity, including (a) all common stock and preferred stock, any limited or general partnership interest and any limited liability company member interest, (b) beneficial interests in trusts, and (c) any other interest or participation that confers upon a Person the right to receive a share of the profits and losses of, or distribution of assets of, the issuing Person.

"Cash Collateralize" means, solely for purposes of Sections 2.05(f), 2.19 and 2.20, to pledge and deposit with or deliver to the Administrative Agent, for the benefit of one or more of the Issuing Banks or Lenders, as collateral for their respective LC Exposure, cash or deposit account balances or, if the Administrative Agent and each applicable Issuing Bank shall agree in their sole discretion, other credit support, in each case pursuant to documentation in form and substance satisfactory to the Administrative Agent and each applicable Issuing Bank. "*Cash Collateral*" shall have a meaning correlative to the foregoing and shall include the proceeds of such cash collateral and other credit support.

"Cash Equivalents" means (a) securities issued or unconditionally guaranteed by the United States government or any agency or instrumentality thereof, in each case having maturities of not more than 24 months from the date of acquisition thereof; (b) securities issued by any state of the United States of America or any political subdivision of any such state or any public instrumentality thereof or any political subdivision of any such state or any public instrumentality thereof having maturities of not more than 24 months from the date of acquisition thereof and, at the time of acquisition, having an investment grade rating generally obtainable from either S&P or Moody's (or, if at any time neither S&P nor Moody's shall be rating such obligations, then from another nationally recognized rating service); (c) commercial paper issued by any Lender or any bank holding company owning any Lender; (d) commercial paper maturing no more than 12 months after the date of creation thereof and, at the time of acquisition, having a rating of at least A-2 or P-2 from either S&P or Moody's (or, if at any time neither S&P nor Moody's shall be rating such obligations, an equivalent rating from another nationally recognized rating service); (e) domestic and Eurodollar Rate certificates of deposit or bankers' acceptances maturing no more than two years after the date of acquisition thereof issued by any Lender or any other bank having combined capital and surplus of not less than $250,000,000 in the case of domestic banks and $100,000,000 (or the equivalent in dollars thereof) in the case of foreign banks; (f) repurchase agreements with a term of not more than 30 days for underlying securities of the type described in clauses (a), (b) and (e) above entered into with any bank meeting the qualifications specified in clause (e) above or securities dealers of recognized national standing; (g) marketable short-term money market and similar funds (i) either having assets in excess of $250,000,000 or (ii) having a rating of at least A-2 or P-2 from either S&P or Moody's (or, if at any time neither S&P nor Moody's shall be rating such obligations, an equivalent rating from another nationally recognized rating service); (h) shares of investment companies that are registered under the Investment Company Act of 1940 and substantially all the investments of which are one or more of the types of securities described in clauses (a) through (g) above; and (i) in the case of investments by any Foreign Subsidiary, other customarily utilized high-quality investments in the country where such Foreign Subsidiary is located.

"Certain Items" means such items that are required to be included in the calculation of Net Income in accordance with GAAP that either (i) are non-cash or (ii) by their nature are separately identifiable from the Borrower and the Subsidiaries' normal business operations and are likely to occur only sporadically, and are reflected as such in the Annual Report on Form 10-K of the Borrower or in the Quarterly Report on Form 10-Q of the Borrower, in each case filed with the SEC. For the avoidance of doubt, Certain Items will be unadjusted for noncontrolling interests related thereto.

"CFC" means a Person that is a "controlled foreign corporation" within the meaning of Section 957 of the Code.

"Change in Control" means and will be deemed to have occurred if (a) any person, entity or "group" (within the meaning of Section 13(d) or 14(d) of the Securities Exchange Act of 1934, as amended) shall at any time have acquired direct or indirect beneficial ownership of a percentage of the voting power of the outstanding Voting Stock of the Borrower that exceeds 50% of the voting power of all the outstanding Voting Stock of the Borrower; or (b) Continuing Directors shall not constitute at least a majority of the board of directors of the Borrower.

"Change in Law" means the occurrence, after the date of this Agreement, of any of the following: (a) the adoption or taking effect of any law, rule, regulation or treaty, (b) any change in any law, rule, regulation or treaty or in the administration, interpretation, implementation or application thereof by any Governmental Authority or (c) the making or issuance of any request, rule, guideline or directive (whether or not having the force of law) by any Governmental Authority; *provided* that notwithstanding anything herein to the contrary, (x) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (y) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to be a "Change in Law", regardless of the date enacted, adopted or issued.

"Charges" has the meaning specified in Section 9.13.

"Citi" means Citibank Global Markets Inc., Citibank, N.A., Citicorp North America Inc., and any of their affiliates.

"Class", when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, are Committed Loans or Swingline Loans.

"Closing Date" means the date on which the conditions specified in Section 3.01 are satisfied (or waived in accordance with Section 9.02).

"Code" means the Internal Revenue Code of 1986, as amended from time to time.

"Commitment" means, with respect to each Lender, the commitment of such Lender to make Committed Loans pursuant to Section 2.01 and to acquire participations in Letters of Credit and Swingline Loans hereunder, expressed as an amount representing the maximum aggregate amount of such Lender's Credit Exposure hereunder, as such commitment may be reduced or increased from time to time pursuant to the terms hereof. The initial amount of each Lender's Commitment as of the Closing Date is set forth on Schedule 1.01, or in the Register maintained by the Administrative Agent pursuant to Section 9.05.

"Commitment Fee" has the meaning specified in Section 2.11(a).

"Committed Letter of Credit" has the meaning specified in Section 2.05(b).

"Committed Loan" means a Loan made pursuant to Section 2.03(a).

"Committed Note" means a promissory note of the Borrower payable to the order of each Lender, in substantially the form of Exhibit 1.01-C, together with all modifications, extensions, renewals and rearrangements thereof.

"Communications" has the meaning specified in Section 9.01(a).

"Connection Income Taxes" means Other Connection Taxes that are imposed on or measured by net income (however denominated) or that are franchise Taxes or branch profits Taxes.

"Consolidated Assets" means, at the date of any determination thereof, the total assets of the Borrower and the Subsidiaries as set forth on a consolidated balance sheet of the Borrower and the Subsidiaries for their most recently completed fiscal quarter, prepared in accordance with GAAP.

"Consolidated EBITDA" means, for any period (without duplication), the Net Income of the Borrower and the Subsidiaries for such period determined on a consolidated basis in accordance with GAAP, increased (a) (to the extent deducted in determining Net Income for such period) by the sum of (i) all book taxes of the Borrower and the Subsidiaries paid or accrued and reflected in the Annual Report on Form 10-K of the Borrower or in the Quarterly Report on Form 10-Q of the Borrower, in each case filed with the SEC, and the pro rata portion of book taxes attributable to Affiliated Entities (net of (x) the noncontrolling interest's portion of such book taxes of KML and (y) the consolidating joint venture partners' share of such book taxes of such consolidating joint venture), for such period; (ii) Consolidated Interest Expense for such period, (iii) all DD&A of the Borrower and the Subsidiaries and the pro rata portion of DD&A attributable to Affiliated Entities (net of (x) the noncontrolling interest's portion of such DD&A of KML and (y) the consolidating joint venture partners' share of such DD&A of such consolidating joint venture), for such period; (iv) Certain Items charges or losses, and (v) amortization, write-off or write-down of debt discount, capitalized interest and debt issuance costs and commissions, discounts and other fees, charges and expenses associated with any letters of credit or Indebtedness, including in connection with the repurchase or repayment thereof, including any premium and acceleration of fees or discounts and other expenses, minus (b) Certain Items of income or gain which were included in determining such consolidated Net Income for such period; provided, that Consolidated EBITDA shall be calculated after giving pro forma effect to acquisitions of any Person, property, business or asset (to the extent not subsequently sold, transferred, abandoned or otherwise disposed) and any sale, transfer, abandonment or other disposition of any Person, property, business or asset made by the Borrower or any Subsidiary during such period, as if the acquisition, sale, transfer, abandonment or other disposition had been effected on the first date of such period.

"Consolidated Interest Expense" means, for any period, the Interest Expense of the Borrower and the Subsidiaries for such period determined on a consolidated basis in accordance with GAAP.

"Consolidated Net Indebtedness" means, at the date of any determination thereof, (a) Indebtedness of the Borrower and the Subsidiaries determined on a consolidated basis in accordance with GAAP minus (b) (i) the aggregate cash included in the cash accounts listed on the consolidated balance sheet of the Borrower and the Subsidiaries as at such date and (ii) Cash Equivalents of the Borrower and the Subsidiaries as at such date, in the case of each of clauses (i) and (ii), to the extent the use thereof for application to payment of Indebtedness is not prohibited by any Requirement of Law or any contract to which the Borrower or any of the Subsidiaries is a party.

"Consolidated Net Tangible Assets" means, at the date of any determination thereof, Consolidated Tangible Assets after deducting therefrom all current liabilities, excluding (i) any current liabilities that by their terms are extendable or renewable at the option of the obligor thereon to a time more than 12 months after the time as of which the amount thereof is being computed; and (ii) current maturities of long-term debt, all as set forth, or on a *pro forma* basis would be set forth, on a consolidated balance sheet of the Borrower and the Subsidiaries for their most recently completed fiscal quarter, prepared in accordance with GAAP.

"Consolidated Tangible Assets" means, at the date of any determination thereof, Consolidated Assets after deducting therefrom the value, net of any applicable reserves and accumulated amortization, of all goodwill, trade names, trademarks, patents and other like intangible assets, all as set forth, or on a pro forma basis would be set forth, on a consolidated balance sheet of the Borrower and the Subsidiaries for their most recently completed fiscal quarter, prepared in accordance with GAAP.

"Continuing Director" means, at any date, an individual (a) who is a member of the board of directors of the Borrower on the Closing Date, (b) who, as at such date, has been a member of such board

of directors for at least the twelve preceding months, or (c) who has been nominated to be a member of such board of directors by, or elected to such board of directors with the approval of, a majority of the other Continuing Directors then in office.

"Credit Event" means the making of any Loan or the issuance or extension of any Letter of Credit or any extension of the Maturity Date pursuant to Section 2.22.

"Credit Exposure" means, with respect to any Lender at any time, the sum of the outstanding principal amount of such Lender's Committed Loans and its LC Exposure and its Swingline Exposure at such time.

"DD&A" means depreciation, depletion and amortization (including amortization of goodwill) and the amortization of excess costs of equity investments, determined in accordance with GAAP.

"Debtor Relief Laws" means the Bankruptcy Code of the United States of America, and all other liquidation, conservatorship, bankruptcy, assignment for the benefit of creditors, moratorium, rearrangement, receivership, insolvency, reorganization, or similar debtor relief Laws of the United States or other applicable jurisdictions from time to time in effect.

"Default" means any event or condition which upon notice, lapse of time or both would, unless cured or waived, become an Event of Default.

"Defaulting Lender" means, subject to Section 2.19(b), any Lender that (a) has failed to (i) fund all or any portion of its Loans within three Business Days of the date such Loans were required to be funded hereunder unless such Lender notifies the Administrative Agent and the Borrower in writing that such failure is the result of such Lender's determination that one or more conditions precedent to funding (each of which conditions precedent, together with any applicable default, shall be specifically identified in such writing) has not been satisfied, or (ii) pay to the Administrative Agent, any Issuing Bank, any Swingline Lender or any other Lender any other amount required to be paid by it hereunder (including in respect of its participation in Letters of Credit or Swingline Loans) within two Business Days of the date when due, (b) has notified the Borrower, the Administrative Agent, any Issuing Bank or any Swingline Lender in writing that it does not intend to comply with its funding obligations hereunder, or has made a public statement to that effect (unless such writing or public statement relates to such Lender's obligation to fund a Loan hereunder and states that such position is based on such Lender's determination that a condition precedent to funding (which condition precedent, together with any applicable default, shall be specifically identified in such writing or public statement) cannot be satisfied), (c) has failed, within three Business Days after written request by the Administrative Agent or the Borrower, to confirm in writing to the Administrative Agent and the Borrower that it will comply with its prospective funding obligations hereunder (*provided* that such Lender shall cease to be a Defaulting Lender pursuant to this clause (c) upon receipt of such written confirmation by the Administrative Agent and the Borrower), or (d) has, or has a direct or indirect parent company that has, (i) become the subject of a proceeding under any Debtor Relief Law, (ii) become subject of a Bail-In Action, or (iii) had appointed for it a receiver, custodian, conservator, trustee, administrator, assignee for the benefit of creditors or similar Person charged with reorganization or liquidation of its business or assets, including the Federal Deposit Insurance Corporation or any other state or federal regulatory authority acting in such a capacity; *provided* that, for the avoidance of doubt, a Lender shall not be a Defaulting Lender solely by virtue of (i) the ownership or acquisition of any equity interest in that Lender or any direct or indirect parent company thereof by a Governmental Authority, or (ii), in the case of a solvent Person, the precautionary appointment of an administrator, guardian, custodian or other similar official by a Governmental Authority under or based on the law of the country where such Person is subject to home

jurisdiction supervision if applicable law requires that such appointment not be publicly disclosed, in each of such cases, so long as such ownership interest or such appointment does not result in or provide such Lender with immunity from the jurisdiction of courts within the United States or from the enforcement of judgments or writs of attachment on its assets or permit such Lender (or such Governmental Authority) to reject, repudiate, disavow or disaffirm any contracts or agreements made with such Lender. Any determination by the Administrative Agent that a Lender is a Defaulting Lender under any one or more of clauses (a) through (d) above shall be conclusive and binding absent manifest error, and such Lender shall be deemed to be a Defaulting Lender (subject to Section 2.19(b)) upon delivery of written notice of such determination to the Borrower and each Lender.

"Dividing Person" has the meaning assigned to such term in the definition of "Division".

"Division" means the division of the assets, liabilities and/or obligations of a Person (the "Dividing Person") among two or more Persons (whether pursuant to a "plan of division" or similar arrangement), which may or may not include the Dividing Person and pursuant to which the Dividing Person may or may not survive.

"Division Successor" means any Person that, upon the consummation of a Division of a Dividing Person, holds all or any portion of the assets, liabilities and/or obligations previously held by such Dividing Person immediately prior to the consummation of such Division. A Dividing Person which retains any of its assets, liabilities and/or obligations after a Division shall be deemed a Division Successor upon the occurrence of such Division.

"Documentation Agents" means Barclays Bank PLC, JPMorgan Chase Bank, N.A., Bank of America, N.A., BMO Harris Bank N.A., Citigroup Global Markets Inc., Credit Suisse AG, Cayman Islands Branch, Mizuho Bank, Ltd., MUFG Bank, Ltd., Royal Bank of Canada, The Bank of Nova Scotia, Houston Branch and Wells Fargo Bank, National Association, as documentation agents.

"dollars" or "$" refers to lawful money of the United States of America.

"Domestic Subsidiary" means any Subsidiary of the Borrower organized under the laws of any jurisdiction within the United States.

"EEA Financial Institution" means (a) any credit institution or investment firm established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country which is a parent of an institution described in clause (a) of this definition, or (c) any financial institution established in an EEA Member Country which is a subsidiary of an institution described in clauses (a) or (b) of this definition and is subject to consolidated supervision with its parent.

"EEA Member Country" means any of the member states of the European Union, Iceland, Liechtenstein, and Norway.

"EEA Resolution Authority" means any public administrative authority or any person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.

"Eligible Assignee" means any Person that meets the requirements to be an assignee under Section 9.05(a)(iii), (v) and (vi) (subject to such consents, if any, as may be required under Section 9.05(a)(iii)).

"Environmental Laws" means all laws, rules, regulations, codes, ordinances, orders, decrees, judgments, injunctions, notices or binding agreements issued, promulgated or entered into by any Governmental Authority, relating in any way to the environment, preservation or reclamation of natural resources, the management, release or threatened release of any Hazardous Material or to health and safety matters.

"Environmental Liability" means any liability, contingent or otherwise (including any liability for damages, costs of environmental remediation, fines, penalties or indemnities), of the Borrower or any Subsidiary directly or indirectly resulting from or based upon (a) violation of any Environmental Law, (b) the generation, use, handling, transportation, storage, treatment or disposal of any Hazardous Materials, (c) exposure to any Hazardous Materials, (d) the release of any Hazardous Materials into the environment, or (e) any contract, agreement or other consensual arrangement pursuant to which liability is assumed or imposed with respect to any of the foregoing.

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended from time to time.

"ERISA Group" means the Borrower and all members of a controlled group of corporations and all trades or businesses (whether or not incorporated) under common control which, together with the Borrower, are treated as a single employer under Section 414 of the Code or Section 4001(a)(14) of ERISA.

"EU Bail-In Legislation Schedule" means the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor person), as in effect from time to time.

"Eurodollar", when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, bear interest at a rate determined by reference to the Adjusted LIBO Rate.

"Eurodollar Rate" means for any Interest Period as to any Eurodollar Loan, (i) the rate per annum determined by the Administrative Agent to be the offered rate which appears on the page of the Reuters Screen which displays the London interbank offered rate administered by ICE Benchmark Administration Limited (such page currently being the LIBOR01 page) (the "LIBO Rate") for deposits (for delivery on the first day of such Interest Period) with a term equivalent to such Interest Period in Dollars, determined as of approximately 11:00 a.m. (London, England time), two Business Days prior to the commencement of such Interest Period, or (ii) in the event the rate referenced in the preceding clause (i) does not appear on such page or service or if such page or service shall cease to be available, the rate determined by the Administrative Agent to be the offered rate on such other page or other service which displays the LIBO Rate for deposits (for delivery on the first day of such Interest Period) with a term equivalent to such Interest Period in Dollars, determined as of approximately 11:00 a.m. (London, England time) two Business Days prior to the commencement of such Interest Period; provided that if LIBO Rates are quoted under either of the preceding clauses (i) or (ii), but there is no such quotation for the Interest Period elected, the LIBO Rate shall be equal to the Interpolated Rate; and provided, further, that if any such rate determined pursuant to the preceding clauses (i) or (ii) is less than zero, the Eurodollar Rate will be deemed to be zero.

"Event of Default" has the meaning specified in Section 7.01.

"Exchange Act" means the Securities Exchange Act of 1934, as amended.

"Excluded Subsidiary" means (i) any Subsidiary that is not a Wholly-owned Domestic Operating Subsidiary, (ii) any Domestic Subsidiary that is a Subsidiary of a CFC or any Domestic Subsidiary (including a disregarded entity for U.S. federal income Tax purposes) substantially all of whose assets (held directly or through Subsidiaries) consist of Capital Stock of one or more CFCs or Indebtedness of such CFCs, (iii) any Immaterial Subsidiary, (iv) any Subsidiary listed on Schedule 1.01A, (v) any other Subsidiary with respect to which, in the reasonable judgment of the Administrative Agent (confirmed in writing by notice to the Borrower), the cost or other consequences (including any adverse Tax consequences) of providing a Guaranty shall be excessive in view of the benefits to be obtained by the Lenders therefrom, (vi) any not-for-profit Subsidiary, (vii) any Subsidiary that is prohibited by a Requirement of Law from providing a Guaranty of the Obligations, and (ix) any Subsidiary acquired by the Borrower and its Subsidiaries after the Closing Date to the extent, and so long as, the financing documentation governing any existing Indebtedness of such Subsidiary (other than Indebtedness created or incurred in anticipation of, or with the intent to circumvent the terms of, this Agreement) that is permitted to survive pursuant to Section 6.01 (and does survive) prohibits such Subsidiary from guaranteeing the Obligations; provided, that notwithstanding the foregoing, any Subsidiary that Guarantees any senior notes or senior debt securities issued by the Borrower shall not constitute an Excluded Subsidiary for so long as such Guarantee is in effect.

"Excluded Taxes" means any of the following Taxes imposed on or with respect to a Recipient or required to be withheld or deducted from a payment to a Recipient, (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes and branch profits Taxes, in each case, (i) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of any Lender, its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) that are Other Connection Taxes, (b) in the case of a Lender, U.S. federal withholding Taxes imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in a Loan or Commitment pursuant to a law in effect on the date on which (i) such Lender acquires such interest in the Loan or Commitment or becomes a party to this Agreement (other than pursuant to an assignment request by the Borrower under Section 2.18(b) or (ii) such Lender changes its lending office, except in each case to the extent that, pursuant to Section 2.16, amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its lending office, (c) Taxes attributable to such Recipient's failure to comply with Section 2.16(g) and (d) any U.S. federal withholding Taxes imposed under FATCA.

"Executive Summary" means the Confidential Information Memorandum relating to this Agreement and the Transactions dated October 2018.

"Existing Credit Agreement" means the Revolving Credit Agreement, dated as of September 19, 2014 (as amended, restated or otherwise modified), among the Borrower, the banks and other financial institutions party thereto as lenders and Barclays Bank, PLC as administrative agent.

"Existing LC Subsidiary" means OLP "B" and each other Subsidiary of the Borrower set forth on Exhibit 1.01E for the account of which an Existing Letter of Credit has been issued.

"Existing Letters of Credit" means the letters of credit issued or, in the case of the Bond Letter of Credit, deemed issued, under the Existing Credit Agreement and certain letters of credit issued under a bilateral facility, in each case, listed on Schedule 1.01B.

"Existing Subsidiary Letters of Credit" means, collectively, (i) the Bond Letter of Credit and (ii) each other Existing Letter of Credit that has been issued for the account of an Existing LC Subsidiary.

"Existing Subsidiary Letters of Credit Guaranteed Obligations" has the meaning specified in Section 2.05(n).

"Existing Subsidiary Letters of Credit Guaranty" has the meaning specified in Section 2.05(n).

"Extension Consenting Lender" has the meaning specified in Section 2.22(b).

"Extension Date" has the meaning specified in Section 2.22(b).

"Extension Non-Consenting Lender" has the meaning specified in Section 2.22(b).

"FATCA" means Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the Code, and any law, regulation, rule, promulgation, guidance notes, practices or official agreement implementing an intergovernmental agreement, treaty or convention with respect to the foregoing.

"Federal Funds Effective Rate" means, for any day, the rate calculated by the Federal Reserve Bank of New York based on such day's federal funds transactions by depository institutions (as determined in such manner as the Federal Reserve Bank of New York shall set forth on its public website from time to time) and published on the next succeeding Business Day by the Federal Reserve Bank of New York as the federal funds effective rate; provided, that if the Federal Funds Effective Rate for any day is less than zero, the Federal Funds Effective Rate for such day will be deemed to be zero.

"Fee Letter" has the meaning specified in Section 2.11(c).

"Fee Letters" means, collectively, the Administrative Agent Fee Letter and the Fee Letter.

"Foreign Lender" means any Lender that is not a U.S. Person.

"Foreign Subsidiary" means any Subsidiary of the Borrower that is not a Domestic Subsidiary.

"Fronting Exposure" means, at any time there is a Defaulting Lender, (a) with respect to any Issuing Bank, such Defaulting Lender's Applicable Percentage of the outstanding LC Exposure with respect to Letters of Credit issued by such Issuing Bank other than LC Exposure as to which such Defaulting Lender's participation obligation has been reallocated to other Lenders or Cash Collateralized in accordance with the terms hereof and (b) with respect to any Swingline Lender, such Defaulting Lender's Applicable Percentage of outstanding Swingline Loans made by such Swingline Lender other than Swingline Loans as to which such Defaulting Lender's participation obligation has been reallocated to other Lenders.

"Fund" means any Person (other than a natural person) that is (or will be) engaged in making, purchasing, holding or otherwise investing in commercial loans and similar extensions of credit in the ordinary course of its business.

"GAAP" means generally accepted accounting principles in the United States of America from time to time, including as set forth in the opinions, statements and pronouncements of the

Accounting Principles Board of the American Institute of Certified Public Accountants and the Financing Accounting Standards Board.

"Governmental Authority" means the government of the United States of America or any other nation, or of any political subdivision thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government (including any supra national bodies such as the European Union or the European Central Bank).

"Guarantee" of or by any Person (the "*guarantor*") means any obligation, contingent or otherwise, of the guarantor guaranteeing or having the economic effect of guaranteeing any Indebtedness or other obligation of any other Person (the "*primary obligor*") in any manner, whether directly or indirectly, and including any obligation of the guarantor, direct or indirect, (a) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness or other obligation or to purchase (or to advance or supply funds for the purchase of) any security for the payment thereof, (b) to purchase or lease property, securities or services for the purpose of assuring the owner of such Indebtedness or other obligation of the payment thereof, (c) to maintain working capital, equity capital or any other financial statement condition or liquidity of the primary obligor so as to enable the primary obligor to pay such Indebtedness or other obligation or (d) as an account party in respect of any letter of credit or letter of guaranty issued to support such Indebtedness or obligation; *provided* that the term Guarantee shall not include endorsements for collection or deposit in the ordinary course of business.

"Guarantors" means each Person that guarantees the Obligations pursuant to the Guaranty.

"Guaranty" means the Guaranty Agreement substantially in the form of Exhibit 1.01-B hereto.

"Hazardous Materials" means all explosive or radioactive substances or wastes and all hazardous or toxic substances, wastes or other pollutants, including petroleum or petroleum distillates, asbestos or asbestos containing materials, polychlorinated biphenyls, radon gas, infectious or medical wastes and all other substances or wastes of any nature regulated pursuant to any Environmental Law.

"Hedging Agreement" means a financial instrument or security which is used as a cash flow or fair value hedge to manage the risk associated with a change in interest rates, foreign currency exchange rates or commodity prices.

"Hybrid Securities" means any trust preferred securities, or deferrable interest subordinated debt with a maturity of at least 20 years, which provides for the optional or mandatory deferral of interest or distributions, issued by the Borrower, or any business trusts, limited liability companies, limited partnerships or similar entities (i) substantially all of the common equity, general partner or similar interests of which are owned (either directly or indirectly through one or more Wholly-owned Subsidiaries) at all times by the Borrower or any of the Subsidiaries, (ii) that have been formed for the purpose of issuing trust preferred securities or deferrable interest subordinated debt, and (iii) substantially all the assets of which consist of (A) subordinated debt of the Borrower or a Subsidiary, and (B) payments made from time to time on the subordinated debt.

"Immaterial Subsidiary" means any Subsidiary that is not a Material Subsidiary.

"Increased Amount Date" has the meaning specified in Section 2.21(a).

"Indebtedness" of any Person means, without duplication, (a) all obligations of such Person for borrowed money, (b) all obligations of such Person evidenced by bonds, debentures, notes or similar instruments (other than surety, performance and guaranty bonds), (c) all obligations of such Person under conditional sale or other title retention agreements relating to property acquired by such Person, (d) all obligations of such Person in respect of the deferred purchase price of property or services (excluding trade accounts payable incurred in the ordinary course of business), (e) all Indebtedness of others secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any Lien on property owned or acquired by such Person, whether or not the Indebtedness secured thereby has been assumed (determined as the lesser of the amount of the Indebtedness so secured and such property's fair market value), (f) all Guarantees by such Person of Indebtedness of others (*provided* that in the event that any Indebtedness of the Borrower or any Subsidiary shall be the subject of a Guarantee by one or more Subsidiaries or by the Borrower, as the case may be, the aggregate amount of the outstanding Indebtedness of the Borrower and the Subsidiaries in respect thereof shall be determined by reference to the primary Indebtedness so guaranteed, and without duplication by reason of the existence of any such guarantee), (g) all Capital Lease Obligations of such Person, (h) all obligations of such Person as an account party in respect of (i) the full face amount of all letters of credit (drawn or undrawn) supporting the exposure of such Person under Hedging Agreements and (ii) the drawn portion of all other letters of credit and letters of guaranty, (i) all obligations, contingent or otherwise, of such Person in respect of funded bankers' acceptances and (j) Hybrid Securities. The Indebtedness of any Person shall include the Indebtedness of any other Person (including any partnership in which such Person is a general partner) to the extent such Person is liable therefor as a result of such Person's ownership interest in or other relationship with such entity, except to the extent the terms of such Indebtedness provide that such Person is not liable therefor: *provided* that Indebtedness shall not include (1) non-recourse debt, (2) performance guaranties, (3) monetary obligations or guaranties of monetary obligations of Person as lessees under leases that are in accordance with GAAP, recorded as operating leases (and giving effect to the proviso in Section 1.03), and (4) guarantees by such Person of obligations of others which are not obligations described in clauses (a) through (j) of this definition, and *provided further*, that where any such indebtedness or obligation of such Person is made jointly, or jointly and severally, with any third party or parties other than any Subsidiary of such Person, the amount thereof for the purpose of this definition only shall be the *pro rata* portion thereof payable by such Person, so long as such third party or parties have not defaulted on its or their joint and several portions thereof and can reasonably be expected to perform its or their obligations thereunder. For the avoidance of doubt, except as expressly provided in clause (h)(i) above, "Indebtedness" of a Person in respect of such letters of credit shall include, without duplication, only the principal amount of the unreimbursed obligations of such Person in respect of such letters of credit that have been drawn upon by the beneficiaries to the extent of the amount drawn, and shall include no other obligations in respect of such letters of credit.

"Indemnified Parties" has the meaning specified in Section 9.03(b).

"Indemnified Taxes" means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any Obligation and (b) to the extent not otherwise described in (a), Other Taxes.

"Indemnity Matters" means, with respect to any Indemnified Party, all losses, liabilities, claims and damages (including reasonable legal fees and expenses).

"Interest Election Request" has the meaning specified in Section 2.07(b).

"Interest Expense" means (without duplication), with respect to any period for any Person (a) the aggregate amount of interest, whether expensed or capitalized, paid, accrued or scheduled to be paid during such period in respect of the Indebtedness of such Person including (i) the interest portion of any

deferred payment obligation; (ii) the portion of any rental obligation in respect of Capital Lease Obligations allocable to interest expenses; and (iii) any non-cash interest payments or accruals, all determined in accordance with GAAP, less (b) Interest Income of such Person for such period.

"Interest Income" means, with respect to any period for any Person, interest actually received by such Person during such period.

"Interest Payment Date" means (a) with respect to any ABR Loan (including a Swingline Loan), the last Business Day of each March, June, September and December, and (b) with respect to any Eurodollar Loan, the last Business Day of the Interest Period applicable to the Borrowing of which such Loan is a part and, in the case of a Eurodollar Borrowing with an Interest Period of more than three months' duration, each day prior to the last day of such Interest Period that occurs at intervals of three months' duration after the first day of such Interest Period.

"Interest Period" means with respect to any Eurodollar Borrowing, the period commencing on the date of such Borrowing and ending (a) on the date that is one week thereafter or (b) on the numerically corresponding day in the calendar month that is one, two, three or six months thereafter, in each case as the Borrower may elect; *provided* (i) if any Interest Period would end on a day other than a Business Day, such Interest Period shall be extended to the next succeeding Business Day unless, in the case of any Eurodollar Borrowing, such next succeeding Business Day would fall in the next calendar month, in which case such Interest Period shall end on the next preceding Business Day, (ii) any Interest Period that commences on the last Business Day of a calendar month (or on a day for which there is no numerically corresponding day in the last calendar month of such Interest Period) shall end on the last Business Day of the last calendar month of such Interest Period and (iii) no Interest Period shall end after the Stated Maturity Date. For purposes hereof, the date of a Borrowing initially shall be the date on which such Borrowing is made and, in the case of a Eurodollar Borrowing, thereafter shall be the effective date of the most recent conversion or continuation of such Borrowing.

"Interpolated Rate" means, in relation to the LIBO Rate, the rate which results from interpolating on a linear basis between:

(a) the applicable LIBO Rate for the longest period (for which that LIBO Rate is available) which is less than the Interest Period of that Loan; and

(b) the applicable LIBO Rate for the shortest period (for which that LIBO Rate is available) which exceeds the Interest Period of that Loan,

each as of approximately 11:00 a.m. (London, England time) two Business Days prior to the commencement of such Interest Period of that Loan.

"IRS" means the United States Internal Revenue Service.

"Issuing Banks" means Barclays Bank PLC, JPMorgan Chase Bank, N.A., Bank of America, N.A., Citi and Wells Fargo in their capacities as issuers of Letters of Credit hereunder, and each other Lender as the Borrower may from time to time select as an Issuing Bank hereunder pursuant to Section 2.05; *provided* that such Lender has agreed to be an Issuing Bank and the Administrative Agent has consented to such selection.

"KML" means Kinder Morgan Canada Limited and its consolidated subsidiaries.

"Laws" means, collectively, all international, foreign, federal, state and local statutes, treaties, rules, guidelines, regulations, ordinances, codes and administrative or judicial precedents or authorities, including the interpretation or administration thereof by any Governmental Authority charged with the enforcement, interpretation or administration thereof, and all applicable administrative orders, directed duties, requests, licenses, authorizations and permits of, and agreements with, any Governmental Authority.

"LC Disbursement" means a payment made by an Issuing Bank pursuant to a Letter of Credit.

"LC Exposure" means, at any time, the sum of (a) the aggregate undrawn amount of all outstanding Committed Letters of Credit and Uncommitted Letters of Credit at such time plus (b) the aggregate amount of all LC Disbursements that have not yet been reimbursed by or on behalf of the Borrower at such time. The LC Exposure of any Lender at any time shall be its Applicable Percentage of the total LC Exposure at such time.

"LC Sublimit" means $500,000,000.

"Lenders" has the meaning specified in the introduction to this Agreement. Unless context otherwise requires, the term "Lenders" includes the Swingline Lender.

"Letter of Credit" means any Existing Letter of Credit or any letter of credit issued pursuant to this Agreement.

"Letter of Credit Commitment" means, with respect to any Issuing Bank, the commitment of such Issuing Bank to issue Letters of Credit hereunder, expressed as an amount representing the maximum aggregate amount of the LC Exposure with respect to Letters of Credit issued by such Issuing Bank as such commitment may be reduced or terminated from time to time pursuant to Section 2.08. The initial amount of each Issuing Bank's Letter of Credit Commitment is set forth on Schedule 1.01.

"Letter of Credit Request" has the meaning specified in Section 2.05(e).

"LIBO Rate" shall have the meaning ascribed thereto in the definition of "Eurodollar Rate".

"Lien" means, with respect to any asset (a) any mortgage, deed of trust, lien, pledge, hypothecation, encumbrance, charge or security interest in, on or of such asset, and (b) the interest of a vendor or a lessor under any conditional sale agreement, capital lease or title retention agreement (or any financing lease having substantially the same economic effect as any of the foregoing) relating to such asset.

"Loan Documents" mean, collectively, this Agreement, the Guaranty, the Notes, if any, the Applications, the Fee Letters and all other instruments and documents from time to time executed and delivered by the Borrower or the Guarantors in connection herewith and therewith.

"Loan Party" means the Borrower and each Guarantor.

"Loans" means advances made by the Lenders to the Borrower pursuant to this Agreement.

"Material Adverse Effect" means, relative to any occurrence of whatever nature, a material adverse effect on (a) the business assets, liabilities or financial condition of the Borrower and the Subsidiaries taken as a whole, (b) the ability of the Borrower and the Guarantors, taken as a whole, to perform the Obligations or (c) the rights and remedies of the Administrative Agent, any Issuing Bank or any Lender against the Borrower or, taken as a whole, the Guarantors, under any material provision of this Agreement or any other Loan Document.

"Material Subsidiary" means, as at any date of determination, any Subsidiary of the Borrower whose total tangible assets (for purposes of the below, when combined with the tangible assets of such Subsidiary's Subsidiaries, after eliminating intercompany obligations) as at such date of determination are greater than or equal to 5% of Consolidated Tangible Assets as of the last day of the fiscal quarter most recently ended for which financial statements have been delivered pursuant to Section 5.01(a) or (b) (the "Most Recent Financial Statement Date"), as the case may be; provided that if the aggregate total tangible assets of all Material Subsidiaries is less than 85% of Consolidated Tangible Assets as of the Most Recent Financial Statement Date, the Borrower shall designate Subsidiaries as "Material Subsidiaries" in writing to the Administrative Agent along with the delivery of the applicable financial statements pursuant to Section 5.01(a) or (b) such that the deficit described in this proviso ceases to exist; provided further that KML shall not be eligible to be considered as a Material Subsidiary (if applicable) until June 30, 2019.

"Maturity Date" means the earlier of (a) the Stated Maturity Date and (b) the acceleration of the Obligations pursuant to Section 7.01.

"Maximum Rate" has the meaning specified in Section 9.13.

"Minimum Collateral Amount" means, solely for purposes of Sections 2.19 and 2.20, at any time, (i) with respect to Cash Collateral consisting of cash or deposit account balances, an amount equal to 100% of the Fronting Exposure of all Issuing Banks with respect to Letters of Credit issued and outstanding at such time and (ii) otherwise, an amount determined by the Administrative Agent and the Issuing Banks in their sole discretion.

"Moody's" means Moody's Investors Service, Inc.

"Most Recent Financial Statement Date" has the meaning specified in the definition of Material Subsidiary.

"Multiemployer Plan" means a multiemployer plan as defined in Section 4001(a)(3) of ERISA.

"Net Income" means with respect to any Person for any period that net income of such Person for such period determined in accordance with GAAP; *provided* that there shall be excluded, without duplication, from such net income (to the extent otherwise included therein).

(a) net extraordinary gains and losses (other than, in the case of losses, losses resulting from charges against net income to establish or increase reserves for potential environmental liabilities and reserves for exposure of such Person under rate cases);

(b) net gains or losses in respect of dispositions of assets other than in the ordinary course of business;

(c) any gains or losses attributable to write-ups or write-downs of assets; and

(d) proceeds of any key man insurance, or any insurance on property, plant or equipment.

"Net Worth" means, as to the Borrower at any date, the sum of the amount of shareholders' equity of the Borrower determined as of such date in accordance with GAAP, *provided* there shall be excluded, without duplication, from such determination (to the extent otherwise included therein) the amount of accumulated other comprehensive gain or loss as of such date.

"New Commitment" has the meaning specified in Section 2.21(a).

"New Lender" has the meaning specified in Section 2.21(b).

"New Loan" has the meaning specified in Section 2.21(b).

"New Loan Increase Joinder" has the meaning specified in Section 2.21(c).

"Non-Consenting Lender" means any Lender that does not approve any consent, waiver or amendment that (i) requires the approval of all Lenders or all affected Lenders in accordance with the terms of Section 9.02 and (ii) has been approved by the Required Lenders.

"Non-Defaulting Lender" means, at any time, each Lender that is not a Defaulting Lender at such time.

"Non-Extension Notice Date" has the meaning specified in Section 2.05(f).

"Non-Guarantor Subsidiary" has the meaning specified in Section 6.01.

"Non-Wholly-owned Subsidiary" means any Subsidiary that is not a Wholly-owned Subsidiary.

"Note" means a Committed Note or a Swingline Note.

"Notice of Default" has the meaning specified in Section 7.01.

"Notice of Prepayment" has the meaning specified in Section 2.10(b).

"Obligations" means collectively:

(a) the payment of all indebtedness and liabilities by, and performance of all other obligations of, the Borrower in respect of the Loans;

(b) all obligations of the Borrower under, with respect to and relating to the Letters of Credit, whether contingent or matured;

(c) the payment of all other indebtedness and liabilities by and performance of all other obligations of the Borrower to the Administrative Agent, the Issuing Banks and the Lenders under, with respect to, and arising in connection with, the Loan Documents, and the payment of all indebtedness and liabilities of the Borrower to the Administrative Agent, the Issuing Banks and the Lenders for fees, costs, indemnification and expenses (including reasonable attorneys' fees and expenses) under the Loan Documents;

(d) the reimbursement of all sums advanced and costs and expenses incurred by the Administrative Agent under any Loan Document (whether directly or indirectly) in connection with the Obligations or any part thereof or any renewal, extension or change of or substitution for the Obligations or, any part thereof, whether such advances, costs and expenses were made or incurred at the request of the Borrower or the Administrative Agent; and

(e) all renewals, extensions, amendments and changes of, or substitutions or replacements for, all or any part of the items described under clauses (a) through (d) above.

"OLP "B"" means Kinder Morgan Operating L.P. "B", a Delaware limited partnership.

"Operating Subsidiary" means any operating company that is a Subsidiary of the Borrower.

"Other Connection Taxes" means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or any Loan Document).

"Other Taxes" means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment (other than an assignment made pursuant to Section 2.18(b)).

"Participant" has the meaning assigned to such term in Section 9.05(c).

"Participant Register" has the meaning specified in Section 9.05(c).

"Patriot Act" has the meaning specified in Section 9.15.

"PBGC" means the Pension Benefit Guaranty Corporation referred to and defined in ERISA and any successor entity performing similar functions.

"Performance Level" means a reference to one of Performance Level I, Performance Level II, Performance Level III, Performance Level IV, Performance Level V or Performance Level VI.

"Performance Level I" means, at any date of determination, that the Borrower shall have a Borrower Debt Rating in effect on such date of at least A- by S&P or at least A3 by Moody's.

"Performance Level II" means, at any date of determination, (a) that the Performance Level does not meet the requirements of Performance Level I and (b) that the Borrower shall have a Borrower Debt Rating in effect on such date of at least BBB+ by S&P or at least Baa1 by Moody's.

"Performance Level III" means, at any date of determination, (a) that the Performance Level does not meet the requirements of Performance Level I or Performance Level II and (b) that the Borrower shall have a Borrower Debt Rating in effect on such date of at least BBB by S&P, or at least Baa2 by Moody's.

"Performance Level IV" means, at any date of determination, (a) that the Performance Level does not meet the requirements of Performance Level I, Performance Level II or Performance Level III and (b) that the Borrower shall have a Borrower Debt Rating in effect on such date of at least BBB- by S&P, or at least Baa3 by Moody's.

"Performance Level V" means, at any date of determination, (a) that the Performance Level does not meet the requirements of Performance Level I, Performance Level II, Performance Level III or Performance Level IV and (b) that the Borrower shall have a Borrower Debt Rating in effect on such date of at least BB+ by S&P, or at least Ba1 by Moody's.

"Performance Level VI" means, at any date of determination, that the Performance Level does not meet the requirements of Performance Level I, Performance Level II, Performance Level III, Performance Level IV or Performance Level V.

"Person" means any natural person, corporation, limited liability company, trust, joint venture, association, company, partnership, Governmental Authority or other entity.

"Plan" means any employee pension benefit plan (other than a Multiemployer Plan) subject to the provisions of Title IV of ERISA or Section 412 of the Code or Section 302 of ERISA, and in respect of which the Borrower or any member of its ERISA Group is (or, if such plan were terminated, would under Section 4069 of ERISA be deemed to be) an *"employer"* as defined in Section 3(5) of ERISA.

"Plan Asset Regulations" means 29 CFR § 2510.3-101 et seq., as modified by Section 3(42) of ERISA, as amended from time to time.

"Prime Rate" means the rate of interest last quoted by The Wall Street Journal as the "Prime Rate" in the U.S. or, if The Wall Street Journal ceases to quote such rate, the highest per annum interest rate published by the Federal Reserve Board in Federal Reserve Statistical Release H.15 (519) (Selected Interest Rates) as the "bank prime loan" rate or, if such rate is no longer quoted therein, any similar rate quoted therein (as determined by the Administrative Agent) or any similar release by the Federal Reserve Board (as determined by the Administrative Agent).

"Principal Office" means the principal office of the Administrative Agent, presently located in New York, New York, or such other location as designated by the Administrative Agent from time to time.

"Recipient" means (a) the Administrative Agent, (b) any Lender and (c) any Issuing Bank, as applicable.

"Register" has the meaning specified in Section 9.05(b).

"Regulation D" means Regulation D of the Board, as the same is from time to time in effect, and all official rulings and interpretations thereunder or thereof.

"Regulation T" means Regulation T of the Board, as the same is from time to time in effect, and all official rulings and interpretations thereunder or thereof.

"Regulation U" means Regulation U of the Board, as the same is from time to time in effect, and all official rulings and interpretations thereunder or thereof.

"Regulation X" means Regulation X of the Board, as the same is from time to time in effect, and all official rulings and interpretations thereunder or thereof.

"Related Parties" means, with respect to any Person, such Person's Affiliates and the partners, directors, officers, employees, agents, trustees, administrators, managers, advisors and representatives of such Person and of such Person's Affiliates.

"Required Lenders" means, at any time, subject to the provisions of Section 9.02(b), Lenders having Credit Exposure and unused Commitments representing more than 50% of the sum of the total Credit Exposures and unused Commitments at such time.

"Requirement of Law" means any law, statute, code, ordinance, order, determination, rule, regulation, judgment, decree, injunction, franchise, permit, certificate, license, authorization or other directive or requirement (whether or not having the force of law), including Environmental Laws, energy regulations and occupational, safety and health standards or controls, of any Governmental Authority.

"Reserve Requirement" means, for any day a fraction (expressed as a decimal), the numerator of which is the number one and the denominator of which is the number one minus the aggregate of the maximum reserve percentage (including any marginal, special, emergency or supplemental reserves) expressed as a decimal established by the Board or other Governmental Authority to which the Administrative Agent is subject with respect to the Adjusted LIBO Rate, for eurocurrency funding (currently referred to as "*Eurocurrency Liabilities*" in Regulation D of the Board). Such reserve percentage shall include those imposed pursuant to such Regulation D. Eurodollar Loans shall be deemed to constitute eurocurrency funding and to be subject to such reserve requirements without benefit of or credit for proration, exemptions or offsets that may be available from time to time to any Lender under such Regulation D or any comparable regulations. The Reserve Requirement shall be adjusted automatically on and as of the effective date of any change in any such reserve percentage.

"Responsible Officer" means, as used with respect to the Borrower, the Chairman, Vice Chairman, President, any Vice President, Chief Executive Officer, Chief Financial Officer, Controller or Treasurer of the Borrower.

"Restricted Payment" means any distribution (whether in cash, securities or other property) with respect to any Capital Stock in the Borrower, or any payment (whether in cash, securities or other property), including any deposit, on account of the purchase, redemption, retirement, acquisition, cancellation or termination of any such Capital Stock or any option or other right to acquire any such Capital Stock.

"S&P" means Standard & Poor's Ratings Group, a division of The McGraw-Hill Companies, Inc.

"Sanctioned Country" means, at any time, a country, region or territory which is itself the subject or target of any Sanctions (at the time of this Agreement, Crimea, Cuba, Iran, North Korea, and Syria).

"Sanctioned Person" means, at any time, (a) any Person listed in any Sanctions-related list of designated Persons maintained by the Office of Foreign Assets Control of the U.S. Department of the Treasury, the U.S. Department of State, (b) any Person operating, organized or resident in a Sanctioned Country or (c) any Person owned or controlled by any such Person or Persons described in the foregoing clauses (a) or (b).

"Sanctions" has the meaning specified in Section 4.14(a).

"SEC" means the Securities and Exchange Commission or any Governmental Authority succeeding to its function.

"Solvent" means, with respect to any Person as of any date, that as of such date, (a)(i) the sum of such Person's indebtedness (including contingent liabilities) does not exceed the present fair saleable value of such Person's present assets; (ii) such Person's capital is not unreasonably small in relation to its business as contemplated on such date; and (iii) such Person has not incurred, and does not intend to incur, or believe that it will incur indebtedness (including current obligations) beyond its ability to pay principal and interest on such indebtedness as it becomes due (whether at maturity or otherwise); and (b) such Person is "solvent" within the meaning given that term and similar terms under applicable laws relating to fraudulent transfers and conveyances. For the purposes of this definition, the amount of any contingent liability at any time shall be computed as the amount that, in light of all the facts and circumstances existing at such time, represents the amount that can reasonably be expected to become an actual or matured liability (irrespective of whether such contingent liabilities meet the criteria for accrual under Statement of Financial Accounting Standard No. 5).

"Stated Maturity Date" means, for any Lender, the date that is five years following the Closing Date subject to the extension thereof for such Lender pursuant to Section 2.22 or, if such date is not a Business Day, the immediately preceding Business Day; provided, however, that the Stated Maturity Date of any Lender that is a Non-Consenting Lender to any requested extension pursuant to Section 2.22 shall be the Stated Maturity Date of such Lender in effect immediately prior to the applicable Extension Date for all purposes of this Agreement.

"Subsidiary" means, with respect to any Person (the "parent") at any date, any corporation, limited liability company, partnership, association or other entity the accounts of which would be consolidated with those of the parent in the parent's consolidated financial statements if such financial statements were prepared in accordance with GAAP as of such date, as well as any other corporation, limited liability company, partnership, association or other entity that is, as of such date, otherwise controlled, by the parent or one or more subsidiaries of the parent or by the parent and one or more subsidiaries of the parent. Unless the context otherwise clearly requires, references in this Agreement to a "Subsidiary" or the "Subsidiaries" refer to a Subsidiary or the Subsidiaries of the Borrower.

"Swingline Exposure" means, at any time, the aggregate principal amount of all Swingline Loans outstanding at such time. The Swingline Exposure of any Lender at any time shall be its Applicable Percentage of the total Swingline Exposure at such time.

"Swingline Lender" means Barclays Bank PLC, in its capacity as lender of Swingline Loans hereunder, or any other Lender acceptable to the Borrower and the Administrative Agent, acting in such capacity.

"Swingline Loan" means a Loan made pursuant to Section 2.04(a).

"Swingline Note" means a promissory note of the Company payable to the Swingline Lender in substantially the form of Exhibit 1.01-D, together with all modifications, extensions, renewals and replacements thereof.

"Syndication Agent" means JPMorgan Chase Bank, N.A.

"Taxes" means all present or future taxes, levies, imposts, duties, deductions, or withholdings (including backup withholding) assets, fees or other charges imposed by any Governmental Authority including any interest, additions to tax or penalties applicable thereto.

"Total Capitalization" means, as to the Borrower at any date, the sum of Consolidated Net Indebtedness (determined at such date) and the Net Worth (determined as at the end of the most recent fiscal quarter of the Borrower for which financial statements pursuant to Section 5.01(a) or Section 5.01(b), as applicable, have been delivered).

"Total Commitment" means the sum of the Commitments of the Lenders.

"Transactions" has the meaning specified in the Preliminary Statements.

"Trustee" means The Bank of New York Mellon Trust Company, N.A., as the beneficiary of the Bond Letter of Credit and any successor beneficiary.

"Type", when used in reference to any Loan or Borrowing, refers to whether the rate of interest on such Loan, or on the Loans comprising such Borrowing, is determined by reference to the Adjusted LIBO Rate or the Alternate Base Rate.

"Uncommitted Letter of Credit" has the meaning specified in Section 2.05(b).

"United States" and "U.S." each means United States of America.

"U.S. Person" means any Person that is a "*United States Person*" as defined in Section 7701(a)(30) of the Code.

"U.S. Tax Compliance Certificate" has the meaning specified in Section 2.16(g)(ii)(B)(3).

"Voting Stock" means, with respect to any Person, securities of any class or classes of Capital Stock in such Person entitling holders thereof (whether at all times or only so long as no senior class of stock has voting power by reason of any contingency) to vote in the election of members of the Board of Directors or other governing body of such Person or its managing member or its general partner (or its managing general partner if there is more than one general partner).

"Wells Fargo" means Wells Fargo Bank National Association.

"Wholly-owned Domestic Operating Subsidiary" means any Wholly-owned Subsidiary that constitutes (i) a Domestic Subsidiary and (ii) an Operating Subsidiary.

"Wholly-owned Subsidiary" means a Subsidiary of which all issued and outstanding Capital Stock (excluding in the case of a corporation, directors' qualifying shares) is directly or indirectly owned by the Borrower.

"Withdrawal Liability" means liability to a Multiemployer Plan as a result of a complete or partial withdrawal from such Multiemployer Plan, as such terms are defined in Part I of Subtitle E of Title IV of ERISA.

"Withholding Agent" means the Administrative Agent and the Borrower.

"Write-Down and Conversion Powers" means, with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule.

SECTION 1.02 Classification of Loans and Borrowings. For purposes of this Agreement, Loans and Borrowings may be classified and referred to by Type (*e.g.*, a "*Eurodollar Loan*" or "*Eurodollar Borrowing*" or an "*ABR Loan*" or "*ABR Borrowing*").

SECTION 1.03 Accounting Terms; Changes in GAAP. All accounting and financial terms used herein and not otherwise defined herein and the compliance with each covenant contained herein which relates to financial matters shall be determined in accordance with GAAP applied by the Borrower on a consistent basis, except to the extent that a deviation therefrom is expressly stated. Should there be a change in GAAP from that in effect on the Closing Date, such that any of the defined terms set forth in Section 1.01 and/or compliance with the covenants set forth in Article VI would then be calculated in a different manner or with different components or any of such covenants and/or defined terms used therein would no longer constitute meaningful criteria for evaluating the matters addressed thereby prior to such change in GAAP (a) the Borrower and the Required Lenders agree, within the 60-day period following any such change, to negotiate in good faith and enter into an amendment to this Agreement in order to modify the defined terms set forth in Section 1.01 or the covenants set forth in Article VI, or both, in such respects as shall reasonably be deemed necessary by the Required Lenders that the criteria for evaluating the matters addressed by such covenants are substantially the same criteria as were effective prior to any such change in GAAP, and (b) the Borrower shall be deemed to be in compliance with such covenants during the 60-day period following any such change, or until the earlier date of execution of such amendment, if and to the extent that the Borrower would have been in compliance therewith under GAAP as in effect immediately prior to such change; provided, however, that for the avoidance of doubt, any lease that was accounted for by the Borrower or the Subsidiaries as an operating lease as of the Closing Date and any other lease entered into after the Closing Date by the Borrower or any Subsidiary shall be accounted for as an operating lease and not a capital lease to the extent that such lease would have been characterized as an operating lease as of the Closing Date.

SECTION 1.04 Interpretation. In this Agreement, unless a clear contrary intention appears:

(a) the singular number includes the plural number and vice versa;

(b) reference to any gender includes each other gender;

(c) the words "*herein*", "*hereof*" and "*hereunder*" and other words of similar import refer to this Agreement as a whole and not to any particular Article, Section or other subdivision;

(d) reference to any Person includes such Person's successors and assigns but, if applicable, only if such successors and assigns are permitted by this Agreement, and reference to a Person in a particular capacity excludes such Person in any other capacity or individually; *provided* that nothing in this clause (d) is intended to authorize any assignment not otherwise permitted by this Agreement;

(e) except as expressly provided to the contrary herein, reference to any agreement, document or instrument (including this Agreement) means such agreement, document or instrument as amended, supplemented or modified, or extended, renewed, refunded, substituted or replaced, and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof, and reference to

any Note or other note or Indebtedness or other indebtedness includes any note or indebtedness issued pursuant hereto in extension or renewal or refunding thereof or in substitution or replacement therefor;

(f) unless the context indicates otherwise, reference to any Article, Section, Schedule or Exhibit means such Article or Section hereof or such Schedule or Exhibit hereto;

(g) the word "*including*" (and with correlative meaning "*include*") means including, without limiting the generality of any description preceding such term;

(h) with respect to the determination of any period of time, except as expressly provided to the contrary, the word "*from*" means "*from and including*" and the word "*to*" means "*to but excluding*";

(i) reference to any law, rule or regulation means such as amended, modified, codified or reenacted, in whole or in part, and in effect from time to time; and

(j) the words "*asset*" and "*property*" shall be construed to have the same meaning and effect and refer to any and all tangible and intangible assets and properties.

ARTICLE II
THE CREDITS

SECTION 2.01 Commitments.

Subject to the terms and conditions set forth herein, each Lender agrees to make Committed Loans in U.S. dollars to the Borrower from time to time during the Availability Period in an aggregate principal amount that will not result in (i) such Lender's Credit Exposure exceeding such Lender's Commitment or (ii) the sum of the total Credit Exposures exceeding the Total Commitment. Within the foregoing limits and subject to the terms and conditions set forth herein, the Borrower may borrow, prepay and reborrow Committed Loans.

SECTION 2.02 Loans and Borrowings.

(a) Each Committed Loan shall be made as part of a Borrowing consisting of Committed Loans denominated in U.S. dollars made by the Lenders, ratably in accordance with their Applicable Percentage of the Total Commitment on the date such Loan is made hereunder. The failure of any Lender to make any Loan required to be made by it shall not relieve any other Lender of its obligations hereunder; *provided* that the Commitments of the Lenders are several and no Lender shall be responsible for any other Lender's failure to make Loans as required.

(b) Subject to Section 2.13, each Borrowing (other than a Borrowing of Swingline Loans, which must be ABR Loans) shall be comprised entirely of ABR Loans or Eurodollar Loans as the Borrower may request in accordance herewith. Each Lender at its option may make any Eurodollar Loan by causing any domestic or foreign branch or Affiliate of such Lender to make such Loan; *provided* that any exercise of such option shall not affect the obligation of the Borrower to repay such Loan in accordance with the terms of this Agreement.

(c) At the commencement of each Interest Period for any Eurodollar Borrowing, such Borrowing shall be in an aggregate amount that is an integral multiple of $1,000,000 and not less than $3,000,000. At the time that each ABR Borrowing is made, such Borrowing shall be in an aggregate amount that is an integral multiple of $1,000,000 and not less than $1,000,000; *provided* that an ABR

Borrowing may be in an aggregate amount that is equal to the entire unused balance of the Total Commitment or that is required to finance the reimbursement of an LC Disbursement as contemplated by Section 2.05(h). Each Swingline Loan shall be in an amount that is an integral multiple of $100,000 and not less than $1,000,000.

(d) There shall not at any time be more than a total of twelve Eurodollar Borrowings outstanding.

(e) Notwithstanding any other provision of this Agreement, the Borrower shall not be entitled to request, or to elect to convert or continue, any Borrowing if the Interest Period requested with respect thereto would end after the Stated Maturity Date.

SECTION 2.03 Requests for Borrowings.

(a) To request a Borrowing (other than a Borrowing of a Swingline Loan), the Borrower shall notify the Administrative Agent of such request (which request shall be in writing unless otherwise agreed to by the Administrative Agent) (a) in the case of a Eurodollar Borrowing, not later than 11:00 a.m., New York, New York time, three Business Days before the date of the proposed Borrowing and (b) in the case of an ABR Borrowing, not later than 10:00 a.m., New York, New York, time, on the date of the proposed Borrowing. Each such Borrowing Request shall be irrevocable and shall be made by hand delivery, telecopy or electronic communication (e-mail) to the Administrative Agent of a written Borrowing Request in a form of Exhibit 2.03 (a "Borrowing Request") and signed by the Borrower. Each such Borrowing Request shall specify the following information in compliance with Section 2.02:

(i) the aggregate amount of the requested Borrowing;

(ii) the date of such Borrowing, which shall be a Business Day;

(iii) whether such Borrowing is to be an ABR Borrowing or a Eurodollar Borrowing;

(iv) in the case of a Eurodollar Borrowing, the initial Interest Period to be applicable thereto, which shall be a period contemplated by the definition of the term *"Interest Period"*; and

(v) the location and number of the Borrower's account to which funds are to be disbursed, which shall comply with the requirements of Section 2.06;

If no election as to the Type of Borrowing is specified, then the requested Borrowing shall be an ABR Borrowing. If no Interest Period is specified with respect to any requested Eurodollar Borrowing, then the Borrower shall be deemed to have selected an Interest Period of one month's duration. Promptly following receipt of a Borrowing Request in accordance with this Section 2.03, the Administrative Agent shall advise each Lender in writing of the details thereof and of the amount of such Lender's Loan to be made as part of the requested Borrowing.

(b) To request a Borrowing of a Swingline Loan, the Borrower shall notify the Administrative Agent of such request (which request shall be in writing unless otherwise agreed by the Administrative Agent), not later than 12:00 noon, New York, New York, time, on the day of a proposed Swingline Loan. Each such notice shall be irrevocable and shall specify (i) the requested date (which shall be a Business Day) of the Swingline Loan, (ii) the amount of the requested Swingline Loan and (iii) the number of the Borrower's deposit account with the Swingline Lender to which funds are to be disbursed.

The Administrative Agent (if not the Swingline Lender) will promptly advise the Swingline Lender of any such notice received from the Borrower. The Swingline Lender shall make each Swingline Loan available to the Borrower by means of a credit to the deposit account of the Borrower identified in the notice or otherwise agreed upon by the Borrower and the Swingline Lender from time to time by 3:00 p.m., New York, New York, time, on the requested date of such Swingline Loan.

SECTION 2.04 Swingline Loans.

(a) Subject to the terms and conditions set forth herein, the Swingline Lender in its individual capacity agrees, at any time and from time to time on and after the Closing Date, to make a loan or loans (each a "Swingline Loan" and, collectively, the "Swingline Loans") to the Borrower from time to time during the Availability Period, in an aggregate principal amount at any time outstanding that will not result in (i) the aggregate principal amount of outstanding Swingline Loans exceeding $50,000,000 or (ii) the sum of the total Credit Exposures exceeding the Total Commitment; *provided* that (A) each Swingline Loan shall be in a minimum amount of $1,000,000 and shall be repayable in full as provided in Section 2.09, and (B) the Swingline Lender shall not be required to make a Swingline Loan to refinance an outstanding Swingline Loan. Within the foregoing limits and subject to the terms and conditions set forth herein, the Borrower may borrow, prepay and reborrow Swingline Loans.

(b) The Swingline Lender may by written notice given to the Administrative Agent not later than 12:00 noon, New York, New York, time, on any Business Day require the Lenders to acquire participations on such Business Day in all or a portion of the Swingline Loans outstanding. Such notice shall specify the aggregate amount of Swingline Loans in which Lenders will participate. Promptly upon receipt of such notice, the Administrative Agent will give notice thereof to each Lender, specifying in such notice such Lender's Applicable Percentage of such Swingline Loan or Loans. Each Lender hereby absolutely and unconditionally agrees, upon receipt of notice as provided above, to pay to the Administrative Agent, for the account of the Swingline Lender, such Lender's Applicable Percentage of such Swingline Loan or Loans. Each Lender acknowledges and agrees that its obligation to acquire participations in Swingline Loans pursuant to this paragraph is irrevocable and unconditional and shall not be affected by any circumstance whatsoever, including the occurrence and continuance of a Default or Event of Default or reduction or termination of the Total Commitment, and that each such payment shall be made without any offset, abatement, withholding or reduction whatsoever. Each Lender shall comply with its obligation under this paragraph by wire transfer of immediately available funds, in the same manner as provided in Section 2.06 with respect to Loans made by such Lender (and Section 2.06 shall apply, mutatis mutandis, to the payment obligations of the Lenders), and the Administrative Agent shall promptly pay to the Swingline Lender the amounts so received by it from the Lenders. The Administrative Agent shall notify the Borrower of any participations in any Swingline Loan acquired pursuant to this paragraph, and thereafter payments in respect of such Swingline Loan shall be made to the Administrative Agent for the account of the Lenders and not to the Swingline Lender. Any amounts received by the Swingline Lender from the Borrower (or other party on behalf of the Borrower) in respect of a Swingline Loan after receipt by the Swingline Lender of the proceeds of a sale of participations therein shall be promptly remitted to the Administrative Agent for the account of the Lenders; any such amounts received by the Administrative Agent shall be promptly remitted by the Administrative Agent to the Lenders that shall have made their payments pursuant to this paragraph and to the Swingline Lender, as their interests may appear. The purchase of participations in a Swingline Loan pursuant to this paragraph shall not relieve the Borrower of any default in the payment thereof.

SECTION 2.05 Letters of Credit.

(a) Existing Letters of Credit. The parties hereto acknowledge that on and after the Closing Date, each Existing Letter of Credit shall be a Letter of Credit issued by the Issuing Bank shown as

the issuer thereof on Schedule 1.01B for the account of the relevant Existing LC Subsidiary in the case of the Existing Subsidiary Letters of Credit, and for the account of the Borrower in the case of all other Existing Letters of Credit. Any Letter of Credit issued by Wachovia Bank, National Association, or First Union National Bank shall be deemed to be a Letter of Credit issued by Wells Fargo. OLP "B" hereby pledges, assigns, transfers and delivers to Wells Fargo, as the Issuing Bank that has issued the Bond Letter of Credit, all its right, title and interest to all Bonds purchased with funds drawn under the Bond Letter of Credit (the "Pledged Bonds"), and hereby grants to such Issuing Bank a first lien on, and security interest in, its rights, title and interest in and to the Pledged Bonds, the interest thereon and all proceeds thereof or substitutions therefor, as collateral security for the prompt and complete payment when due of the amounts payable in respect of the Bond Letter of Credit. During such time as any Bonds are Pledged Bonds, the Issuing Bank that has issued the Bond Letter of Credit shall be entitled to exercise all of the rights of a holder of Bonds with respect to voting, consenting and directing the Trustee as if such Issuing Bank were the owner of such Bonds, and OLP "B" hereby grants and assigns to such Issuing Bank all such rights.

(b) General. Subject to the terms and conditions set forth herein, the Borrower may request the issuance, amendment, renewal or extension of Letters of Credit from an Issuing Bank for its own account individually, for its own account and that of any Subsidiary as co-applicants, or, in the case of the Existing Subsidiary Letters of Credit, for the account of the relevant Existing LC Subsidiary, in a form reasonably acceptable to the Administrative Agent and such Issuing Bank, at any time and from time to time during the Availability Period. Subject to the terms and conditions set forth herein, such Issuing Bank shall have an obligation to issue a Letter of Credit (each such Letter of Credit, a "Committed Letter of Credit"), and to amend, renew or extend any Letter of Credit previously issued by it, under this Section 2.05 if, after giving effect to any such issuance, amendment, renewal or extension, (i) the LC Exposure for all Letters of Credit issued by such Issuing Bank would not exceed such Issuing Bank's Letter of Credit Commitment at such time, (ii) the total LC Exposure would not exceed the LC Sublimit and (iii) the total Credit Exposure does not exceed the Total Commitment. In addition, at the request of the Borrower, an Issuing Bank may in its sole discretion agree to issue, amend, renew, or extend Letters of Credit for the account of the Borrower individually or for its own account and that of any Subsidiary (each such Letter of Credit, an "Uncommitted Letter of Credit"); *provided*, *however*, after giving effect to any such issuance, amendment, renewal or extension, (i) the total LC Exposure shall not exceed the LC Sublimit, and (ii) the total Credit Exposure shall not exceed the Total Commitment. In the event of any inconsistency between the terms and conditions of this Agreement and the terms and conditions of any Application or other agreement submitted by the Borrower to, or entered into by the Borrower with, the Issuing Bank thereof relating to any Letter of Credit, the terms and conditions of this Agreement shall control. All Letters of Credit issued and deemed issued under this Section 2.05 shall constitute utilization of the Total Commitment including the total Letter of Credit Commitments in an amount equal to the LC Exposure relating to such Letters of Credit. All Letters of Credit issued under this Agreement shall be denominated in U.S. dollars. In no event shall any Issuing Bank be required to issue any Letter of Credit other than a stand-by Letter of Credit.

(c) No Issuing Bank shall be under any obligation to issue any Letter of Credit if:

(i) any order, judgment or decree of any Governmental Authority or arbitrator shall by its terms purport to enjoin or restrain such Issuing Bank from issuing such Letter of Credit, or any Law applicable to such Issuing Bank or any request or directive (whether or not having the force of law) from any Governmental Authority with jurisdiction over such Issuing Bank shall prohibit, or request that such Issuing Bank refrain from, the issuance of letters of credit generally or such Letter of Credit in particular or shall impose upon such Issuing Bank with respect to such Letter of Credit any restriction, reserve or capital requirement (for which such Issuing Bank is not otherwise compensated hereunder) not in effect on the Closing Date, or shall impose upon such

Issuing Bank any unreimbursed loss, cost or expense which was not applicable on the Closing Date and which such Issuing Bank in good faith deems material to it;

(ii) the issuance of such Letter of Credit would violate one or more policies of such Issuing Bank applicable to letters of credit generally;

(iii) except as otherwise agreed by the Administrative Agent and such Issuing Bank, such Letter of Credit is in an initial stated amount less than $10,000;

(iv) such Letter of Credit is to be denominated in a currency other than U.S. dollars;

(v) such Letter of Credit contains any provisions for automatic reinstatement of the stated amount after any drawing thereunder; or

(vi) any Lender is at such time a Defaulting Lender, unless such Issuing Bank has entered into arrangements, including reallocation of such Lender's Applicable Percentage of the outstanding LC Exposure pursuant to Section 2.19(a)(iv) or the delivery of Cash Collateral, satisfactory to such Issuing Bank (in its sole discretion) with the Borrower or such Lender to eliminate such Issuing Bank's actual or potential Fronting Exposure (after giving effect to Section 2.19(a)(iv)) with respect to such Lender arising from either the Letter of Credit then proposed to be issued or such Letter of Credit and all other LC Exposure as to which such Issuing Bank has actual or potential Fronting Exposure, as it may elect in its sole discretion.

(d) No Issuing Bank shall be under any obligation to amend or extend any Letter of Credit if (A) such Issuing Bank would have no obligation at such time to issue the Letter of Credit in its amended form under the terms hereof or (B) the beneficiary of such Letter of Credit does not accept the proposed amendment thereto.

(e) Notice of Issuance, Amendment, Renewal, Extension; Certain Conditions. To request the issuance of a Letter of Credit (or the amendment, renewal or extension of an outstanding Letter of Credit), the Borrower shall hand deliver or telecopy (or transmit by electronic communication (e-mail), if arrangements for doing so have been approved by the designated Issuing Bank) to the designated Issuing Bank and the Administrative Agent not less than five Business Days (or such lesser number as may be otherwise acceptable to such Issuing Bank) in advance of the requested date of issuance, amendment, renewal or extension) a notice (a "Letter of Credit Request") requesting the issuance of a Letter of Credit, or identifying the Letter of Credit to be amended, renewed or extended, the date of issuance, amendment, renewal or extension, the date on which such Letter of Credit is to expire (which shall comply with Section 2.05(f)), the amount of such Letter of Credit, the name and address of the beneficiary thereof and such other information as shall be necessary to prepare, amend, renew or extend such Letter of Credit. If requested by the Issuing Bank that has been requested to issue such Letter of Credit, the Borrower also shall submit a letter of credit application on such Issuing Bank's standard form (an "Application"), appropriately completed and signed by a Responsible Officer of the Borrower and including agreed-upon draft language for such Letter of Credit reasonably acceptable to the applicable Issuing Bank, in connection with any request for a Letter of Credit. A Letter of Credit shall be issued, amended, renewed or extended only if, after giving effect to such issuance, amendment, renewal or extension, (i) at any time prior to the Stated Maturity Date (A) the sum of the total Credit Exposures at any time shall not exceed the Total Commitment, (B) the LC Exposure in respect of Committed Letters of Credit issued by any Issuing Bank shall not exceed the Letter of Credit Commitment of such Issuing Bank and (C) the total LC Exposure shall not exceed the LC Sublimit, and (ii) at any time on and after the Stated Maturity Date, no Lender shall have any Credit Exposure or LC Exposure. Upon the

issuance, amendment, renewal or extension of each Letter of Credit, the Issuing Bank that has issued such Letter of Credit will notify the Administrative Agent, who, in turn, will notify the Lenders, of the amount and type of such Letter of Credit that is issued, amended, renewed or extended pursuant to this Agreement.

(f) Expiration Date. Each Letter of Credit (other than the Bond Letter of Credit) shall expire at or prior to the close of business on the earlier of (i) the date one year after the date of the issuance of such Letter of Credit (unless the Issuing Bank issuing such Letter of Credit otherwise agrees in its sole discretion) and (ii) five Business Days prior to the Stated Maturity Date (except to the extent Cash Collateralized or backstopped pursuant to arrangements satisfactory to the relevant Issuing Bank when required in accordance with Section 2.05(l)). If the Borrower so requests in any applicable Letter of Credit Request, the Issuing Bank may, in its sole and absolute discretion, agree to issue a Letter of Credit that has automatic extension provisions (each, an "Auto-Extension Letter of Credit"); *provided* that any such Auto-Extension Letter of Credit must permit the Issuing Bank to prevent any such extension at least once in each twelve-month period (commencing with the date of issuance of such Letter of Credit) by giving prior notice to the beneficiary thereof not later than a day (the "Non-Extension Notice Date") in each such twelve-month period to be agreed upon at the time such Letter of Credit is issued. Unless otherwise directed by the Issuing Bank, the Borrower shall not be required to make a specific request to the Issuing Bank for any such extension. Once an Auto-Extension Letter of Credit has been issued, the Lenders shall be deemed to have authorized (but may not require) the Issuing Bank to permit the extension of such Letter of Credit at any time to an expiry date not later than the five Business Days prior to the Stated Maturity Date; *provided*, *however*, that (i) the Issuing Bank shall not permit any such extension if the Issuing Bank has determined that it would not be permitted, or would have no obligation, at such time to issue such Letter of Credit in its revised form (as extended) under the terms hereof (by reason of the provisions of clause (e) of this Section 2.05 or otherwise pursuant to the terms hereof) and (ii) an Issuing Bank may permit the extension of such Letter of Credit to an expiry date that is later than the five Business Days prior to the Stated Maturity Date (but in any case to a date that is no later than twelve months since the expiry date as of the last auto-extension), provided that such Letter of Credit is Cash Collateralized or otherwise backstopped pursuant to arrangements satisfactory to the relevant Issuing Bank when required in accordance with Section 2.05(l).

(g) Participations. On the Closing Date, with respect to the Existing Letters of Credit and by the issuance of each other Letter of Credit (or an amendment to a Letter of Credit increasing the amount thereof) and without any further action on the part of the Issuing Banks or the Lenders, the Issuing Bank that has issued such Letter of Credit hereby grants to each Lender, and each Lender hereby acquires from such Issuing Bank, a participation in such Letter of Credit equal to such Lender's Applicable Percentage of the aggregate amount available to be drawn under such Letter of Credit. In consideration and in furtherance of the foregoing, each Lender hereby absolutely and unconditionally agrees to pay to the Administrative Agent, for the account of such Issuing Bank, such Lender's Applicable Percentage of each LC Disbursement made by such Issuing Bank and not reimbursed by the Borrower on the date due as provided in Section 2.05(h), or of any reimbursement payment required to be refunded to the Borrower for any reason. Each Lender acknowledges and agrees that its obligation to acquire participations pursuant to this paragraph in respect of Letters of Credit is irrevocable and unconditional and shall not be affected by any circumstance whatsoever, including any amendment, renewal or extension of any Letter of Credit or the occurrence and continuance of a Default or an Event of Default or reduction or termination of the Total Commitment, and that each such payment shall be made without any offset, abatement, withholding or reduction whatsoever.

(h) Reimbursement. If any Issuing Bank shall make any LC Disbursement in respect of a Letter of Credit, the Borrower shall reimburse such LC Disbursement by paying to the Administrative Agent (whether from its own funds or with the proceeds of Committed Loans) an amount equal to such LC Disbursement not later than 12:00 noon, New York, New York, time, on the Business

Day immediately following the day that the Borrower receives notice of such LC Disbursement; *provided* that if the Borrower fails to make such payment when due, then, upon demand by such Issuing Bank sent to the Administrative Agent and each Lender before 10:00 a.m., New York, New York, time, each Lender shall pursuant to Section 2.06 on the same day make available to the Administrative Agent for delivery to such Issuing Bank, immediately available funds in an amount equal to such Lender's Applicable Percentage of the amount of such payment by such Issuing Bank, and the funding of such amount shall be treated as the funding of an ABR Loan by such Lender to the Borrower. Notwithstanding anything herein or in any other Loan Document to the contrary, the funding obligations of the Lenders set forth in this Section 2.05(h) shall be binding regardless of whether or not a Default or an Event of Default shall exist or the other conditions precedent in Article III are satisfied at such time. If and to the extent any Lender fails to effect any payment due from it under this Section 2.05(h) to the Administrative Agent, then interest shall accrue on the obligation of such Lender to make such payment from the date such payment became due to the date such obligation is paid in full at a rate per annum equal to the Federal Funds Effective Rate. The failure of any Lender to pay its Applicable Percentage of any payment under any Letter of Credit shall not relieve any other Lender of its obligation hereunder to pay to the Administrative Agent its Applicable Percentage of any payment under any Letter of Credit on the date required, as specified above, but no Lender shall be responsible for the failure of any other Lender to pay to the Administrative Agent such other Lender's Applicable Percentage of any such payment.

(i) Obligations Absolute. The Borrower's obligation to reimburse LC Disbursements as *provided* in Section 2.05(h) shall, to the extent permitted by law, be absolute, unconditional and irrevocable, and shall be performed strictly in accordance with the terms of this Agreement under any and all circumstances whatsoever and irrespective of:

(i) any lack of validity or enforceability of any Letter of Credit, this Agreement or any other Loan Document, or any term or provision herein or therein;

(ii) any amendment or waiver of or any consent to departure from all or any of the provisions of any Letter of Credit, this Agreement or any other Loan Document;

(iii) the existence of any claim, setoff, defense or other right that any Loan Party, any Affiliate of any Loan Party or any other Person may at any time have against the beneficiary under any Letter of Credit, any Issuing Bank, the Administrative Agent or any Lender or any other Person, whether in connection with this Agreement or any other related or unrelated agreement or transaction;

(iv) any draft or other document presented under a Letter of Credit proving to be forged, fraudulent or invalid in any respect or any statement therein being untrue or inaccurate in any respect;

(v) payment by any Issuing Bank under a Letter of Credit against presentation of a draft or other document that does not comply with the terms of such Letter of Credit; and

(vi) any other act or omission to act or delay of any kind of the Issuing Banks, the Lenders, the Administrative Agent or any other Person or any other event or circumstance whatsoever, whether or not similar to any of the foregoing, that might, but for the provisions of this Section 2.05, constitute a legal or equitable discharge of either Borrower's obligations hereunder.

Neither the Administrative Agent, the Lenders nor the Issuing Banks, nor any of their Related Parties, shall have any liability or responsibility by reason of or in connection with the issuance or transfer of any Letter of Credit or any payment or failure to make any payment thereunder, including any of the circumstances specified in clauses (i) through (vi) above, as well as any error, omission, interruption, loss or delay in transmission or delivery of any draft, notice or other communication under or relating to any Letter of Credit (including any document required to make a drawing thereunder), any error in interpretation of technical terms or any consequence arising from causes beyond the control of any Issuing Bank; *provided* that the foregoing shall not be construed to excuse any Issuing Bank from liability to the Borrower (or, in the case of the Existing Subsidiary Letters of Credit, the relevant Existing LC Subsidiary) to the extent of any direct damages (as opposed to consequential damages, claims in respect of which are hereby waived by each Borrower to the extent permitted by applicable law) suffered by the Borrower that are caused by such Issuing Bank's failure to exercise the agreed standard of care (as set forth below) in determining whether drafts and other documents presented under a Letter of Credit comply with the terms thereof. The parties hereto expressly agree that each Issuing Bank shall have exercised the agreed standard of care in the absence of gross negligence, willful misconduct or unlawful conduct on the part of such Issuing Bank. Without limiting the generality of the foregoing, it is understood that each Issuing Bank may accept documents that appear on their face to be in substantial compliance with the terms of a Letter of Credit, without responsibility for further investigation, regardless of any notice or information to the contrary, and may make payment upon presentation of documents that appear on their face to be in substantial compliance with the terms of such Letter of Credit; *provided* that each Issuing Bank shall have the right, in its sole discretion, to decline to accept such documents and to make such payment if such documents are not in strict compliance with the terms of such Letter of Credit.

(j) Disbursement Procedures. Each Issuing Bank shall, promptly following its receipt thereof, examine all documents purporting to represent a demand for payment under a Letter of Credit issued by it. Each Issuing Bank shall promptly notify the Administrative Agent and the Borrower and, in the case of the Existing Subsidiary Letters of Credit, the relevant Existing LC Subsidiary, by telephone (confirmed by telecopy) or by electronic communication (e-mail) of such demand for payment and whether such Issuing Bank has made or will make an LC Disbursement thereunder; *provided* that any failure to give or delay in giving such notice shall not relieve the Borrower of its obligation to reimburse such Issuing Bank and the Lenders with respect to any such LC Disbursement.

(k) Interim Interest. If any Issuing Bank shall make any LC Disbursement, then, unless the Borrower shall reimburse such LC Disbursement in full on the date specified in Section 2.05(h), the unpaid amount thereof shall bear interest, for each day from the date such LC Disbursement is made to the date that the Borrower reimburses such LC Disbursement (or all Lenders make the payments to the Administrative Agent contemplated by Section 2.05(h) and treated pursuant to said Section as constituting the funding of ABR Loans), at the rate per annum then applicable to ABR Committed Loans.

(l) Cash Collateralization. If (i) any Event of Default shall occur and be continuing, on the Business Day that the Borrower receives notice from the Administrative Agent or the Required Lenders (or, if the maturity of the Loans has been accelerated, Lenders with LC Exposure representing greater than 51% of the total LC Exposure) demanding the deposit of cash collateral pursuant to this paragraph or (ii) any Letter of Credit remains outstanding on the fifth Business Day prior to the Stated Maturity Date, the Borrower shall deposit in an account with the Administrative Agent, in the name of the Administrative Agent and for the benefit of the Lenders, an amount in cash equal to the LC Exposure as of such date *plus* any accrued and unpaid interest thereon; *provided* that the obligation to deposit such cash collateral shall become effective immediately, and such deposit shall become immediately due and payable, without demand or notice of any kind, upon (A) the occurrence of any event described in the foregoing clauses (i) or (ii) or (B) the occurrence of any Event of Default with respect to the Borrower

described in clause (g) or (h) of Section 7.01. Such deposit shall be held by the Administrative Agent as collateral for the payment and performance of the obligations of the Borrower under this Agreement and the other Loan Documents. The Administrative Agent shall have exclusive dominion and control, including the exclusive right of withdrawal, over such account. Other than any interest earned on the investment of such deposits (which investments shall be made at the option and sole discretion of the Administrative Agent, but only in investments rated at least AA (or equivalent) by at least one nationally recognized rating agency) such deposits shall not bear interest. Interest or profits, if any, on such investments shall accumulate in such account and may, subject to the immediately preceding sentence be reinvested from time to time. Moneys in such account shall be applied by the Administrative Agent to reimburse each Issuing Bank for LC Disbursements for which it has not been reimbursed and, to the extent not so applied, shall be held for the satisfaction of the reimbursement obligations of the Borrower for the LC Exposure at such time or, if the maturity of the Loans has been accelerated (but subject to the consent of Lenders with LC Exposure representing greater than 51% of the total LC Exposure), be applied to satisfy other obligations of the Borrower under this Agreement and the other Loan Documents. If the Borrower is required to provide an amount of cash collateral hereunder as a result of the occurrence of an Event of Default, such amount (to the extent not applied as aforesaid) shall be returned to the Borrower within three Business Days after all Events of Default have been cured or waived. If the Borrower is required to provide an amount of cash collateral hereunder as a result of any Letter of Credit remaining outstanding on the fifth Business Day prior to the Stated Maturity Date, then such cash collateral or portion thereof shall be released promptly following: (i) the elimination of the applicable LC Exposure, (ii) the Administrative Agent's good faith determination that there exists excess cash collateral, or (iii) the extension of the Stated Maturity Date to a date that is more than five Business Days later than the expiry date of the applicable Letter of Credit.

(m) Designation. In addition the Borrower and any Issuing Bank, with the written consent of the applicable Issuing Bank and notice to the Administrative Agent and the Lenders, may designate letters of credit issued by such Issuing Bank that were not originally issued under this Agreement as Letters of Credit issued hereunder, so long as, at the time of such designation, (i) the Borrower would have been able to deliver a Letter of Credit Request with respect to a Letter of Credit hereunder containing the same terms as such letter of credit that was so designated, (ii) such Issuing Bank would have been required to issue a Letter of Credit hereunder containing the same terms as such letter of credit that was so designated and (iii) all the conditions to a credit extension set forth in Section 3.02 have been met immediately prior to such designation. Upon such designation in accordance with the foregoing, such designated letter of credit of such Issuing Bank shall be deemed to be a Letter of Credit issued by such Issuing Bank hereunder.

(n) Existing Subsidiary Letters of Credit Guaranty. Notwithstanding that each Existing Subsidiary Letter of Credit is in support of obligations of, and is for the account of, a Subsidiary, the Borrower shall be obligated to reimburse the Issuing Bank hereunder for any and all drawings under such Existing Subsidiary Letter of Credit in accordance with Section 2.05(h). Notwithstanding the foregoing, to the extent that the Borrower is not treated as the primary obligor for the reimbursement of such Existing Subsidiary Letter of Credit pursuant to the relevant documentation for such Existing Subsidiary Letter of Credit, the Debtor Relief Laws, any other applicable Laws or otherwise, the Borrower hereby absolutely, unconditionally and irrevocably guarantees (this "Existing Subsidiary Letters of Credit Guaranty") the punctual payment and performance when due, whether at stated maturity, by acceleration or otherwise, of the obligations of the Existing LC Subsidiaries under the Existing Subsidiary Letters of Credit, whether for principal, interest (including interest accruing or becoming owing both prior to and subsequent to the commencement of any proceeding against or with respect to the Existing LC Subsidiaries under any Debtor Relief Laws, fees, commissions, expenses (including reasonable attorneys' fees and expenses) or otherwise (all such obligations being the "Existing Subsidiary Letters of Credit Guaranteed Obligations"). The Borrower agrees to pay any and all expenses incurred by

each Lender, the Issuing Bank and the Administrative Agent in enforcing this Existing Subsidiary Letters of Credit Guaranty against the Borrower. This Existing Subsidiary Letters of Credit Guaranty is an absolute, unconditional, present and continuing guaranty of payment and not of collectability and is in no way conditioned upon any attempt to collect from the Existing LC Subsidiaries or any other action, occurrence or circumstance whatsoever. The Borrower agrees that, to the maximum extent permitted by applicable law, the Existing Subsidiary Letters of Credit Guaranteed Obligations may be extended or renewed, and indebtedness thereunder repaid and reborrowed in whole or in part, without notice to or assent by the Borrower, and that it will remain bound upon this Existing Subsidiary Letters of Credit Guaranty notwithstanding any extension, renewal or other alteration of any Existing Subsidiary Letters of Credit Guaranteed Obligations, or any repayment and reborrowing of Loans. To the maximum extent permitted by applicable law, except as otherwise expressly provided in this Agreement or any other Loan Document to which the Borrower is a party, the obligations of the Borrower under this Existing Subsidiary Letters of Credit Guaranty shall be absolute, unconditional and irrevocable, and shall be performed strictly in accordance with the terms hereof under any circumstances whatsoever. The Borrower hereby waives promptness, diligence, notice of acceptance and any other notice with respect to any of the Existing Subsidiary Letters of Credit Guaranteed Obligations and this Existing Subsidiary Letters of Credit Guaranty and waives presentment, demand for payment, notice of intent to accelerate, notice of dishonor or nonpayment and any requirement that the Administrative Agent or any Lender institute suit, collection proceedings or take any other action to collect the Existing Subsidiary Letters of Credit Guaranteed Obligations, including any requirement that the Administrative Agent or any Lender exhaust any right or take any action against the Existing LC Subsidiaries or any other Person or any collateral (it being the intention of the Administrative Agent, the Lenders and the Borrower that this Existing Subsidiary Letters of Credit Guaranty is to be a guaranty of payment and not of collection). It shall not be necessary for the Administrative Agent or any Lender, in order to enforce any payment by the Borrower hereunder, to institute suit or exhaust its rights and remedies against the Existing LC Subsidiaries or any other Person, including others liable to pay any Existing Subsidiary Letters of Credit Guaranteed Obligations, or to enforce its rights against any security ever given to secure payment thereof. The Borrower hereby expressly waives to the maximum extent permitted by applicable law each and every right to which it may be entitled by virtue of the suretyship laws of the State of New York or any other state in which it may be located, including any and all rights it may have pursuant to Rule 31, Texas Rules of Civil Procedure, Section 17.001 of the Texas Civil Practice and Remedies Code and Chapter 34 of the Texas Business and Commerce Code.

SECTION 2.06 Funding of Borrowings.

(a) Each Lender shall make each Loan to be made by it hereunder on the proposed date thereof by wire transfer of immediately available funds by 2:00 p.m., New York, New York time, to the account of the Administrative Agent most recently designated by it for such purpose by notice to the Lenders; *provided* that Swingline Loans shall be made as provided in Section 2.04. The Borrower hereby irrevocably authorizes the Administrative Agent to disburse the proceeds of each Borrowing requested pursuant to Section 2.03 in immediately available funds by crediting or wiring such proceeds to the deposit account of the Borrower identified in the Borrowing Request or otherwise agreed upon by the Borrower and the Administrative Agent from time to time; *provided* that ABR Committed Loans made to finance the reimbursement of an LC Disbursement as provided in Section 2.05(g) and (h) shall be remitted by the Administrative Agent to the Issuing Bank that made such LC Disbursement.

(b) Unless the Administrative Agent shall have received notice from a Lender prior to the proposed date of any Borrowing (or prior to 11:00 a.m., New York, New York, time, on such date in the case of an ABR Borrowing) that such Lender will not make available to the Administrative Agent such Lender's Applicable Percentage of such Borrowing, the Administrative Agent may assume that such Lender has made such Applicable Percentage of such Borrowing available on such date in accordance with

Section 2.06(a) and may, in reliance upon such assumption, make available to the Borrower a corresponding amount. In such event, if a Lender has not in fact made its Applicable Percentage of the applicable Borrowing available to the Administrative Agent, then the applicable Lender and the Borrower severally agree to pay to the Administrative Agent forthwith on demand such corresponding amount with interest thereon, for each day from the date such amount is made available to the Borrower to the date of payment to the Administrative Agent, at (i) in the case of such Lender, the greater of the Federal Funds Effective Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation, or (ii) in the case of the Borrower, the interest rate applicable to ABR Loans. If the Borrower and such Lender shall pay such interest to the Administrative Agent for the same or an overlapping period, the Administrative Agent shall promptly remit to the Borrower the amount of such interest paid by the Borrower for such period. If such Lender pays its share of the applicable Borrowing to the Administrative Agent, then the amount so paid shall constitute such Lender's Loan included in such Borrowing. Any payment by the Borrower shall be without prejudice to any claim the Borrower may have against a Lender that shall have failed to make such payment to the Administrative Agent.

SECTION 2.07 Interest Elections.

(a) Subject to Section 2.13, each Borrowing initially shall be of the Type specified in the applicable Borrowing Request and, in the case of a Eurodollar Borrowing, shall have an initial Interest Period as specified in such Borrowing Request. Thereafter, subject to Section 2.13, the Borrower may elect to convert such Borrowing to a different Type or to continue such Borrowing and, in the case of a Eurodollar Borrowing, may elect Interest Periods therefor, all as provided in this Section 2.07. The Borrower may elect different options with respect to different portions of the affected Borrowing, in which case each such portion shall be allocated ratably among the Lenders holding the Loans comprising such Borrowing, and the Loans comprising each such portion shall be considered a separate Borrowing. This Section 2.07 shall not apply to Swingline Borrowings, which may not be converted or continued.

(b) To make an election pursuant to this Section 2.07, the Borrower shall notify the Administrative Agent of such election (which notification shall be in writing unless otherwise agreed to by the Administrative Agent) by the time that a Borrowing Request would be required under Section 2.03 if the Borrower were requesting a Borrowing of the Type resulting from such election to be made on the effective date of such election. Each such Interest Election Request shall be irrevocable and shall be made by hand delivery or telecopy or by electronic communication (e-mail) to the Administrative Agent of an Interest Election Request in the form of Exhibit 2.07 (an "Interest Election Request").

(c) Each Interest Election Request shall specify the following information in compliance with Section 2.02:

(i) the Borrowing to which such Interest Election Request applies and, if different options are being elected with respect to different portions thereof, the portions thereof to be allocated to each resulting Borrowing (in which case the information to be specified pursuant to clauses (iii) and (iv) below shall be specified for each resulting Borrowing);

(ii) the effective date of the election made pursuant to such Interest Election Request, which shall be a Business Day;

(iii) whether the resulting Borrowing is to be an ABR Borrowing or a Eurodollar Borrowing; and

(iv) if the resulting Borrowing is a Eurodollar Borrowing, the Interest Period to be applicable thereto after giving effect to such election, which shall be a period contemplated by the definition of the term "*Interest Period*".

If any such Interest Election Request requests a Eurodollar Borrowing but does not specify an Interest Period, then the Borrower shall be deemed to have selected an Interest Period of one month's duration.

(d) Promptly following receipt of an Interest Election Request, the Administrative Agent shall advise each Lender in writing of the details thereof and of such Lender's portion of each resulting Borrowing.

(e) If the Borrower fails to deliver a timely Interest Election Request with respect to a Eurodollar Borrowing prior to the end of the Interest Period applicable thereto, then, unless such Borrowing is repaid as provided herein, at the end of such Interest Period such Borrowing shall be converted to an ABR Borrowing. Notwithstanding any contrary provision hereof, if and so long as an Event of Default is continuing and the Administrative Agent, at the request of the Required Lenders, so notifies the Borrower, then so long as an Event of Default has occurred and is continuing (i) no outstanding Borrowing may be converted to or continued as a Eurodollar Borrowing, and (ii) unless repaid, each Eurodollar Borrowing shall be converted to an ABR Borrowing at the end of the Interest Period applicable thereto.

SECTION 2.08 Termination and Reduction of Commitments; Mandatory Prepayments.

(a) Unless previously terminated, the Total Commitment shall terminate on the Maturity Date.

(b) The Borrower may at any time terminate, or from time to time reduce, the Total Commitment or the Letter of Credit Commitments, in whole or in part; *provided* that (i) each partial reduction of the Total Commitment or Letter of Credit Commitments shall be in an amount that is an integral multiple of $1,000,000 and not less than $5,000,000, (ii) the Borrower shall not terminate or reduce the Commitments if, after giving effect to any concurrent prepayment of the Loans in accordance with Section 2.10, the total Credit Exposures would exceed the Total Commitment and (iii) the Borrower shall not terminate or reduce the Letter of Credit Commitments if, after giving effect to such termination or reduction, (A) the total LC Exposure would exceed the total Letter of Credit Commitments as so reduced or (B) the LC Exposure of any Issuing Bank would exceed its Letter of Credit Commitment.

(c) The Borrower shall notify the Administrative Agent of any election to terminate or reduce the Total Commitment or the Letter of Credit Commitments under Section 2.08(a) at least three Business Days prior to the effective date of such termination or reduction, specifying such election and the effective date thereof. Promptly following receipt of any notice, the Administrative Agent shall advise the Lenders of the contents thereof. Each notice delivered by the Borrower pursuant to this Section 2.08 shall be irrevocable; *provided* that a notice of termination of the Total Commitment or the Letter of Credit Commitments delivered by the Borrower may state that such notice is conditioned upon the effectiveness of other credit facilities or other event, in which case such notice may be revoked by the Borrower (by notice to the Administrative Agent on or prior to the specified effective date) if such condition is not satisfied. Any termination or reduction of the Total Commitment or the Letter of Credit Commitments shall be permanent. Except as expressly provided in Section 2.19, each reduction of the Total Commitment shall be made ratably among the Lenders in accordance with their Applicable Percentages.

SECTION 2.09 Repayment of Loans; Evidence of Debt.

(a) The Borrower hereby unconditionally promises to pay (i) to the Administrative Agent for the account of each Lender the then unpaid principal amount of each Committed Loan on the Maturity Date and (ii) to the Swingline Lender the then unpaid principal amount of each Swingline Loan not later than seven days after the date such Swingline Loan is made. In addition, if the total Credit Exposures exceeds the Total Commitment, the Borrower shall pay to the Administrative Agent for the account of each Lender an aggregate principal amount of Committed Loans or Swingline Loans sufficient to cause the total Credit Exposures not to exceed the Total Commitment; *provided*, *however*, if the repayment of the outstanding Committed Loans and/or Swingline Loans does not cause the total Credit Exposures, to be equal to or less than the Total Commitment, the Borrower shall deposit in an account with the Administrative Agent in the name of the Administrative Agent and for the benefit of the Lenders, an amount in cash equal to the amount by which the total Credit Exposures exceeds the Total Commitment, which cash deposit shall be held by the Administrative Agent for the payment of the Obligations of the Borrower under this Agreement and the other Loan Documents. The Administrative Agent shall have exclusive dominion and control, including the exclusive right of withdrawal, over such account other than any interest earned on the investment of such deposit (which investments shall be made at the option and sole discretion of the Administrative Agent, but only in investments rated at least AA (or equivalent) by at least one nationally recognized rating agency, unless an Event of Default shall have occurred and be continuing, and in any event at the Borrower's risk and expense). Interest or profits, if any, on such investments shall accumulate in such account. Moneys in such account shall be applied by the Administrative Agent to reimburse each Issuing Bank for LC Disbursements for which it has not been reimbursed and, to the extent not so applied, shall be held for the satisfaction of the reimbursement obligations of the Borrower for the LC Exposure at such time, or if the maturity of the Loans has been accelerated (but subject to the consent of the Lenders with LC Exposure representing greater than 51% of the total LC Exposure), be applied to satisfy other obligations of the Borrower under this Agreement and the other Loan Documents. At any time when the sum of the total Credit Exposures does not exceed the Total Commitment and so long as no Default under Section 7.01(b) or Event of Default shall then exist, upon the request of the Borrower the amount of such deposit (to the extent not applied as aforesaid) shall be returned to the Borrower within three Business Days after receipt of such request.

(b) Each Lender shall maintain in accordance with its usual practice an account or accounts evidencing the indebtedness of the Borrower to such Lender resulting from each Loan made by such Lender, including the amounts of principal and interest payable and paid to such Lender from time to time hereunder.

(c) The Administrative Agent shall maintain accounts in which it shall record (i) the amount of each Loan made hereunder, the Class and Type thereof and the Interest Period applicable thereto, (ii) the amount of any principal or interest due and payable or to become due and payable from the Borrower to each Lender hereunder and (iii) the amount of any sum received by the Administrative Agent hereunder for the account of the Lenders and each Lender's share thereof.

(d) The entries made in the accounts maintained pursuant to Section 2.09(b) or (c) shall be prima facie evidence of the existence and amounts of the obligations recorded therein; *provided* that the failure of any Lender or the Administrative Agent to maintain such accounts or any error or conflict therein shall not in any manner affect the obligation of the Borrower to repay the Loans in accordance with the terms of this Agreement.

(e) Any Lender may request that Loans made by it be evidenced by a Committed Note or a Swingline Note, as applicable. In such event, the Borrower shall prepare, execute and deliver to such

Lender a Committed Note or a Swingline Note, as applicable. Thereafter, the Loans evidenced by such Committed Note and interest thereon shall at all times (including after assignment pursuant to Section 9.05) be represented by one or more Committed Notes in such forms payable to the payee named therein.

SECTION 2.10 Voluntary Prepayment of Loans.

(a) The Borrower shall have the right at any time and from time to time to prepay any Borrowing in whole or in part, subject to prior notice in accordance with Section 2.10(b).

(b) The Borrower shall notify the Administrative Agent (or, in the case of prepayment of a Swingline Loan, the Swingline Lender) (which notice shall be made in writing by telecopy or electronic communication (e-mail) in the form of Exhibit 2.10 (a "Notice of Prepayment")) of any prepayment hereunder (i) in the case of prepayment of a Eurodollar Borrowing, not later than 11:00 a.m., New York, New York time, three Business Days before the date of prepayment, (ii) in the case of prepayment of an ABR Borrowing (other than Swingline Loans), not later than 11:00 a.m., New York, New York time, one Business Day prior to the date of prepayment or (iii) in the case of prepayment of a Swingline Loan, not later than 11:00 a.m., New York, New York time on the date of the prepayment. Each such notice shall be irrevocable and shall specify the prepayment date, Type and the principal amount of each Borrowing or portion thereof to be prepaid; *provided* that, if a notice of prepayment is given in connection with a conditional notice of termination of the Total Commitment as contemplated by Section 2.08, then such notice of prepayment may be revoked if such notice of termination of the Total Commitment is revoked in accordance with Section 2.08. Each partial prepayment shall be in an aggregate amount not less than, and shall be an integral multiple of, the amounts shown below with respect to the applicable Type of Loan or Borrowing:

Type of Loan/Borrowing	Integral Multiple of	Minimum Aggregate Amount
Eurodollar Borrowing	$1,000,000	$3,000,000
ABR Borrowing	$1,000,000	$1,000,000
Swingline Loan	$100,000	$1,000,000

Promptly following receipt of any such notice relating to a Borrowing, the Administrative Agent shall advise the Lenders in writing of the contents thereof. If the Borrower fails to designate the Type of Borrowings to be prepaid, partial prepayments shall be applied first to the outstanding Swingline Loans until the outstanding principal amount of all Swingline Loans is repaid in full, then to the outstanding ABR Borrowings until the outstanding principal amount of all ABR Borrowings is repaid in full, and then to the outstanding principal amount of Eurodollar Borrowings. Each partial prepayment of any Borrowing shall be in an amount that would be permitted in the case of an advance of a Borrowing of the same Type as provided in Section 2.02. Each prepayment of a Borrowing shall be applied to the Loans included in the prepaid Borrowing in accordance with the Lenders' Applicable Percentage of such Borrowing. Prepayments shall be accompanied by accrued interest to the extent required by Section 2.12.

SECTION 2.11 Fees.

(a) The Borrower agrees to pay to the Administrative Agent for the account of each Lender (other than a Defaulting Lender) a commitment fee (the "Commitment Fee"), which shall be equal to (a) the Applicable Commitment Fee Rate times (b) the daily average undrawn portion of the such

Lender's Commitment (it being understood that (i) such Lender's Applicable Percentage of the face amount of Letters of Credit issued and outstanding shall be considered a drawn portion of such Lender's Commitment for such purpose and (ii) such Lender's Swingline Exposure shall be excluded from the drawn portion of such Lender's Commitment for such purpose), during the period from the Closing Date to the later of (i) the date on which such Commitment terminates and (ii) the date on which the Loans are paid in full; *provided* that, if such Lender continues to have any Credit Exposure after its Commitment terminates, then such Commitment Fee shall continue to accrue on the daily amount of such Lender's Credit Exposure from the date on which its Commitment terminates to the date on which such Lender ceases to have any Credit Exposure. Accrued Commitment Fees shall be payable in arrears on the last Business Day of March, June, September and December of each year and on the date on which the Commitments terminate and the date the Loans are paid in full, commencing on the first such date to occur after the Closing Date. All Commitment Fees shall be computed on the basis of a year of 365 or 366 days, as the case may be, and shall be payable for the actual number of days elapsed (including the first day but excluding the last day).

(b) The Borrower agrees to pay (i) to the Administrative Agent for the account of each Lender (other than a Defaulting Lender) a participation fee with respect to its participations in Letters of Credit which shall accrue at a rate per annum equal to the Applicable Margin for Eurodollar Loans on the average daily amount of such Lender's LC Exposure (excluding any portion thereof attributable to unreimbursed LC Disbursements) during the period from and including the Closing Date to but excluding the later of the date on which such Lender's Commitment terminates and the date on which such Lender ceases to have any LC Exposure and (ii) to each Issuing Bank that has issued a Letter of Credit, a fronting fee which shall accrue a rate agreed to by the Borrower and such Issuing Bank (and notified to the Administrative Agent) on the average daily amount of the LC Exposure in respect of each such Letter of Credit from the date such Letter of Credit is issued to the date on which there ceases to be any LC Exposure with respect to such Letter of Credit. The Borrower also agrees to pay each Issuing Bank's standard fees with respect to the issuance, amendment, renewal or extension of any Letter of Credit issued by it or the processing of drawings thereunder. Accrued participation fees and fronting fees shall be payable in arrears on the last Business Day of March, June, September and December of each year, commencing on the first such date to occur after the Closing Date; *provided* that all such fees shall be payable on the date on which the Total Commitment terminates and any such fees accruing after the date on which the Total Commitment terminates shall be payable on demand. Any other fees payable to any Issuing Bank pursuant to this paragraph shall be payable within 10 days after demand. All participation fees shall be computed on the basis of a year of 360 days, as applicable, and shall be payable for the actual number of days elapsed (including the first day but excluding the last day).

(c) The Borrower agrees to pay, without duplication, to (i) the Administrative Agent and the Lenders, for their own accounts (or that of their applicable Affiliate), fees payable in the amounts and at the times specified in that letter agreement dated October 23, 2018 among the Borrower, Barclays Bank PLC and JPMorgan Chase Bank, N.A. (as from time to time amended, the "Fee Letter") and (ii) the Administrative Agent, for its own account (or that of its applicable Affiliate), fees payable in amounts and at the times specified in that letter agreement dated October 23, 2018 among the Borrower and Barclays Bank PLC (the "Administrative Agent Fee Letter").

(d) All fees payable hereunder shall be paid on the dates due, in immediately available funds, to the Administrative Agent (or to each Issuing Bank, in the case of fees payable to it) (for distribution, in the case of Commitment Fees and participation fees, to the Lenders). Except as required by law, fees paid shall not be refundable under any circumstance.

SECTION 2.12 Interest.

(a) The Loans comprising each ABR Borrowing shall bear interest at a rate per annum equal to the *sum* of Alternate Base Rate *plus* the Applicable Margin. Each Swingline Loan shall be an ABR Loan and shall bear interest at the Alternate Base Rate plus the Applicable Margin.

(b) The Loans comprising each Eurodollar Borrowing shall bear interest at the Adjusted LIBO Rate for the Interest Period in effect for such Borrowing *plus* the Applicable Margin.

(c) Notwithstanding the foregoing, if any principal of or interest on any Loan or any fee or other amount payable by the Borrower hereunder is not paid when due, whether at stated maturity, upon acceleration or otherwise, such overdue amount shall bear interest, after as well as before judgment, at a rate per annum equal to (i) in the case of overdue principal of any Loan, 2% *plus* the rate otherwise applicable to such Loan as provided above or (ii) in the case of any other amount, 2% *plus* the Alternate Base Rate.

(d) Accrued interest on each Loan shall be payable in arrears on each Interest Payment Date for such Loan; *provided* that (i) interest accrued pursuant to Section 2.12(c) shall be payable on demand, (ii) in the event of any repayment or prepayment of any Loan (other than a prepayment of an ABR Committed Loan prior to the end of the Availability Period), accrued interest on the principal amount repaid or prepaid shall be payable on the date of such repayment or prepayment, (iii) in the event of any conversion of any Eurodollar Committed Loan prior to the end of the current Interest Period therefor, accrued interest on such Loan shall be payable on the effective date of such conversion and (iv) all accrued interest shall be payable upon termination of the Total Commitment.

(e) All interest hereunder shall be computed on the basis of a year of 360-day year, except that interest computed by reference to the Alternate Base Rate at times when the Alternate Base Rate is based on the Prime Rate shall be computed on the basis of a year of 365 days (or 366 days in a leap year), and in each case shall be payable for the actual number of days elapsed (including the first day but excluding the last day). The applicable Alternate Base Rate, Adjusted LIBO Rate or LIBO Rate shall be determined by the Administrative Agent, and such determination shall be conclusive absent manifest error.

SECTION 2.13 Alternate Rate of Interest.

(a) If prior to the commencement of any Interest Period for a Eurodollar Borrowing:

(i) the Administrative Agent determines (which determination shall be conclusive absent manifest error) that adequate and reasonable means do not exist for ascertaining the Adjusted LIBO Rate or the LIBO Rate for such Interest Period; or

(ii) the Administrative Agent is advised by the Required Lenders that the Adjusted LIBO Rate or the LIBO Rate, as applicable, for such Interest Period will not adequately and fairly reflect the cost to such Lenders of making or maintaining their Loans included in such Borrowing for such Interest Period;

then the Administrative Agent shall give notice thereof to the Borrower and the Lenders in writing as promptly as practicable thereafter and, until the Administrative Agent notifies the Borrower and the Lenders in writing that the circumstances giving rise to such notice no longer exist, (i) any Interest Election Request that requests the conversion of any Borrowing to, or continuation of any Borrowing as, a Eurodollar Borrowing shall be ineffective, and (ii) if any Borrowing Request requests a Eurodollar Borrowing, such Borrowing shall be made as an ABR Borrowing.

(b) If at any time the Administrative Agent determines (which determination shall be conclusive absent manifest error) that (i) the circumstances set forth in clause (a)(i) have arisen and such circumstances are unlikely to be temporary or (ii) the circumstances set forth in clause (a)(i) have not arisen but the supervisor for the administrator of the LIBO Rate or a Governmental Authority having jurisdiction over the Administrative Agent has made a public statement identifying a specific date after which the LIBO Rate shall no longer be used for determining interest rates for loans, then the Administrative Agent and the Borrower shall endeavor to establish an alternate rate of interest to the LIBO Rate that gives due consideration to the then prevailing market convention for determining a rate of interest for syndicated loans in the United States at such time, and shall enter into an amendment to this Agreement to reflect such alternate rate of interest and such other related changes to this Agreement as may be applicable (but for the avoidance of doubt, such related changes shall not include a reduction of the Applicable Margin). Notwithstanding anything to the contrary in Section 9.02, such amendment shall become effective without any further action or consent of any other party to this Agreement so long as the Administrative Agent shall not have received, within five Business Days of the date notice of such alternate rate of interest is provided to the Lenders, a written notice from the Required Lenders stating that such Required Lenders object to such amendment. Until an alternate rate of interest shall be determined in accordance with this clause (b) (but, in the case of the circumstances described in clause (ii) of the first sentence of this Section 2.13(b), only to the extent the LIBO Rate for such Interest Period is not available or published at such time on a current basis), (x) any Interest Election Request that requests the conversion of any Borrowing to, or continuation of any Borrowing as, a Eurodollar Borrowing shall be ineffective and (y) if any Borrowing Request requests a Eurodollar Borrowing, such Borrowing shall be made as an ABR Borrowing; provided that, if such alternate rate of interest shall be less than zero, such rate shall be deemed to be zero for the purposes of this Agreement.

SECTION 2.14 Increased Costs.

(a) If any Change in Law shall:

(i) impose, modify or deem applicable any reserve, special deposit or similar requirement against assets of, deposits with or for the account of, or credit extended by, any Lender (except any such reserve requirement reflected in the Adjusted LIBO Rate) or any Issuing Bank;

(ii) subject any Recipient to any Taxes (other than (A) Indemnified Taxes, (B) Taxes described in clauses (b) through (d) of the definition of Excluded Taxes and (C) Connection Income Taxes) on its Loans, loan principal, Letters of Credit, Commitments, or other Obligations, or its deposits, reserves, other liabilities or capital attributable thereto; or

(iii) impose on any Lender, any Issuing Bank or the London interbank market any other condition, cost or expense (other than Taxes) affecting this Agreement or Eurodollar Loans made by such Lender or any Letter of Credit or participation therein;

and the result of any of the foregoing shall be to increase the cost to such Lender or such other Recipient of making, converting to, continuing or maintaining any Loan or of maintaining its obligation to make any such Loan, or to increase the cost to such Lender, such Issuing Bank or such other Recipient of participating in, issuing or maintaining any Letter of Credit (or of maintaining any obligation to participate in or to issue any Letter of Credit), or to reduce the amount of any sum received or receivable by such Lender, Issuing Bank or other Recipient hereunder (whether of principal, interest or any other amount) then, upon request of such Lender, Issuing Bank or other Recipient, the Borrower will pay to such Lender or other Recipient, as the case may be, such additional amount or amounts as will

compensate such Lender, Issuing Bank or other Recipient, as the case may be, for such additional costs incurred or reduction suffered.

(b) If any Lender or Issuing Bank determines that any Change in Law affecting such Lender or Issuing Bank or any lending office of such Lender or such Lender's or Issuing Bank's holding company, if any, regarding capital or liquidity requirements, has or would have the effect of reducing the rate of return on such Lender's or Issuing Bank's capital or on the capital of such Lender's or Issuing Bank's holding company, if any, as a consequence of this Agreement, the Commitment of such Lender or the Loans made by, or participations in Letters of Credit or Swingline Loans held by, such Lender, or the Letters of Credit issued by any Issuing Bank, to a level below that which such Lender or Issuing Bank or such Lender's or Issuing Bank's holding company could have achieved but for such Change in Law (taking into consideration such Lender's or Issuing Bank's policies and the policies of such Lender's or Issuing Bank's holding company with respect to capital adequacy and/or liquidity requirements), then from time to time the Borrower will pay to such Lender or Issuing Bank, as the case may be, such additional amount or amounts as will compensate such Lender or Issuing Bank or such Lender's or Issuing Bank's holding company for any such reduction suffered.

(c) A certificate of a Lender or any Issuing Bank setting forth the amount or amounts necessary to compensate such Lender or Issuing Bank or its holding company, as the case may be, as specified in paragraph (a) or (b) of this Section 2.14 and delivered to the Borrower, shall be conclusive absent manifest error. The Borrower shall pay such Lender or Issuing Bank, as the case may be, the amount shown as due on any such certificate within 10 Business Days after receipt thereof.

(d) Failure or delay on the part of any Lender or any Issuing Bank to demand compensation pursuant to this Section 2.14 shall not constitute a waiver of such Lender's or Issuing Bank's right to demand such compensation; *provided* that the Borrower shall not be required to compensate a Lender or any Issuing Bank pursuant to this Section 2.14 for any increased costs or reductions incurred more than six months prior to the date that such Lender or such Issuing Bank, as the case may be, notifies the Borrower of the Change in Law giving rise to such increased costs or reductions and of such Lender's or such Issuing Bank's intention to claim compensation therefor (except that, if the Change in Law giving rise to such increased costs or reductions is retroactive, then the six-month period referred to above shall be extended to include the period of retroactive effect thereof).

SECTION 2.15 Break Funding Payments. In the event of (a) the payment of any principal of any Eurodollar Loan other than on the last day of an Interest Period applicable thereto (including as a result of an Event of Default), (b) the conversion of any Eurodollar Loan other than on the last day of the Interest Period applicable thereto, (c) the failure to borrow (unless such failure was caused by the failure of a Lender to make such Loan), convert, continue or prepay any Eurodollar Loan, or the failure to convert an ABR Loan to a Eurodollar Loan, on the date specified in any notice delivered pursuant hereto (regardless of whether such notice is permitted to be revocable under Section 2.08 and is revoked in accordance herewith), or (d) the assignment of any Eurodollar Loan other than on the last day of the Interest Period applicable thereto as a result of a request by the Borrower pursuant to Section 2.18, then, in any such event, the Borrower shall compensate each Lender for the loss, cost and expense attributable to such event. In the case of a Eurodollar Loan, the loss to any Lender attributable to any such event shall be deemed to include an amount determined by such Lender to be equal to the excess, if any, of (i) the amount of interest that such Lender would pay for a deposit equal to the principal amount of such Loan for the period from the date of such payment, conversion, failure or assignment to the last day of the then current Interest Period for such Loan (or, in the case of a failure to borrow, convert or continue, the duration of the Interest Period that would have resulted from such borrowing, conversion or continuation) if the interest rate payable on such deposit were equal to the Adjusted LIBO Rate for such Interest Period, over (ii) the amount of interest that such Lender

would earn on such principal amount for such period if such Lender were to invest such principal amount for such period at the interest rate that would be bid by such Lender (or an affiliate of such Lender) for dollar deposits from other banks in the Eurodollar market at the commencement of such period. A certificate of any Lender setting forth any amount or amounts that such Lender is entitled to receive pursuant to this Section 2.15 shall be delivered to the Borrower and shall be conclusive absent manifest error. The Borrower shall pay such Lender the amount shown as due on any such certificate within 10 Business Days after receipt thereof.

SECTION 2.16 Taxes.

(a) Defined Terms. For purposes of this Section 2.16, the term "Requirement of Law" includes FATCA.

(b) Payments Free of Taxes. Any and all payments by or on account of any obligation of the Borrower under any Loan Document shall be made without deduction or withholding for any Taxes, except as required by a Requirement of Law. If any Requirement of Law (as determined in the good faith discretion of the Withholding Agent) requires the deduction or withholding of any Tax from any such payment by the Withholding Agent, then the Withholding Agent shall be entitled to make such deduction or withholding and shall timely pay the full amount deducted or withheld to the relevant Governmental Authority in accordance with applicable Requirement of Law and, if such Tax is an Indemnified Tax, then the sum payable by the Borrower shall be increased as necessary so that after such deduction or withholding has been made (including such deductions and withholdings applicable to additional sums payable under this Section 2.16) the applicable Recipient receives an amount equal to the sum it would have received had no such deduction or withholding been made.

(c) Payment of Other Taxes by the Borrower. Without duplication of any obligation under this Section 2.16, the Borrower shall timely pay to the relevant Governmental Authority in accordance with applicable Requirement of Law, or at the option of the Administrative Agent timely reimburse it for the payment of, any Other Taxes.

(d) Indemnification by the Borrower. Without duplication of any obligation under this Section 2.16, the Borrower shall indemnify each Recipient, within 10 days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority; *provided, however*, the Borrower shall not be required to indemnify a Recipient pursuant to this Section 2.16(d) for any Indemnified Taxes unless such Recipient makes written demand on the Borrower for indemnification for such Indemnified Taxes no later than six months after the earlier of (i) the date on which such Recipient receives written demand from the relevant Governmental Authority for payment of such Indemnified Taxes or (ii) the date on which such Recipient has made payment of such Indemnified Taxes. A certificate as to the amount of such payment or liability delivered to the Borrower by a Lender (with a copy to the Administrative Agent), or by the Administrative Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.

(e) Indemnification by the Lenders. Each Lender shall severally indemnify the Administrative Agent, within 10 days after demand therefor, for (i) any Taxes attributable to such Lender (but only to the extent that the Borrower has not already indemnified the Administrative Agent for such Taxes and without limiting the obligation of the Borrower to do so), (ii) any Taxes attributable to such Lender's failure to comply with the provisions of Section 9.05(c) relating to the maintenance of a Participant

Register and (iii) any Excluded Taxes attributable to such Lender, in each case, that are payable or paid by the Administrative Agent in connection with any Loan Document, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender by the Administrative Agent shall be conclusive absent manifest error. Each Lender hereby authorizes the Administrative Agent to set off and apply any and all amounts at any time owing to such Lender under any Loan Document or otherwise payable by the Administrative Agent to the Lender from any other source against any amount due to the Administrative Agent under this paragraph (e).

(f) Evidence of Payments. As soon as practicable after any payment of Taxes by the Borrower to a Governmental Authority pursuant to this Section 2.16, the Borrower shall deliver to the Administrative Agent the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to the Administrative Agent.

(g) Status of Lenders. (i) Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to the Borrower and the Administrative Agent, at the time or times reasonably requested by the Borrower or the Administrative Agent, such properly completed and executed documentation reasonably requested by the Borrower or the Administrative Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by the Borrower or the Administrative Agent, shall deliver such other documentation prescribed by applicable Requirement of Law or reasonably requested by the Borrower or the Administrative Agent as will enable the Borrower or the Administrative Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in subsections (ii)(A), (ii)(B) and (ii)(D) below) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(ii) Without limiting the generality of the foregoing, in the event that the Borrower is a U.S. Borrower,

(A) any Lender that is a U.S. Person shall deliver to the Borrower and the Administrative Agent on or prior to the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), executed originals of IRS Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding Tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Administrative Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), whichever of the following is applicable:

(1) in the case of a Foreign Lender claiming the benefits of an income Tax treaty to which the United States is a party (x) executed originals of IRS Form W-8BEN or IRS Form W-8BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "interest" article of such Tax treaty and (y) IRS Form W-8BEN or IRS Form W-8BEN-E establishing an

exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "business profits" or "other income" article of such Tax treaty;

(2) executed originals of IRS Form W-8ECI;

(3) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate substantially in the form of Exhibit 2.16-A to the effect that such Foreign Lender is not a "bank" within the meaning of Section 881(c)(3)(A) of the Code, a "10 percent shareholder" of the Borrower within the meaning of Section 881(c)(3)(B) of the Code, or a "controlled foreign corporation" described in Section 881(c)(3)(C) of the Code (a "U.S. Tax Compliance Certificate") and (y) executed originals of IRS Form W-8BEN or IRS Form W-8BEN-E; or

(4) to the extent a Foreign Lender is not the beneficial owner, executed originals of IRS Form W-8IMY, accompanied by IRS Form W-8ECI, IRS Form W-8BEN or IRS Form W-8BEN-E, a U.S. Tax Compliance Certificate substantially in the form of Exhibit 2.16-B or Exhibit 2.16-C, IRS Form W-9, and/or other certification documents from each beneficial owner, as applicable; *provided* that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate substantially in the form of Exhibit 2.16-D on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Administrative Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), executed originals of any other form prescribed by applicable Requirement of Law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax, duly completed and executed, together with such supplementary documentation as may be prescribed by applicable Requirement of Law to permit the Borrower or the Administrative Agent to determine the withholding or deduction required to be made; and

(D) if a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to the Borrower and the Administrative Agent at the time or times prescribed by Requirement of Law and at such time or times reasonably requested by the Borrower or the Administrative Agent such documentation prescribed by applicable Requirement of Law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by the Borrower or the Administrative Agent as may be necessary for the Borrower and the Administrative Agent to comply with their obligations under FATCA and to determine that such Lender has complied with such Lender's obligations under FATCA or to determine the amount to deduct and withhold from such payment. Solely for purposes of this clause (D), "*FATCA*" shall include any amendments made to FATCA after the date of this Agreement.

Each Lender agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify the Borrower and the Administrative Agent in writing of its legal inability to do so.

(h) Treatment of Certain Refunds. If any party determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified pursuant to this Section 2.16 (including by the payment of additional amounts pursuant to this Section 2.16), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made under this Section with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of such indemnified party and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund). Such indemnifying party, upon the request of such indemnified party, shall repay to such indemnified party the amount paid over pursuant to this paragraph (h) (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) in the event that such indemnified party is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this paragraph (h), in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this paragraph (h) the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax had never been paid. This paragraph shall not be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to the indemnifying party or any other Person.

(i) On or before the date that Barclays Bank PLC (or any successor or replacement Administrative Agent) becomes the Administrative Agent hereunder, it shall deliver to the Borrower two duly executed originals of either (i) IRS Form W-9 (or any applicable successor form) certifying that the Administrative Agent is not subject to backup withholding, or (ii) IRS Form W-8IMY (or any applicable successor form) establishing that the Administrative Agent will act as a withholding agent for any U.S. federal withholding tax imposed with respect to any payments made to Lenders under any Loan Document.

(j) Survival. Each party's obligations under this Section 2.16 shall survive the resignation or replacement of the Administrative Agent or any assignment of rights by, or the replacement of, a Lender, the termination of the Commitments and the repayment, satisfaction or discharge of all obligations under any Loan Document.

SECTION 2.17 Payments Generally; Pro Rata Treatment; Sharing of Set-offs.

(a) The Borrower shall make each payment required to be made by the Borrower hereunder (whether of principal, interest or fees, or under Section 2.14, 2.15 or 2.16, or otherwise) prior to 12:00 noon, New York, New York time, on the date when due, in immediately available funds, without set-off or counterclaim. Any amounts received after such time on any date may, in the discretion of the Administrative Agent, be deemed to have been received on the next succeeding Business Day for purposes of calculating interest thereon. All such payments shall be made to the Administrative Agent at its Principal Office, except payments made directly to an Issuing Bank or the Swingline Lender as expressly provided herein and except that payments pursuant to Sections 2.14, 2.15, 2.16 and 9.03 shall be made directly to the Persons entitled thereto. The Administrative Agent shall distribute any such payments received by it for the account of any other Person to the appropriate recipient promptly following receipt thereof. If any payment hereunder shall be due on a day that is not a Business Day, the date for payment shall be extended to the next succeeding Business Day, and, in the case of any payment

accruing interest, interest thereon shall be payable for the period of such extension. All payments hereunder shall be made in dollars.

(b) If at any time insufficient funds are received by and available to the Administrative Agent to pay fully all amounts of principal, unreimbursed LC Disbursements, interest and fees then due hereunder, such funds shall be applied (i) first, to pay interest and fees then due hereunder, ratably among the parties entitled thereto in accordance with the amounts of interest and fees then due to such parties, and (ii) second, to pay principal and unreimbursed LC Disbursements then due hereunder, ratably among the parties entitled thereto in accordance with the amount of principal and unreimbursed LC Disbursements then due to such parties.

(c) If any Lender shall, by exercising any right of setoff or counterclaim or otherwise, obtain payment in respect of any principal of or interest on any of its Loans or other obligations hereunder resulting in such Lender receiving payment of a proportion of the aggregate amount of its Loans and accrued interest thereon or other such obligations greater than its *pro rata* share thereof as provided herein, then the Lender receiving such greater proportion shall (a) notify the Administrative Agent of such fact, and (b) purchase (for cash at face value) participations in the Loans and such other obligations of the other Lenders, or make such other adjustments as shall be equitable, so that the benefit of all such payments shall be shared by the Lenders ratably in accordance with the aggregate amount of principal of and accrued interest on their respective Loans and other amounts owing them*; provided* that:

(i) if any such participations are purchased and all or any portion of the payment giving rise thereto is recovered, such participations shall be rescinded and the purchase price restored to the extent of such recovery, without interest; and

(ii) the provisions of this paragraph shall not be construed to apply to (x) any payment made by the Borrower pursuant to and in accordance with the express terms of this Agreement (including the application of funds arising from the existence of a Defaulting Lender), or (y) any payment obtained by a Lender as consideration for the assignment of or sale of a participation in any of its Loans or participations in LC Disbursements to any assignee or participant, other than to the Borrower or any Subsidiary thereof (as to which the provisions of this paragraph shall apply).

The Borrower consents to the foregoing and agrees, to the extent it may effectively do so under applicable law, that any Lender acquiring a participation pursuant to the foregoing arrangements may exercise against the Borrower rights of setoff and counterclaim with respect to such participation as fully as if such Lender were a direct creditor of the Borrower in the amount of such participation.

(d) Unless the Administrative Agent shall have received notice from the Borrower prior to the date on which any payment is due to the Administrative Agent for the account of the Lenders or the Issuing Banks hereunder that the Borrower will not make such payment, the Administrative Agent may assume that the Borrower has made such payment on such date in accordance herewith and may, in reliance upon such assumption, distribute to the Lenders or such Issuing Bank, as the case may be, the amount due. In such event, if the Borrower has not in fact made such payment, then each of the Lenders or the Issuing Banks, as the case may be, severally agrees to repay to the Administrative Agent forthwith on demand the amount so distributed to such Lender or such Issuing Bank with interest thereon, for each day from the date such amount is distributed to it to the date of payment to the Administrative Agent, at the greater of the Federal Funds Effective Rate and a rate determined by the Administrative Agent in accordance with banking industry rules or interbank compensation.

(e) If any Lender shall fail to make any payment required to be made by it pursuant to Section 2.04(b), 2.05(h), 2.06(b), 2.17(d) or 8.08, then the Administrative Agent may, in its discretion (notwithstanding any contrary provision hereof), (i) apply any amounts thereafter received by the Administrative Agent for the account of such Lender to satisfy such Lender's obligations under such Sections until all such unsatisfied obligations are fully paid and/or (ii) hold any such amounts in a segregated account as cash collateral for, and application to, any future funding obligations of such Lender under such Sections; in the case of each of (i) and (ii) above, in any order as determined by the Administrative Agent in its discretion.

SECTION 2.18 Mitigation of Obligations; Replacement of Lenders.

(a) Designation of a Different Lending Office. If any Lender requests compensation under Section 2.14, or requires the Borrower to pay any Indemnified Taxes or additional amounts to any Lender or any Governmental Authority for the account of any Lender pursuant to Section 2.16, then such Lender shall (at the request of the Borrower) use reasonable efforts to designate a different lending office for funding or booking its Loans hereunder or to assign its rights and obligations hereunder to another of its offices, branches or affiliates, if, in the judgment of such Lender, such designation or assignment (i) would eliminate or reduce amounts payable pursuant to Section 2.14 or 2.16, as the case may be, in the future, and (ii) would not subject such Lender to any unreimbursed cost or expense and would not otherwise be disadvantageous to such Lender. The Borrower hereby agrees to pay all reasonable costs and expenses incurred by any Lender in connection with any such designation or assignment.

(b) Replacement of Lenders. If any Lender requests compensation under Section 2.14, or if the Borrower is required to pay any Indemnified Taxes or additional amounts to any Lender or any Governmental Authority for the account of any Lender pursuant to Section 2.16 and, in each case, such Lender has declined or is unable to designate a different lending office in accordance with Section 2.18(a), or if any Lender is a Defaulting Lender or a Non-Consenting Lender, then the Borrower may, at its sole expense and effort, upon notice to such Lender and the Administrative Agent, require such Lender to assign and delegate, without recourse (in accordance with and subject to the restrictions contained in, and consents required by, Section 9.05), all of its interests, rights (other than its existing rights to payments pursuant to Section 2.14 or Section 2.16) and obligations under this Agreement and the related Loan Documents to an Eligible Assignee that shall assume such obligations (which assignee may be another Lender, if a Lender accepts such assignment); *provided* that:

(i) the Borrower shall have paid to the Administrative Agent the assignment fee (if any) specified in Section 9.05;

(ii) such Lender shall have received payment of an amount equal to the outstanding principal of its Loans and participations in LC Disbursements, accrued interest thereon, accrued fees and all other amounts payable to it hereunder and under the other Loan Documents (including any amounts under Section 2.15) from the assignee (to the extent of such outstanding principal and accrued interest and fees) or the Borrower (in the case of all other amounts);

(iii) in the case of any such assignment resulting from a claim for compensation under Section 2.14 or payments required to be made pursuant to Section 2.16, such assignment will result in a reduction in such compensation or payments thereafter;

(iv) such assignment does not conflict with applicable law; and

(v) in the case of any assignment resulting from a Lender becoming a Non-Consenting Lender, the applicable assignee shall have consented to the applicable amendment, waiver or consent.

A Lender shall not be required to make any such assignment or delegation if, prior thereto, as a result of a waiver by such Lender or otherwise, the circumstances entitling the Borrower to require such assignment and delegation cease to apply.

SECTION 2.19 Defaulting Lenders. (a) Notwithstanding anything to the contrary contained in this Agreement, if any Lender becomes a Defaulting Lender, then, until such time as such Lender is no longer a Defaulting Lender, to the extent permitted by applicable law:

(i) Such Defaulting Lender's right to approve or disapprove any amendment, waiver or consent with respect to this Agreement shall be restricted as set forth in Section 9.02.

(ii) Any payment of principal, interest, fees or other amounts received by the Administrative Agent for the account of such Defaulting Lender (whether voluntary or mandatory, at maturity, pursuant to Article VII or otherwise) or received by the Administrative Agent from a Defaulting Lender pursuant to Section 9.09 shall be applied at such time or times as may be determined by the Administrative Agent as follows: *first*, to the payment of any amounts owing by such Defaulting Lender to the Administrative Agent hereunder; *second*, to the payment on a *pro rata* basis of any amounts owing by such Defaulting Lender to any Issuing Bank or Swingline Lender hereunder; *third*, to Cash Collateralize the Issuing Banks' Fronting Exposure with respect to such Defaulting Lender in accordance with Section 2.20; *fourth*, as the Company may request (so long as no Default or Event of Default exists), to the funding of any Loan in respect of which such Defaulting Lender has failed to fund its portion thereof as required by this Agreement, as determined by the Administrative Agent; *fifth*, if so determined by the Administrative Agent and the Borrower, to be held in a deposit account and released *pro rata* in order to (x) satisfy such Defaulting Lender's potential future funding obligations with respect to Loans under this Agreement and (y) Cash Collateralize the Issuing Banks' future Fronting Exposure with respect to such Defaulting Lender with respect to future Letters of Credit issued under this Agreement, in accordance with Section 2.20; *sixth*, to the payment of any amounts owing to the Lenders, the Issuing Banks or the Swingline Lender as a result of any judgment of a court of competent jurisdiction obtained by any Lender, any Issuing Bank or the Swingline Lender against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement; *seventh,* so long as no Default or Event of Default exists, to the payment of any amounts owing to the Borrower as a result of any judgment of a court of competent jurisdiction obtained by the Borrower against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement; and *eighth*, to such Defaulting Lender or as otherwise directed by a court of competent jurisdiction; *provided* that if (x) such payment is a payment of the principal amount of any Loans or LC Disbursements in respect of which such Defaulting Lender has not fully funded its appropriate share, and (y) such Loans were made or the related Letters of Credit were issued at a time when the conditions set forth in Section 3.02 were satisfied or waived, such payment shall be applied solely to pay the Loans of, and LC Disbursements owed to, all Non-Defaulting Lenders on a *pro rata* basis prior to being applied to the payment of any Loans of, or LC Disbursements owed to, such Defaulting Lender until such time as all Loans and funded and unfunded participations in Letter of Credit Commitments and Swingline Loans are held by the Lenders *pro rata* in accordance with the Commitments without giving effect to Section 2.19(a)(iv). Any payments, prepayments or other amounts paid or payable to a Defaulting Lender that are applied (or held) to pay amounts owed by a Defaulting Lender or to

post Cash Collateral pursuant to this Section 2.19(a)(ii) shall be deemed paid to and redirected by such Defaulting Lender, and each Lender irrevocably consents hereto.

(iii) (A) Each Defaulting Lender shall be entitled to receive a Commitment Fee for any period during which that Lender is a Defaulting Lender only to extent allocable to the sum of (1) the outstanding principal amount of the Loans funded by it, and (2) its Applicable Percentage of the stated amount of Letters of Credit for which it has provided Cash Collateral pursuant to Section 2.20.

(B) Each Defaulting Lender shall be entitled to receive letter of credit fees under Section 2.11(b) for any period during which that Lender is a Defaulting Lender only to the extent allocable to its Applicable Percentage of the stated amount of Letters of Credit for which it has provided Cash Collateral pursuant to Section 2.20.

(C) With respect to any Commitment Fee or letter of credit fee under Section 2.11(b) not required to be paid to any Defaulting Lender pursuant to clause (A) or (B) above, the Borrower shall (x) pay to each Non-Defaulting Lender that portion of any such fee otherwise payable to such Defaulting Lender with respect to such Defaulting Lender's LC Exposure or Swingline Loans that has been reallocated to such Non-Defaulting Lender pursuant to clause (iv) below, (y) pay to each Issuing Bank and Swingline Lender, as applicable, the amount of any such fee otherwise payable to such Defaulting Lender to the extent allocable to such Issuing Bank's or Swingline Lender's Fronting Exposure to such Defaulting Lender, and (z) not be required to pay the remaining amount of any such fee.

(iv) All or any part of such Defaulting Lender's LC Exposure and Swingline Loans shall be reallocated among the Non-Defaulting Lenders in accordance with their respective Applicable Percentages (calculated without regard to such Defaulting Lender's Commitment) but only to the extent that (x) the conditions set forth in Section 3.02 are satisfied at the time of such reallocation (and, unless the Borrower shall have otherwise notified the Administrative Agent at such time, the Borrower shall be deemed to have represented and warranted that such conditions are satisfied at such time), and (y) such reallocation does not cause the aggregate Credit Exposure of any Non-Defaulting Lender to exceed such Non-Defaulting Lender's Commitment. Subject to Section 9.18, no reallocation hereunder shall constitute a waiver or release of any claim of any party hereunder against a Defaulting Lender arising from that Lender having become a Defaulting Lender, including any claim of a Non-Defaulting Lender as a result of such Non-Defaulting Lender's increased exposure following such reallocation.

(v) If the reallocation described in clause (iv) above cannot, or can only partially, be effected, the Borrower shall, without prejudice to any right or remedy available to it hereunder or under law, (x) *first*, prepay Swingline Loans in an amount equal to the Swingline Lenders' Fronting Exposure and (y) *second*, Cash Collateralize the Issuing Banks' Fronting Exposure in accordance with the procedures set forth in Section 2.20.

(b) If the Borrower, the Administrative Agent, the Swingline Lender and each Issuing Bank agree in writing that a Lender is no longer a Defaulting Lender, the Administrative Agent will so notify the parties hereto, whereupon as of the effective date specified in such notice and subject to any conditions set forth therein (which may include arrangements with respect to any Cash Collateral), that Lender will, to the extent applicable, purchase at par that portion of outstanding Loans of the other Lenders or take such other actions as the Administrative Agent may determine to be necessary to cause

the Loans and funded and unfunded participations in Letters of Credit and Swingline Loans to be held *pro rata* by the Lenders in accordance with their respective Commitments (without giving effect to Section 2.19(a)(iv), whereupon, that Lender will cease to be a Defaulting Lender; *provided* that no adjustments will be made retroactively with respect to fees accrued or payments made by or on behalf of the Borrower while that Lender was a Defaulting Lender; and *provided*, *further*, that except to the extent otherwise expressly agreed by the affected parties, no change hereunder from Defaulting Lender to Lender will constitute a waiver or release of any claim of any party hereunder arising from that Lender's having been a Defaulting Lender.

(c) So long as any Lender is a Defaulting Lender, (i) the Swingline Lender shall not be required to fund any Swingline Loans unless it is satisfied that it will have no Fronting Exposure after giving effect to such Swingline Loan and (ii) no Issuing Bank shall be required to issue, extend, renew or increase any Letter of Credit unless it is satisfied that it will have no Fronting Exposure after giving effect thereto.

SECTION 2.20 Cash Collateral.

At any time that there shall exist a Defaulting Lender, within one Business Day following the written request of the Administrative Agent or any Issuing Bank (with a copy to the Administrative Agent) the Borrower shall Cash Collateralize the Issuing Banks' Fronting Exposure with respect to such Defaulting Lender (determined after giving effect to Section 2.19(a)(iv) and any Cash Collateral provided by such Defaulting Lender) in an amount not less than the Minimum Collateral Amount.

(a) The Borrower, and to the extent provided by any Defaulting Lender, such Defaulting Lender, hereby grants to the Administrative Agent, for the benefit of the Issuing Banks, and agrees to maintain, a first priority security interest in all such Cash Collateral as security for the Defaulting Lenders' LC Exposure, to be applied pursuant to clause (b) below. If at any time the Administrative Agent determines that Cash Collateral is subject to any right or claim of any Person other than the Administrative Agent and the Issuing Banks as herein provided, or that the total amount of such Cash Collateral is less than the Minimum Collateral Amount, the Borrower will, promptly upon demand by the Administrative Agent, pay or provide to the Administrative Agent additional Cash Collateral in an amount sufficient to eliminate such deficiency (after giving effect to any Cash Collateral provided by the Defaulting Lender).

(b) Application. Notwithstanding anything to the contrary contained in this Agreement, Cash Collateral provided under this Section 2.20 or Section 2.19 in respect of Letters of Credit shall be applied to the satisfaction of the Defaulting Lender's LC Exposure (including, as to Cash Collateral provided by a Defaulting Lender, any interest accrued on such obligation) for which the Cash Collateral was so provided, prior to any other application of such property as may otherwise be provided for herein.

(c) Termination of Requirement. Cash Collateral (or the appropriate portion thereof) provided to reduce any Issuing Bank's Fronting Exposure shall no longer be required to be held as Cash Collateral pursuant to this Section 2.20 following (i) the elimination of the applicable Fronting Exposure (including by the termination of Defaulting Lender status of the applicable Lender), or (ii) the determination by the Administrative Agent and each Issuing Bank that there exists excess Cash Collateral; *provided* that, subject to Section 2.19 the Person providing Cash Collateral and each Issuing Bank may agree that Cash Collateral shall be held to support future anticipated Fronting Exposure or other obligations and *provided further* that to the extent that such Cash Collateral was provided by the Borrower, such Cash Collateral shall remain subject to the security interest granted pursuant to the Loan Documents.

SECTION 2.21 Accordion Facilities.

(a) Before the Maturity Date, the Borrower may by written notice to Administrative Agent elect to request the establishment of one or more increases in the Total Commitment (each increase to the Total Commitment, a "New Commitment" and, collectively, the "New Commitments"), in an aggregate amount not to exceed $1,000,000,000. Each such notice shall specify the date (each, an "Increased Amount Date") on which the Borrower proposes that the New Commitments shall be effective, which shall be a date not less than ten Business Days after the date on which such notice is delivered to the Administrative Agent; *provided* that any Lender offered or approached to provide all or a portion of the New Commitments may elect or decline, in its sole discretion, to provide a New Commitment. Such New Commitments shall become effective as of such Increased Amount Date; *provided further* that, (i) no Event of Default shall exist on such Increased Amount Date before or after giving effect to such New Commitments; (ii) the Borrower shall make any payments required pursuant to this Agreement (including Section 2.15) to the Administrative Agent and the Lenders (other than any Defaulting Lender), in connection with the New Commitments, as applicable; (iii) the Administrative Agent, the Swingline Lender and the Issuing Banks shall have consented to such prospective lender (such consent not to be unreasonably withheld or delayed) and (iv) such New Commitment will be documented solely as an increase to the Total Commitment, without any change to the terms of revolving facility provided for herein. The proceeds of each New Commitment shall be used for working capital and general corporate purposes. For the avoidance of doubt, no Lender shall be obligated to provide any portion of the New Commitments.

(b) On any Increased Amount Date on which New Commitments are effected, subject to the satisfaction of the foregoing terms and conditions, (a) each of the Lenders with Commitments shall assign to each Lender with a New Commitment (each such Lender and each Eligible Assignee that agrees to an extension of the Maturity Date in accordance with Section 2.22(c), a "New Lender") and each of the New Lenders shall purchase from each of the Lenders with Commitments, at the principal amount thereof (together with accrued interest), such interests in the Committed Loans outstanding on such Increased Amount Date as shall be necessary in order that, after giving effect to all such assignments and purchases, such Committed Loans will be held by existing Lenders with Committed Loans and New Lenders ratably in accordance with their Commitments after giving effect to the addition of such New Commitments to the Total Commitment, (b) each New Commitment shall be deemed for all purposes a Commitment and each Loan made thereunder (a "New Loan") shall be deemed, for all purposes, a Committed Loan and (c) each New Lender shall become a Lender with respect to the New Commitment and all matters relating thereto.

(c) The New Commitments shall be effected by a joinder agreement (the "New Loan Increase Joinder") substantially in the form of Exhibit 2.21 executed by the Borrower, the Administrative Agent and each Lender making such New Commitment, in form and substance reasonably satisfactory to each of them, and consented to by the Administrative Agent, the Issuing Banks and the Swingline Lender. Each New Loan Increase Joinder may, without the consent of any other Lenders, effect such amendments to this Agreement and the other Loan Documents as may be necessary or appropriate, in the opinion of the Administrative Agent, to effect the provisions of this Section 2.21.

SECTION 2.22 Extension of Maturity Date.

(a) At least 60 days but not more than 90 days prior to any anniversary of the Effective Date (the "Applicable Anniversary"), the Borrower, by written notice to the Administrative Agent, may request an extension of the Maturity Date in effect at such time by one year from its then scheduled expiration (which request may be conditioned on a minimum level of Commitments from Extension Consenting Lenders and New Lenders); provided that the Maturity Date shall not be extended

more than twice. The Administrative Agent shall promptly notify each Lender of such request, and each Lender shall in turn, in its sole discretion, not later than 30 days prior to the Applicable Anniversary, notify the Borrower and the Administrative Agent in writing as to whether such Lender will consent to such extension. If any Lender shall fail to notify the Administrative Agent and the Borrower in writing of its consent to any such request for extension of the Maturity Date at least 30 days prior to the Applicable Anniversary, such Lender shall be deemed to be an Extension Non-Consenting Lender with respect to such request. The Administrative Agent shall notify the Borrower not later than 25 days prior to the Applicable Anniversary of the decision of the Lenders regarding the Borrower's request for an extension of the Maturity Date.

(b) If all the Lenders consent in writing to any such request in accordance with Section 2.22(a), the Maturity Date in effect at such time shall, effective as at the Applicable Anniversary (the "Extension Date"), be extended for one year; provided that on each Extension Date the applicable conditions set forth in Section 3.02 shall be satisfied. If less than all of the Lenders consent in writing to any such request in accordance with Section 2.22(a), the Maturity Date in effect at such time shall, effective as at the applicable Extension Date and subject to Section 2.22(d), be extended as to those Lenders that so consented (each a "Extension Consenting Lender") but shall not be extended as to any other Lender (each a "Extension Non-Consenting Lender"). To the extent that the Maturity Date is not extended as to any Lender pursuant to this Section 2.22 and the Commitment of such Lender is not assumed in accordance with Section 2.22(c) on or prior to the applicable Extension Date, the Commitment of such Extension Non-Consenting Lender shall automatically terminate in whole on such unextended Maturity Date without any further notice or other action by the Borrower, such Lender or any other Person; provided that such Extension Non-Consenting Lender's rights under Sections 2.14, 2.16 and 9.03, and its obligations under Section 8.08, shall survive the Maturity Date for such Lender as to matters occurring prior to such date. It is understood and agreed that no Lender shall have any obligation whatsoever to agree to any request made by the Borrower for any requested extension of the Maturity Date.

(c) If less than all of the Lenders consent to any such request pursuant to Section 2.22(a), the Administrative Agent shall promptly so notify the Extension Consenting Lenders, and each Extension Consenting Lender may, in its sole discretion, give written notice to the Administrative Agent not later than ten days prior to the Extension Date of the amount of the Extension Non-Consenting Lenders' Commitments for which it is willing to accept an assignment. If the Extension Consenting Lenders notify the Administrative Agent that they are willing to accept assignments of Commitments in an aggregate amount that exceeds the amount of the Commitments of the Extension Non-Consenting Lenders, such Commitments shall be allocated among the Extension Consenting Lenders willing to accept such assignments in such amounts as are agreed between the Borrower and the Administrative Agent. If after giving effect to the assignments of Commitments described above there remains any Commitments of Extension Non-Consenting Lenders, the Borrower may arrange for one or more Extension Consenting Lenders or other Eligible Assignees as New Lenders to assume, effective as of the Extension Date, any Extension Non-Consenting Lender's Commitment and all of the obligations of such Extension Non-Consenting Lender under this Agreement thereafter arising, without recourse to or warranty by, or expense to, such Extension Non-Consenting Lender; provided, however, that the amount of the Commitment of any such New Lender as a result of such substitution shall in no event be less than $20,000,000 unless the amount of the Commitment of such Extension Non-Consenting Lender is less than $20,000,000, in which case such New Lender shall assume all of such lesser amount; and provided further that:

(i) any such Extension Consenting Lender or New Lender shall have paid to such Extension Non-Consenting Lender (A) the aggregate principal amount of, and any interest accrued and unpaid to the effective date of the assignment on, the outstanding Borrowings, if any,

of such Extension Non-Consenting Lender plus (B) any accrued but unpaid facility fees owing to such Extension Non-Consenting Lender as of the effective date of such assignment;

(ii) all additional costs reimbursements, expense reimbursements and indemnities payable to such Extension Non-Consenting Lender, and all other accrued and unpaid amounts owing to such Extension Non-Consenting Lender hereunder, as of the effective date of such assignment shall have been paid to such Extension Non-Consenting Lender;

(iii) with respect to any such New Lender, the applicable processing and recordation fee required under Section 9.05 for such assignment shall have been paid; and

(iv) each Issuing Bank shall have consented to any such assignment to a New Lender.

provided further that such Extension Non-Consenting Lender's rights under Sections 2.14, 2.16 and 9.03, and its obligations under Section 8.08, shall survive such substitution as to matters occurring prior to the date of substitution. At least five Business Days prior to any Extension Date, (A) each such New Lender, if any, shall have delivered to the Borrower and the Administrative Agent an Assumption Agreement, duly executed by such New Lender, such Extension Non-Consenting Lender, the Borrower and the Administrative Agent and (B) any such Extension Consenting Lender shall have delivered confirmation in writing satisfactory to the Borrower and the Administrative Agent as to the increase in the amount of its Commitment. Upon the payment or prepayment of all amounts referred to in clauses (i), (ii) and (iii) of the immediately preceding sentence, each such Extension Consenting Lender or New Lender, as of the Extension Date, will be substituted for such Extension Non-Consenting Lender under this Agreement and shall be a Lender for all purposes of this Agreement, without any further acknowledgment by or the consent of the other Lenders, and the obligations of each such Extension Non-Consenting Lender hereunder shall, by the provisions hereof, be released and discharged.

(d) If (after giving effect to any assignments or assumptions pursuant to Section 2.22(c)) Lenders having Commitments equal to more than 50% of the Commitments in effect immediately prior to the Extension Date consent in writing to a requested extension (whether by execution or delivery of an Assumption Agreement or otherwise) not later than one Business Day prior to such Extension Date, the Administrative Agent shall so notify the Borrower, and, subject to the satisfaction of the applicable conditions in Section 3.02, the Maturity Date for each Extension Consenting Lender and each New Lender then in effect shall be extended for the additional one year period as described in Section 2.22(b); provided that the Maturity Date for each Extension Non-Consenting Lender shall not be so extended. Promptly following each Extension Date, the Administrative Agent shall notify the Lenders (including, without limitation, each New Lender) of the extension of the scheduled Maturity Date in effect immediately prior thereto and shall thereupon record in the Register the relevant information with respect to each such Extension Consenting Lender and each such New Lender. On and after each Extension Date, the Applicable Percentage of each Lender's participation in Letter of Credit Commitments shall be calculated after giving effect to the Commitments of the Lenders after the occurrence of such Extension Date.

ARTICLE III
CONDITIONS PRECEDENT

SECTION 3.01 Conditions Precedent to the Closing Date. The obligations of the Lenders to make Loans hereunder and the obligations of the Issuing Banks to issue Letters of Credit hereunder shall not become effective until the date on which each of the following conditions is satisfied or waived in accordance with Section 9.02:

(a) The Administrative Agent shall have received the following, each dated as of the Closing Date:

(i) this Agreement executed by each party hereto;

(ii) the Guaranty executed by each party thereto;

(iii) a certificate of an officer and of the secretary or an assistant secretary of the Borrower and each Guarantor, certifying, *inter alia* (A) true and complete copies of each of the certificate of incorporation or other appropriate organizational document, as amended and in effect, of such Person, the bylaws or similar organizational document, as amended and in effect, of such Person and the resolutions adopted by the Board of Directors or similar governing body of such Person (1) authorizing the execution, delivery and performance by such Person of each Loan Document to which such Person is or will be a party, (2) approving the Loan Documents to which such Person is or will be a party and (3) authorizing officers of such Person to execute and deliver the Loan Documents to which such Person is or will be a party and any related documents and (B) the incumbency and specimen signatures of the officers of such Person executing any documents on its behalf; provided, that there shall be no requirement to deliver such certificates for any Guarantor that is not a Material Subsidiary;

(iv) a certificate of a Responsible Officer of the Borrower certifying as to the satisfaction of the conditions in Sections 3.01(c) and (e); and

(v) signed opinions addressed to the Administrative Agent and the Lenders from legal counsel to the Borrower and the Guarantors covering the matters reasonably requested by the Administrative Agent; provided, that there shall be no requirement to deliver opinions of legal counsel for any Guarantor that is not a Material Subsidiary.

(b) The Administrative Agent shall have received a certificate of appropriate officials as to the existence and good standing of the Borrower and each Guarantor.

(c) There shall not have occurred any change, effect, event or occurrence since December 31, 2017 that, individually or in the aggregate, has had, or would reasonably be expected to have, a Material Adverse Effect.

(d) The Administrative Agent shall have received evidence that the Existing Credit Agreement has been, or substantially concurrently with the Closing Date will be, terminated and the obligations outstanding thereunder repaid in full pursuant to customary payoff documentation, including evidence of the release of Liens, if any, granted in connection therewith.

(e) The conditions precedent set forth in Sections 3.02(b) and (d) shall have theretofore been satisfied or waived in accordance with Section 9.02.

(f) (i) The Administrative Agent shall have received (for distribution to the Lenders so requesting) at least three business days prior to the Closing Date all documentation and other information about the Borrower and Guarantors as required by regulatory authorities under applicable "know your customer" and anti-money laundering rules and regulations, including without limitation the Patriot Act, to the extent reasonably requested by any Lender to the Administrative Agent and conveyed by the Administrative Agent to the Borrower in writing at least 10 days prior to the Closing Date and (ii) to the extent the Borrower qualifies as a "legal entity customer" under the Beneficial Ownership Regulation, at

least five days prior to the Closing Date, any Lender that has requested, in a written notice to the Borrower at least 10 days prior to the Closing Date, a Beneficial Ownership Certification in relation to the Borrower shall have received such Beneficial Ownership Certification (provided that, upon the execution and delivery by such Lender of its signature page to this Agreement, the condition set forth in this clause (ii) shall be deemed to be satisfied).

(g) All fees required to be paid on the Closing Date pursuant to the Fee Letters referenced in Section 2.11(c) and all reasonable out-of-pocket expenses required to be paid on the Closing Date, to the extent invoiced at least two Business Days prior to the Closing Date shall have been paid.

The Administrative Agent shall notify the Borrower and the Lenders of the Closing Date in writing promptly upon such conditions precedent being satisfied (or waived in accordance with Section 9.02), and such notice shall be conclusive and binding.

SECTION 3.02 Conditions Precedent to Each Credit Event. Except with respect to Committed Loans made by the Lenders pursuant to Section 2.05(h), the obligations of (i) the Lenders to make Loans hereunder (ii) the obligations of the Issuing Banks to issue or extend any Letter of Credit under this Agreement and (iii) each extension of the Maturity Date pursuant to Section 2.22 is subject to the satisfaction or waiver in accordance with Section 9.02 of the following conditions precedent:

(a) The conditions precedent set forth in Section 3.01 shall have theretofore been satisfied or waived in accordance with Section 9.02;

(b) The representations and warranties set forth in Article IV and in the other Loan Documents shall be true and correct in all material respects as of, and as if such representations and warranties were made on, the Borrowing Date of the proposed Loan or Letter of Credit, as the case may be (unless such representation and warranty expressly relates to an earlier date), and by the Borrower's delivery of a Borrowing Request, the Borrower shall be deemed to have certified to the Administrative Agent and the Lenders that such representations and warranties are true and correct in all material respects;

(c) The Company shall have complied with the provisions of Section 2.03, Section 2.04 or Section 2.05, as the case may be;

(d) No Default or Event of Default shall have occurred and be continuing or would result from such Credit Event; and

(e) A Borrowing Request shall have been delivered in accordance with the terms of Section 2.03.

The acceptance by the Borrower of the benefits of each Credit Event shall constitute a representation and warranty by the Borrower to each of the Lenders that all of the conditions specified in this Section 3.02 above exist as of that time.

ARTICLE IV
REPRESENTATIONS AND WARRANTIES

On the Closing Date and on each Borrowing Date, the Borrower makes the following representations and warranties to the Administrative Agent and the Lenders:

SECTION 4.01 Organization and Qualification. The Borrower and each of the Material Subsidiaries (a) is a corporation, partnership or limited liability company duly organized or formed, validly

existing and in good standing under the laws of the state of its incorporation, organization or formation, (b) has all requisite corporate, partnership, limited liability company or other power and all material governmental licenses, authorizations, consents and approvals required to carry on its business as now conducted and (c) is duly qualified to do business and is in good standing in every jurisdiction in which the failure to be so qualified would, individually or together with all such other failures of the Borrower and the Subsidiaries, have a Material Adverse Effect.

SECTION 4.02 Authorization, Validity, Etc. The Borrower and each Guarantor has all requisite corporate (or other organizational) power and authority to execute and deliver, and to incur and perform its obligations under this Agreement and under the other Loan Documents to which it is a party and, in the case of the Borrower, to make the Borrowings hereunder, and all such actions have been duly authorized by all necessary proceedings on its behalf. This Agreement and the other Loan Documents have been duly and validly executed and delivered by or on behalf of the Borrower (and, on the Closing Date, with respect to the Guaranty, each Guarantor) party thereto and constitute valid and legally binding agreements of the Borrower and each Guarantor, as applicable, enforceable against the Borrower or the Guarantor in accordance with the respective terms thereof, except (a) as may be limited by bankruptcy, insolvency, reorganization, moratorium, fraudulent transfer, fraudulent conveyance or other similar laws relating to or affecting the enforcement of creditors' rights generally, and by general principles of equity (including principles of good faith, reasonableness, materiality and fair dealing) which may, among other things, limit the right to obtain equitable remedies (regardless of whether considered in a proceeding in equity or at law) and (b) as to the enforceability of provisions for indemnification for violation of applicable securities laws, limitations thereon arising as a matter of law or public policy.

SECTION 4.03 Governmental Consents, Etc. No authorization, consent, approval, license or exemption of or registration, declaration or filing with any Governmental Authority, is necessary for the valid execution and delivery of, or the incurrence and performance by the Borrower or each Guarantor of its obligations under, any Loan Document to which it is a party, except those that have been obtained and such matters relating to performance as would ordinarily be done in the ordinary course of business after the Closing Date.

SECTION 4.04 No Breach or Violation of Agreements or Restrictions, Etc. Neither the execution and delivery of, nor the incurrence and performance by any Loan Party of its obligations under, the Loan Documents to which it is a party, nor the extensions of credit contemplated by the Loan Documents, will (a) breach or violate any applicable Requirement of Law, (b) result in any breach or violation of any of the terms, covenants, conditions or provisions of, or constitute a default under, or result in the creation or imposition of (or the obligation to create or impose) any Lien upon any of its property or assets (other than Liens created or contemplated by this Agreement) pursuant to the terms of, any indenture, mortgage, deed of trust, agreement or other instrument to which it or any of the Subsidiaries is party or by which any of its properties or assets, or those of any of the Subsidiaries is bound or to which it is subject, except for breaches, violations and defaults under clauses (a) and (b) that neither individually nor in the aggregate could reasonably be expected to result in a Material Adverse Effect, or (c) violate any provision of the organizational documents of such Loan Party.

SECTION 4.05 Properties. Each of the Borrower and the Material Subsidiaries has good title to, or valid leasehold or other interests in, all its real and personal property material to its business free of all Liens securing Indebtedness except for such Liens permitted under Section 6.02.

SECTION 4.06 Litigation and Environmental Matters. (a) Except as disclosed in the most recent Annual Report on Form 10-K delivered by the Borrower to the Lenders, there is no action, suit or proceeding by or before any arbitrator or Governmental Authority pending against or, to the knowledge

of the Borrower, threatened against or affecting the Borrower or any of the Material Subsidiaries as to which there is a reasonable possibility of an adverse determination and that, if adversely determined, could reasonably be expected to result in a Material Adverse Effect.

(b) Except as disclosed in the most recent Annual Report on Form 10-K delivered by the Borrower to the Lenders, the associated liabilities and costs of the Borrower's compliance with Environmental Laws (including any capital or operating expenditures required for clean-up or closure of properties currently or previously owned, any capital or operating expenditures required to achieve or maintain compliance with environmental protection standards imposed by Environmental Laws or as a condition of any license, permit or contract, any related constraints on operating activities, including any periodic or permanent shutdown of any facility or reduction in the level of or change in the nature of operations conducted thereat, any costs or liabilities in connection with off-site disposal of wastes or Hazardous Materials, and any actual or potential liabilities to third parties, including employees, and any related costs and expenses) are unlikely to result in a Material Adverse Effect.

SECTION 4.07 Financial Statements.

(a) The consolidated balance sheet of the Borrower and the Subsidiaries as at December 31, 2017 and the related consolidated statements of income, comprehensive income, shareholders' equity and cash flows of the Borrower and the Subsidiaries for the fiscal year ended on said date, with the opinion thereon of PricewaterhouseCoopers LLP and set forth in the Borrower's 2017 Annual Report on Form 10-K, as filed with the SEC, fairly present, in all material respects, the consolidated financial position of the Borrower and the Subsidiaries as of such date and their consolidated results of operations and cash flows for such fiscal year in accordance with GAAP.

(b) The unaudited consolidated balance sheets of the Borrower and the Subsidiaries as at March 31, 2018, June 30, 2018 and September 30, 2018 and the related consolidated statements of income and cash flows of the Borrower and the Subsidiaries for the three month period ended on such date and set forth in the Borrower's Quarterly Report on Form 10-Q for its fiscal quarter then ended, as filed with the SEC, fairly present, in all material respects, the consolidated financial position of the Borrower and the Subsidiaries as of such date and their consolidated results of their operations cash flows for the applicable time period ended on said date (subject to the absence of footnotes and to normal year-end and audit adjustments), in accordance with GAAP applied on a basis consistent with the financial statements referred to in Section 4.07(a).

(c) On the Closing Date and since the date of the Annual Report on Form 10-K delivered by the Borrower to the Lenders with respect to the fiscal year ended December 31, 2017, there has been no material adverse change in the business, assets, liabilities or financial condition of the Borrower and the Subsidiaries, taken as a whole.

SECTION 4.08 Disclosure.

(a) As of the Closing Date only, information heretofore furnished by the Borrower to the Administrative Agent or any Lender for purposes of or in connection with this Agreement or any transaction contemplated hereby, together with the Executive Summary is, when taken as a whole, true and accurate in all material respects on the date as of which such information is stated or certified. The Executive Summary and the reports, financial statements, certificates or other written information furnished by or on behalf of the Borrower to the Administrative Agent or any Lender in connection with the syndication or negotiation of this Agreement or delivered hereunder (as modified or supplemented by other information so furnished) on or prior to the Closing Date, when taken as a whole, do not contain any material misstatement

of fact or omits to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; *provided* that, with respect to any projected financial information, the Borrower represents only that such information was prepared in good faith based upon assumptions believed by the Borrower to be reasonable at the time (it being recognized, however, that projections as to future events are not to be viewed as facts and that the actual results during the period or periods covered by any projects may materially different from the projected results).

(b) As of the Closing Date, to the knowledge of the Borrower, the information included in the Beneficial Ownership Certification provided on or prior to the Closing Date to any Lender in connection with this Agreement is true and correct in all respects.

SECTION 4.09 Investment Company Act. The Borrower is not, and no Loan Party is required to register as, an "*investment company*," as such term is defined in the Investment Company Act of 1940, as amended.

SECTION 4.10 ERISA. Each member of the ERISA Group has fulfilled its obligations under the minimum funding standards of ERISA and the Code with respect to each Plan and is in compliance in all material respects with the presently applicable provisions of ERISA and the Code with respect to each Plan, except where the failure to so fulfill such obligations and such noncompliance individually, or together with all such failures to fulfill such obligations and all such noncompliance, could not reasonably be expected to result in a Material Adverse Effect. No member of the ERISA Group has (i) sought a waiver of the minimum funding standard under Section 412 of the Code in respect of any Plan, (ii) failed to make any contribution or payment to any Plan or Multiemployer Plan or in respect of any Benefit Arrangement, or made any amendment to any Plan or Benefit Arrangement, which has resulted or could result in the imposition of a Lien or the posting of a bond or other security under ERISA or the Code or (iii) incurred any liability under Title IV of ERISA other than a liability to the PBGC for premiums under Section 4007 of ERISA, which waiver, failure, amendment or liability individually, or collectively with all such waivers, failures, amendments or liabilities, could reasonably be expected to result in a Material Adverse Effect. Except where the failure to so fulfill such obligations and such noncompliance could individually, or together with all such failures to fulfill such obligations and all such noncompliance could reasonably be expected to result in a Material Adverse Effect, (i) no "reportable event", as defined in Section 4043 of ERISA or the regulations issued thereunder, has occurred with respect to a Plan (other than an event for which the 30 day notice period is waived),. (ii) neither the Borrower nor any member of its ERISA Group has received any notice from the PBGC or a plan administrator relating to an intention to terminate any Plan or Plans or to appoint a trustee to administer any Plan and (iii) neither the Borrower or any members of its ERISA Group has any liability with respect to the withdrawal or partial withdrawal from any Plan or Multiemployer Plan, nor has the Borrower, any members of its ERISA Group, or any Multiemployer Plan from the Borrower or member of its ERISA Group received any notice concerning the imposition of Withdrawal Liability or a determination that a Multiemployer Plan is, or is expected to be, insolvent within the meaning of Title IV of ERISA.

SECTION 4.11 Tax Returns and Payments. The Borrower and the Material Subsidiaries have caused to be filed all federal income Tax returns and other material Tax returns, statements and reports (or obtained extensions with respect thereto) which are required to be filed and have paid or deposited or made adequate provision in accordance with GAAP for the payment of all Taxes (including estimated Taxes shown on such returns, statements and reports) which are shown to be due pursuant to such returns, except for Taxes being contested in good faith by appropriate proceedings for which adequate reserves in accordance with GAAP have been created on the books of the Borrower and the Subsidiaries and where the failure to pay such Taxes (individually or in the aggregate for the Borrower and the Subsidiaries) would not have a Material Adverse Effect.

SECTION 4.12 Compliance with Laws and Agreements. Each of the Borrower and the Material Subsidiaries is in compliance with all laws, regulations and orders of any Governmental Authority applicable to it or its property and all indentures, agreements and other instruments binding upon it or its property, except where the failure to do so, individually or in the aggregate for the Borrower and the Material Subsidiaries, could not reasonably be expected to result in a Material Adverse Effect.

SECTION 4.13 Purpose of Loans.

(a) All proceeds of the Loans will be used for the purposes set forth in Section 5.07.

(b) Neither the Borrower nor any agent acting on its behalf has taken or will take any action which might cause this Agreement or any other Loan Document to violate Regulation T, Regulation U, Regulation X, or any other regulation of the Board or to violate the Exchange Act. Margin stock does not constitute more than 25% of the assets of the Borrower, or of the Borrower and the Subsidiaries on a consolidated basis, and the Borrower does not intend or foresee that it will ever do so.

SECTION 4.14 Foreign Assets Control Regulations, etc. (a) To the extent applicable, neither any Letter of Credit nor any part of the proceeds of the Loans will (i) be used to violate in any material respect the Trading with the Enemy Act, as amended, or (ii) be used, directly or indirectly or made available to any subsidiary, joint venture partner or any other Person to fund or support any activities or business of or with any Person, or in any country or territory, that, at the time of such funding or extension, is, or whose government is, at the time of making such Loans or extension of such Letters of Credit, the subject of any economic or financial sanctions or trade embargoes administered or enforced by the U.S. Government, including any enforced by the U.S. Department of Treasury's Office of Foreign Assets Control or the U.S. Department of State (collectively, "Sanctions").

(b) Neither the Borrower nor any Subsidiary, nor, to the knowledge of the Borrower, any director, officer, employee, agent, affiliate or representative of the Borrower or any Subsidiary is a Person that is, or is owned or controlled by, a Sanctioned Person. The Borrower and the Subsidiaries are in compliance, in all material respects, with the Patriot Act.

(c) Neither any Letter of Credit nor any part of the proceeds of the Loans will be used, directly or indirectly, for any payments to any person in violation of any Anti-Corruption Laws, to the extent the Anti-Corruption Laws apply to the Borrower or one of the Subsidiaries.

SECTION 4.15 Solvency. On the Closing Date, after giving effect to the Transactions, the Borrower and its Subsidiaries, on a consolidated basis, are Solvent.

ARTICLE V
AFFIRMATIVE COVENANTS

From the Closing Date until the Commitments have expired or been terminated and principal of and interest on each Loan and all fees payable hereunder shall have been paid in full and all Letters of Credit shall have expired or terminated (or other arrangements satisfactory to the applicable Issuing Bank made with respect thereto) and all LC Disbursements shall have been reimbursed, the Borrower covenants and agrees with the Lenders that:

SECTION 5.01 Financial Statements and Other Information. The Borrower will furnish to the Administrative Agent:

(a) within ten days after the date in each fiscal year on which the Borrower is required to file its Annual Report on Form 10-K with the SEC or, if earlier, 100 days after the end of each fiscal year (i) such Annual Report, and (ii) its audited consolidated balance sheet and the related consolidated statements of income, comprehensive income, operations, shareholders' equity and cash flows as of the end of and for such year, setting forth in each case in comparative form the figures as of the end of and for the previous fiscal year, all reported on by, and accompanied by an opinion (without a "*going concern*" or like qualification or exception and without any qualification or exception as to the scope of their audit) of, PricewaterhouseCoopers LLP, or other independent public accountants of recognized national standing to the effect that such consolidated financial statements present fairly in all material respects the financial position, results of operations and cash flows of the Borrower and the Subsidiaries on a consolidated basis in accordance with GAAP; *provided*, *however*, that (x) the Borrower shall be deemed to have furnished said Annual Report on Form 10-K for purposes of clause (i) if it shall have timely made the same available on "EDGAR" and/or on its home page on the worldwide web (at the date of this Agreement located at http://www.kindermorgan.com) and complied with the last grammatical paragraph of this Section 5.01 in respect thereof, and (y) if said Annual Report contains such consolidated balance sheet and such consolidated statements of results of income, comprehensive income, shareholders' equity and cash flows, and the report thereon of such independent public accountants (without qualification or exception, and to the effect, as specified above), the Borrower shall not be required to comply with clause (ii);

(b) within five days after each date in each fiscal year on which the Borrower is required to file a Quarterly Report on Form 10-Q with the SEC or, if earlier, 50 days after the end of each fiscal quarter (i) such Quarterly Report, and (ii) its consolidated balance sheet and the related consolidated statements of income and cash flows as of the end of and for the fiscal quarter to which said Quarterly Report relates and the then elapsed portion of the fiscal year, setting forth in each case in comparative form the figures as of the end and for the corresponding period or periods of the previous fiscal year, all certified by a Responsible Officer as presenting fairly in all material respects the financial condition and results of operations of the Borrower and the Subsidiaries on a consolidated basis in accordance with GAAP, subject to normal year-end audit adjustments and the absence of footnotes; *provided*, *however*, that (x) the Borrower shall be deemed to have furnished said Quarterly Report for purposes of clause (i) if it shall have timely made the same available on "EDGAR" and/or on its home page on the worldwide web (at the date of this Agreement located at http://www.kindermorgan.com) and complied with the last grammatical paragraph of this Section 5.01 in respect thereof, and (y) if said Quarterly Report contains such consolidated balance sheet and consolidated statements of income and cash flows, and such certifications, the Borrower shall not be required to comply with clause (ii);

(c) simultaneously with the delivery of each set of financial statements referred to in clauses (a) and (b) above, a certificate in substantially the form of Exhibit 5.01 signed by an authorized financial or accounting officer of the Borrower (i) setting forth in reasonable detail the calculations required to establish whether the Borrower was in compliance with the requirements of Section 6.07, (ii) (A) in the case of the first set of financial statements delivered following the Closing Date, setting forth a list of the Material Subsidiaries, and (B) in the case of each set of financial statements delivered thereafter, an update of any change in the list of the Material Subsidiaries or stating that there has been no such change, and (iii) stating whether any Default or Event of Default exists on the date of such certificate and, if any Default or Event of Default then exists, setting forth the details thereof and the action which the Borrower is taking or proposes to take with respect thereto;

(d) prompt written notice of the following:

(i) the occurrence of any Default or Event of Default;

(ii) any other development that results in, or could reasonably be expected to result in, a Material Adverse Effect; and

(iii) any change in the information provided in the Beneficial Ownership Certification delivered to such Lender that would result in a change to the list of beneficial owners identified in such certification;

(each notice delivered under this Section 5.01(d) to be accompanied by a statement of a Responsible Officer setting forth the details of the event or development requiring such notice and any action taken or proposed to be taken with respect thereto);

(e) without duplication of any other requirement of this Section 5.01, promptly upon the mailing thereof to the public shareholders of the Borrower generally, copies of all financial statements, reports and proxy statements so mailed;

(f) promptly upon the filing thereof with the SEC, copies of all registration statements (other than the exhibits thereto and any registration statements on Form S-8 or its equivalent) and reports on Form 8-K which the Borrower shall have filed with the SEC;

(g) if and when any member of the ERISA Group (i) gives or is required to give notice to the PBGC of any "*reportable event*" (as defined in Section 4043 of ERISA) (other than such event as to which the 30-day notice requirement is waived) with respect to any Plan which would reasonably be expected to constitute grounds for a termination of such Plan under Title IV of ERISA, or knows that the plan administrator of any Plan has given or is required to give notice of any such reportable event, a copy of the notice of such reportable event given or required to be given to the PBGC; (ii) receives notice of complete or partial material Withdrawal Liability under Title IV of ERISA or notice that any Multiemployer Plan is insolvent, is in "endangered" or "critical" status (within the meaning of Section 432 of the Code or Section 305 of ERISA) or has been terminated, a copy of such notice; (iii) receives notice from the PBGC under Title IV of ERISA of an intent to terminate, impose liability (other than for premiums under Section 4007 of ERISA) in respect of, or appoint a trustee to administer any Plan, a copy of such notice; (iv) fails to satisfy, or applies for a waiver of, the minimum funding standard under Section 412 of the Code, a copy of such application; (v) gives notice of intent to terminate any Plan under Section 4041(c) of ERISA, a copy of such notice and other information filed with the PBGC; (vi) gives notice of withdrawal from any Plan pursuant to Section 4063 of ERISA, a copy of such notice; or (vii) fails to make any payment or contribution to any Plan or Multiemployer Plan or in respect of any Benefit Arrangement or makes any amendment to any Plan or Benefit Arrangement which has resulted or could result in the imposition of a Lien or the posting of a bond or other security, a certificate of the chief financial officer or the chief accounting officer of the Borrower setting forth details as to such occurrence and action, if any, which the Borrower or applicable member of the ERISA Group is required or proposes to take; and

(h) (x) from time to time such other information (other than projections) regarding the business, affairs or financial condition of the Borrower or any Subsidiary as the Required Lenders or the Administrative Agent may reasonably request and (y) promptly following any request therefor, information and documentation reasonably requested by the Administrative Agent for distribution to the Lenders so requesting for purposes of compliance with applicable "know your customer" and anti-money laundering rules and regulations, including the Patriot Act and the Beneficial Ownership Regulation.

Information required to be delivered pursuant to Section 5.01(a), 5.01(b) or 5.01(f) above shall be deemed to have been delivered on the date on which the Borrower provides notice to the Administrative Agent and the Lenders that such information has been posted on "EDGAR" or the Borrower's

website or another website identified in such notice and accessible by the Administrative Agent and the Lenders without charge (and the Borrower hereby agrees to provide such notice); *provided* that such notice may be included in a certificate delivered pursuant to Section 5.01(c).

SECTION 5.02 Existence, Conduct of Business. The Borrower will, and will cause each of the Material Subsidiaries to, do or cause to be done all things necessary to preserve, renew and keep in full force and effect its legal existence and the rights, licenses, permits, privileges and franchises material to the conduct of its business, except where the failure to do so (individually or collectively with all such failures) could not reasonably expected to have a Material Adverse Effect; *provided* that the foregoing shall not prohibit any merger, consolidation, liquidation or dissolution permitted under Section 6.03.

SECTION 5.03 Payment of Obligations. The Borrower will, and will cause each of the Material Subsidiaries to, pay, before the same shall become delinquent or in default, its Indebtedness and Tax liabilities but excluding Indebtedness (other than the Obligations) that is not in excess of $150,000,000, except where (a) the validity or amount thereof is being contested in good faith by appropriate proceedings, (b) the Borrower or such Material Subsidiary has set aside on its books adequate reserves with respect thereto in accordance with GAAP or (c) the failure to make payment pending such contest could not reasonably be expected to result in a Material Adverse Effect.

SECTION 5.04 Maintenance of Properties; Insurance.

(a) The Borrower will keep, and will cause each Material Subsidiary to keep, all property material to the conduct its business (taken as a whole) in good working order and condition, ordinary wear and tear excepted, in the reasonable judgment of the Borrower.

(b) The Borrower will maintain or cause to be maintained with, in the good faith judgment of the Borrower, financially sound and reputable insurers, or through self-insurance, insurance with respect to its properties and business and the properties and businesses of the Subsidiaries against loss or damage of the kinds customarily insured against by business enterprises of established reputation engaged in the same or similar business and similarly situated, of such types and in such amounts as are customarily carried under similar circumstances by such other corporations. Such insurance may include self-insurance or be subject to co-insurance, deductibility or similar clauses which, in effect, result in self-insurance of certain losses, *provided* that such self-insurance is in accord with the approved practices of business enterprises of established reputation similarly situated and adequate insurance reserves are maintained in connection with such self-insurance, and, notwithstanding the foregoing provisions of this Section 5.04 the Borrower or any Subsidiary may effect workers' compensation or similar insurance in respect of operations in any state or other jurisdiction any through an insurance fund operated by such state or other jurisdiction or by causing to be maintained a system or systems of self-insurance in accord with applicable laws.

SECTION 5.05 Books and Records; Inspection Rights. The Borrower will, and will cause each of the Material Subsidiaries to, keep, in accordance with GAAP, books of record and account. The Borrower will, and will cause each of the Material Subsidiaries to, permit any representatives designated by the Administrative Agent or any Lender, upon reasonable prior notice during normal business hours, and, if the Borrower shall so request, in the presence of a Responsible Officer or an appointee of a Responsible Officer, at the expense of the Administrative Agent or such Lender (unless an Event of Default exists, in which event the expense shall be that of the Borrower) to visit and inspect its properties, to examine and make extracts from its books and records (subject to compliance with confidentiality agreements and applicable copyright law), and to discuss its affairs, finances and condition

with its officers, all at such times, and as often, as reasonably requested, but unless an Event of Default exists, no more frequently than once during each calendar year.

SECTION 5.06 Compliance with Laws. The Borrower will, and will cause each of the Material Subsidiaries to, comply with all Requirements of Law applicable to it or its property, except where the failure to do so, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect. The Borrower will maintain in effect and enforce policies and procedures designed to ensure compliance by the Borrower, its Subsidiaries and their respective directors, officers, employees and agents with Anti-Corruption Laws and applicable Sanctions.

SECTION 5.07 Use of Proceeds. The proceeds of the Loans will be used for working capital and other general corporate purposes.

SECTION 5.08 Additional Guarantors. The Borrower shall cause each Subsidiary (including, without limitation, any Division Successor) (other than any Excluded Subsidiary) formed or otherwise purchased or acquired after the Closing Date (including each Subsidiary that ceases to constitute an Excluded Subsidiary after the Closing Date) to execute a supplement to the Guaranty and become a Guarantor within 45 days of the occurrence of the applicable event specified in this Section 5.08 (or such longer period of time as the Administrative Agent shall reasonably agree).

ARTICLE VI
NEGATIVE COVENANTS

From the Closing Date until the Commitments have expired or terminated and principal of and interest on each Loan and all fees payable hereunder have been paid in full and all Letters of Credit have expired or terminated (or other arrangements satisfactory to the applicable Issuing Bank made with respect thereto) and all LC Disbursements shall have been reimbursed, the Borrower covenants and agrees with the Lenders that:

SECTION 6.01 Indebtedness of Non-Guarantor Subsidiaries. The Borrower will not permit any Subsidiary that is not a Guarantor (each a "Non-Guarantor Subsidiary") to create, incur or assume Indebtedness other than the following:

(a) Indebtedness existing as of the Closing Date and set forth on Schedule 6.01 and any Indebtedness incurred to refund, extend, refinance or otherwise replace such Indebtedness; provided that the principal amount of such Indebtedness does not exceed the principal amount of Indebtedness refinanced (plus the amount of penalties, premiums, fees, accrued interest and reasonable expenses and other obligations incurred therewith) at the time of the refinancing;

(b) Indebtedness owing to the Borrower or its Subsidiaries;

(c) Indebtedness that is (or was) secured by Liens permitted pursuant to Section 6.02(b) or (c) and any Indebtedness incurred to refund, extend, refinance or otherwise replace such Indebtedness; provided, that the principal amount of such Indebtedness does not exceed the principal amount of Indebtedness refinanced (plus the amount of penalties, premiums, fees, accrued interest and reasonable expenses and other obligations incurred therewith) at the time of refinancing;

(d) (i) Indebtedness attaching to any property or asset prior to the acquisition thereof by any Non-Guarantor Subsidiary or of, or attaching to any property or asset of, any Person that becomes a Non-Guarantor Subsidiary after the date hereof prior to the time such Person becomes a Non-Guarantor

Subsidiary, in each case, outstanding prior to the acquisition of such property or asset or such Person becoming a Non-Guarantor Subsidiary; *provided* that such Indebtedness was not incurred in contemplation of or in connection with such acquisition or such Person becoming a Non-Guarantor Subsidiary, as the case may be and (ii) and any Indebtedness incurred to refund, extend, refinance or otherwise replace such Indebtedness (plus the amount of penalties, premiums, fees, accrued interest and reasonable expenses and other obligations incurred therewith);

(e) Indebtedness of Foreign Subsidiaries; and

(f) Indebtedness of Non-Wholly-owned Subsidiaries.

SECTION 6.02 Liens. The Borrower will not, and will not permit any Subsidiary to, create, incur, assume or permit to exist any Lien securing Indebtedness on any property or asset now owned or hereafter acquired by it except:

(a) Liens existing as of the Closing Date (including any replacement, extension or renewal of any such Lien permitted upon or in the same assets (other than after acquired property that is affixed or incorporated into the property covered by such Lien) theretofore subject to such Lien or the replacement, extension or renewal (without increase in the amount or change in any direct or contingent obligor except to the extent otherwise permitted hereunder) of the Indebtedness secured thereby);

(b) Liens securing (A) Capital Lease Obligations, or (B) Indebtedness incurred to finance the acquisition, construction, expansion or improvement of any fixed or capital assets of the Borrower or its Subsidiaries; *provided* that (x) such Liens attach at all times only to the assets so financed except for accessions to such property, improvements thereof and general intangibles relating thereto, and the proceeds and the products thereof and (y) individual financings of equipment provided by one lender may be cross collateralized to other financings of equipment provided by such lender;

(c) Liens existing on any property or asset prior to the acquisition thereof by the Borrower or any Subsidiary or existing on any property or asset of any Person that becomes a Subsidiary after the date hereof prior to the time such Person becomes a Subsidiary, in each case, pursuant to security documents in effect prior to the acquisition of such property or asset or such Person becoming a Subsidiary ("Existing Security Documents"), and securing Indebtedness whose incurrence, for purposes of this Agreement, by virtue of acquisition of such property or asset, or by virtue of such Person so becoming a Subsidiary, would not result in a violation of Section 6.07; *provided* that (i) such Lien is not created in contemplation of or in connection with such acquisition or such Person becoming a Subsidiary, as the case may be, (ii) such Lien shall not apply to any other property or assets of the Borrower or any Subsidiary except to the extent such Lien attaches to such property or assets pursuant to Existing Security Documents, (iii) such Lien shall secure only those obligations which it secures on the date of such acquisition or the date such Person becomes a Subsidiary, as the case may be, and extensions, renewals and replacements thereof that do not increase the outstanding principal amount thereof. For purposes of this Section 6.02(c), the Indebtedness so secured shall be deemed to have been incurred on the last day of the fiscal quarter then most recently ended; and

(d) Liens, not otherwise permitted by the foregoing clauses (a) and (b), securing Indebtedness in an aggregate amount not exceeding 15% of Consolidated Net Tangible Assets.

SECTION 6.03 Fundamental Changes. The Borrower will not, and will not permit any Material Subsidiary to, merge into or consolidate with any other Person, or permit any other Person to merge into or consolidate with it, or sell, transfer, lease or otherwise dispose of (including pursuant to a Division

and whether in one transaction or in a series of transactions) all (or substantially all) of its assets, or all or substantially all of the stock of or other equity interest in any of the Material Subsidiaries (in each case, whether now owned or hereafter acquired), or liquidate or dissolve, unless: (a) at the time thereof and immediately after giving effect thereto no Event of Default or Default shall have occurred and be continuing; and (b) (i) the Borrower or a Material Subsidiary is the surviving entity or the recipient of the assets so sold, transferred, leased or otherwise disposed of in any such sale, transfer, lease or other disposition of assets, *provided,* that no such merger, consolidation, sale, transfer, lease or other disposition shall have the effect of releasing the Borrower from any of the Obligations or (ii) such merger, consolidation, sale, transfer, lease or other disposition, when taken together with all other consolidations, mergers or sales of assets by the Borrower or any Material Subsidiary since the Closing Date, shall not result in the disposition by the Borrower and the Material Subsidiaries of assets in an amount that would constitute all or substantially all of the consolidated assets of the Borrower and the Material Subsidiaries.

SECTION 6.04 Restricted Payments. The Borrower will not declare or make, or agree to pay or make, directly or indirectly, any Restricted Payment except (a) distributions with respect to the Capital Stock of the Borrower, so long as both before and after the making of such distribution, no Event of Default shall have occurred and be continuing, (b) any Capital Stock split, Capital Stock reverse split, dividend of Borrower Capital Stock or similar transaction will not constitute a Restricted Payment, and (c) acquisitions by officers, directors and employees of the Borrower of equity interests in the Borrower through cashless exercise of options pursuant to, and in accordance with the terms of, management and/or employee stock plans, stock subscription agreements or shareholder agreements.

SECTION 6.05 Transactions with Affiliates. The Borrower will conduct, and cause each of the Subsidiaries to conduct, all transactions with any of its Affiliates (other than the Borrower or the Subsidiaries) on terms that are substantially as favorable to the Borrower or such Subsidiary as it would obtain in a comparable arm's-length transaction with a Person that is not an Affiliate, provided that the foregoing shall be deemed to be satisfied with respect to any transaction that is approved by a majority of the independent members of the Borrower's board of directors, or of a committee thereof consisting solely of independent directors, and provided, further that the foregoing restrictions shall not apply to:

(a) the payment of customary fees for management, consulting and financial services rendered to the Borrower and the Subsidiaries and (ii) customary investment banking fees paid for services rendered to the Borrower and the Subsidiaries in connection with divestitures, acquisitions, financings and other transactions;

(b) transactions permitted by Section 6.04;

(c) the payment of any fees or expenses incurred or paid by the Borrower or any of its Subsidiaries in connection with the Transactions, this Agreement and the other Loan Documents and the transactions contemplated hereby and thereby;

(d) the issuance of Capital Stock of the Borrower to the management of the Borrower or any of its Subsidiaries in connection with the Transactions or pursuant to arrangements described in clause (f) of this Section 6.05;

(e) loans, advances, provision of credit support and other investments by (or to) the Borrower and the Subsidiaries;

(f) employment and severance arrangements among the Borrower and the Subsidiaries and their respective officers and employees in the ordinary course of business;

(g) payments by the Borrower and the Subsidiaries pursuant to tax sharing agreements among the Borrower and the Subsidiaries on customary terms to the extent attributable to the ownership or operation of the Borrower and the Subsidiaries;

(h) the payment of customary fees and reasonable out of pocket costs to, and indemnities provided on behalf of, directors, managers, consultants, officers and employees of the Borrower and the Subsidiaries in the ordinary course of business to the extent attributable to the ownership or operation of the Borrower and the Subsidiaries; and

(i) transactions pursuant to agreements set forth on Schedule 6.05 or any amendment thereto to the extent such an amendment is not adverse, taken as a whole, to the Lenders in any material respect.

SECTION 6.06 Restrictive Agreements. The Borrower will not, and will not permit any of the Material Subsidiaries that are not Guarantors to, directly or indirectly, enter into, incur or permit to exist any agreement or other arrangement that prohibits, restricts or imposes any condition upon the ability of any non-Guarantor Material Subsidiary to pay dividends or other distributions with respect to any shares of its Capital Stock or to make or repay loans (including subordinate loans) or advances to the Borrower or any Guarantor, *provided* that the foregoing shall not apply to (a) restrictions and conditions imposed by law or by this Agreement, (b) customary restrictions and conditions contained in agreements relating to the sale of all or substantially all of the Capital Stock or assets of a Subsidiary pending such sale, *provided* such restrictions and conditions apply only to the Subsidiary that is to be sold and such sale is permitted hereunder, (c) restrictions and conditions existing on the date hereof identified on Schedule 6.06 (but shall apply to any extension or renewal of, or any amendment or modification expanding the scope of, any such restriction or condition) and (d) restrictions or conditions contained in, or existing by reason of, any agreement or instrument relating to any Subsidiary at the time such Subsidiary was merged or consolidated with or into, or acquired by, the Borrower or a Subsidiary or became a Subsidiary and not created in contemplation thereof.

SECTION 6.07 Ratio of Consolidated Net Indebtedness to Consolidated EBITDA. Commencing with the last day of the first full fiscal quarter following the Closing Date and on the last day of each fiscal quarter ended thereafter, the Borrower will not permit the ratio of Consolidated Net Indebtedness to Consolidated EBITDA for the most recent four full fiscal quarters ended as of the last day of such applicable fiscal quarter, to exceed 5.50:1.00.

In addition, for purposes of this Section 6.07, Hybrid Securities up to an aggregate amount of 5% of Total Capitalization (after giving effect to the following exclusion) shall be excluded from Consolidated Net Indebtedness.

SECTION 6.08 Use of Proceeds. The Borrower will not request any Borrowing or Letter of Credit, and the Borrower shall not use, and shall procure that its Subsidiaries and its or their respective directors, officers, employees and agents shall not use, the proceeds of any Borrowing or Letter of Credit (A) in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any Person in violation of any Anti-Corruption Laws, (B) for the purpose of funding, financing or facilitating any activities, business or transaction of or with any Sanctioned Person, or in any Sanctioned Country, or (C) in any manner that would result in the violation of any Sanctions applicable to any party hereto.

ARTICLE VII
EVENTS OF DEFAULT

SECTION 7.01 Events of Default and Remedies. If any of the following events ("Events of Default") shall occur and be continuing:

(a) the principal of any Loan or any reimbursement obligation in respect of any LC Disbursement shall not be paid when and as the same shall become due and payable, whether at the due date thereof or at a date fixed for prepayment thereof or otherwise;

(b) any interest on any Loan or any fee or any other amount (other than an amount referred to in clause (a) of this Article) payable by a Loan Party under this Agreement or any other Loan Document shall not be paid, when and as the same shall become due and payable, and such failure shall continue unremedied for a period of five Business Days;

(c) any representation or warranty made or, for purposes of Article III, deemed made by or on behalf of the Borrower herein, at the direction of the Borrower or by any Loan Party in any other Loan Document or in any document, certificate or financial statement delivered in connection with this Agreement or any other Loan Document shall prove to have been incorrect in any material respect when made or deemed made or reaffirmed, as the case may be;

(d) the Borrower shall fail to observe or perform any covenant, condition or agreement contained in Section 5.01(d)(i), 5.02 (with respect to the Borrower's existence) or 5.07 or in Article VI;

(e) any Loan Party shall fail to perform or observe any other term, covenant or agreement contained in this Agreement (other than those specified in Section 7.01(a), Section 7.01(b) or Section 7.01(d)) or any other Loan Document to which it is a party and, in any event, such failure shall remain unremedied for 30 calendar days after the earlier of (i) written notice of such failure shall have been given to the Borrower by the Administrative Agent or any Lender or, (ii) a Responsible Officer of the Borrower becomes aware of such failure;

(f) other than as specified in Section 7.01(a) or (b), (i) the Borrower or any Subsidiary fails to make (whether as primary obligor or as guarantor or other surety) any payment of principal of, or interest or premium, if any, on any item or items of Indebtedness (other than as specified in Section 7.01(a) or Section 7.01(b)) or any payment in respect of any Hedging Agreement, in each case when the same becomes due and payable (whether by scheduled maturity, required payment or prepayment, acceleration, demand or otherwise), beyond any period of grace provided with respect thereto (not to exceed 30 days); *provided* that the aggregate outstanding principal amount of all Indebtedness or payment obligations in respect of all Hedging Agreements as to which such a payment default shall occur and be continuing is equal to or exceeds $150,000,000, or (ii) the Borrower or any Subsidiary fails to duly observe, perform or comply with any agreement with any Person or any term or condition of any instrument, if such failure, either individually or in the aggregate, shall have resulted in the acceleration of the payment of Indebtedness with an aggregate face amount which is equal to or exceeds $150,000,000; *provided* that this Section 7.01(f) shall not apply to secured Indebtedness that becomes due as a result of the voluntary sale or transfer of the property or assets securing such Indebtedness, so long as such Indebtedness is paid in full when due;

(g) an involuntary case shall be commenced or an involuntary petition shall be filed seeking (i) liquidation, reorganization or other relief in respect of the Borrower or any Material Subsidiary or its debts, or of a substantial part of its assets, under any Debtor Relief Laws or (ii) the appointment of a

receiver, trustee, custodian, sequestrator, conservator or similar official for the Borrower or any Material Subsidiary or for a substantial part of its assets, and, in any such case, such proceeding or petition shall continue undismissed for 60 days or an order or decree approving or ordering any of the foregoing shall be entered;

(h) the Borrower or any Material Subsidiary shall (i) voluntarily commence any proceeding or file any petition seeking liquidation, winding-up, reorganization or other relief under any Debtor Relief Laws, (ii) consent to the institution of, or fail to contest in a timely and appropriate manner, any proceeding or petition described in Section 7.01(g), (iii) apply for or consent to the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for the Borrower or any Material Subsidiary or for a substantial part of its assets, (iv) file an answer admitting the material allegations of a petition filed against it in any such proceeding, (v) make a general assignment for the benefit of creditors or (vi) take any action for the purpose of effecting any of the foregoing;

(i) the Borrower or any Material Subsidiary shall become unable, admit in writing or fail generally to pay its debts as they become due;

(j) one or more judgments for the payment of money in an aggregate amount in excess of $150,000,000 shall be rendered against the Borrower, any Subsidiary or any combination thereof and the same shall (x) not be covered by insurance and (y) remain undischarged for a period of 60 consecutive days during which execution shall not be effectively stayed, or any action shall be legally taken by a judgment creditor to attach or levy upon any assets of the Borrower or any Subsidiary to enforce any such judgment;

(k) a Change in Control shall occur;

(l) any member of the ERISA Group shall fail to pay when due an amount which it shall have become liable to pay under Title IV of ERISA; or notice of intent to terminate a Plan shall be filed under Title IV of ERISA by any member of the ERISA Group, any plan administrator or any combination of the foregoing; or the PBGC shall institute proceedings under Title IV of ERISA to terminate, to impose liability (other than for premiums under Section 4007 of ERISA) in respect of, or to cause a trustee to be appointed to administer any Plan; or a condition shall exist by reason of which the PBGC would be entitled to obtain a decree adjudicating that any Plan must be terminated; or there shall occur a complete or partial withdrawal from, or a default, within the meaning of Section 4219(c)(5) of ERISA, with respect to, one or more Multiemployer Plans which could cause one or more members of the ERISA Group to incur a current payment obligation; and in each of the foregoing instances such condition could reasonably be expected to result in a Material Adverse Effect;

then, and in any such event, and at any time thereafter (but for the avoidance of doubt, in each case, not prior to the Closing Date) if any Event of Default shall then be continuing, the Administrative Agent, may, and upon the written request of the Required Lenders shall, by written notice (including notice sent by telecopy or electronic mail) to the Borrower (a "Notice of Default") take any or all of the following actions, without prejudice to the rights of the Administrative Agent, any Lender or other holder of any of the Obligations to enforce its claims against the Borrower (*provided* that, if an Event of Default specified in Section 7.01(g) or Section 7.01(h) shall occur with respect to the Borrower or any Material Subsidiary, the actions described in clauses (i), (ii) and (v) below shall occur automatically without the giving of any Notice of Default): (i) declare the Total Commitment terminated, whereupon the Commitments of the Lenders shall forthwith terminate immediately and any accrued Commitment Fees shall forthwith become due and payable without any other notice of any kind; (ii) declare the principal of and any accrued interest in respect of all Loans, and all the other Obligations owing hereunder and under the other Loan Documents, to be, whereupon the same shall become, forthwith due and payable without presentment, demand, notice of demand or of dishonor

and nonpayment, protest, notice of protest, notice of intent to accelerate, declaration or notice of acceleration or any other notice of any kind, all of which are hereby waived by the Borrower; (iii) exercise any rights or remedies under the Loan Documents; (iv) terminate any Letter of Credit which may be terminated in accordance with its terms (whether by the giving of written notice to the beneficiary or otherwise); and (v) direct the Borrower to comply, and the Borrower agrees that upon receipt of such notice (or upon the occurrence of an Event of Default specified in Section 7.01(g) or Section 7.01(h)) it will comply, with the provisions of Section 2.05(l).

ARTICLE III
THE ADMINISTRATIVE AGENT

SECTION 8.01 Appointment and Authority. Each of the Lenders and the Issuing Banks hereby irrevocably appoints Barclays Bank PLC to act on its behalf as the Administrative Agent hereunder and under the other Loan Documents and authorizes the Administrative Agent to take such actions on its behalf and to exercise such powers as are delegated to the Administrative Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto. The provisions of this Article are solely for the benefit of the Administrative Agent, the Lenders and the Issuing Banks and, except as specifically provided in Section 8.06(a) and (b), the Borrower shall not have rights as a third-party beneficiary of any of such provisions. It is understood and agreed that the use of the term "agent" herein or in any other Loan Documents (or any other similar term) with reference to the Administrative Agent is not intended to connote any fiduciary or other implied (or express) obligations arising under agency doctrine of any applicable law. Instead such term is used as a matter of market custom, and is intended to create or reflect only an administrative relationship between contracting parties.

SECTION 8.02 Rights as a Lender. The Person serving as the Administrative Agent hereunder shall have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not the Administrative Agent, and the term *"Lender"* or *"Lenders"* shall, unless otherwise expressly indicated or unless the context otherwise requires, include the Person serving as the Administrative Agent hereunder in its individual capacity. Such Person and its Affiliates may accept deposits from, lend money to, own securities of, act as the financial advisor or in any other advisory capacity for, and generally engage in any kind of business with, the Borrower or any Subsidiary or other Affiliate thereof as if such Person were not the Administrative Agent hereunder and without any duty to account therefor to the Lenders.

SECTION 8.03 Exculpatory Provisions.

(a) The Administrative Agent shall not have any duties or obligations except those expressly set forth herein and in the other Loan Documents, and its duties hereunder shall be administrative in nature. Without limiting the generality of the foregoing, the Administrative Agent:

(i) shall not be subject to any fiduciary or other implied duties, regardless of whether a Default or an Event of Default has occurred and is continuing;

(ii) shall not have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated hereby or by the other Loan Documents that the Administrative Agent is required to exercise as directed in writing by the Required Lenders (or such other number or percentage of the Lenders as shall be expressly provided for herein or in the other Loan Documents); *provided* that the Administrative Agent shall not be required to take any action that, in its opinion or the opinion of its counsel, may expose the Administrative Agent to liability or that is contrary to any Loan Document or applicable law,

including for the avoidance of doubt any action that may be in violation of the automatic stay under any Debtor Relief Law or that may effect a forfeiture, modification or termination of property of a Defaulting Lender in violation of any Debtor Relief Law; and

(iii) shall not, except as expressly set forth herein and in the other Loan Documents, have any duty to disclose, and shall not be liable for the failure to disclose, any information relating to the Borrower or any of its Affiliates that is communicated to or obtained by the Person serving as the Administrative Agent or any of its Affiliates in any capacity.

(b) The Administrative Agent shall not be liable for any action taken or not taken by it (i) with the consent or at the request of the Required Lenders (or such other number or percentage of the Lenders as shall be necessary, or as the Administrative Agent shall believe in good faith shall be necessary, under the circumstances as provided in Sections 9.02 and 9.03) or (ii) in the absence of its own gross negligence or willful misconduct as determined by a court of competent jurisdiction by final and nonappealable judgment. The Administrative Agent shall be deemed not to have knowledge of any Default or Event of Default unless and until notice describing such Default is given to the Administrative Agent in writing by the Borrower, a Lender or an Issuing Bank.

(c) The Administrative Agent shall not be responsible for or have any duty to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with this Agreement or any other Loan Document, (ii) the contents of any certificate, report or other document delivered hereunder or thereunder or in connection herewith or therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth herein or therein or the occurrence of any Default or Event of Default or the enforceability, effectiveness or genuineness of this Agreement, any other Loan Document or any other agreement, instrument or document, or (v) the satisfaction of any condition set forth in Article III or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to the Administrative Agent.

SECTION 8.04 Reliance by Administrative Agent. The Administrative Agent shall be entitled to rely upon, and shall not incur any liability for relying upon, any notice, request, certificate, consent, statement, instrument, document or other writing (including any electronic message, Internet or intranet website posting or other distribution) believed by it to be genuine and to have been signed, sent or otherwise authenticated by the proper Person. The Administrative Agent also may rely upon any statement made to it orally or by telephone and believed by it to have been made by the proper Person, and shall not incur any liability for relying thereon. In determining compliance with any condition hereunder to the making or extension of a Loan or the issuance, extension, renewal or increase of a Letter of Credit, that by its terms must be fulfilled to the satisfaction of a Lender or an Issuing Bank, the Administrative Agent may presume that such condition is satisfactory to such Lender or Issuing Bank unless the Administrative Agent shall have received notice to the contrary from such Lender or Issuing Bank prior to the making or extension of such Loan or the issuance of such Letter of Credit. The Administrative Agent may consult with legal counsel (who may be counsel for the Borrower), independent accountants and other experts selected by it, and shall not be liable for any action taken or not taken by it in accordance with the advice of any such counsel, accountants or experts.

SECTION 8.05 Delegation of Duties. The Administrative Agent may perform any and all of its duties and exercise its rights and powers hereunder or under any other Loan Document by or through any one or more sub agents appointed by the Administrative Agent. The Administrative Agent and any such sub agent may perform any and all of its duties and exercise its rights and powers by or through their respective Related Parties. The exculpatory provisions of this Article shall apply to any such sub agent and to the Related Parties of the Administrative Agent and any such sub agent, and shall apply to their respective

activities in connection with the syndication of the revolving credit facility provided for herein as well as activities as Administrative Agent. The Administrative Agent shall not be responsible for the negligence or misconduct of any sub-agents except to the extent that a court of competent jurisdiction determines in a final and nonappealable judgment that the Administrative Agent acted with gross negligence or willful misconduct in the selection of such sub agents.

SECTION 8.06 Resignation of Administrative Agent.

(a) The Administrative Agent may at any time give notice of its resignation to the Lenders, the Issuing Banks and the Borrower. Upon receipt of any such notice of resignation, the Required Lenders shall have the right to appoint a successor, subject to (so long as no Default or Event of Default exists) the prior written consent of the Borrower (which consent will not be unreasonably withheld or delayed), which shall be a bank with an office in the United States, or an Affiliate of any such bank with an office in the United States. If no such successor shall have been so appointed by the Required Lenders and shall have accepted such appointment within 30 days after the retiring Administrative Agent gives notice of its resignation (or such earlier day as shall be agreed by the Required Lenders) (the "Resignation Effective Date"), then the retiring Administrative Agent may (but shall not be obligated to), subject to (so long as no Default or Event of Default exists) the prior written consent of the Borrower (which consent will not be unreasonably withheld), on behalf of the Lenders and the Issuing Banks, appoint a successor Administrative Agent meeting the qualifications set forth above. Whether or not a successor has been appointed, such resignation shall become effective in accordance with such notice on the Resignation Effective Date.

(b) If the Person serving as Administrative Agent is a Defaulting Lender pursuant to clause (d) of the definition thereof, the Required Lenders may, to the extent permitted by applicable law, by notice in writing to the Borrower and such Person remove such Person as Administrative Agent and, subject to (so long as no Default or Event of Default exists) the prior written consent of the Borrower (which consent will not be unreasonably withheld or delayed), appoint a successor. If no such successor shall have been so appointed by the Required Lenders and shall have accepted such appointment within 30 days (or such earlier day as shall be agreed by the Required Lenders) (the "Removal Effective Date"), then such removal shall nonetheless become effective in accordance with such notice on the Removal Effective Date.

(c) With effect from the Resignation Effective Date or the Removal Effective Date (as applicable) (1) the retiring or removed Administrative Agent shall be discharged from its duties and obligations hereunder and under the other Loan Documents (except that in the case of any collateral security held by the Administrative Agent on behalf of the Lenders or the Issuing Banks under any of the Loan Documents, the retiring or removed Administrative Agent shall continue to hold such collateral security until such time as a successor Administrative Agent is appointed) and (2) except for any indemnity payments owed to the retiring or removed Administrative Agent, all payments, communications and determinations provided to be made by, to or through the Administrative Agent shall instead be made by or to each Lender and Issuing Bank directly, until such time, if any, as the Required Lenders appoint a successor Administrative Agent as provided for above. Upon the acceptance of a successor's appointment as Administrative Agent hereunder, such successor shall succeed to and become vested with all of the rights, powers, privileges and duties of the retiring or removed Administrative Agent (other than any rights to indemnity payments owed to the retiring or removed Administrative Agent), and the retiring or removed Administrative Agent shall be discharged from all of its duties and obligations hereunder or under the other Loan Documents. The fees payable by the Borrower to a successor Administrative Agent shall be the same as those payable to its predecessor unless otherwise agreed between the Borrower and such successor. After the retiring or removed Administrative Agent's resignation or removal hereunder and under the other Loan Documents, the provisions of this Article and Section 9.03 shall continue in effect for the benefit of such retiring or removed Administrative Agent, its sub agents and their respective Related Parties in respect of any actions taken or

omitted to be taken by any of them while the retiring or removed Administrative Agent was acting as Administrative Agent.

SECTION 8.07 Non-Reliance on Administrative Agent and Other Lenders.

(a) Each Lender acknowledges that it has, independently and without reliance upon the Administrative Agent or any other Lender or any of their Related Parties and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Agreement. Each Lender and Issuing Bank also acknowledges that it will, independently and without reliance upon the Administrative Agent or any other Lender or any of their Related Parties and based on such documents and information as it shall from time to time deem appropriate, continue to make its own decisions in taking or not taking action under or based upon this Agreement, any other Loan Document or any related agreement or any document furnished hereunder or thereunder.

(b) Each Lender acknowledges that Simpson Thacher & Bartlett LLP is acting in this transaction as special legal counsel to the Administrative Agent only. Each Lender and Issuing Bank will consult with its own legal counsel to the extent it deems necessary with this Agreement and the other Loan Documents and the matters contemplated herein and therein.

SECTION 8.08 INDEMNIFICATION. **THE LENDERS AGREE TO INDEMNIFY THE ADMINISTRATIVE AGENT, THE ARRANGERS, THE SYNDICATION AGENT AND THE DOCUMENTATION AGENTS RATABLY IN ACCORDANCE WITH THEIR APPLICABLE PERCENTAGES FOR THE INDEMNITY MATTERS AS DESCRIBED IN SECTION 9.03 TO THE EXTENT NOT INDEMNIFIED OR REIMBURSED BY THE BORROWER UNDER SECTION 9.03, BUT WITHOUT LIMITING THE OBLIGATIONS OF THE BORROWER UNDER SAID SECTION 9.03 AND FOR ANY AND ALL OTHER LIABILITIES, OBLIGATIONS, LOSSES, DAMAGES, PENALTIES, ACTIONS, JUDGMENTS, SUITS, COSTS, EXPENSES OR DISBURSEMENTS OF ANY KIND AND NATURE WHATSOEVER WHICH MAY BE IMPOSED ON, INCURRED BY OR ASSERTED AGAINST THE ADMINISTRATIVE AGENT, ANY ARRANGER, THE SYNDICATION AGENT OR ANY DOCUMENTATION AGENT IN ANY WAY RELATING TO OR ARISING OUT OF: (A) THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT CONTEMPLATED BY OR REFERRED TO HEREIN OR THE TRANSACTIONS CONTEMPLATED HEREBY, BUT EXCLUDING, UNLESS A DEFAULT OR AN EVENT OF DEFAULT HAS OCCURRED AND IS CONTINUING, NORMAL ADMINISTRATIVE COSTS AND EXPENSES INCIDENT TO THE PERFORMANCE OF ITS AGENCY DUTIES, IF ANY, HEREUNDER OR UNDER ANY SUCH OTHER LOAN DOCUMENT OR (B) THE ENFORCEMENT OF ANY OF THE TERMS OF THIS AGREEMENT OR OF ANY OTHER LOAN DOCUMENT; WHETHER OR NOT ANY OF THE FOREGOING SPECIFIED IN THIS SECTION 8.08 ARISES FROM THE SOLE OR CONCURRENT NEGLIGENCE OF THE ADMINISTRATIVE AGENT, ANY ARRANGER, THE SYNDICATION AGENT OR ANY DOCUMENTATION AGENT, AS THE CASE MAY BE; *PROVIDED* THAT NO LENDER SHALL BE LIABLE FOR ANY OF THE FOREGOING TO THE EXTENT THEY ARISE FROM THE GROSS NEGLIGENCE, WILLFUL MISCONDUCT OR UNLAWFUL CONDUCT OF THE ADMINISTRATIVE AGENT, ANY ARRANGER, THE SYNDICATION AGENT OR ANY DOCUMENTATION AGENT AS DETERMINED BY A COURT OF COMPETENT JURISDICTION IN A FINAL AND NONAPPEALABLE JUDGMENT.**

SECTION 8.09 No Reliance on Agents or other Lenders. Each Lender acknowledges and agrees that it has, independently and without reliance on the Administrative Agent, any Arranger, the Syndication Agent, any Documentation Agent or any other Lender, and based on such documents and

information as it has deemed appropriate, made its own credit analysis of the Borrower and its Subsidiaries and its decision to enter into this Agreement, and that it will, independently and without reliance upon the Administrative Agent, any Arranger, the Syndication Agent, any Documentation Agent or any other Lender, and based on such documents and information as it shall deem appropriate at the time, continue to make its own analysis and decisions in taking or not taking action under this Agreement. None of the Administrative Agent, the Arrangers, the Syndication Agent or the Documentation Agents shall be required to keep itself informed as to the performance or observance by the Borrower of this Agreement, the other Loan Documents or any other document referred to or provided for herein or to inspect the properties or books of the Borrower. Except for notices, reports and other documents and information expressly required to be furnished to the Lenders by the Administrative Agent hereunder, none of the Administrative Agent, the Arrangers, the Syndication Agent or the Documentation Agents shall have any duty or responsibility to provide any Lender with any credit or other information concerning the affairs, financial condition or business of the Borrower (or any of its Affiliates) which may come into the possession of the Administrative Agent, any Arranger, the Syndication Agent, any Documentation Agent or any of their respective Affiliates. In this regard, each Lender acknowledges that Simpson Thacher & Bartlett LLP is acting in this transaction as special counsel to the Administrative Agent only. Each Lender will consult with its own legal counsel to the extent that it deems necessary in connection with this Agreement and other Loan Documents and the matters contemplated herein and therein.

SECTION 8.10 Duties of the Syndication Agent, Documentation Agents, Arrangers. Notwithstanding the indemnity of the Syndication Agent, the Documentation Agents and the Arrangers contained in Section 8.08 and in Section 9.03, nothing contained in this Agreement shall be construed to impose any obligation or duty whatsoever on any Person named on the cover of this Agreement or elsewhere in this Agreement as a Syndication Agent, a Documentation Agent, an Arranger, a "lead arranger" or a "bookrunner", other than those applicable to all Lenders as such.

SECTION 8.11 Certain ERISA Matters.

(a) Each Lender (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Administrative Agent and the Joint Lead Arrangers and their respective Affiliates, and not, for the avoidance of doubt, to or for the benefit of the Borrower or any other Loan Party, that at least one of the following is and will be true:

(i) such Lender is not using "plan assets" (within the meaning of the Plan Asset Regulations) of one or more Benefit Plans in connection with the Loans, the Letters of Credit or the Commitments,

(ii) the transaction exemption set forth in one or more PTEs, such as PTE 84-14 (a class exemption for certain transactions determined by independent qualified professional asset managers), PTE 95-60 (a class exemption for certain transactions involving insurance company general accounts), PTE 90-1 (a class exemption for certain transactions involving insurance company pooled separate accounts), PTE 91-38 (a class exemption for certain transactions involving bank collective investment funds) or PTE 96-23 (a class exemption for certain transactions determined by in-house asset managers), is applicable with respect to such Lender's entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement, and the conditions for exemptive relief thereunder are and will continue to be satisfied in connection therewith,

(iii) (A) such Lender is an investment fund managed by a "Qualified Professional Asset Manager" (within the meaning of Part VI of PTE 84-14), (B) such Qualified Professional Asset Manager made the investment decision on behalf of such Lender to enter into, participate in, administer and perform the Loans, the Letters of Credit, the Commitments and this Agreement, (C) the entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement satisfies the requirements of sub-sections (b) through (g) of Part I of PTE 84-14 and (D) to the best knowledge of such Lender, the requirements of subsection (a) of Part I of PTE 84-14 are satisfied with respect to such Lender's entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement, or

(iv) such other representation, warranty and covenant as may be agreed in writing between the Administrative Agent, in its sole discretion, and such Lender.

(b) In addition, unless sub-clause (i) in the immediately preceding clause (a) is true with respect to a Lender or such Lender has not provided another representation, warranty and covenant as provided in sub-clause (iv) in the immediately preceding clause (a), such Lender further (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Administrative Agent and the Joint Lead Arrangers and their respective Affiliates, and not, for the avoidance of doubt, to or for the benefit of the Borrower or any other Loan Party, that none of the Administrative Agent or the Joint Leader Arrangers or any of their respective Affiliates is a fiduciary with respect to the assets of such Lender (including in connection with the reservation or exercise of any rights by the Administrative Agent under this Agreement, any Loan Document or any documents related to hereto or thereto),

(c) The Administrative Agent and the Joint Leader Arrangers hereby inform the Lenders that each such Person is not undertaking to provide impartial investment advice, or to give advice in a fiduciary capacity, in connection with the transactions contemplated hereby, and that such Person has a financial interest in the transactions contemplated hereby in that such Person or an Affiliate thereof (i) may receive interest or other payments with respect to the Loans, the Letters of Credit, the Commitments and this Agreement, (ii) may recognize a gain if it extended the Loans, the Letters of Credit or the Commitments for an amount less than the amount being paid for an interest in the Loans, the Letters of Credit or the Commitments by such Lender or (iii) may receive fees or other payments in connection with the transactions contemplated hereby, the Loan Documents or otherwise, including structuring fees, commitment fees, arrangement fees, facility fees, upfront fees, underwriting fees, ticking fees, agency fees, administrative agent or collateral agent fees, utilization fees, minimum usage fees, letter of credit fees, fronting fees, deal-away or alternate transaction fees, amendment fees, processing fees, term out premiums, banker's acceptance fees, breakage or other early termination fees or fees similar to the foregoing.

ARTICLE IX
MISCELLANEOUS

SECTION 9.01 Notices, Etc.

(a) All notices, consents, requests, approvals, demands and other communications (collectively "Communications") provided for herein shall be in writing (including facsimile Communications) and mailed, telecopied or delivered:

(i) if to the Borrower, to it at:

1001 Louisiana Street, Suite 1000
Houston, Texas 77002
Attention: Anthony Ashley
Telecopy No.: (713) 445-8302;

With a copy to:

1001 Louisiana Street, Suite 1000
Houston, Texas 77002
Attention: General Counsel
Telecopy No.: (713) 495-2877;

(ii) if to the Administrative Agent, to it at

c/o Barclays Bank PLC
745 Seventh Avenue
27th Floor
New York, NY 10019
Attention: Patrick Shields
Email: patrick.shields@barclays.com
Phone: 212-526-9531

(iii) if to the Swingline Lender, to it at

c/o Barclays Bank PLC
745 Seventh Avenue
27th Floor
New York, NY 10019
Attention: Patrick Shields
Email: patrick.shields@barclays.com
Phone: 212-526-9531

c/o Barclays Bank PLC
400 Jefferson Park
Whippany, NJ 07981
Attention: Bobby Fitzpatrick
Email: bobby.fitzpatrick@barclays.com
Phone: 201-499-5043

(i) if to any other Lender or to any Issuing Bank, to it at its address (or telecopy number) set forth in the Administrative Questionnaire delivered by such Person to the Administrative Agent or in the Assignment and Acceptance executed by such Person;

or, in the case of any party hereto, such other address or telecopy number as such party may hereafter specify for such purpose by notice to the other parties.

(b) Communications to the Lenders hereunder may be delivered or furnished by electronic communications (including electronic mail and internet or intranet websites) pursuant to procedures approved by the Administrative Agent; *provided* that the foregoing shall not apply to notices

pursuant to Article II unless otherwise agreed by the Administrative Agent and the applicable Lender. The Administrative Agent or the Borrower may, in its discretion, agree to accept notices and other communications to it hereunder by electronic communications pursuant to procedures approved by it; *provided* that approval of such procedures may be limited to particular notices or communications.

(c) Unless the Administrative Agent otherwise prescribes, (i) notices and other communications sent to an e-mail address shall be deemed received upon the sender's receipt of an acknowledgement from the intended recipient (such as by the "return receipt requested" function, as available, return e-mail or other written acknowledgement), and (ii) notices or communications posted to an Internet or intranet website shall be deemed received upon the deemed receipt by the intended recipient, at its e-mail address as described in the foregoing clause (i), of notification that such notice or communication is available and identifying the website address therefor; *provided* that, for both clauses (i) and (ii) above, if such notice, email or other communication is not sent during the normal business hours of the recipient, such notice or communication shall be deemed to have been sent at the opening of business on the next business day for the recipient.

(d) Any party hereto may change its address or telecopy number for notices and other communications hereunder by notice to the other parties hereto.

(e) Platform.

(i) The Borrower agrees that the Administrative Agent may, but shall not be obligated to, make the Communications available to the Lenders and the Issuing Banks by posting the Communications on Debt Domain, Intralinks, Syndtrak or a substantially similar electronic transmission system (the "Platform").

The Platform is provided "*as is*" and "*as available*." The Agent Parties (as defined below) do not warrant the adequacy of the Platform and expressly disclaim liability for errors or omissions in the Electronic Communications (as defined below). No warranty of any kind, express, implied or statutory, including, without limitation, any warranty of merchantability, fitness for a particular purpose, non-infringement of third-party rights or freedom from viruses or other code defects, is made by any Agent Party in connection with the Communications or the Platform. In no event shall the Administrative Agent or any of its Related Parties (collectively, the "Agent Parties") have any liability to the Borrower, any Lender, any Issuing Bank or any other Person or entity for damages of any kind, including, without limitation, direct or indirect, special, incidental or consequential damages, losses or expenses (whether in tort, contract or otherwise) arising out of the Borrower or the Administrative Agent's transmission of communications through the Platform. "Electronic Communications" means, collectively, any notice, demand, communication, information, document or other material provided by or on behalf of the Borrower pursuant to any Loan Document or the transactions contemplated therein which is distributed to the Administrative Agent, any Lender or any Issuing Bank by means of electronic communications pursuant to this Section, including through the Platform.

SECTION 9.02 Waivers; Amendments; Releases.

(a) No failure or delay by the Administrative Agent, any Issuing Bank or any Lender in exercising, and no course of dealing with respect to, any right or power hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such a right or power, preclude any other or further exercise thereof or the exercise of any other right or power. No notice to or demand on the Borrower in any case shall entitle the Borrower to any other or further notice or demand in similar or other circumstances. No waiver of any provision of this Agreement or consent to any departure therefrom shall in any event be effective unless the

same shall be permitted by Section 9.02(b), and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. Without limiting the generality of the foregoing, the making of a Loan or issuance of a Letter of Credit shall not be construed as a waiver of any Default or Event of Default, regardless of whether the Administrative Agent, any Lender or any Issuing Bank may have had notice or knowledge of such Default at the time.

(b) No provision of this Agreement or any other Loan Document (other than each Fee Letter, which may be amended by the parties thereto) provision may be waived, amended or modified except pursuant to an agreement or agreements in writing entered into by the Borrower (or to the extent another Loan Party and not the Borrower is party thereto, such Loan Party) and the Required Lenders or by the Borrower and the Administrative Agent with the consent of the Required Lenders; *provided* that no such agreement shall (i) increase the Commitment of any Lender without the written consent of such Lender, other than increases of Commitments as provided in Section 2.21 and extensions of Commitments as provided in Section 2.22, (ii) reduce the principal amount of any Loan or LC Disbursement or reduce the rate of interest thereon, or reduce any fees payable hereunder, without the written consent of each Lender affected thereby (for the avoidance of doubt, any amendment imposing an alternative interest rate basis in accordance with Section 2.13(b) shall become effective as provided in Section 2.13(b)), (iii) postpone the scheduled date of payment of the principal amount of any Loan or LC Disbursement, or any interest thereon, or any fees or other amounts payable hereunder, or reduce the amount of, waive or excuse any such payment, or postpone the scheduled date of expiration of any Commitment, without the written consent of each Lender affected thereby, other than extensions of the Maturity Date as provided in Section 2.22, (iv) change Section 2.17(b) or (c) in a manner that would alter the *pro rata* sharing of payments required thereby, without the written consent of each Lender, (v) amend Section 2.19 or 2.20 without the consent of the Administrative Agent, the Swingline Lender and the Issuing Banks in addition to the consent of the Required Lenders, (vi) release all or substantially all of the value of the Guarantees under the Guaranty or change any of the provisions of this Section 9.02(b), or the definition of "*Required Lenders*" or any other provision hereof specifying the number or percentage of Lenders required to waive, amend or modify any rights hereunder or make any determination or grant any consent hereunder, without the written consent of each Lender; *provided*, *further*, that no such agreement shall amend, modify or otherwise affect the rights or duties of the Administrative Agent, the Swingline Lender or any Issuing Bank hereunder without the prior written consent of the Administrative Agent, the Swingline Lender or such Issuing Bank, as the case may be. Except as provided herein, during such period as a Lender is a Defaulting Lender, to the fullest extent permitted by applicable law, such Lender will not be entitled to vote in respect of amendments and waivers hereunder and the Commitment and the outstanding Loans or other extensions of credit of such Lender hereunder will not be taken into account in determining whether the Required Lenders or all of the Lenders, as required, have approved any such amendment or waiver (and the definition of "*Required Lenders*" will automatically be deemed modified accordingly for the duration of such period); *provided* that any such amendment or waiver referred to in clauses (i) through (vi) or the first of this Section 9.02(b) above or that would alter the terms set forth in such proviso shall require the consent of such Defaulting Lender.

Notwithstanding the foregoing, the Administrative Agent and the Borrower may amend any Loan Document to correct any obvious errors, mistakes, omissions, defects or inconsistencies and such amendment shall become effective without any further consent of any other party to such Loan Document other than the Administrative Agent and the Borrower.

(c) Notwithstanding the provisions of Section 9.02(b), amendments to this Agreement pursuant to Section 2.21(c) and Section 2.22 may be effected without the consent of any Lenders other than the Administrative Agent, the Issuing Banks, the Swingline Lender and each Lender making a New Commitment or extending a Commitment.

(d) The Lenders hereby irrevocably agree that any Guarantor shall be automatically released from the Guarantee upon consummation of any transaction not prohibited hereunder resulting in such Subsidiary ceasing to constitute a Subsidiary or upon any Subsidiary becoming an Excluded Subsidiary, provided that with respect to any Excluded Subsidiary that is a Guarantor on the Closing Date or that has become a Guarantor after the Closing Date at the request of the Borrower, such Excluded Subsidiary shall be automatically released from the Guaranty upon written notice thereof from a Responsible Officer of the Borrower to the Administrative Agent certifying that (i) such Excluded Subsidiary is an Excluded Subsidiary and (ii) on such date, or concurrently with such release, such Excluded Subsidiary shall be automatically released as a guarantor under the Cross Guarantee Agreement, dated as of November 26, 2014 (as amended, restated, supplemented or otherwise modified from time to time) entered by the Borrower and the other signatories party thereto, and is not a guarantor of the Bonds or any other material Indebtedness of the Borrower or any Subsidiary. The Lenders hereby authorize the Administrative Agent to execute and deliver any instruments, documents, and agreements necessary or desirable to evidence and confirm the release of any Guarantor pursuant to the foregoing provisions of this paragraph, all without the further consent or joinder of any Lender.

SECTION 9.03 Payment of Expenses, Indemnities, etc. The Borrower agrees:

(a) to pay (i) all reasonable out-of-pocket expenses incurred by the Administrative Agent and its Affiliates, including the reasonable fees, charges and disbursements of counsel for the Administrative Agent, in connection with the syndication of the credit facility provided for herein, the preparation and administration of this Agreement or any amendments, modifications or waivers of the provisions hereof, (ii) all reasonable out-of-pocket expenses incurred by any Issuing Bank in connection with the issuance, amendment, renewal or extension of any Letter of Credit or any demand for payment thereunder and (iii) all out-of-pocket expenses incurred by the Administrative Agent, any Issuing Bank or any Lender, including the fees, charges and disbursements of any counsel for the Administrative Agent, any Issuing Bank or any Lender, in connection with the enforcement or protection of its rights in connection with this Agreement, including its rights under this Section, or in connection with the Loans made or Letters of Credit issued hereunder, including all such out-of-pocket expenses incurred during any workout, restructuring or negotiations in respect of such Loans or Letters of Credit.

(b) TO INDEMNIFY THE ADMINISTRATIVE AGENT, EACH ISSUING BANK, EACH ARRANGER, THE SYNDICATION AGENT, EACH DOCUMENTATION AGENT AND EACH LENDER AND EACH OF THEIR AFFILIATES AND EACH OF THEIR OFFICERS, DIRECTORS, EMPLOYEES, REPRESENTATIVES, AGENTS, ATTORNEYS, ACCOUNTANTS AND EXPERTS ("INDEMNIFIED PARTIES") FROM, HOLD EACH OF THEM HARMLESS AGAINST AND PROMPTLY UPON DEMAND PAY OR REIMBURSE EACH OF THEM FOR, THE INDEMNITY MATTERS WHICH MAY BE REASONABLY INCURRED BY OR ASSERTED AGAINST OR INVOLVE ANY OF THEM (WHETHER OR NOT ANY OF THEM IS DESIGNATED A PARTY THERETO AND WHETHER OR NOT THE CLAIM IS BROUGHT BY THE BORROWER OR A THIRD PARTY) AS A RESULT OF, ARISING OUT OF OR IN ANY WAY RELATED TO (I) ANY ACTUAL OR PROPOSED USE BY THE BORROWER OF THE PROCEEDS OF ANY OF THE LOANS OR ANY LETTER OF CREDIT, (II) THE EXECUTION, DELIVERY AND PERFORMANCE OF THE LOAN DOCUMENTS, (III) THE OPERATIONS OF THE BUSINESS OF THE BORROWER AND THE SUBSIDIARIES, (IV) THE FAILURE OF THE BORROWER OR ANY SUBSIDIARY TO COMPLY WITH THE TERMS OF THIS AGREEMENT, OR WITH ANY REQUIREMENT OF LAW, (V) ANY INACCURACY OF ANY REPRESENTATION OR ANY BREACH OF ANY WARRANTY OF THE BORROWER SET FORTH IN ANY OF THE LOAN DOCUMENTS, (VI) THE ISSUANCE, EXECUTION AND DELIVERY OR TRANSFER OF OR PAYMENT OR FAILURE TO PAY UNDER ANY LETTER OF CREDIT, (VII) THE PAYMENT OF A DRAWING UNDER ANY LETTER OF CREDIT NOTWITHSTANDING THE NON-

COMPLIANCE, NON-DELIVERY OR OTHER IMPROPER PRESENTATION OF THE MANUALLY EXECUTED DRAFT(S) AND CERTIFICATION(S), OR (VIII) ANY OTHER ASPECT OF THE LOAN DOCUMENTS, INCLUDING THE REASONABLE FEES AND DISBURSEMENTS OF COUNSEL AND ALL OTHER EXPENSES INCURRED IN CONNECTION WITH INVESTIGATING, DEFENDING OR PREPARING TO DEFEND ANY SUCH ACTION, SUIT, PROCEEDING (INCLUDING ANY INVESTIGATIONS, LITIGATION OR INQUIRIES) OR CLAIM AND INCLUDING ALL INDEMNITY MATTERS ARISING BY REASON OF THE ORDINARY NEGLIGENCE OF ANY INDEMNIFIED PARTY, BUT EXCLUDING ALL INDEMNITY MATTERS ARISING SOLELY (I) BY REASON OF CLAIMS BETWEEN THE LENDERS OR ANY LENDER AND THE ADMINISTRATIVE AGENT, ANY ARRANGER, THE SYNDICATION AGENT, ANY DOCUMENTATION AGENT, OR A LENDER'S SHAREHOLDERS AGAINST THE ADMINISTRATIVE AGENT OR LENDER (OTHER THAN CLAIMS IN ITS ROLE AS AGENT OR ARRANGER) OR (II) BY REASON OF THE GROSS NEGLIGENCE, WILLFUL MISCONDUCT OR UNLAWFUL CONDUCT ON THE PART OF THE INDEMNIFIED PARTY SEEKING INDEMNIFICATION AS DETERMINED BY A COURT OF COMPETENT JURISDICTION IN A FINAL AND NONAPPEALABLE JUDGMENT. FOR THE AVOIDANCE OF DOUBT, THIS SECTION 9.03(B) SHALL NOT APPLY WITH RESPECT TO TAXES OTHER THAN ANY TAXES THAT REPRESENT LOSSES, CLAIMS, DAMAGES, ETC. ARISING FROM ANY NON-TAX CLAIM.

(c) TO INDEMNIFY AND HOLD HARMLESS FROM TIME TO TIME THE INDEMNIFIED PARTIES FROM AND AGAINST ANY AND ALL LOSSES, CLAIMS, COST RECOVERY ACTIONS, ADMINISTRATIVE ORDERS OR PROCEEDINGS, DAMAGES AND LIABILITIES TO WHICH ANY SUCH PERSON MAY BECOME SUBJECT (I) UNDER ANY ENVIRONMENTAL LAW APPLICABLE TO THE BORROWER OR ANY SUBSIDIARY OR ANY OF THEIR PROPERTIES OR ASSETS, INCLUDING THE TREATMENT OR DISPOSAL OF HAZARDOUS MATERIALS ON ANY OF THEIR PROPERTIES OR ASSETS, (II) AS A RESULT OF THE BREACH OR NON-COMPLIANCE BY THE BORROWER OR ANY SUBSIDIARY WITH ANY ENVIRONMENTAL LAW APPLICABLE TO THE BORROWER OR ANY SUBSIDIARY, (III) DUE TO PAST OWNERSHIP BY THE BORROWER OR ANY SUBSIDIARY OF ANY OF THEIR PROPERTIES OR ASSETS OR PAST ACTIVITY ON ANY OF THEIR PROPERTIES OR ASSETS WHICH, THOUGH LAWFUL AND FULLY PERMISSIBLE AT THE TIME, COULD RESULT IN PRESENT LIABILITY, (IV) THE PRESENCE, USE, RELEASE, STORAGE, TREATMENT OR DISPOSAL OF HAZARDOUS MATERIALS ON OR AT ANY OF THE PROPERTIES OWNED OR OPERATED BY THE BORROWER OR ANY SUBSIDIARY, OR (V) ANY OTHER ENVIRONMENTAL, HEALTH OR SAFETY CONDITION IN CONNECTION WITH THE LOAN DOCUMENTS (EXPRESSLY INCLUDING ANY SUCH CLAIM, DAMAGE LOSS, LIABILITY, COST, PENALTY, FEE OR EXPENSE ATTRIBUTABLE TO THE ORDINARY, SOLE OR CONTRIBUTORY NEGLIGENCE OF SUCH INDEMNIFIED PARTY, BUT EXCLUDING ANY SUCH CLAIM, DAMAGE, LOSS, LIABILITY, COST, PENALTY, FEE OR EXPENSE RESULTING FROM THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF SUCH INDEMNIFIED PARTY AS DETERMINED BY A COURT OF COMPETENT JURISDICTION IN A FINAL AND NONAPPEALABLE JUDGMENT). FOR THE AVOIDANCE OF DOUBT, THIS SECTION 9.03(C) SHALL NOT APPLY WITH RESPECT TO TAXES OTHER THAN ANY TAXES THAT REPRESENT LOSSES, CLAIMS, DAMAGES, ETC. ARISING FROM ANY NON-TAX CLAIM.

(d) No Indemnified Party may settle any claim to be indemnified without the consent of the indemnitor, such consent not to be unreasonably withheld; *provided* that the indemnitor may not reasonably withhold consent to any settlement that an Indemnified Party proposes, if the indemnitor does not have the financial ability to pay all its obligations outstanding and asserted against the indemnitor at

that time, including the maximum potential claims against the Indemnified Party to be indemnified pursuant to this Section 9.03.

(e) In the case of any indemnification hereunder, the Indemnified Party, as appropriate, shall give notice to the Borrower of any such claim or demand being made against the Indemnified Party and the Borrower shall have the non-exclusive right to join in the defense against any such claim or demand; *provided* that if the Borrower provides a defense, the Indemnified Party shall bear its own cost of defense unless there is a conflict between the Borrower and such Indemnified Party.

(f) THE FOREGOING INDEMNITIES SHALL EXTEND TO THE INDEMNIFIED PARTIES NOTWITHSTANDING THE SOLE OR CONCURRENT NEGLIGENCE OF EVERY KIND OR CHARACTER WHATSOEVER, WHETHER ACTIVE OR PASSIVE, WHETHER AN AFFIRMATIVE ACT OR AN OMISSION, INCLUDING, ALL TYPES OF NEGLIGENT CONDUCT IDENTIFIED IN THE RESTATEMENT (SECOND) OF TORTS OF ONE OR MORE OF THE INDEMNIFIED PARTIES OR BY REASON OF STRICT LIABILITY IMPOSED WITHOUT FAULT ON ANY ONE OR MORE OF THE INDEMNIFIED PARTIES. TO THE EXTENT THAT AN INDEMNIFIED PARTY IS FOUND TO HAVE COMMITTED AN ACT OF GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OR ENGAGED IN UNLAWFUL CONDUCT (AS DETERMINED BY A COURT OF COMPETENT JURISDICTION IN A FINAL AND NONAPPEALABLE JUDGMENT), THIS CONTRACTUAL OBLIGATION OF INDEMNIFICATION SHALL CONTINUE BUT SHALL ONLY EXTEND TO THE PORTION OF THE CLAIM THAT IS DEEMED TO HAVE OCCURRED BY REASON OF EVENTS OTHER THAN THE GROSS NEGLIGENCE, WILLFUL MISCONDUCT OR UNLAWFUL CONDUCT OF THE INDEMNIFIED PARTY (AS DETERMINED BY A COURT OF COMPETENT JURISDICTION IN A FINAL AND NONAPPEALABLE JUDGMENT).

(g) The Borrower's obligations under this Section 9.03 shall survive any termination of this Agreement, the payment of the Loans and the expiration of the Letters of Credit and shall continue thereafter in full force and effect.

(h) To the extent that the Borrower fails to pay any amount required to be paid by it to the Administrative Agent, the Swingline Lender or any Issuing Bank under this Section 9.03, each Lender severally agrees to pay to the Administrative Agent, the Swingline Lender or such Issuing Bank, as the case may be, such Lender's Applicable Percentage (determined as of the time that the applicable unreimbursed expense or indemnity payment is sought) of such unpaid amount; *provided* that the unreimbursed expense or indemnified loss, claim, damage, liability or related expense, as the case may be, was incurred by or asserted against the Administrative Agent, the Swingline Lender or such Issuing Bank in its capacity as such.

(i) The Borrower shall pay any amounts due under this Section 9.03 within 30 days of the receipt by the Borrower of notice of the amount due.

(j) To the fullest extent permitted by applicable law, no party shall assert, and each party hereby waives, any claim against any other party, on any theory of liability, for special, indirect, consequential or punitive damages (as opposed to direct or actual damages) arising out of, in connection with, or as a result of this Agreement, any other Loan Document or any agreement or instrument contemplated hereby, the transactions contemplated hereby or thereby, any Loan or Letter of Credit or the use of the proceeds thereof; *provided, howev*er, that the foregoing limitation shall not be deemed to impair or affect the indemnification obligations of the Borrower under the Loan Documents. No Indemnified Party referred to in paragraph (b) above shall be liable for any damages arising from the use by unintended recipients of any information or other materials distributed by it through telecommunications, electronic or other

information transmission systems in connection with this Agreement or the other Loan Documents or the transactions contemplated hereby or thereby.

SECTION 9.04 Successors and Assigns Generally. The provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns permitted hereby, except that the Borrower may not assign or otherwise transfer any of its rights or obligations hereunder without the prior written consent of the Administrative Agent and each Lender, and no Lender may assign or otherwise transfer any of its rights or obligations hereunder except (i) to an assignee in accordance with the provisions of Section 9.05(a), (ii) by way of participation in accordance with the provisions of Section 9.05(c), or (iii) by way of pledge or assignment of a security interest subject to the restrictions of Section 9.05(d) (and any other attempted assignment or transfer by any party hereto shall be null and void). Nothing in this Agreement, expressed or implied, shall be construed to confer upon any Person (other than the parties hereto, their respective successors and assigns permitted hereby, Participants to the extent provided in Section 9.05(c) and, to the extent expressly contemplated hereby, the Related Parties of each of the Administrative Agent and the Lenders) any legal or equitable right, remedy or claim under or by reason of this Agreement.

SECTION 9.05 Assignments by Lenders.

(a) Any Lender may at any time assign to one or more assignees all or a portion of its rights and obligations under this Agreement (including all or a portion of its Commitment, Letter of Credit Commitment and the Loans at the time owing to it); *provided* that any such assignment shall be subject to the following conditions:

(i) (A) in the case of an assignment of the entire remaining amount of the assigning Lender's Commitment and/or the Loans at the time owing to it or contemporaneous assignments to related Approved Funds that equal at least the amount specified in paragraph (a)(i)(B) of this Section; and

(B) in any case not described in the proviso to paragraph (a)(i)(A) of this Section, the aggregate amount of the Commitment (which for this purpose includes Loans outstanding thereunder) or, if the applicable Commitment is not then in effect, the principal outstanding balance of the Loans of the assigning Lender subject to each such assignment (determined as of the date the Assignment and Acceptance with respect to such assignment is delivered to the Administrative Agent or, if "Trade Date" is specified in the Assignment and Acceptance, as of the Trade Date) shall not be less than $5,000,000, unless each of the Administrative Agent and, so long as no Event of Default has occurred and is continuing, the Borrower otherwise consents (each such consent not to be unreasonably withheld or delayed); *provided*, however, in the case of an assignment to a Lender, an Affiliate of a Lender or an Approved Fund, no minimum amount need be assigned.

(ii) Each partial assignment shall be made as an assignment of a proportionate part of all the assigning Lender's rights and obligations under this Agreement with respect to the Loans or the Commitment assigned.

(iii) No consent shall be required for any assignment except to the extent required by paragraph (a)(i)(B) of this Section and, in addition:

(A) the consent of the Borrower (such consent not to be unreasonably withheld or delayed) shall be required unless (x) an Event of Default has occurred and is

continuing at the time of such assignment or (y) such assignment is to a Lender, an Affiliate of a Lender or an Approved Fund, *provided* that the Borrower's consent shall not be required during the primary syndication of the credit facility evidenced by this Agreement;

(B) the consent of the Administrative Agent (such consent not to be unreasonably withheld or delayed) shall be required for assignments if such assignment is to a Person that is not a Lender, an Affiliate of such Lender or an Approved Fund with respect to such Lender; and

(C) the consent of each Issuing Bank and the Swingline Lender (such consents not to be unreasonably withheld or delayed) shall be required for any assignment.

(iv) The parties to each assignment shall execute and deliver to the Administrative Agent an Assignment and Acceptance, together with a processing and recordation fee of $3,500; *provided* that the Administrative Agent may, in its sole discretion, elect to waive such processing and recordation fee in the case of any assignment. The assignee, if it is not a Lender, shall deliver to the Administrative Agent an Administrative Questionnaire.

(v) No such assignment shall be made to (A) the Borrower or any of the Borrower's Affiliates or Subsidiaries or (B) to any Defaulting Lender or any of its Subsidiaries, or any Person who, upon becoming a Lender hereunder, would constitute any of the foregoing Persons described in this clause (B).

(vi) No such assignment shall be made to a natural Person.

(vii) In connection with any assignment of rights and obligations of any Defaulting Lender hereunder, no such assignment shall be effective unless and until, in addition to the other conditions thereto set forth herein, the parties to the assignment shall make such additional payments to the Administrative Agent in an aggregate amount sufficient, upon distribution thereof as appropriate (which may be outright payment, purchases by the assignee of participations or subparticipations, or other compensating actions, including funding, with the consent of the Borrower and the Administrative Agent, the applicable *pro rata* share of Loans previously requested but not funded by the Defaulting Lender, to each of which the applicable assignee and assignor hereby irrevocably consent), to (x) pay and satisfy in full all payment liabilities then owed by such Defaulting Lender to the Administrative Agent, each Issuing Bank, the Swingline Lender and each other Lender hereunder (and interest and fees accrued thereon), and (y) acquire (and fund as appropriate) its full *pro rata* share of all Loans and participations in Letters of Credit and Swingline Loans in accordance with its Applicable Percentage. Notwithstanding the foregoing, in the event that any assignment of rights and obligations of any Defaulting Lender hereunder shall become effective under applicable law without compliance with the provisions of this paragraph, then the assignee of such interest shall be deemed to be a Defaulting Lender for all purposes of this Agreement until such compliance occurs.

Subject to acceptance and recording thereof by the Administrative Agent pursuant to paragraph (b) of this Section, from and after the effective date specified in each Assignment and Acceptance, the assignee thereunder shall be a party to this Agreement and, to the extent of the interest assigned by such Assignment and Acceptance, have the rights and obligations of a Lender under this Agreement, and the assigning Lender thereunder shall, to the extent of the interest assigned by such Assignment and Acceptance, be released from its obligations under this Agreement (and, in the case of an Assignment and

Acceptance covering all of the assigning Lender's rights and obligations under this Agreement, such Lender shall cease to be a party hereto) but shall continue to be entitled to the benefits of Sections 2.14, 2.15 and 9.03 and with respect to facts and circumstances occurring prior to the effective date of such assignment; *provided*, that except to the extent otherwise expressly agreed by the affected parties, no assignment by a Defaulting Lender will constitute a waiver or release of any claim of any party hereunder arising from that Lender's having been a Defaulting Lender. Any assignment or transfer by a Lender of rights or obligations under this Agreement that does not comply with this paragraph shall be treated for purposes of this Agreement as a sale by such Lender of a participation in such rights and obligations in accordance with paragraph (c) of this Section.

(b) Upon its receipt of a duly completed Assignment and Acceptance executed by an assigning Lender and an assignee, the assignee's completed Administrative Questionnaire (unless the assignee shall already be a Lender hereunder), the processing and recordation fee, if any, referred to in Section 9.05(a) and any written consent to such assignment required by Section 9.05(a), the Administrative Agent shall accept such Assignment and Acceptance and record the information contained therein in the Register (as defined below). No assignment shall be effective for purposes of this Agreement unless it has been recorded in the Register as provided in this paragraph. The Administrative Agent, acting solely for this purpose as a non-fiduciary agent of the Borrower, shall maintain at one of its offices in New York, New York a copy of each Assignment and Acceptance delivered to it and a register for the recordation of the names and addresses of the Lenders, and the Commitments of, and principal amounts (and stated interest) of the Loans owing to, each Lender pursuant to the terms hereof from time to time (the "Register"). The entries in the Register shall be conclusive absent manifest error, and the Borrower, the Administrative Agent and the Lenders shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement. The Register shall be available for inspection by the Borrower and any Lender (with respect to its own interest only), at any reasonable time and from time to time upon reasonable prior notice.

(c) Any Lender may at any time, without the consent of, or notice to, the Borrower, the Administrative Agent, the Swingline Lender or the Issuing Banks, sell participations to any Person (other than a natural Person or the Borrower or any of the Borrower's Affiliates or Subsidiaries) (each, a "Participant") in all or a portion of such Lender's rights and/or obligations under this Agreement (including all or a portion of its Commitment and/or the Loans owing to it); *provided* that (i) such Lender's obligations under this Agreement shall remain unchanged, (ii) such Lender shall remain solely responsible to the other parties hereto for the performance of such obligations, and (iii) the Borrower, the Administrative Agent, the Issuing Banks and the Lenders shall continue to deal solely and directly with such Lender in connection with such Lender's rights and obligations under this Agreement. For the avoidance of doubt, each Lender shall be responsible for the indemnity under Section 8.08 with respect to any payments made by such Lender to its Participant(s).

Any agreement or instrument pursuant to which a Lender sells such a participation shall provide that such Lender shall retain the sole right to enforce this Agreement and to approve any amendment, modification or waiver of any provision of this Agreement; *provided* that such agreement or instrument may provide that such Lender will not, without the consent of the Participant, agree to any amendment, modification or waiver described in the first proviso Section 9.02(b) that affects such Participant. The Borrower agrees that each Participant shall be entitled to the benefits of Sections 2.14, 2.15 and 2.16 (subject to the requirements and limitations therein, including the requirements under Section 2.16 (it being understood that the documentation required under Section 2.16 shall be delivered to the participating Lender)) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to paragraph (a) of this Section; *provided* that such Participant (A) agrees to be subject to the provisions of Sections 2.18 as if it were an assignee under paragraph (a) of this Section; and (B) shall not be entitled to receive any greater

payment under Sections 2.14 and 2.16, with respect to any participation, than its participating Lender would have been entitled to receive, except to the extent such entitlement to receive a greater payment results from a Change in Law that occurs after the Participant acquired the applicable participation. Each Lender that sells a participation agrees, at the Borrower's request and expense, to use reasonable efforts to cooperate with the Borrower to effectuate the provisions of Section 2.18 with respect to any Participant. To the extent permitted by law, each Participant also shall be entitled to the benefits of Section 9.09 as though it were a Lender; *provided* that such Participant agrees to be subject to Section 2.17 as though it were a Lender. Each Lender that sells a participation shall, acting solely for this purpose as a non-fiduciary agent of the Borrower, maintain a register on which it enters the name and address of each Participant and the principal amounts (and stated interest) of each Participant's interest in the Loans or other obligations under the Loan Documents (the "Participant Register"); *provided* that no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any Participant or any information relating to a Participant's interest in any commitments, loans, letters of credit or its other obligations under any Loan Document) to any Person except to the extent that such disclosure is necessary to establish that such commitment, loan, letter of credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary. For the avoidance of doubt, the Administrative Agent (in its capacity as Administrative Agent) shall have no responsibility for maintaining a Participant Register.

(d) Any Lender may at any time pledge or assign a security interest in all or any portion of its rights under this Agreement to secure obligations of such Lender, including any pledge or assignment to secure obligations to a Federal Reserve Bank or any central bank having jurisdiction over such Lender; *provided* that no such pledge or assignment shall release such Lender from any of its obligations hereunder or substitute any such pledgee or assignee for such Lender as a party hereto.

SECTION 9.06 Survival; Reinstatement.

(a) All covenants, agreements, representations and warranties made by the Borrower herein and in the certificates or other instruments delivered in connection with or pursuant to this Agreement shall be considered to have been relied upon by the other parties hereto and shall survive the execution and delivery of this Agreement and the making of any Loans and issuance of any Letters of Credit, regardless of any investigation made by any such other party or on its behalf and notwithstanding that the Administrative Agent, any Issuing Bank or any Lender may have had notice or knowledge of any Default or Event of Default or incorrect representation or warranty at the time any credit is extended hereunder, and shall continue in full force and effect as long as the principal of or any accrued interest on any Loan or any fee or any other amount payable under this Agreement is outstanding and unpaid or any Letter of Credit is outstanding or so long as the Commitments have not expired or terminated. The provisions of Sections 2.14, 2.15, 2.16 and 9.03 and Article VIII shall survive and remain in full force and effect regardless of the consummation of the transactions contemplated hereby, the repayment of the Loans, the expiration or termination of the Letters of Credit and the Commitments or the termination of this Agreement or any provision hereof.

(b) To the extent that any payments on the Obligations are subsequently invalidated, declared to be fraudulent or preferential, set aside or required to be repaid to a trustee, debtor in possession, receiver or other Person under any bankruptcy law, common law or equitable cause, then to such extent, the Obligations so satisfied shall be revived and continue as if such payment or proceeds had not been received.

SECTION 9.07 Counterparts; Integration; Effectiveness; Electronic Execution.

(a) This Agreement may be executed in counterparts (and by different parties hereto on different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. This Agreement, the other Loan Documents and the Fee Letters constitute the entire contract among the parties hereto relating to the subject matter hereof and supersede any and all previous agreements and understandings, oral or written, relating to the subject matter hereof (including the Executive Summary). Except as provided in Section 3.01, this Agreement shall become effective when it shall have been executed by the Administrative Agent and when the Administrative Agent shall have received counterparts hereof which, when taken together, bear the signatures of each of the other parties hereto, and thereafter shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns. Delivery of an executed counterpart of a signature page of this Agreement by facsimile or electronic (*i.e.*, "*pdf*" or "*tif*") format shall be effective as delivery of a manually executed counterpart of this Agreement.

(b) The words "execution," "signed," "signature," and words of like import in any Assignment and Acceptance shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act.

SECTION 9.08 Severability. Any provision of this Agreement held to be invalid, illegal or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity, illegality or unenforceability without affecting the validity, legality and enforceability of the remaining provisions hereof; and the invalidity of a particular provision in a particular jurisdiction shall not invalidate such provision in any other jurisdiction.

SECTION 9.09 Right of Setoff. If an Event of Default shall have occurred and be continuing, each Lender, each Issuing Bank and each of their respective Affiliates is hereby authorized at any time and from time to time, to the fullest extent permitted by applicable law, to set off and apply any and all deposits (general or special, time or demand, provisional or final, in whatever currency) at any time held, and other obligations (in whatever currency) at any time owing, by such Lender, such Issuing Bank or any such Affiliate, to or for the credit or the account of a Loan Party against any and all of the obligations of a Loan Party now or hereafter existing under this Agreement or any other Loan Document to such Lender, such Issuing Bank or their respective Affiliates, irrespective of whether or not such Lender, Issuing Bank or Affiliate shall have made any demand under this Agreement or any other Loan Document and although such obligations of the Loan Parties may be contingent or unmatured or are owed to a branch, office or Affiliate of such Lender or Issuing Bank different from the branch, office or Affiliate holding such deposit or obligated on such indebtedness; *provided* that in the event that any Defaulting Lender shall exercise any such right of setoff, (x) all amounts so set off shall be paid over immediately to the Administrative Agent for further application in accordance with the provisions of Section 2.19 pending such payment, shall be segregated by such Defaulting Lender from its other funds and deemed held in trust for the benefit of the Administrative Agent, the Issuing Banks and the Lenders, and (y) the Defaulting Lender shall provide promptly to the Administrative Agent a statement describing in reasonable detail the Obligations owing to such Defaulting Lender as to which it exercised such right of setoff. The rights of each Lender, each Issuing Bank and their respective Affiliates under this Section are in addition to other rights and remedies (including other rights of setoff) that such Lender, such Issuing Bank or their respective Affiliates may have. Each Lender and Issuing Bank agrees to notify the Borrower and the Administrative Agent promptly after any such setoff and application; *provided* that the failure to give such notice shall not affect the validity of such setoff and

application. The rights of each Lender under this Section 9.09 are in addition to other rights and remedies (including other rights of setoff) which such Lender may have.

SECTION 9.10 Governing Law; Jurisdiction; Consent to Service of Process. (a) This Agreement and the other Loan Documents shall be construed in accordance with and governed by the laws of the State of New York.

(b) **ANY LEGAL ACTION OR PROCEEDING WITH RESPECT TO THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS SHALL BE BROUGHT IN THE COURTS OF THE STATE OF NEW YORK SITTING IN THE BOROUGH OF MANHATTAN OR OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK AND, BY EXECUTION AND DELIVERY OF THIS AGREEMENT, EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY ACCEPTS FOR ITSELF AND IN RESPECT OF ITS PROPERTY AND ASSETS, UNCONDITIONALLY, THE EXCLUSIVE JURISDICTION OF THE AFORESAID COURTS WITH RESPECT TO ANY SUCH ACTION OR PROCEEDING. THE BORROWER HEREBY IRREVOCABLY DESIGNATES, APPOINTS AND EMPOWERS C T CORPORATION SYSTEM, WITH OFFICES ON THE DATE HEREOF AT 111 8TH AVENUE, NEW YORK, NEW YORK 10011, AS ITS DESIGNEE, APPOINTEE AND AGENT TO RECEIVE AND ACCEPT FOR AND ON ITS BEHALF, AND IN RESPECT OF ITS PROPERTY, SERVICE OF ANY AND ALL LEGAL PROCESS, SUMMONS, NOTICES AND DOCUMENTS WHICH MAY BE SERVED IN ANY SUCH ACTION OR PROCEEDING. IF FOR ANY REASON SUCH DESIGNEE, APPOINTEE AND AGENT SHALL CEASE TO BE AVAILABLE TO ACT AS SUCH, THE BORROWER AGREES TO DESIGNATE A NEW DESIGNEE, APPOINTEE AND AGENT IN NEW YORK, NEW YORK ON THE TERMS AND FOR THE PURPOSES OF THIS PROVISION SATISFACTORY TO THE ADMINISTRATIVE AGENT. THE BORROWER FURTHER IRREVOCABLY CONSENTS TO THE SERVICE OF PROCESS OUT OF ANY OF THE AFOREMENTIONED COURTS IN ANY SUCH ACTION OR PROCEEDING BY THE MAILING OF COPIES THEREOF BY REGISTERED OR CERTIFIED MAIL, POSTAGE PREPAID, TO IT AT ITS ADDRESS PROVIDED IN SECTION 9.01, SUCH SERVICE TO BECOME EFFECTIVE THIRTY DAYS AFTER SUCH MAILING. NOTHING HEREIN SHALL AFFECT THE RIGHT OF THE ADMINISTRATIVE AGENT OR ANY LENDER TO SERVE PROCESS IN ANY OTHER MANNER PERMITTED BY LAW.**

(c) **THE BORROWER HEREBY IRREVOCABLY WAIVES ANY OBJECTION WHICH IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF VENUE OF ANY OF THE AFORESAID ACTIONS OR PROCEEDINGS ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT BROUGHT IN THE COURTS REFERRED TO IN CLAUSE (b) ABOVE AND HEREBY FURTHER IRREVOCABLY WAIVES, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE RIGHT TO PLEAD OR CLAIM, AND AGREES NOT TO PLEAD OR CLAIM, THAT ANY SUCH ACTION OR PROCEEDING BROUGHT IN ANY SUCH COURT HAS BEEN BROUGHT IN AN INCONVENIENT FORUM.**

(d) **EACH PARTY HERETO HEREBY (i) IRREVOCABLY WAIVES, TO THE MAXIMUM EXTENT PERMITTED BY LAW, ANY RIGHT IT MAY HAVE TO CLAIM OR RECOVER IN ANY SUCH LITIGATION ANY SPECIAL, EXEMPLARY, PUNITIVE OR CONSEQUENTIAL DAMAGES, OR DAMAGES OTHER THAN, OR IN ADDITION TO, ACTUAL DAMAGES; (ii) CERTIFIES THAT NO PARTY HERETO NOR ANY REPRESENTATIVE OR AGENT OR COUNSEL FOR ANY PARTY HERETO HAS REPRESENTED, EXPRESSLY OR OTHERWISE, OR IMPLIED THAT SUCH PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING**

WAIVERS, AND (iii) ACKNOWLEDGES THAT IT HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE TRANSACTIONS CONTEMPLATED HEREBY AND THEREBY BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS CONTAINED IN THIS SECTION 9.10.

SECTION 9.11 **WAIVER OF JURY TRIAL. EACH PARTY HERETO HEREBY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 9.11.**

SECTION 9.12 Confidentiality. Each of the Administrative Agent, the Issuing Banks and the Lenders agrees to maintain the confidentiality of the Information (as defined below), except that Information may be disclosed (a) to their Affiliates, to their and their Affiliates' directors, officers and employees and agents, including accountants, legal counsel and other advisors who have been informed of the confidential nature of the information provided, (b) disclosures in connection with any pledge or assignment permitted under Section 9.05(d) and, to the extent requested by any regulatory authority, including any self-regulatory authority such as the National Association of Insurance Commissioners or any similar organization, or any nationally recognized rating agency that requires access to information about a Lender's investment portfolio, (c) to the extent a Lender reasonably believes it is required by applicable laws or regulations or by any subpoena or similar legal process (and, to the extent not prohibited under applicable law), such Lender will provide prompt notice thereof to the Borrower), (d) to any other party to this Agreement, (e) in connection with the exercise of any remedies hereunder or any suit, action or proceeding relating to this Agreement or any other Loan Document or the enforcement of rights hereunder or thereunder, (f) subject to an understanding with such Person that such Person will comply with this Section 9.12, to (i) any assignee of or Participant in, or any prospective assignee of or Participant in, any of its rights or obligations under this Agreement or (ii) any actual or prospective party (or its Related Parties) to any swap, derivative, or other transaction under which payments are to be made by reference to the Borrower, and its obligations under this Agreement or the payments hereunder, (g) with the consent of the Borrower or (h) to the extent such Information (i) becomes publicly available other than as a result of a breach of this Section 9.12 or (ii) becomes available to the Administrative Agent, any Issuing Bank or any Lender from a source other than the Borrower (unless such source is actually known by the individual providing the information to be bound by a confidentiality agreement or other legal or contractual obligation of confidentiality with respect to such information). In addition, the Administrative Agent and the Lenders may disclose the existence of this Agreement and information about this Agreement to market data collectors, similar service providers to the lending industry and service providers to the Administrative Agent and the Lenders in connection with the administration of this Agreement, the other Loan Documents, and the Commitments. For the purposes of this Section 9.12, "Information" means all information received from the Borrower relating to the Borrower or its business, other than any such information that is known to a Lender, publicly known or otherwise available to the Administrative Agent or any Lender other than through disclosure (a) by the Borrower, or (b) from a source actually known to a Lender to be bound by a confidentiality agreement or other legal or contractual obligation of confidentiality with respect to such information. Any Person required to maintain the confidentiality of Information as provided in this Section 9.12 shall be considered

to have complied with its obligation to do so if such Person maintains the confidentiality of such Information in accordance with procedures adopted in good faith to protect confidential Information of third parties delivered to a lender.

SECTION 9.13 Interest Rate Limitation. Notwithstanding anything herein to the contrary, if at any time the interest rate applicable to any Loan, together with all fees, charges and other amounts which are treated as interest on such Loan under applicable law (collectively the "Charges"), shall exceed the maximum lawful rate (the "Maximum Rate") which may be contracted for, charged, taken, received or reserved by the Lender holding such Loan in accordance with applicable law, the rate of interest payable in respect of such Loan hereunder, together with all Charges payable in respect thereof, shall be limited to the Maximum Rate and, to the extent lawful, the interest and Charges that would have been payable in respect of such Loan but were not payable as a result of the operation of this Section 9.13 shall be cumulated and the interest and Charges payable to such Lender in respect of other Loans or periods shall be increased (but not above the Maximum Rate therefor) until such cumulated amount, together with interest thereon at the Federal Funds Effective Rate to the date of repayment, shall have been received by such Lender.

SECTION 9.14 **EXCULPATION PROVISIONS**. EACH OF THE PARTIES HERETO SPECIFICALLY AGREES THAT IT HAS A DUTY TO READ THIS AGREEMENT, THE NOTES AND (IN THE CASE OF THE BORROWER AND THE ADMINISTRATIVE AGENT) THE FEE LETTERS AND AGREES THAT IT IS CHARGED WITH NOTICE AND KNOWLEDGE OF THE TERMS OF THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS; THAT IT HAS IN FACT READ THIS AGREEMENT AND IS FULLY INFORMED AND HAS FULL NOTICE AND KNOWLEDGE OF THE TERMS, CONDITIONS AND EFFECTS OF THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS; THAT IT HAS BEEN REPRESENTED BY INDEPENDENT LEGAL COUNSEL OF ITS CHOICE THROUGHOUT THE NEGOTIATIONS PRECEDING ITS EXECUTION OF THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS; AND HAS RECEIVED THE ADVICE OF ITS ATTORNEY IN ENTERING INTO THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS; AND THAT IT RECOGNIZES THAT CERTAIN OF THE TERMS OF THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS RESULT IN ONE PARTY ASSUMING THE LIABILITY INHERENT IN SOME ASPECTS OF THE TRANSACTION AND RELIEVING THE OTHER PARTY OF ITS RESPONSIBILITY FOR SUCH LIABILITY. EACH PARTY HERETO AGREES AND COVENANTS THAT IT WILL NOT CONTEST THE VALIDITY OR ENFORCEABILITY OF ANY EXCULPATORY PROVISION OF THIS AGREEMENT ON THE BASIS THAT THE PARTY HAD NO NOTICE OR KNOWLEDGE OF SUCH PROVISION OR THAT THE PROVISION IS NOT *"CONSPICUOUS."*

SECTION 9.15 U.S. Patriot Act. Each Lender that is subject to the requirements of the USA PATRIOT ACT (Title III of Pub. L. 107-56 (signed into law October 26, 2001)) (the "Patriot Act") and the Beneficial Ownership Regulation hereby notifies the Loan Parties that pursuant to the requirements of the Patriot Act and the Beneficial Ownership Regulation, it is required to obtain, verify, and record information that identifies the Loan Parties, which information includes the name and address of the Loan Parties and other information that will allow such Lender to identify the Loan Parties in accordance with the Patriot Act and the Beneficial Ownership Regulation.

SECTION 9.16 No Advisory or Fiduciary Responsibility. In connection with all aspects of each transaction contemplated hereby, the Borrower acknowledges and agrees, and acknowledges its Affiliates' understanding, that: (i) the credit facility provided for hereunder and any related arranging or other services in connection therewith (including in connection with any amendment, waiver or other modification hereof or of any other Loan Document) are an arm's-length commercial transaction between the Borrower, on the one hand, and the Administrative Agent, the Arrangers,

the Syndication Agent, the Documentation Agents, the Issuing Banks and the Lenders, on the other hand, and the Borrower is capable of evaluating and understanding and understands and accepts the terms, risks and conditions of the transactions contemplated hereby and by the other Loan Documents (including any amendments, waiver or other modification hereof or thereof); (ii) in connection with the process leading to such transaction, the Administrative Agent, the Arrangers, the Syndication Agent, the Documentation Agents, the Issuing Banks and the Lenders are and have been acting solely as principals and are not the financial advisors, agents or fiduciaries, for the Borrower or any of its Affiliates, stockholders, creditors or employees or any other Person; (iii) the Administrative Agent, the Arrangers, Syndication Agent, the Documentation Agents, the Issuing Banks and the Lenders have not assumed and will not assume an advisory, agency or fiduciary responsibility in favor of the Borrower with respect to any of the transactions contemplated hereby or the process leading thereto, including with respect to any amendment, waiver or other modification hereof or of any other Loan Document (irrespective of whether the Administrative Agent, any Arranger, the Syndication Agent, any Documentation Agent, any Issuing Bank or any Lender advised or is currently advising the Borrower or any of its Affiliates on other matters) and the Administrative Agent, the Arrangers, the Syndication Agent, the Documentation Agents, the Issuing Banks and the Lenders have no obligation to the Borrower or any of its Affiliates with respect to the transactions contemplated hereby except those obligations expressly set forth herein and in the other Loan Documents; (iv) the Administrative Agent, the Arrangers, the Syndication Agent, the Documentation Agents, the Issuing Banks, the Lenders and their respective Affiliates may be engaged in a broad range of transactions that involve interests that differ from those of the Borrower and its Affiliates, and the Administrative Agent, the Arrangers, the Syndication Agent, the Documentation Agents, the Issuing Banks and the Lenders have no obligation to disclose any of such interests by virtue of any advisory, agency or fiduciary relationship; and (v) the Administrative Agent, the Arrangers, the Syndication Agent, the Documentation Agents, the Issuing Banks and the Lenders have not provided and will not provide any legal, accounting, regulatory or Tax advice with respect to any of the transactions contemplated hereby (including any amendment, waiver or other modification hereof or of any other Loan Document) and the Loan Parties have consulted its own legal, accounting, regulatory and Tax advisors to the extent it has deemed appropriate. Each Loan Parties hereby waive and release, to the fullest extent permitted by law, any claims that it may have against the Administrative Agent, the Arrangers, the Syndication Agent, the Documentation Agents, the Issuing Banks or the Lenders with respect to any breach or alleged breach of agency or fiduciary duty.

SECTION 9.17 Headings. Section headings herein are included herein for convenience of reference only and shall not constitute a part hereof for any other purpose or be given any substantive effect.

SECTION 9.18 Acknowledgement and Consent to Bail-In of EEA Financial Institutions. (a) Notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any EEA Financial Institution arising under any Loan Document, to the extent such liability is unsecured, may be subject to the write-down and conversion powers of an EEA Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by: (a) the application of any Write-Down and Conversion Powers by an EEA Resolution Authority to any such liabilities arising hereunder which may be payable to it by any party hereto that is an EEA Financial Institution; and

(b) the effects of any Bail-in Action on any such liability, including, if applicable:

(i) a reduction in full or in part or cancellation of any such liability;

(ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such EEA Financial Institution, its parent undertaking, or a bridge

institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement or any other Loan Document; or

(iii) the variation of the terms of such liability in connection with the exercise of the write-down and conversion powers of any EEA Resolution Authority.

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The parties hereto have caused this Agreement to be duly executed as of the date and year first above written.

KINDER MORGAN, INC.,
as the Borrower

By: /s/ Anthony B. Ashley /s/
Name: Anthony B. Ashley
Title: Treasurer

BARCLAYS BANK PLC,
as the Administrative Agent and as a Lender

By: /s/ Sydney G. Dennis
Name: Sydney G. Dennis
Title: Director

JPMORGAN CHASE BANK, N.A.,
as a Lender

By: /s/ Stephanie Balette /s/
Name: Stephanie Balette
Title: Authorized Officer

Bank of America, N.A.,
as a Lender

By: /s/ Tyler Ellis /s/
Name: Tyler Ellis
Title: Director

BMO Harris Bank, N.A.,
as a Lender

By: /s/ Melissa Guzman /s/
Name: Melissa Guzman
Title: Director

CITIBANK, N.A.,
as a Lender

By: /s/ Maureen Maroney /s/
Name: Maureen Maroney
Title: Vice President

CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH,
as a Lender

By: /s/ Nupur Kumar /s/
Name: Nupur Kumar
Title: Authorized Signatory

By: /s/ Christopher Zybrick /s/
Name: Christopher Zybrick
Title: Authorized Signatory

Mizuho Bank, Ltd.,
as a Lender

By: /s/ Donna DeMagistris /s/
Name: Donna DeMagistris
Title: Authorized Signatory

MUFG BANK, LTD.
as a Lender

By: /s/ Christopher Facenda /s/
Name: Christopher Facenda
Title: Director

ROYAL BANK OF CANADA,
as a Lender

By: /s/ Jason S. York /s/
Name: Jason S. York
Title: Authorized Signatory

The Bank of Nova Scotia, Houston Branch,
as a Lender

By: /s/ Alfredo Brahim /s/
Name: Alfredo Brahim
Title: Director

Wells Fargo Bank, N.A.,
as a Lender

By: /s/ Doug McDowell /s/
Name: Doug McDowell
Title: Managing Director

Commerzbank AG, New York Branch,
as a Lender

By: /s/ Barbara Stacks /s/
Name: Barbara Stacks
Title: Director

By: /s/ James Boyle /s/
Name: James Boyle
Title: Director

Sumitomo Mitsui Banking Corporation,
as a Lender

By: /s/ Katsuyuki Kubo /s/
Name: Katsuyuki Kubo
Title: Managing Director

CANADIAN IMPERIAL BANK OF COMMERCE,
New York Branch,
as a Lender

By: /s/ Donovan C. Broussard /s/
Name: Donovan C. Broussard
Title: Authorized Signatory

By: /s/ Trudy Nelson /s/
Name: Trudy Nelson
Title: Authorized Signatory

CREDIT AGRICOLE CORPORATE AND
INVESTMENT BANK,
as a Lender

By: /s/ Dixon Schultz /s/
Name: Dixon Schultz
Title: Managing Director

By: /s/ Michael Willis /s/
Name: Michael Willis
Title: Managing Director

SUNTRUST BANK,
as a Lender

By: /s/ Carmen Malizia /s/
Name: Carmen Malizia
Title: Director

PNC Bank, National Association,
as a Lender

By: /s/ Stephen Monto /s/
Name: Stephen Monto
Title: SVP

SOCIETE GENERALE,
as a Lender

By: /s/ Diego Medina /s/
Name: Diego Medina
Title: Director

THE TORONTO-DOMINION BANK, NEW YORK BRANCH
as a Lender

By: /s/ Annie Dorval /s/
Name: Annie Dorval
Title: Authorized Signatory

MORGAN STANLEY SENIOR FUNDING, INC.,
as a Lender

By: /s/ Michael King /s/
Name: Michael King
Title: Vice President

MORGAN STANLEY BANK, N.A.,
as a Lender

By: /s/ Michael King /s/
Name: Michael King
Title: Authorized Signatory

Compass Bank,
as a Lender

By: /s/ Mark H. Wolf /s/
Name: Mark H. Wolf
Title: Senior Vice President

ING Capital LLC,
as a Lender

By: /s/ Subha Pasumarti /s/
Name: Subha Pasumarti
Title: Managing Director

By: /s/ Tanja van der Woude /s/
Name: Tanja van der Woude
Title: Director

REGIONS BANK,
as a Lender

By: /s/ David Valentine /s/
Name: David Valentine
Title: Managing Director

Intesa Sanpaolo S.p.A. – New York Branch,
as a Lender

By: /s/ Christophe Hamonet /s/
Name: Christophe Hamonet
Title: Reginal Business Manager

By: /s/ Francesco Di Mario /s/
Name: Francesco Di Mario
Title: FVP – Head of Credit

NATIONAL BANK OF CANADA,
as a Lender

By: /s/ Rahul Rahul /s/
Name: Rahul Rahul
Title: Authorized Signatory

By: /s/ Mark Williamson /s/
Name: Mark Williamson
Title: Authorized Signatory

Acknowledged and agreed, solely for the purpose of Section 2.05(a):

KINDER MORGAN OPERATING L.P. "B"

By: Kinder Morgan G.P., Inc.,
its General Partner

By: /s/ Anthony B. Ashley /s/
Name: Anthony B. Ashley
Title: Treasurer

SCHEDULE 1.01
Commitments

Lender	Commitment	Letter of Credit Commitment
Barclays Bank PLC	$195,000,000	$100,000,000
JPMorgan Chase Bank, N.A.	$195,000,000	$100,000,000
Bank of America, N.A.	$195,000,000	$100,000,000
BMO Harris Bank, N.A.	$195,000,000	N/A
Citibank, N.A.	$195,000,000	$100,000,000
Credit Suisse AG, Cayman Islands Branch	$195,000,000	N/A
Mizuho Bank, Ltd.	$195,000,000	N/A
MUFG Bank, Ltd.	$195,000,000	N/A
Royal Bank of Canada	$195,000,000	N/A
The Bank of Nova Scotia, Houston Branch	$195,000,000	N/A
Wells Fargo Bank, N.A.	$195,000,000	$100,000,000
Commerzbank AG, New York Branch	$144,500,000	N/A
Sumitomo Mitsui Banking Corporation	$144,500,000	N/A
Canadian Imperial Bank of Commerce, New York Branch	$144,500,000	N/A
Credit Agricole Corporate and Investment Bank	$144,500,000	N/A
SunTrust Bank	$144,500,000	N/A
PNC Bank, National Association	$144,500,000	N/A
Societe Generale	$144,500,000	N/A
The Toronto-Dominion Bank, New York Branch	$144,500,000	N/A
Morgan Stanley Senior Funding, Inc.	$46,500,000	N/A
Morgan Stanley Bank, N.A.	$70,000,000	N/A
Compass Bank	$116,500,000	N/A
ING Capital LLC	$116,500,000	N/A
Regions Bank	$116,500,000	N/A
Intesa Sanpaolo S.p.A.-New York Branch	$116,500,000	N/A
National Bank of Canada	$116,500,000	N/A
Total	**$4,000,000,000**	**$500,000,000**

SCHEDULE 1.01A
Excluded Subsidiaries

ANR Real Estate Corporation
Calnev Pipeline LLC
Coastal Eagle Point Oil Company
Coastal Oil New England, Inc.
Colton Processing Facility
Coscol Petroleum Corporation
El Paso CGP Company, L.L.C.
El Paso Energy Argentina Service Company
El Paso Energy Capital Trust I
El Paso Energy E.S.T. Company
El Paso Energy International Company
El Paso Marketing Company, L.L.C.
El Paso Merchant Energy North America Company, L.L.C.
El Paso Merchant Energy-Petroleum Company
El Paso Reata Energy Company, L.L.C.
El Paso Remediation Company
El Paso Services Holding Company
EPC Building, LLC
EPC Property Holdings, Inc.
EPEC Corporation
EPEC Oil Company Liquidating Trust
EPEC Polymers, Inc.
EPEC Realty, Inc.
EPED Holding Company
I.M.T Land Corp.
International Marine Terminals Partnership
Kinder Morgan Foundation
Kinder Morgan G.P., Inc.
Kinder Morgan Mexico LLC
Kinder Morgan Services International LLC
Kinder Morgan Tejas Pipeline GP LLC
Kinder Morgan Urban Renewal, L.L.C.
Kinder Morgan Urban Renewal II, LLC
KM Express LLC
KM Insurance Texas Inc.
KN Capital Trust I
KN Capital Trust III
Mesquite Investors, L.L.C.
SFPP, L.P.

Note the Excluded Subsidiaries listed on this Schedule 1.01A may also be Excluded Subsidiaries pursuant to other exceptions set forth in the definition of "Excluded Subsidiary".

SCHEDULE 1.01B
Existing Letters of Credit

Letters of Credit issued under the Existing Credit Agreement (as of September 15, 2014):

Letter of Credit #	Beneficiary	Amount
	JP Morgan	
P-367925	Insurance Company of North America	30,650.00
TPTS-211032	TCEQ	8,000,000.00
P-381222	SCA Services, Inc.	282,000.00
TPTS-390077	U.S. Environmental Protection Agency	3,700,000.00
TPTS-330400	RBC/BC Maritime	399,018.00
		4,381,018.00
	Wells Fargo	
SM215665W	TCEQ	7,000,000.00
SM230084W	Bank of New York Mellon	22,750,000.00
SM230086W	Bank of New York Mellon	22,750,000.00
S113181	Bank of New York	24,128,548.00
SM238154W	Port of Houston Authority	25,000.00
SM231529W	Port Authority of NY & NJ	375,000.00
SM235293W	Port of Portland	300,000.00
IS0012983	Guadalupe Valley Electric Coop	320,000.00
IS0011480	U.S. Environmental Protection Agency	489,652.00
IS0021875U	Twin County Electric Power Assoc	1,000,000.00
IS0024221U	Medina Electric Cooperative	536,433.63
IS0178750U	Karnes Electric Cooperative	875,329.00
IS0194687U	New Jersey Department of Environmental Protection (NJDEP)	423,972.00
IS0213588U	Guadalupe Valley Electric Coop	265,000.00
IS0255620U	California Department of Fish and Wildlife	685,795.72
		81,924,730.35
	Citigroup, N.A.	
61663921	Terasen Inc.	522,365.00
63656702	KANSAS H&E	2,000,000.00
63660191	SELF INS CA	836,631.00
63668640	New Jersey Dept of Environmental Protection Site Remediation Program	172,920.00
69605543	Philadelphia Gas Works	97,384.00
69606341	BP Products, NA	807,872.00
		4,437,172.00
	Total LCs under KMI Revolver	**90,742,920.35**

SCHEDULE 6.01
Existing Non-Guarantor Indebtedness

- Certificate of Designations of Series A Fixed-to-Floating Rate Term Cumulative Preferred Stock due 2057 of Kinder Morgan G.P., Inc.
- EPC Building, LLC, promissory note, 3.967%, due 2013 through 2035
- K N Capital Trust I 8.56% capital trust securities due 2027
- K N Capital Trust III 7.63% capital trust securities due 2028
- El Paso Energy Capital Trust I 4.75% preferred securities due 2028
- International Marine Terminals Partnership 2002 floating rate notes due 2025

SCHEDULE 6.05
Existing Transactions with Affiliates

None.

SCHEDULE 6.06
Existing Restrictive Agreements

- Certificate of Designations of Series A Fixed-to-Floating Rate Term Cumulative Preferred Stock due 2057 of Kinder Morgan G.P., Inc.
- Constituent documents of Kinder Morgan Canada Limited and its subsidiaries, each as amended to date, setting forth terms related to Kinder Morgan Canada Limited's (i) Cumulative Redeemable Minimum Rate Reset Preferred Shares, Series 1; and (ii) Cumulative Redeemable Minimum Rate Reset Preferred Shares, Series 3:
    - Certificate and Articles of Incorporation of Kinder Morgan Canada Limited
    - Certificate and Articles of Incorporation of Kinder Morgan Canada GP Inc.
    - Certificate of Limited Partnership of Kinder Morgan Canada Limited Partnership
    - Second Amended and Restated Limited Partnership Agreement of Kinder Morgan Canada Limited Partnership
    - Articles of Association of Kinder Morgan Cochin ULC
- Credit Agreement, dated August 31, 2018, by and among Kinder Morgan Cochin ULC, Royal Bank of Canada and the lenders party thereto

EXHIBIT 1.01-A

FORM OF ASSIGNMENT AND ASSUMPTION

This Assignment and Assumption (the "Assignment and Assumption") is dated as of the Effective Date set forth below and is entered into by and between [the][each][1] Assignor identified in item 1 below ([the][each, an] "Assignor") and [the][each][2] Assignee identified in item 2 below ([the][each, an] "Assignee"). [It is understood and agreed that the rights and obligations of [the Assignors][the Assignees][3] hereunder are several and not joint.][4] Capitalized terms used but not defined herein shall have the meanings given to them in the 5-Year Credit Agreement identified below (as further restated, amended, modified, supplemented and in effect, the "5-Year Credit Agreement"), receipt of a copy of which is hereby acknowledged by [the][each] Assignee. The Standard Terms and Conditions set forth in Annex 1 attached hereto are hereby agreed to and incorporated herein by reference and made a part of this Assignment and Assumption as if set forth herein in full.

For an agreed consideration, [the][each] Assignor hereby irrevocably sells and assigns to [the Assignee][the respective Assignees], and [the][each] Assignee hereby irrevocably purchases and assumes from [the Assignor][the respective Assignors], subject to and in accordance with the Standard Terms and Conditions and the 5-Year Credit Agreement, as of the Effective Date inserted by the Administrative Agent as contemplated below (i) all of [the Assignor's][the respective Assignors'] rights and obligations in [its capacity as a Lender][their respective capacities as Lenders] under the 5-Year Credit Agreement and any other documents or instruments delivered pursuant thereto to the extent related to the amount and percentage interest identified below of all of such outstanding rights and obligations of [the Assignor][the respective Assignors] under the revolving credit facility identified below (including, without limitation, the Letters of Credit and the Swingline Loans included in such facility), and (ii) to the extent permitted to be assigned under applicable law, all claims, suits, causes of action and any other right of [the Assignor (in its capacity as a Lender)][the respective Assignors (in their respective capacities as Lenders)] against any Person, whether known or unknown, arising under or in connection with the 5-Year Credit Agreement, any other documents or instruments delivered pursuant thereto or the loan transactions governed thereby or in any way based on or related to any of the foregoing, including, but not limited to, contract claims, tort claims, malpractice claims, statutory claims and all other claims at law or in equity related to the rights and obligations sold and assigned pursuant to clause (i) above (the rights and obligations sold and assigned by [the][any] Assignor to [the][any] Assignee pursuant to clauses (i) and (ii) above being referred to herein collectively as [the][an] "Assigned Interest"). Each such sale and assignment is without recourse to [the][any] Assignor and, except as expressly provided in this Assignment and Assumption, without representation or warranty by [the][any] Assignor.

---

1 For bracketed language here and elsewhere in this form relating to the Assignor(s), if the assignment is from a single Assignor, choose the first bracketed language. If the assignment is from multiple Assignors, choose the second bracketed language.

2 For bracketed language here and elsewhere in this form relating to the Assignee(s), if the assignment is to a single Assignee, choose the first bracketed language. If the assignment is to multiple Assignees, choose the second bracketed language.

3 Select as appropriate.

4 Include bracketed language if there are either multiple Assignors or multiple Assignees.

1. Assignor[s]: _____

_____

[Assignor [is] [is not] a Defaulting Lender]

2. Assignee[s]: _____

_____

[for each Assignee, indicate [Affiliate][Approved Fund] of [identify Lender]

3. Borrower: Kinder Morgan, Inc.

4. Administrative Agent: _____, as the administrative agent under the 5-Year Credit Agreement

5. 5-Year Credit Agreement: The Revolving Credit Agreement dated as of November 16, 2018 among Kinder Morgan, Inc., the Lenders parties thereto, Barclays Bank PLC, as Administrative Agent, and the other agents parties thereto

6. Assigned Interest[s]:

Assignor[s][5]	Assignee[s][6]	Aggregate Amount of Commitment/Loans for all Lenders[7]	Amount of Commitment/Loans Assigned[8]	Percentage Assigned of Commitment/ Loans[8]	CUSIP Number
		$	$	%	
		$	$	%	
		$	$	%	

[7. Trade Date: _____][9]

Effective Date: _____ ___, 20___ [TO BE INSERTED BY ADMINISTRATIVE AGENT AND WHICH SHALL BE THE EFFECTIVE DATE OF RECORDATION OF TRANSFER IN THE REGISTER THEREFOR.]

The terms set forth in this Assignment and Assumption are hereby agreed to:

---

5 List each Assignor, as appropriate.

6 List each Assignee, as appropriate.

7 Amount to be adjusted by the counterparties to take into account any payments or prepayments made between the Trade Date and the Effective Date.

8 Set forth, to at least 9 decimals, as a percentage of the Commitment/Loans of all Lenders thereunder.

[9] To be completed if the Assignor(s) and the Assignee(s) intend that the minimum assignment amount is to be determined as of the Trade Date.

ASSIGNOR[S][10]
[NAME OF ASSIGNOR]

By:_____
Title:

[NAME OF ASSIGNOR]

By:_____
Title:

ASSIGNEE[S][11]
[NAME OF ASSIGNEE]

By:_____
Title:

[NAME OF ASSIGNEE]

By:_____
Title:

[10] Add additional signature blocks as needed. Include both Fund/Pension Plan and manager making the trade (if applicable).

[11] Add additional signature blocks as needed. Include both Fund/Pension Plan and manager making the trade (if applicable).

[Consented to and][12] Accepted:

[NAME OF ADMINISTRATIVE AGENT], as
Administrative Agent

By: _____
Title:

[Consented to:][13]

[NAME OF THE RELEVANT PARTY]

By: _____
Title:

[12] To be added only if the consent of the Administrative Agent is required by the terms of the 5-Year Credit Agreement.

[13] To be added only if the consent of the Borrower and/or other parties (e.g. Swingline Lender or Issuing Bank) is required by the terms of the 5-Year Credit Agreement.

ANNEX 1 TO ASSIGNMENT AND ASSUMPTION

STANDARD TERMS AND CONDITIONS FOR

ASSIGNMENT AND ASSUMPTION

1. Representations and Warranties.

1.1. Assignor. [The][Each] Assignor (a) represents and warrants that (i) it is the legal and beneficial owner of [the][[the relevant] Assigned Interest, (ii) [the][such] Assigned Interest is free and clear of any lien, encumbrance or other adverse claim and (iii) it has full power and authority, and has taken all action necessary, to execute and deliver this Assignment and Assumption and to consummate the transactions contemplated hereby; and (b) assumes no responsibility with respect to (i) any statements, warranties or representations made in or in connection with the 5-Year Credit Agreement or any other Loan Document, (ii) the execution, legality, validity, enforceability, genuineness, sufficiency or value of the Loan Documents or any collateral thereunder, (iii) the financial condition of the Borrower, any of its Subsidiaries or Affiliates or any other Person obligated in respect of any Loan Document or (iv) the performance or observance by the Borrower, any of its Subsidiaries or Affiliates or any other Person of any of their respective obligations under any Loan Document.

1.2. Assignee. [The][Each] Assignee (a) represents and warrants that (i) it has full power and authority, and has taken all action necessary, to execute and deliver this Assignment and Assumption and to consummate the transactions contemplated hereby and to become a Lender under the 5-Year Credit Agreement, (ii) it meets all the requirements to be an assignee under the paragraph following Section 9.05(a)(vii) and Section 9.05(b) of the 5-Year Credit Agreement (subject to such consents, if any, as may be required under Section 9.05(a)(iii) of the 5-Year Credit Agreement), (iii) from and after the Effective Date, it shall be bound by the provisions of the 5-Year Credit Agreement as a Lender thereunder and, to the extent of [the][the relevant] Assigned Interest, shall have the obligations of a Lender thereunder, (iv) it is sophisticated with respect to decisions to acquire assets of the type represented by [the][such] Assigned Interest and either it, or the Person exercising discretion in making its decision to acquire [the][such] Assigned Interest, is experienced in acquiring assets of such type, (v) it has received a copy of the 5-Year Credit Agreement, and has received or has been accorded the opportunity to receive copies of the most recent financial statements delivered pursuant to Section 5.01 of the 5-Year Credit Agreement, as applicable, and such other documents and information as it deems appropriate to make its own credit analysis and decision to enter into this Assignment and Assumption and to purchase [the][such] Assigned Interest, (vi) it has, independently and without reliance upon the Administrative Agent or any other Lender and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Assignment and Assumption and to purchase [the][such] Assigned Interest and (vii) attached to this Assignment and Assumption is any documentation required to be delivered by it pursuant to Section 2.16 of the 5-Year Credit Agreement; and (b) agrees that (i) it will, independently and without reliance upon the Administrative Agent, [the][any] Assignor or any other Lender, and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under the Loan Documents, and (ii) it will perform in accordance with their terms all of the obligations which by the terms of the Loan Documents are required to be performed by it as a Lender.

2. Payments. From and after the Effective Date, the Administrative Agent shall make all payments in respect of [the][each] Assigned Interest (including payments of principal, interest, fees and other

amounts) to [the][the relevant] Assignor for amounts which have accrued to but excluding the Effective Date and to [the][the relevant] Assignee for amounts which have accrued from and after the Effective Date.

3. General Provisions.

3.1. In accordance with Sections 9.04 and 9.05 of the 5-Year Credit Agreement, upon execution, delivery, acceptance and recording of this Assignment and Assumption, from and after the Effective Date, (a) the Assignee shall be a party to the 5-Year Credit Agreement and, to the extent provided in this Assignment and Assumption, have the rights and obligations of a Lender under the 5-Year Credit Agreement with a Commitment as set forth herein and (b) the Assignor shall, to the extent of the Assigned Interest assigned pursuant to this Assignment and Assumption, be released from its obligations under the 5-Year Credit Agreement (and, in the case of this Assignment and Assumption covers all of the Assignor's rights and obligations under the 5-Year Credit Agreement, the Assignor shall cease to be a party to the 5-Year Credit Agreement but shall continue to be entitled to the benefits of Sections 2.14, 2.15, 2.16 and 9.03 thereof).

3.2. This Assignment and Assumption shall be binding upon, and inure to the benefit of, the parties hereto and their respective successors and assigns. This Assignment and Assumption may be executed in any number of counterparts, which together shall constitute one instrument. Delivery of an executed counterpart of a signature page of this Assignment and Assumption by telecopy shall be effective as delivery of a manually executed counterpart of this Assignment and Assumption. This Assignment and Assumption shall be governed by, and construed in accordance with, the laws of the State of New York.

EXHIBIT 10.14

EXHIBIT 1.01-B

FORM OF GUARANTY AGREEMENT

[See attached.]

EXHIBIT 1.01-C

FORM OF COMMITTED NOTE

_____, _____

FOR VALUE RECEIVED, the undersigned, KINDER MORGAN, INC., a Delaware corporation (the "Borrower"), HEREBY PROMISES TO PAY to the order of _____ (the "Lender"), the lesser of (i) such Lender's Commitment and (ii) the aggregate amount of Committed Loans made by the Lender and outstanding on the Maturity Date. The principal amount of the Committed Loans made by the Lender to the Borrower shall be due and payable on the dates and in the amounts as are specified in that certain Revolving Credit Agreement, dated as of November 16, 2018 (as further restated, amended, modified, supplemented and in effect from time to time, the "5-Year Credit Agreement"), among the Borrower, the Lender, certain other lenders that are party thereto, Barclays Bank PLC, as Administrative Agent for the Lender and such other lenders, and the other agents named therein. All capitalized terms used herein and not otherwise defined shall have the meanings as defined in the 5-Year Credit Agreement.

The Borrower promises to pay interest on the unpaid principal amount of each Committed Loan outstanding from time to time from the date thereof until such principal amount is paid in full, at such interest rates and payable on such dates as are specified in the 5-Year Credit Agreement. Principal and interest are payable in same day funds in lawful money of the United States of America to the Administrative Agent at its Principal Office, or at such other place as the Administrative Agent shall designate in writing to the Borrower.

This Note is one of the Committed Notes referred to in, and this Note and all provisions herein are entitled to the benefits of, the 5-Year Credit Agreement. The 5-Year Credit Agreement, among other things (a) provides for the making of Committed Loans by the Lender and the other lenders to the Borrower from time to time, and (b) contains provisions for acceleration of the maturity hereof upon the happening of certain stated events, for prepayments on account of principal hereof prior to the maturity hereof upon the terms and conditions therein specified, and for limitations on the amount of interest paid such that no provision of the 5-Year Credit Agreement or this Note shall require the payment or permit the collection of interest in excess of the Maximum Rate.

This Note may be held by the Lender for the account of its applicable lending office and may be transferred from one lending office to another lending office from time to time as the Lender may determine.

The Borrower and any and all endorsers, guarantors and sureties severally waive grace, demand, presentment for payment, notice of dishonor, default or intent to accelerate, protest and notice of protest and diligence in collecting and bringing of suit against any party hereto, and agree to all renewals, extensions or partial payments hereon and to any release or substitution of security herefor, in whole or in part, with or without notice, before or after maturity.

This Note shall be governed by and construed under the laws of the State of New York and the applicable laws of the United States of America.

KINDER MORGAN, INC.,
as the Borrower

By:_____
Name:_____
Title:_____

EXHIBIT 10.14

EXHIBIT 1.01-D

FORM OF SWINGLINE NOTE

$_____ _____, _____

FOR VALUE RECEIVED, the undersigned, KINDER MORGAN, INC., a Delaware corporation (the "Borrower"), HEREBY PROMISES TO PAY to the order of _____ (the "Swingline Lender"), the lesser of (i) $_____ and (ii) the aggregate amount of Swingline Loans made by the Swingline Lender and outstanding on the Maturity Date. The principal amount of the Swingline Loans made by the Swingline Lender to the Borrower shall be due and payable on the dates and in the amounts as are specified in that certain Revolving Credit Agreement dated as of November 16, 2018 (as further restated, amended, modified, supplemented and in effect from time to time, the "5-Year Credit Agreement") among the Borrower, the Swingline Lender, certain other lenders that are party thereto, Barclays Bank PLC, as Administrative Agent for the Swingline Lender and such other lenders, and the other agents named therein. All capitalized terms used herein and not otherwise defined shall have the meanings as defined in the 5-Year Credit Agreement.

The Borrower promises to pay interest on the unpaid principal amount of each Swingline Loan outstanding from time to time from the date thereof until such principal amount is paid in full, at such interest rates and payable on such dates as are specified in the 5-Year Credit Agreement. Both principal and interest are payable in same day funds in lawful money of the United States of America to the Swingline Lender at its Principal Office or such other place as the Swingline Lender shall designate in writing to the Borrower.

This Note is the Swingline Note referred to in, and this Note and all provisions herein are entitled to the benefits of, the 5-Year Credit Agreement. The 5-Year Credit Agreement, among other things (a) provides for the making of Swingline Loans by the Swingline Lender to the Borrower from time to time, and (b) contains provisions for acceleration of the maturity hereof upon the happening of certain stated events, for prepayments on account of principal hereof prior to the maturity hereof upon the terms and conditions therein specified, and for limitations on the amount of interest paid such that no provision of the 5-Year Credit Agreement or this Note shall require the payment or permit the collection of interest in excess of the Maximum Rate.

The Borrower and any and all endorsers, guarantors and sureties severally waive grace, demand, presentment for payment, notice of dishonor, default or intent to accelerate, protest and notice of protest and diligence in collecting and bringing of suit against any party hereto, and agree to all renewals, extensions or partial payments hereon and to any release or substitution of security herefor, in whole or in part, with or without notice, before or after maturity.

This Note shall be governed by and construed under the laws of the State of New York and the applicable laws of the United States of America.

KINDER MORGAN, INC.,
as the Borrower

By:_____
Name:_____
Title:_____

EXHIBIT 2.03

FORM OF BORROWING REQUEST

Dated _____

Barclays Bank PLC,
1301 Sixth Avenue
New York, NY 10019
Attn: Bobby Fitzpatrick
Phone: 201-499-5043
E-mail: bobby.fitzpatrick@barclays.com and 12145455230@tls.ldsprod.com

Ladies and Gentlemen:

This Borrowing Request is delivered to you by Kinder Morgan, Inc. (the "Borrower"), a Delaware corporation, under Section 2.03 of the Revolving Credit Agreement, dated as of November 16, 2018 (as further restated, amended, modified, supplemented and in effect, the "5-Year Credit Agreement"), by and among the Borrower, the Lenders party thereto, Barclays Bank PLC, as Administrative Agent, and the other agents named therein.

1. The Borrower hereby requests that the Lenders make a [Committed] [Swingline][1] Loan or Loans in the aggregate principal amount of $_____.[2]

2. The Borrower hereby requests that the [Committed] [Swingline] Loan or Loans be made on the following Business Day: _____.[3]

3. The Borrower hereby requests that the Borrowing be [an ABR Borrowing] [a Eurodollar Borrowing].[4]

4. In the case of a Eurodollar Borrowing, the initial Interest Period shall be [one week] [one month] [two months] [three months] [six months].

5. The Borrower hereby requests that the funds from the requested Loan or Loans be disbursed to the following bank account: _____.

6. After giving effect to the requested Loan or Loans, the aggregate Credit Exposures outstanding as of the date hereof (including the requested Loans) does not exceed the maximum amount permitted to be outstanding pursuant to the terms of the 5-Year Credit Agreement.

---

1 Items 3 and 4 are not completed for Swingline Loans.

2 Complete with an amount in accordance with Section 2.03 of the 5-Year Credit Agreement.

3 Complete with a Business Day in accordance with Section 2.03 of the 5-Year Credit Agreement.

4 If no election as to Type of Borrowing is made for a Committed Loan, the Requested Borrowing shall be an ABR Borrowing.

7. The representations and warranties set forth in the 5-Year Credit Agreement and the other Loan Documents are true and correct in all material respects on and as of the date hereof (unless such representation and warranty expressly relates to an earlier date).

8. No Default or Event of Default has occurred and is continuing on the date hereof or would result after giving effect to the Loans requested hereby.

9. All capitalized undefined terms used herein have the meanings assigned thereto in the 5-Year Credit Agreement.

IN WITNESS WHEREOF, the undersigned have executed this Borrowing Request this _____ day of _____, _____.

KINDER MORGAN, INC.,
as the Borrower

By:_____
Name:_____
Title:_____

EXHIBIT 2.05

FORM OF LETTER OF CREDIT REQUEST

Dated _____

Barclays Bank PLC,
1301 Sixth Avenue
New York, NY 10019
Attn: Patrick Shields
Phone: 212-526-9531
E-mail: xraletterofcredit@barclays.com and Patrick.shields@barclays.com

and

**[Name and address of Issuing Bank,
if the Issuing Bank is not Barclays Bank PLC]**

Ladies and Gentlemen:

This Letter of Credit Request is delivered to you by Kinder Morgan, Inc., (the "Borrower"), a Delaware corporation, under Section 2.05 of the Revolving Credit Agreement, dated as of November 16, 2018 (as further restated, amended, modified, supplemented, and in effect from time to time, the "5-Year Credit Agreement"), by and among the Borrower, the Lenders party thereto, Barclays Bank PLC, as Administrative Agent, and the other parties named therein.

The Borrower hereby requests the issuance of a Letter of Credit under the 5-Year Credit Agreement, and in that connection sets forth below the information relating to such Letter of Credit (the "Proposed Letter of Credit") as required by Section 2.05(e) of the 5-Year Credit Agreement. The Proposed Letter of Credit must be issued:

on or before _____, _____[1]

for the benefit of _____ whose address is _____

In the amount of $_____

having an expiry date of _____, ____[2]

attached hereto is any special language to be incorporated into the Proposed Letter of Credit.

or

The Borrower hereby refers to Letter of Credit Number _____ (the "Existing Letter of Credit") which has an existing expiry date of _____. The Borrower hereby requests

---

[1] Must be a date not earlier than five Business Days after notice is given to the Issuing Bank.

[2] May include requirement for automatic extension provision but, in any event must comply with Section 2.05(f) of the 5-Year Credit Agreement.

that [the expiry date of the Expiring Letter of Credit be extended to _____.[2]] [the Existing Letter of Credit be amended.] [the Existing Letter of Credit be renewed.[3]]

1. After giving effect to the Proposed Letter of Credit, (i) the LC Exposure for all Committed Letters of Credit issued by such Issuing Bank does not exceed such Issuing Bank's Letter of Credit Commitment at such time, (ii) the total LC Exposure does not exceed the LC Sublimit and (iii) the total Credit Exposure does not exceed the Total Commitment.

2. All capitalized undefined terms used herein have the meanings assigned thereto in the 5-Year Credit Agreement.

The undersigned hereby certifies that:

1.The representations and warranties set forth in the 5-Year Credit Agreement and the other Loan Documents are true and correct in all material respects on and as of the date hereof (unless such representation and warranty expressly relates to an earlier date); and

2.No Default or Event of Default has occurred and is continuing on the date hereof or would result from the issuance of the Letter of Credit requested hereby.

[Remainder of page intentionally left blank]

[3] If an amendment, describe the proposed amendment.

IN WITNESS WHEREOF, the undersigned have executed this Letter of Credit Request this _____ day of _____, _____.

KINDER MORGAN, INC.,
as the Borrower

By:_____
Name:_____
Title:_____

EXHIBIT 10.14

EXHIBIT 2.07

FORM OF INTEREST ELECTION REQUEST

Date: **[**_____**]**, 20**[**__**]**

Barclays Bank PLC,
1301 Sixth Avenue
New York, NY 10019
Attn: Bobby Fitzpatrick
Phone: 201-499-5043
E-mail: bobby.fitzpatrick@barclays.com and 12145455230@tls.ldsprod.com

Re: Kinder Morgan, Inc. – Interest Election Request

Ladies and Gentlemen:

Reference is made to the Revolving Credit Agreement, dated as of November 16, 2018 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "5-Year Credit Agreement"), among Kinder Morgan, Inc., a Delaware corporation (the "Borrower"), the Lenders party thereto from time to time, Barclays Bank PLC as Administrative Agent, and the other parties thereto from time to time. Capitalized terms used but not otherwise defined in this Interest Election Request shall have the meanings assigned to such terms in the 5-Year Credit Agreement.

1. Interest Election Request. This Interest Election Request relates to the Borrower's election to (i) continue a Eurodollar Borrowing, (ii) convert a Eurodollar Borrowing or (iii) convert a Base Rate Borrowing on _____ (the "Interest Election Date"), as indicated below (*check each that applies*):

☐ **Continuation of Eurodollar Borrowing**.

Pursuant to Section 2.07 of the 5-Year Credit Agreement, this Interest Election Request confirms our written election on the date hereof to continue the following outstanding Borrowing comprised of Eurodollar Loans on the Interest Election Date, as follows:

(A) Expiration date of current Interest Period: _____

(B) Aggregate amount of outstanding Borrowing: _____

(C) Aggregate amount to be continued as Eurodollar Loans: _____

(D) Elected Interest Period: _____

☐ **Conversion of Eurodollar Borrowing**.

Pursuant to Section 2.07 of the 5-Year Credit Agreement, this Interest Election Request confirms our written election on the date hereof to convert the following outstanding Borrowing

comprised of Eurodollar Loans to Borrowing(s) comprised of ABR Loans on the Interest Election Date, as follows:

(A) Expiration date of current Interest Period: _____

(B) Aggregate amount of outstanding Borrowing: _____

(C) Aggregate amount to be converted to ABR Loans: _____

☐ **Conversion of Base Rate Borrowing**.

Pursuant to Section 2.07 of the 5-Year Credit Agreement, this Interest Election Request confirms our written election on the date hereof that the following outstanding Borrowing comprised of ABR Loans be converted to a Borrowing comprised of Eurodollar Loans on the Interest Election Date, as follows:

(A) Date of Conversion: _____

(B) Aggregate amount of outstanding Borrowing: _____

(C) Aggregate amount to be converted to Eurodollar Loans: _____

(D) Elected Interest Period: _____

2. Certifications. The Borrower hereby represents and warrants to the Lenders that, as of the date of this Interest Election Request and after giving effect to the continuations or conversions being requested under Section 1 hereof, no Default or Event of Default has occurred and is continuing.

[*Signature page follows*]

IN WITNESS WHEREOF, the undersigned has executed this Interest Election Request this _____ day of _____, ____.

KINDER MORGAN, INC.,
as the Borrower

By:_____
Name:_____
Title:_____

EXHIBIT 2.10

FORM OF NOTICE OF PREPAYMENT

Date: _____, ____

To: Barclays Bank PLC,
1301 Sixth Avenue
New York, NY 10019
Attn: Patrick Shields
Phone: 212-526-9531
E-mail: bobby.fitzpatrick@barclays.com, 12145455230@tls.ldsprod.com and Patrick.shields@barclays.com

Ladies and Gentlemen:

Reference is made to that certain Revolving Credit Agreement, dated as of November 16, 2018 (as may be amended, restated, amended and restated, extended, supplemented or otherwise modified in writing from time to time in accordance with its terms, the "5-Year Credit Agreement"; the terms defined therein being used herein as therein defined), among Kinder Morgan, Inc., a Delaware corporation (the "Borrower"), the Lenders party thereto from time to time, Barclays Bank PLC, as Administrative Agent, and the other parties thereto. All capitalized terms used but not defined herein have the meanings assigned in the 5-Year Credit Agreement.

This Prepayment Notice is delivered to you pursuant to Section 2.10 of the Agreement. The Borrower hereby gives notice of a prepayment of Loans as follows:

1. (select Class of Loans)

☐ Committed Loans

☐ Swingline Loans

2. (select Type(s) of Loans)

☐ ABR Loans in the aggregate principal amount of $_____.

☐ Eurodollar Loans with an Interest Period ending _____, 201_ in the aggregate principal amount of $_____.

3. On _____, 201_ (a Business Day).

IN WITNESS WHEREOF, the undersigned have executed this Prepayment Notice this _____ day of _____, _____.

KINDER MORGAN, INC.,
as the Borrower

By: _____
Name:_____
Title:_____

EXHIBIT 2.16-A

[FORM OF]
U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Lenders That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Revolving Credit Agreement, dated as of November 16, 2018 (as further amended, supplemented or otherwise modified from time to time, the "5-Year Credit Agreement"), among Kinder Morgan, Inc. (the "Borrower"), Barclays Bank PLC, as administrative agent for the lenders party thereto (the "Lenders") and such Lenders.

Pursuant to the provisions of Section 2.16(g) of the 5-Year Credit Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the Loan(s) (as well as any Note(s) evidencing such Loan(s)) in respect of which it is providing this certificate, (ii) it is not a bank within the meaning of Section 881(c)(3)(A) of the Code, (iii) it is not a ten percent shareholder of the Borrower within the meaning of Section 881(c)(3)(B) of the Code and (iv) it is not a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished the Administrative Agent and the Borrower with a certificate of its non-U.S. Person status on IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform the Borrower and the Administrative Agent, and (2) the undersigned shall have at all times furnished the Borrower and the Administrative Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the 5-Year Credit Agreement and used herein shall have the meanings given to them in the 5-Year Credit Agreement.

[NAME OF LENDER]

By:
Name:
Title:

Date: _____ __, 20[ ]

EXHIBIT 2.16-B

[FORM OF]
U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Participants That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Revolving Credit Agreement, dated as of November 16, 2018 (as further amended, supplemented or otherwise modified from time to time, the "5-Year Credit Agreement"), among Kinder Morgan, Inc. (the "Borrower"), Barclays Bank PLC, as administrative agent for the lenders party thereto (the "Lenders") and such Lenders.

Pursuant to the provisions of Section 2.16(g) of the 5-Year Credit Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the participation in respect of which it is providing this certificate, (ii) it is not a bank within the meaning of Section 881(c)(3)(A) of the Code, (iii) it is not a ten percent shareholder of the Borrower within the meaning of Section 881(c)(3)(B) of the Code, and (iv) it is not a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with a certificate of its non-U.S. Person status on IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform such Lender in writing, and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the 5-Year Credit Agreement and used herein shall have the meanings given to them in the 5-Year Credit Agreement.

[NAME OF PARTICIPANT]

By:
Name:
Title:

Date: _____ __, 20[ ]

EXHIBIT 2.16-C

[FORM OF]
U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Participants That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Revolving Credit Agreement, dated as of November 16, 2018 (as further amended, supplemented or otherwise modified from time to time, the "5-Year Credit Agreement"), among Kinder Morgan, Inc. (the "Borrower), Barclays Bank PLC, as administrative agent for the lenders party thereto (the "Lenders") and such Lenders.

Pursuant to the provisions of Section 2.16(g) of the 5-Year Credit Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the participation in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such participation, (iii) with respect such participation, neither the undersigned nor any of its direct or indirect partners/members is a bank extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (iv) none of its direct or indirect partners/members is a ten percent shareholder of the Borrower within the meaning of Section 881(c)(3)(B) of the Code and (v) none of its direct or indirect partners/members is a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with IRS Form W-8IMY accompanied by one of the following forms from each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable, or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable, from each of such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform such Lender and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the 5-Year Credit Agreement and used herein shall have the meanings given to them in the 5-Year Credit Agreement.

[NAME OF PARTICIPANT]

By:
Name:
Title:

Date: _____ __, 20[ ]

EXHIBIT 2.16-D

[FORM OF]
U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Lenders That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Revolving Credit Agreement, dated as of November 16, 2018 (as further amended, supplemented or otherwise modified from time to time, the "5-Year Credit Agreement"), among Kinder Morgan, Inc. (the "Borrower"), Barclays Bank PLC, as administrative agent for the lenders party thereto (the "Lenders") and such Lenders.

Pursuant to the provisions of Section 2.16(g) of the 5-Year Credit Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the Loan(s) (as well as any Note(s) evidencing such Loan(s)) in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such Loan(s) (as well as any Note(s) evidencing such Loan(s)), (iii) with respect to the extension of credit pursuant to this 5-Year Credit Agreement or any other Loan Document, neither the undersigned nor any of its direct or indirect partners/members is a bank extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (iv) none of its direct or indirect partners/members is a ten percent shareholder of the Borrower within the meaning of Section 881(c)(3)(B) of the Code and (v) none of its direct or indirect partners/members is a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished the Administrative Agent and the Borrower with IRS Form W-8IMY accompanied by one of the following forms from each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable, or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable, from each of such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform the Borrower and the Administrative Agent, and (2) the undersigned shall have at all times furnished the Borrower and the Administrative Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the 5-Year Credit Agreement and used herein shall have the meanings given to them in the 5-Year Credit Agreement.

[NAME OF LENDER]

By:
Name:
Title:

Date: _____ __, 20[ ]

EXHIBIT 2.21

FORM OF NEW LOAN INCREASE JOINDER

NEW LOAN INCREASE JOINDER, dated as of [_____], 201[_] (this "Agreement"), by and among [NEW LENDERS] (each, a "New Lender" and, collectively, the "New Lenders"), Kinder Morgan, Inc., a Delaware corporation (the "Borrower") and Barclays Bank PLC, as Administrative Agent in such capacity (the "Administrative Agent").

R E C I T A L S

WHEREAS, reference is hereby made to the Revolving Credit Agreement, dated as of November 16, 2018 (as amended, restated, supplemented or otherwise modified, refinanced or replaced from time to time, the "5-Year Credit Agreement"), among the Borrower, the Lenders party thereto, Barclays Bank PLC as Administrative Agent, and the other parties thereto (capitalized terms used but not defined herein having the meaning provided in the 5-Year Credit Agreement); and

WHEREAS, subject to the terms and conditions of the 5-Year Credit Agreement, the Borrower may establish New Commitments by, among other things, entering into one or more New Loan Increase Joinders with New Lenders;

NOW, THEREFORE, in consideration of the premises and agreements, provisions and covenants herein contained, the parties hereto agree as follows:

Each New Lender party hereto hereby agrees to commit to provide its respective New Commitment, as set forth opposite its name on Schedule A annexed hereto, on the terms and subject to the conditions set forth below.

Each New Lender (i) confirms that it has received a copy of the 5-Year Credit Agreement and the other Loan Documents and the exhibits thereto, together with copies of the financial statements referred to therein and such other documents and information as it has deemed appropriate to make its own credit analysis and decision to enter into this Agreement; (ii) agrees that it will, independently and without reliance upon the Administrative Agent, the Syndication Agent, any Documentation Agent, any other New Lender or any other Lender and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under the 5-Year Credit Agreement; (iii) appoints and authorizes the Administrative Agent to take such action as agent on its behalf and to exercise such powers under the 5-Year Credit Agreement and the other Loan Documents as are delegated to the Administrative Agent by the terms thereof, together with such powers as are reasonably incidental thereto; and (iv) agrees that it will perform in accordance with their terms all of the obligations which by the terms of the 5-Year Credit Agreement are required to be performed by it as a New Lender.

Each New Lender hereby agrees to make its respective Commitment on the following terms and conditions:

1. Proposed Increase to Revolving Facility. This Agreement represents the Borrower's request to increase the Total Commitment pursuant to Section 2.21 of the 5-Year Credit Agreement through New Commitments from the New Lenders as follows (the "Proposed Commitment Increase"):

(a) Business Day of Proposed Revolving Credit Commitment Increase: _____, ____ (the "Increased Amount Date")

(b) Amount of Proposed Commitment Increase: $_____[1]

2. [Acknowledgment and Agreement. Each New Lender acknowledges and agrees that upon its execution of this Agreement and the making of New Loans that such New Lender shall become a "Lender" under, and for all purposes of, the 5-Year Credit Agreement and the other Loan Documents, and shall be subject to and bound by the terms thereof, and shall perform all the obligations of and shall have all rights of a Lender thereunder.][2]

3. 5-Year Credit Agreement Governs. Except as set forth in this Agreement, the New Commitments shall otherwise be subject to the provisions of the 5-Year Credit Agreement and the other Loan Documents.

4. Borrower's Certifications. By its execution of this Agreement, the undersigned officer of the Borrower, to the best of his or her knowledge, hereby certifies that:

i. The representations and warranties set forth in the 5-Year Credit Agreement and the other Loan Documents are true and correct in all material respects on and as of the date hereof (unless such representation and warranty expressly relates to an earlier date); and

ii. No Event of Default exists on such Increased Amount Date before or after giving effect to such New Commitments.

5. Borrower Covenants. By its execution of this Agreement, Borrower hereby covenants that:

i. Borrower shall make any payments required pursuant the 5-Year Credit Agreement (including Section 2.15 thereof) to the Administrative Agent and the Lenders (other than any Defaulting Lender), in connection with the New Commitments;

ii. Borrower shall deliver or cause to be delivered the following legal opinions and documents: [_____], together with all other legal opinions and other documents reasonably requested by the Administrative Agent in connection with this Agreement; and

iii. Set forth on the attached Officers' Certificate are the calculations (in reasonable detail) demonstrating compliance on a pro forma basis with the financial tests described in Section 6.07 of the 5-Year Credit Agreement as of the Increased Amount Date and as of the Most Recent Financial Statement Date, after giving effect to such New Commitments (assuming for the purposes of such calculation that any New Commitments are fully drawn) and other customary and appropriate pro forma adjustments, including any acquisitions or dispositions

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[1] Amount not to exceed $1,000,000,000 in the aggregate with all other New Commitments.

[2] Insert bracketed language if the lending institution is not already a Lender.

after the beginning of the relevant determination period and prior to or simultaneous with the effectiveness of such New Commitments.

7. Consents. The Administrative Agent, the Swingline Lender and the Issuing Banks have consented to each New Lender on or prior to the date hereof.

8. Notice. For purposes of the 5-Year Credit Agreement, the initial notice address of each New Lender that is not a Lender under the 5-Year Credit Agreement shall be as set forth below its signature below.

9. Tax Forms. For each relevant New Lender, delivered herewith to the Administrative Agent are such forms, certificates or other evidence with respect to United States federal income tax withholding matters as such New Lender may be required to deliver to the Administrative Agent pursuant to Section 2.16(g) of the 5-Year Credit Agreement.

10. Recordation of the New Revolving Credit Commitments. Upon execution and delivery hereof, the Administrative Agent will record the New Commitments made by each New Lender in the Register.

11. Amendment, Modification and Waiver. This Agreement may not be amended, modified or waived except by an instrument or instruments in writing signed and delivered on behalf of each of the parties hereto.

12. Entire Agreement. This Agreement, the 5-Year Credit Agreement and the other Loan Documents constitute the entire agreement among the parties with respect to the subject matter hereof and thereof and supersede all other prior agreements and understandings, both written and verbal, among the parties or any of them with respect to the subject matter hereof.

13. GOVERNING LAW. THIS AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

14. Severability. Any term or provision of this Agreement which is invalid or unenforceable in any jurisdiction shall, as to that jurisdiction, be ineffective to the extent of such invalidity or unenforceability without rendering invalid or unenforceable the remaining terms and provisions of this Agreement or affecting the validity or enforceability of any of the terms or provisions of this Agreement in any other jurisdiction. If any provision of this Agreement is so broad as to be unenforceable, the provision shall be interpreted to be only so broad as would be enforceable.

15. Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed to be an original, but all of which shall constitute one and the same agreement.

IN WITNESS WHEREOF, each of the undersigned has caused its duly authorized officer to execute and deliver this New Loan Increase Joinder as of _____, _____.

[NEW REVOLVING LOAN LENDER]

By:
Name:
Title:

[Notice Address:
Attention:
Telephone:
Facsimile:][3]

KINDER MORGAN, INC., as Borrower

By:
Name:
Title:

[NAME OF ADMINISTRATIVE AGENT], as Administrative Agent

By:
Name:
Title:

[3] Insert notice information if such New Revolving Loan Lender is not a Revolving Credit Lender under the 5-Year Credit Agreement.

Consented to:

[NAME OF ADMINISTRATIVE AGENT], as
Administrative Agent

By: _____
Name:
Title:

[NAME OF EACH RELEVANT PARTY][4]

By: _____
Name:
Title:

---

[4] Requires consent of the Administrative Agent, each Swingline Lender and each Issuing Bank.

EXHIBIT 5.01

FORM OF COMPLIANCE CERTIFICATE

The undersigned hereby certifies that he is the _____ of KINDER MORGAN, INC., a Delaware corporation (the "Borrower"), and that as such he is authorized to execute this certificate on behalf of the Borrower. With reference to the Revolving Credit Agreement dated as of November 16, 2018 (as further restated, amended, modified, supplemented and in effect from time to time, the "5-Year Credit Agreement") among the Borrower, Barclays Bank PLC, as Administrative Agent, for the lenders (the "Lenders") and such Lenders, the undersigned represents and warrants as follows (each capitalized term used herein having the same meaning given to it in the 5-Year Credit Agreement unless otherwise specified);

Attached hereto as Annex I are the detailed computations necessary to determine whether the Borrower is in compliance with Section 6.07 of the 5-Year Credit Agreement as of the end of the [fiscal quarter][fiscal year] ending _____.

[Attached hereto as Annex II is a list of the Material Subsidiaries.][1]

[There has been no change in the list of Material Subsidiaries since [ ], the date of the last Compliance Certificate delivered prior to the date hereof.] [Attached hereto as Annex II is an update to the list of Material Subsidiaries to reflect changes in such list since [ ], the date of the last Compliance Certificate delivered prior to the date hereof.][2]

There does not exist any Default or Event of Default under the 5-Year Credit Agreement as of the date of this Compliance Certificate, except as set forth in a separate attachment, if any, to this Compliance Certificate, setting forth the details thereof and the action taken or proposed to be taken by the Borrower with respect thereto.

EXECUTED AND DELIVERED this _____ day of _____, _____.

KINDER MORGAN, INC.,
as the Borrower

By: _____
Name:_____
Title:_____

---

1 To be included in the compliance certificate delivered simultaneously with the first set of financial statements delivered following the Closing Date.

2 Select the appropriate option for each Compliance Certificate delivered simultaneously with the second set of financial statements delivered following the Closing Date and each set of financial statements delivered thereafter.

EXHIBIT 10.15

$500,000,000

REVOLVING CREDIT AGREEMENT

dated as of
November 16, 2018

among

KINDER MORGAN, INC.,
as the Borrower,

THE LENDERS PARTY HERETO

and

BARCLAYS BANK PLC,
as the Administrative Agent

JPMORGAN CHASE BANK, N.A.,
as the Syndication Agent,

and

BARCLAYS BANK PLC,
JPMORGAN CHASE BANK, N.A.,
BANK OF AMERICA, N.A.,
BMO HARRIS BANK N.A.,
CITIGROUP GLOBAL MARKETS INC.,
CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH,
MIZUHO BANK, LTD.,
MUFG BANK, LTD.,
ROYAL BANK OF CANADA,
THE BANK OF NOVA SCOTIA, HOUSTON BRANCH and
WELLS FARGO BANK, NATIONAL ASSOCIATION,
as the Documentation Agents,

BARCLAYS BANK PLC,
JPMORGAN SECURITIES LLC,
BMO CAPITAL MARKETS CORP.,
CITIGROUP GLOBAL MARKETS INC.,
CREDIT SUISSE SECURITIES (USA) LLC,
MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED,
MIZUHO BANK, LTD.,
MUFG BANK, LTD.,
RBC CAPITAL MARKETS,
THE BANK OF NOVA SCOTIA, HOUSTON BRANCH and
WELLS FARGO SECURITIES, LLC,

as the Joint Lead Arrangers and the Joint Book Runners

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SCHEDULES:

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EXHIBIT 10.15

REVOLVING CREDIT AGREEMENT

THIS REVOLVING CREDIT AGREEMENT, dated as of November 16, 2018 (this "Agreement") is among:

(a) Kinder Morgan, Inc., a Delaware corporation (the "Borrower");

(b) the banks, financial institutions and other lenders listed on the signature pages hereof under the caption "Lenders" (the "Lenders" and together with each other Person that becomes a Lender pursuant to Section 9.05, collectively, the "Lenders"); and

(c) Barclays Bank PLC, individually as a Lender and as the administrative agent for the Lenders (in such latter capacity together with any other Person that becomes Administrative Agent pursuant to Section 8.08, the "Administrative Agent").

PRELIMINARY STATEMENTS

The Borrower has requested that the Lenders extend credit to the Borrower in the form of Loans (as defined below) in an aggregate principal amount of $500,000,000 (the "Transactions") to be used by Borrower and its subsidiaries for working capital and general corporate purposes, and the Lenders have indicated their willingness to lend on the terms and subject to the conditions set forth herein.

NOW, THEREFORE, the parties hereto agree as follows:

ARTICLE I
DEFINITIONS

SECTION 1.01 Defined Terms. As used in this Agreement, the following terms have the meanings specified below:

"ABR", when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, bear interest at a rate determined by reference to the Alternate Base Rate.

"Adjusted LIBO Rate" means, with respect to any Eurodollar Loan for any Interest Period for such Loan, a rate per annum (rounded upwards, if necessary, to the nearest 1/100 of 1%) determined by the Administrative Agent to be equal to the product of (i) the Eurodollar Rate for such Loan for such Interest Period multiplied by (ii) the Reserve Requirement for such Loan for such Interest Period. In no case shall the Adjusted LIBO Rate be less than zero.

"Administrative Agent" has the meaning specified in the introduction to this Agreement.

"Administrative Agent Fee Letter" has the meaning specified in Section 2.11(c).

"Administrative Questionnaire" means an Administrative Questionnaire in the form supplied by the Administrative Agent.

"Affiliate" of any Person means (i) any Person directly or indirectly controlled by, controlling or under common control with such first Person, (ii) any director or officer of such first Person or of any Person referred to in clause (i) above and (iii) if any Person in clause (i) above is an individual, any member of the immediate family (including parents, siblings, spouse and children) of such individual and any trust

whose principal beneficiary is such individual or one or more members of such immediate family and any Person who is controlled by any such member or trust. For purposes of this definition, any Person that owns directly or indirectly 25% or more of the securities having ordinary voting power for the election of directors or other governing body of a corporation or 25% or more of the partnership or other ownership interests of any other Person (other than as a limited partner of such other Person) will be deemed to *"control"* (including, with its correlative meanings, *"controlled by"* and *"under common control with"*) such corporation or other Person. In no event shall the Administrative Agent or any Lender be deemed to an Affiliate of the Borrower of any of its Subsidiaries.

"Affiliated Entities" means unconsolidated Subsidiaries of the Borrower and Persons not otherwise constituting Subsidiaries of the Borrower in which the Borrower has an equity investment.

"Agreement" has the meaning specified in the introduction to this Agreement (*subject, however*, to Section 1.04(e) hereof).

"Alternate Base Rate" means, for any day, a fluctuating rate per annum equal to the greatest of (a) the Federal Funds Effective Rate in effect on such day *plus* ½ of 1%, (b) the Prime Rate in effect for such day, and (c) the Adjusted LIBO Rate for a Eurodollar Loan with a one month Interest Period that begins on such day (and if such day is not a Business Day, the immediately preceding Business Day) *plus* 1%. Any change in the Alternate Base Rate due to a change in the Prime Rate, the Federal Funds Effective Rate or the Adjusted LIBO Rate shall be effective from the effective date of such change in the Prime Rate, the Federal Funds Effective Rate or the Adjusted LIBO Rate, respectively.

"Anti-Corruption Laws" means all laws, rules, and regulations of any jurisdiction applicable to the Borrower or any of its Subsidiaries from time to time concerning or relating to bribery or corruption.

"Applicable Commitment Fee Rate" means, at any time and from time to time, the percentage per annum equal to the applicable percentage set forth below for the corresponding Performance Level at such time:

Performance Level	Applicable Commitment Fee Rate
I	0.090%
II	0.100%
III	0.125%
IV	0.175%
V	0.225%
VI	0.275%

The Applicable Commitment Fee Rate shall be determined by reference to the Performance Level in effect from time to time and any change in the Applicable Commitment Fee Rate shall be effective from the effective date of the change in the applicable Performance Level giving rise thereto.

"Applicable Margin" means, as to any ABR Borrowing or any Eurodollar Borrowing, as the case may be, at any time and from time to time, a percentage per annum equal to the applicable percentage set forth below for the corresponding Performance Level at such time:

Performance Level	Eurodollar Borrowings Applicable Margin Percentage	ABR Borrowings Applicable Margin Percentage
I	1.000%	0.100%
II	1.125%	0.125%
III	1.250%	0.250%
IV	1.500%	0.500%
V	1.750%	0.750%
VI	2.000%	1.000%

The Applicable Margin shall be determined by reference to the Performance Level in effect from time to time, and any change in the Applicable Margin shall be effective from the effective date of any change in the applicable Performance Level giving rise thereto.

"Applicable Percentage" means at any time, for each Lender, the percentage obtained by dividing (a) such Lender's Commitment by (b) the amount of the Total Commitment, *provided* that at any time when the Total Commitment shall have been terminated, each Lender's Applicable Percentage shall be the percentage obtained by dividing (a) such Lender's Credit Exposure by (b) the aggregate Credit Exposure of all Lenders.

"Approved Fund" means any Fund that is administered or managed by (a) a Lender, (b) an Affiliate of a Lender or (c) an entity or an Affiliate of an entity that administers or manages a Lender.

"Arrangers" means Barclays Bank PLC, J.P. Morgan Securities LLC., Merrill Lynch, Pierce, Fenner & Smith Incorporated (or any other registered broker-dealer wholly-owned by Bank of America Corporation to which all or substantially all of Bank of America Corporation's or any of its subsidiaries' investment banking, commercial lending services or related businesses may be transferred following the date of this Agreement), BMO Capital Markets Corp., Citigroup Global Markets Inc., Credit Suisse Securities (USA) LLC, Mizuho Bank, Ltd., MUFG Bank, Ltd., RBC Capital Markets, The Bank of Nova Scotia, Houston Branch and Wells Fargo Securities LLC, as joint lead arrangers and joint book runners.

"Assignment and Acceptance" means an assignment and acceptance entered into by a Lender and an assignee (with the consent of any party whose consent is required by Section 9.05), and accepted by the Administrative Agent, in the form of Exhibit 1.01-A or any other form approved by the Administrative Agent.

"Availability Period" means the period from the Closing Date to the earlier of (i) the Maturity Date or (ii) the date of termination of the Total Commitment.

"Bail-In Action" means the exercise of any Write-Down and Conversion Powers by the applicable EEA Resolution Authority in respect of any liability of an EEA Financial Institution.

"Bail-In Legislation" means, with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule.

"Beneficial Ownership Certification" means a certification regarding beneficial ownership or control as required by the Beneficial Ownership Regulation, which certification shall be substantially similar in form and substance to the form of Certification Regarding Beneficial Owners of Legal Entity Customers published jointly, in May 2018, by the Loan Syndications and Trading Association and Securities Industry and Financial Markets Association.

"Beneficial Ownership Regulation" means 31 C.F.R. § 1010.230.

"Benefit Arrangement" means at any time an employee benefit plan within the meaning of Section 3(3) of ERISA which is not a Plan or a Multiemployer Plan and which is maintained or otherwise contributed to by any member of the ERISA Group.

"Benefit Plan" means any of (a) an "employee benefit plan" (as defined in Section 3(3) of ERISA) that is subject to Title I of ERISA, (b) a "plan" as defined in Section 4975 of the Code to which Section 4975 of the Code applies, and (c) any Person whose assets include (for purposes of the Plan Asset Regulations or otherwise for purposes of Title I of ERISA or Section 4975 of the Code) the assets of any such "employee benefit plan" or "plan".

"Board" means the Board of Governors of the Federal Reserve System of the United States of America.

"Board of Directors" means, with respect to any Person, the Board of Directors of such Person or any committee of the Board of Directors of such Person duly authorized to act on behalf of the Board of Directors of such Person.

"Bonds" means the Port Facility Refunding Revenue Bonds (Enron Transportation Services, L.P. Project) Series 1994 in the original aggregate principal amount of $23,700,000, as issued by the Jackson-Union Regional Port District.

"Borrower" has the meaning specified in the introduction to this Agreement.

"Borrower Debt Rating" means, with respect to the Borrower as of any date of determination, the rating that has been most recently announced by each of S&P or Moody's for any non-credit enhanced, unsecured long-term senior debt issued or to be issued by the Borrower. For purposes of the foregoing:

(a) if, at any time, neither S&P nor Moody's shall have in effect a Borrower Debt Rating, the Applicable Margin or the Applicable Commitment Fee Rate, as the case may be, shall be set in accordance with Performance Level VI under the definition of "*Applicable Margin*" or "*Applicable Commitment Fee Rate*", as the case may be;

(b) if the ratings established by S&P and Moody's shall fall within different Performance Levels, the Applicable Margin or the Applicable Commitment Fee Rate, as the case may be,

shall be based upon the higher rating; *provided, however*, that, if the lower of such ratings is two or more Performance Levels below the higher of such ratings, the Applicable Margin or the Applicable Commitment Fee Rate, as the case may be, shall be based upon the rating that is one Performance Level higher than the lower rating;

(c) if any rating established by S&P or Moody's shall be changed, such change shall be effective as of the date on which such change is announced publicly by the rating agency making such change;

(d) if S&P or Moody's shall change the basis on which ratings are established by it, each reference to the Borrower Debt Rating announced by S&P or Moody's shall refer to the then equivalent rating by S&P or Moody's, as the case may be.

"Borrowing" means a borrowing comprised of Committed Loans of the same Type, made, converted or continued on the same date and, in the case of Eurodollar Loans, as to which a single Interest Period is in effect.

"Borrowing Date" means the Business Day upon which any Loans are to be made available to the Borrower.

"Borrowing Request" has the meaning specified in Section 2.03.

"Business Day" means any day that is not a Saturday, Sunday or other day on which commercial banks in Houston, Texas or New York, New York are authorized or required by law to remain closed; *provided* that, when used in connection with a rate of interest determined by reference to the Eurodollar Rate, the term *"Business Day"* shall also exclude any day on which banks are not open for dealings in dollar deposits in the London interbank market.

"Capital Lease Obligations" of any Person means the obligations of such Person to pay rent or other amounts under any lease of (or other arrangement conveying the right to use) real or personal property, or a combination thereof, which obligations are required to be classified and accounted for as capital leases on a balance sheet of such Person under GAAP, and the amount of such obligations shall be the capitalized amount thereof determined in accordance with GAAP.

"Capital Stock" means, with respect to any Person, any and all shares, interests, rights to purchase, warrants, options, participations or other equivalents (however designated) of such Person's equity, including (a) all common stock and preferred stock, any limited or general partnership interest and any limited liability company member interest, (b) beneficial interests in trusts, and (c) any other interest or participation that confers upon a Person the right to receive a share of the profits and losses of, or distribution of assets of, the issuing Person.

"Cash Equivalents" means (a) securities issued or unconditionally guaranteed by the United States government or any agency or instrumentality thereof, in each case having maturities of not more than 24 months from the date of acquisition thereof; (b) securities issued by any state of the United States of America or any political subdivision of any such state or any public instrumentality thereof or any political subdivision of any such state or any public instrumentality thereof having maturities of not more than 24 months from the date of acquisition thereof and, at the time of acquisition, having an investment grade rating generally obtainable from either S&P or Moody's (or, if at any time neither S&P nor Moody's shall be rating such obligations, then from another nationally recognized rating service); (c) commercial paper issued by any Lender or any bank holding company owning any Lender; (d) commercial paper maturing no more than

12 months after the date of creation thereof and, at the time of acquisition, having a rating of at least A-2 or P-2 from either S&P or Moody's (or, if at any time neither S&P nor Moody's shall be rating such obligations, an equivalent rating from another nationally recognized rating service); (e) domestic and Eurodollar Rate certificates of deposit or bankers' acceptances maturing no more than two years after the date of acquisition thereof issued by any Lender or any other bank having combined capital and surplus of not less than $250,000,000 in the case of domestic banks and $100,000,000 (or the equivalent in dollars thereof) in the case of foreign banks; (f) repurchase agreements with a term of not more than 30 days for underlying securities of the type described in clauses (a), (b) and (e) above entered into with any bank meeting the qualifications specified in clause (e) above or securities dealers of recognized national standing; (g) marketable short-term money market and similar funds (i) either having assets in excess of $250,000,000 or (ii) having a rating of at least A-2 or P-2 from either S&P or Moody's (or, if at any time neither S&P nor Moody's shall be rating such obligations, an equivalent rating from another nationally recognized rating service); (h) shares of investment companies that are registered under the Investment Company Act of 1940 and substantially all the investments of which are one or more of the types of securities described in clauses (a) through (g) above; and (i) in the case of investments by any Foreign Subsidiary, other customarily utilized high-quality investments in the country where such Foreign Subsidiary is located.

"Certain Items" means such items that are required to be included in the calculation of Net Income in accordance with GAAP that either (i) are non-cash or (ii) by their nature are separately identifiable from the Borrower and the Subsidiaries' normal business operations and are likely to occur only sporadically, and are reflected as such in the Annual Report on Form 10-K of the Borrower or in the Quarterly Report on Form 10-Q of the Borrower, in each case filed with the SEC. For the avoidance of doubt, Certain Items will be unadjusted for noncontrolling interests related thereto.

"CFC" means a Person that is a "controlled foreign corporation" within the meaning of Section 957 of the Code.

"Change in Control" means and will be deemed to have occurred if (a) any person, entity or "group" (within the meaning of Section 13(d) or 14(d) of the Securities Exchange Act of 1934, as amended) shall at any time have acquired direct or indirect beneficial ownership of a percentage of the voting power of the outstanding Voting Stock of the Borrower that exceeds 50% of the voting power of all the outstanding Voting Stock of the Borrower; or (b) Continuing Directors shall not constitute at least a majority of the board of directors of the Borrower.

"Change in Law" means the occurrence, after the date of this Agreement, of any of the following: (a) the adoption or taking effect of any law, rule, regulation or treaty, (b) any change in any law, rule, regulation or treaty or in the administration, interpretation, implementation or application thereof by any Governmental Authority or (c) the making or issuance of any request, rule, guideline or directive (whether or not having the force of law) by any Governmental Authority; *provided* that notwithstanding anything herein to the contrary, (x) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (y) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to be a "Change in Law", regardless of the date enacted, adopted or issued.

"Charges" has the meaning specified in Section 9.13.

"Closing Date" means the date on which the conditions specified in Section 3.01 are satisfied (or waived in accordance with Section 9.02).

"Code" means the Internal Revenue Code of 1986, as amended from time to time.

"Commitment" means, with respect to each Lender, the commitment of such Lender to make Committed Loans pursuant to Section 2.01, expressed as an amount representing the maximum aggregate amount of such Lender's Credit Exposure hereunder, as such commitment may be reduced or increased from time to time pursuant to the terms hereof. The initial amount of each Lender's Commitment as of the Closing Date is set forth on Schedule 1.01, or in the Register maintained by the Administrative Agent pursuant to Section 9.05.

"Commitment Fee" has the meaning specified in Section 2.11(a).

"Committed Loan" means a Loan made pursuant to Section 2.03.

"Committed Note" means a promissory note of the Borrower payable to the order of each Lender, in substantially the form of Exhibit 1.01-C, together with all modifications, extensions, renewals and rearrangements thereof.

"Communications" has the meaning specified in Section 9.01(a).

"Connection Income Taxes" means Other Connection Taxes that are imposed on or measured by net income (however denominated) or that are franchise Taxes or branch profits Taxes.

"Consolidated Assets" means, at the date of any determination thereof, the total assets of the Borrower and the Subsidiaries as set forth on a consolidated balance sheet of the Borrower and the Subsidiaries for their most recently completed fiscal quarter, prepared in accordance with GAAP.

"Consolidated EBITDA" means, for any period (without duplication), the Net Income of the Borrower and the Subsidiaries for such period determined on a consolidated basis in accordance with GAAP, increased (a) (to the extent deducted in determining Net Income for such period) by the sum of (i) all book taxes of the Borrower and the Subsidiaries paid or accrued and reflected in the Annual Report on Form 10-K of the Borrower or in the Quarterly Report on Form 10-Q of the Borrower, in each case filed with the SEC, and the pro rata portion of book taxes attributable to Affiliated Entities (net of (x) the noncontrolling interest's portion of such book taxes of KML and (y) the consolidating joint venture partners' share of such book taxes of such consolidating joint venture), for such period; (ii) Consolidated Interest Expense for such period, (iii) all DD&A of the Borrower and the Subsidiaries and the pro rata portion of DD&A attributable to Affiliated Entities (net of (x) the noncontrolling interest's portion of such DD&A of KML and (y) the consolidating joint venture partners' share of such DD&A of such consolidating joint venture), for such period; (iv) Certain Items charges or losses, and (v) amortization, write-off or write-down of debt discount, capitalized interest and debt issuance costs and commissions, discounts and other fees, charges and expenses associated with any letters of credit or Indebtedness, including in connection with the repurchase or repayment thereof, including any premium and acceleration of fees or discounts and other expenses, minus (b) Certain Items of income or gain which were included in determining such consolidated Net Income for such period; provided, that Consolidated EBITDA shall be calculated after giving pro forma effect to acquisitions of any Person, property, business or asset (to the extent not subsequently sold, transferred, abandoned or otherwise disposed) and any sale, transfer, abandonment or other disposition of any Person, property, business or asset made by the Borrower or any Subsidiary during such period, as if the acquisition, sale, transfer, abandonment or other disposition had been effected on the first date of such period.

"Consolidated Interest Expense" means, for any period, the Interest Expense of the Borrower and the Subsidiaries for such period determined on a consolidated basis in accordance with GAAP.

"Consolidated Net Indebtedness" means, at the date of any determination thereof, (a) Indebtedness of the Borrower and the Subsidiaries determined on a consolidated basis in accordance with GAAP minus (b) (i) the aggregate cash included in the cash accounts listed on the consolidated balance sheet of the Borrower and the Subsidiaries as at such date and (ii) Cash Equivalents of the Borrower and the Subsidiaries as at such date, in the case of each of clauses (i) and (ii), to the extent the use thereof for application to payment of Indebtedness is not prohibited by any Requirement of Law or any contract to which the Borrower or any of the Subsidiaries is a party.

"Consolidated Net Tangible Assets" means, at the date of any determination thereof, Consolidated Tangible Assets after deducting therefrom all current liabilities, excluding (i) any current liabilities that by their terms are extendable or renewable at the option of the obligor thereon to a time more than 12 months after the time as of which the amount thereof is being computed; and (ii) current maturities of long-term debt, all as set forth, or on a *pro forma* basis would be set forth, on a consolidated balance sheet of the Borrower and the Subsidiaries for their most recently completed fiscal quarter, prepared in accordance with GAAP.

"Consolidated Tangible Assets" means, at the date of any determination thereof, Consolidated Assets after deducting therefrom the value, net of any applicable reserves and accumulated amortization, of all goodwill, trade names, trademarks, patents and other like intangible assets, all as set forth, or on a pro forma basis would be set forth, on a consolidated balance sheet of the Borrower and the Subsidiaries for their most recently completed fiscal quarter, prepared in accordance with GAAP.

"Continuing Director" means, at any date, an individual (a) who is a member of the board of directors of the Borrower on the Closing Date, (b) who, as at such date, has been a member of such board of directors for at least the twelve preceding months, or (c) who has been nominated to be a member of such board of directors by, or elected to such board of directors with the approval of, a majority of the other Continuing Directors then in office.

"Credit Event" means the making of any Loan.

"Credit Exposure" means, with respect to any Lender at any time, the outstanding principal amount of such Lender's Committed Loans.

"DD&A" means depreciation, depletion and amortization (including amortization of goodwill) and the amortization of excess costs of equity investments, determined in accordance with GAAP.

"Debtor Relief Laws" means the Bankruptcy Code of the United States of America, and all other liquidation, conservatorship, bankruptcy, assignment for the benefit of creditors, moratorium, rearrangement, receivership, insolvency, reorganization, or similar debtor relief Laws of the United States or other applicable jurisdictions from time to time in effect.

"Default" means any event or condition which upon notice, lapse of time or both would, unless cured or waived, become an Event of Default.

"Defaulting Lender" means, subject to Section 2.19(b), any Lender that (a) has failed to (i) fund all or any portion of its Loans within three Business Days of the date such Loans were required to

be funded hereunder unless such Lender notifies the Administrative Agent and the Borrower in writing that such failure is the result of such Lender's determination that one or more conditions precedent to funding (each of which conditions precedent, together with any applicable default, shall be specifically identified in such writing) has not been satisfied, or (ii) pay to the Administrative Agent or any Lender any other amount required to be paid by it hereunder within two Business Days of the date when due, (b) has notified the Borrower or the Administrative Agent in writing that it does not intend to comply with its funding obligations hereunder, or has made a public statement to that effect (unless such writing or public statement relates to such Lender's obligation to fund a Loan hereunder and states that such position is based on such Lender's determination that a condition precedent to funding (which condition precedent, together with any applicable default, shall be specifically identified in such writing or public statement) cannot be satisfied), (c) has failed, within three Business Days after written request by the Administrative Agent or the Borrower, to confirm in writing to the Administrative Agent and the Borrower that it will comply with its prospective funding obligations hereunder (*provided* that such Lender shall cease to be a Defaulting Lender pursuant to this clause (c) upon receipt of such written confirmation by the Administrative Agent and the Borrower), or (d) has, or has a direct or indirect parent company that has, (i) become the subject of a proceeding under any Debtor Relief Law, (ii) become subject of a Bail-In Action, or (iii) had appointed for it a receiver, custodian, conservator, trustee, administrator, assignee for the benefit of creditors or similar Person charged with reorganization or liquidation of its business or assets, including the Federal Deposit Insurance Corporation or any other state or federal regulatory authority acting in such a capacity; *provided* that, for the avoidance of doubt, a Lender shall not be a Defaulting Lender solely by virtue of (i) the ownership or acquisition of any equity interest in that Lender or any direct or indirect parent company thereof by a Governmental Authority, or (ii), in the case of a solvent Person, the precautionary appointment of an administrator, guardian, custodian or other similar official by a Governmental Authority under or based on the law of the country where such Person is subject to home jurisdiction supervision if applicable law requires that such appointment not be publicly disclosed, in each of such cases, so long as such ownership interest or such appointment does not result in or provide such Lender with immunity from the jurisdiction of courts within the United States or from the enforcement of judgments or writs of attachment on its assets or permit such Lender (or such Governmental Authority) to reject, repudiate, disavow or disaffirm any contracts or agreements made with such Lender. Any determination by the Administrative Agent that a Lender is a Defaulting Lender under any one or more of clauses (a) through (d) above shall be conclusive and binding absent manifest error, and such Lender shall be deemed to be a Defaulting Lender (subject to Section 2.19(b)) upon delivery of written notice of such determination to the Borrower and each Lender.

"Dividing Person" has the meaning assigned to such term in the definition of "Division".

"Division" means the division of the assets, liabilities and/or obligations of a Person (the "Dividing Person") among two or more Persons (whether pursuant to a "plan of division" or similar arrangement), which may or may not include the Dividing Person and pursuant to which the Dividing Person may or may not survive.

"Division Successor" means any Person that, upon the consummation of a Division of a Dividing Person, holds all or any portion of the assets, liabilities and/or obligations previously held by such Dividing Person immediately prior to the consummation of such Division. A Dividing Person which retains any of its assets, liabilities and/or obligations after a Division shall be deemed a Division Successor upon the occurrence of such Division.

"Documentation Agents" means Barclays Bank PLC, JPMorgan Chase Bank, N.A., Bank of America, N.A., BMO Harris Bank N.A., Citigroup Global Markets Inc., Credit Suisse AG, Cayman Islands Branch, Mizuho Bank, Ltd., MUFG Bank, Ltd., Royal Bank of Canada, The Bank of Nova Scotia, Houston Branch and Wells Fargo Bank, National Association, as documentation agents.

"dollars" or "$" refers to lawful money of the United States of America.

"Domestic Subsidiary" means any Subsidiary of the Borrower organized under the laws of any jurisdiction within the United States.

"EEA Financial Institution" means (a) any credit institution or investment firm established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country which is a parent of an institution described in clause (a) of this definition, or (c) any financial institution established in an EEA Member Country which is a subsidiary of an institution described in clauses (a) or (b) of this definition and is subject to consolidated supervision with its parent.

"EEA Member Country" means any of the member states of the European Union, Iceland, Liechtenstein, and Norway.

"EEA Resolution Authority" means any public administrative authority or any person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.

"Eligible Assignee" means any Person that meets the requirements to be an assignee under Section 9.05(a)(iii), (v) and (vi) (subject to such consents, if any, as may be required under Section 9.05(a)(iii)).

"Environmental Laws" means all laws, rules, regulations, codes, ordinances, orders, decrees, judgments, injunctions, notices or binding agreements issued, promulgated or entered into by any Governmental Authority, relating in any way to the environment, preservation or reclamation of natural resources, the management, release or threatened release of any Hazardous Material or to health and safety matters.

"Environmental Liability" means any liability, contingent or otherwise (including any liability for damages, costs of environmental remediation, fines, penalties or indemnities), of the Borrower or any Subsidiary directly or indirectly resulting from or based upon (a) violation of any Environmental Law, (b) the generation, use, handling, transportation, storage, treatment or disposal of any Hazardous Materials, (c) exposure to any Hazardous Materials, (d) the release of any Hazardous Materials into the environment, or (e) any contract, agreement or other consensual arrangement pursuant to which liability is assumed or imposed with respect to any of the foregoing.

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended from time to time.

"ERISA Group" means the Borrower and all members of a controlled group of corporations and all trades or businesses (whether or not incorporated) under common control which, together with the Borrower, are treated as a single employer under Section 414 of the Code or Section 4001(a)(14) of ERISA.

"EU Bail-In Legislation Schedule" means the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor person), as in effect from time to time.

"Eurodollar", when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, bear interest at a rate determined by reference to the Adjusted LIBO Rate.

"Eurodollar Rate" means for any Interest Period as to any Eurodollar Loan, (i) the rate per annum determined by the Administrative Agent to be the offered rate which appears on the page of the Reuters Screen which displays the London interbank offered rate administered by ICE Benchmark Administration Limited (such page currently being the LIBOR01 page) (the "LIBO Rate") for deposits (for delivery on the first day of such Interest Period) with a term equivalent to such Interest Period in Dollars, determined as of approximately 11:00 a.m. (London, England time), two Business Days prior to the commencement of such Interest Period, or (ii) in the event the rate referenced in the preceding clause (i) does not appear on such page or service or if such page or service shall cease to be available, the rate determined by the Administrative Agent to be the offered rate on such other page or other service which displays the LIBO Rate for deposits (for delivery on the first day of such Interest Period) with a term equivalent to such Interest Period in Dollars, determined as of approximately 11:00 a.m. (London, England time) two Business Days prior to the commencement of such Interest Period; provided that if LIBO Rates are quoted under either of the preceding clauses (i) or (ii), but there is no such quotation for the Interest Period elected, the LIBO Rate shall be equal to the Interpolated Rate; and provided, further, that if any such rate determined pursuant to the preceding clauses (i) or (ii) is less than zero, the Eurodollar Rate will be deemed to be zero.

"Event of Default" has the meaning specified in Section 7.01.

"Exchange Act" means the Securities Exchange Act of 1934, as amended.

"Excluded Subsidiary" means (i) any Subsidiary that is not a Wholly-owned Domestic Operating Subsidiary, (ii) any Domestic Subsidiary that is a Subsidiary of a CFC or any Domestic Subsidiary (including a disregarded entity for U.S. federal income Tax purposes) substantially all of whose assets (held directly or through Subsidiaries) consist of Capital Stock of one or more CFCs or Indebtedness of such CFCs, (iii) any Immaterial Subsidiary, (iv) any Subsidiary listed on Schedule 1.01A, (v) any other Subsidiary with respect to which, in the reasonable judgment of the Administrative Agent (confirmed in writing by notice to the Borrower), the cost or other consequences (including any adverse Tax consequences) of providing a Guaranty shall be excessive in view of the benefits to be obtained by the Lenders therefrom, (vi) any not-for-profit Subsidiary, (vii) any Subsidiary that is prohibited by a Requirement of Law from providing a Guaranty of the Obligations, and (ix) any Subsidiary acquired by the Borrower and its Subsidiaries after the Closing Date to the extent, and so long as, the financing documentation governing any existing Indebtedness of such Subsidiary (other than Indebtedness created or incurred in anticipation of, or with the intent to circumvent the terms of, this Agreement) that is permitted to survive pursuant to Section 6.01 (and does survive) prohibits such Subsidiary from guaranteeing the Obligations; provided, that notwithstanding the foregoing, any Subsidiary that Guarantees any senior notes or senior debt securities issued by the Borrower shall not constitute an Excluded Subsidiary for so long as such Guarantee is in effect.

"Excluded Taxes" means any of the following Taxes imposed on or with respect to a Recipient or required to be withheld or deducted from a payment to a Recipient, (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes and branch profits Taxes, in each case, (i) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of any Lender, its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) that are Other Connection Taxes, (b) in the case of a Lender, U.S. federal withholding Taxes imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in a Loan or Commitment pursuant to a law in effect on the date on which (i) such Lender acquires such interest in the Loan or Commitment or becomes a party to this Agreement (other than pursuant to an assignment request by the Borrower under Section 2.18(b) or (ii) such Lender changes its lending office, except in each case to the extent that, pursuant to Section 2.16, amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender

became a party hereto or to such Lender immediately before it changed its lending office, (c) Taxes attributable to such Recipient's failure to comply with Section 2.16(g) and (d) any U.S. federal withholding Taxes imposed under FATCA.

"Executive Summary" means the Confidential Information Memorandum relating to this Agreement and the Transactions dated October 2018.

"Existing Credit Agreement" means the Revolving Credit Agreement, dated as of September 19, 2014 (as amended, restated or otherwise modified), among the Borrower, the banks and other financial institutions party thereto as lenders and Barclays Bank, PLC as administrative agent.

"FATCA" means Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the Code, and any law, regulation, rule, promulgation, guidance notes, practices or official agreement implementing an intergovernmental agreement, treaty or convention with respect to the foregoing.

"Federal Funds Effective Rate" means, for any day, the rate calculated by the Federal Reserve Bank of New York based on such day's federal funds transactions by depository institutions (as determined in such manner as the Federal Reserve Bank of New York shall set forth on its public website from time to time) and published on the next succeeding Business Day by the Federal Reserve Bank of New York as the federal funds effective rate; provided, that if the Federal Funds Effective Rate for any day is less than zero, the Federal Funds Effective Rate for such day will be deemed to be zero.

"Fee Letter" has the meaning specified in Section 2.11(c).

"Fee Letters" means, collectively, the Administrative Agent Fee Letter and the Fee Letter.

"Foreign Lender" means any Lender that is not a U.S. Person.

"Foreign Subsidiary" means any Subsidiary of the Borrower that is not a Domestic Subsidiary.

"Fund" means any Person (other than a natural person) that is (or will be) engaged in making, purchasing, holding or otherwise investing in commercial loans and similar extensions of credit in the ordinary course of its business.

"GAAP" means generally accepted accounting principles in the United States of America from time to time, including as set forth in the opinions, statements and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and the Financing Accounting Standards Board.

"Governmental Authority" means the government of the United States of America or any other nation, or of any political subdivision thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government (including any supra national bodies such as the European Union or the European Central Bank).

"Guarantee" of or by any Person (the "*guarantor*") means any obligation, contingent or otherwise, of the guarantor guaranteeing or having the economic effect of guaranteeing any Indebtedness or other obligation of any other Person (the "*primary obligor*") in any manner, whether directly or indirectly, and including any obligation of the guarantor, direct or indirect, (a) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness or other obligation or to purchase (or to advance or supply funds for the purchase of) any security for the payment thereof, (b) to purchase or lease property, securities or services for the purpose of assuring the owner of such Indebtedness or other obligation of the payment thereof, (c) to maintain working capital, equity capital or any other financial statement condition or liquidity of the primary obligor so as to enable the primary obligor to pay such Indebtedness or other obligation or (d) as an account party in respect of any letter of credit or letter of guaranty issued to support such Indebtedness or obligation; *provided* that the term Guarantee shall not include endorsements for collection or deposit in the ordinary course of business.

"Guarantors" means each Person that guarantees the Obligations pursuant to the Guaranty.

"Guaranty" means the Guaranty Agreement substantially in the form of Exhibit 1.01-B hereto.

"Hazardous Materials" means all explosive or radioactive substances or wastes and all hazardous or toxic substances, wastes or other pollutants, including petroleum or petroleum distillates, asbestos or asbestos containing materials, polychlorinated biphenyls, radon gas, infectious or medical wastes and all other substances or wastes of any nature regulated pursuant to any Environmental Law.

"Hedging Agreement" means a financial instrument or security which is used as a cash flow or fair value hedge to manage the risk associated with a change in interest rates, foreign currency exchange rates or commodity prices.

"Hybrid Securities" means any trust preferred securities, or deferrable interest subordinated debt with a maturity of at least 20 years, which provides for the optional or mandatory deferral of interest or distributions, issued by the Borrower, or any business trusts, limited liability companies, limited partnerships or similar entities (i) substantially all of the common equity, general partner or similar interests of which are owned (either directly or indirectly through one or more Wholly-owned Subsidiaries) at all times by the Borrower or any of the Subsidiaries, (ii) that have been formed for the purpose of issuing trust preferred securities or deferrable interest subordinated debt, and (iii) substantially all the assets of which consist of (A) subordinated debt of the Borrower or a Subsidiary, and (B) payments made from time to time on the subordinated debt.

"Immaterial Subsidiary" means any Subsidiary that is not a Material Subsidiary.

"Indebtedness" of any Person means, without duplication, (a) all obligations of such Person for borrowed money, (b) all obligations of such Person evidenced by bonds, debentures, notes or similar instruments (other than surety, performance and guaranty bonds), (c) all obligations of such Person under conditional sale or other title retention agreements relating to property acquired by such Person, (d) all obligations of such Person in respect of the deferred purchase price of property or services (excluding trade accounts payable incurred in the ordinary course of business), (e) all Indebtedness of others secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any Lien on property owned or acquired by such Person, whether or not the Indebtedness secured thereby has been assumed (determined as the lesser of the amount of the Indebtedness so secured and such property's fair market value), (f) all Guarantees by such Person of Indebtedness of others (*provided* that in the event that any Indebtedness of the Borrower or any Subsidiary shall be the subject of a Guarantee by one or more

Subsidiaries or by the Borrower, as the case may be, the aggregate amount of the outstanding Indebtedness of the Borrower and the Subsidiaries in respect thereof shall be determined by reference to the primary Indebtedness so guaranteed, and without duplication by reason of the existence of any such guarantee), (g) all Capital Lease Obligations of such Person, (h) all obligations of such Person as an account party in respect of (i) the full face amount of all letters of credit (drawn or undrawn) supporting the exposure of such Person under Hedging Agreements and (ii) the drawn portion of all other letters of credit and letters of guaranty, (i) all obligations, contingent or otherwise, of such Person in respect of funded bankers' acceptances and (j) Hybrid Securities. The Indebtedness of any Person shall include the Indebtedness of any other Person (including any partnership in which such Person is a general partner) to the extent such Person is liable therefor as a result of such Person's ownership interest in or other relationship with such entity, except to the extent the terms of such Indebtedness provide that such Person is not liable therefor: *provided* that Indebtedness shall not include (1) non-recourse debt, (2) performance guaranties, (3) monetary obligations or guaranties of monetary obligations of Person as lessees under leases that are in accordance with GAAP, recorded as operating leases (and giving effect to the proviso in Section 1.03), and (4) guarantees by such Person of obligations of others which are not obligations described in clauses (a) through (j) of this definition, and *provided further*, that where any such indebtedness or obligation of such Person is made jointly, or jointly and severally, with any third party or parties other than any Subsidiary of such Person, the amount thereof for the purpose of this definition only shall be the *pro rata* portion thereof payable by such Person, so long as such third party or parties have not defaulted on its or their joint and several portions thereof and can reasonably be expected to perform its or their obligations thereunder. For the avoidance of doubt, except as expressly provided in clause (h)(i) above, "Indebtedness" of a Person in respect of such letters of credit shall include, without duplication, only the principal amount of the unreimbursed obligations of such Person in respect of such letters of credit that have been drawn upon by the beneficiaries to the extent of the amount drawn, and shall include no other obligations in respect of such letters of credit.

"Indemnified Parties" has the meaning specified in Section 9.03(b).

"Indemnified Taxes" means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any Obligation and (b) to the extent not otherwise described in (a), Other Taxes.

"Indemnity Matters" means, with respect to any Indemnified Party, all losses, liabilities, claims and damages (including reasonable legal fees and expenses).

"Interest Election Request" has the meaning specified in Section 2.07(b).

"Interest Expense" means (without duplication), with respect to any period for any Person (a) the aggregate amount of interest, whether expensed or capitalized, paid, accrued or scheduled to be paid during such period in respect of the Indebtedness of such Person including (i) the interest portion of any deferred payment obligation; (ii) the portion of any rental obligation in respect of Capital Lease Obligations allocable to interest expenses; and (iii) any non-cash interest payments or accruals, all determined in accordance with GAAP, less (b) Interest Income of such Person for such period.

"Interest Income" means, with respect to any period for any Person, interest actually received by such Person during such period.

"Interest Payment Date" means (a) with respect to any ABR Loan, the last Business Day of each March, June, September and December, and (b) with respect to any Eurodollar Loan, the last Business Day of the Interest Period applicable to the Borrowing of which such Loan is a part and, in the case of a Eurodollar Borrowing with an Interest Period of more than three months' duration, each day prior to the last

day of such Interest Period that occurs at intervals of three months' duration after the first day of such Interest Period.

"Interest Period" means with respect to any Eurodollar Borrowing, the period commencing on the date of such Borrowing and ending (a) on the date that is one week thereafter or (b) on the numerically corresponding day in the calendar month that is one, two, three or six months thereafter, in each case as the Borrower may elect; *provided* (i) if any Interest Period would end on a day other than a Business Day, such Interest Period shall be extended to the next succeeding Business Day unless, in the case of any Eurodollar Borrowing, such next succeeding Business Day would fall in the next calendar month, in which case such Interest Period shall end on the next preceding Business Day, (ii) any Interest Period that commences on the last Business Day of a calendar month (or on a day for which there is no numerically corresponding day in the last calendar month of such Interest Period) shall end on the last Business Day of the last calendar month of such Interest Period and (iii) no Interest Period shall end after the Stated Maturity Date. For purposes hereof, the date of a Borrowing initially shall be the date on which such Borrowing is made and, in the case of a Eurodollar Borrowing, thereafter shall be the effective date of the most recent conversion or continuation of such Borrowing.

"Interpolated Rate" means, in relation to the LIBO Rate, the rate which results from interpolating on a linear basis between:

(a) the applicable LIBO Rate for the longest period (for which that LIBO Rate is available) which is less than the Interest Period of that Loan; and

(b) the applicable LIBO Rate for the shortest period (for which that LIBO Rate is available) which exceeds the Interest Period of that Loan,

each as of approximately 11:00 a.m. (London, England time) two Business Days prior to the commencement of such Interest Period of that Loan.

"IRS" means the United States Internal Revenue Service.

"KML" means Kinder Morgan Canada Limited and its consolidated subsidiaries.

"Laws" means, collectively, all international, foreign, federal, state and local statutes, treaties, rules, guidelines, regulations, ordinances, codes and administrative or judicial precedents or authorities, including the interpretation or administration thereof by any Governmental Authority charged with the enforcement, interpretation or administration thereof, and all applicable administrative orders, directed duties, requests, licenses, authorizations and permits of, and agreements with, any Governmental Authority.

"Lenders" has the meaning specified in the introduction to this Agreement.

"LIBO Rate" shall have the meaning ascribed thereto in the definition of "Eurodollar Rate".

"Lien" means, with respect to any asset (a) any mortgage, deed of trust, lien, pledge, hypothecation, encumbrance, charge or security interest in, on or of such asset, and (b) the interest of a vendor or a lessor under any conditional sale agreement, capital lease or title retention agreement (or any financing lease having substantially the same economic effect as any of the foregoing) relating to such asset.

"Loan Documents" mean, collectively, this Agreement, the Guaranty, the Notes, if any, the Fee Letters and all other instruments and documents from time to time executed and delivered by the Borrower or the Guarantors in connection herewith and therewith.

"Loan Party" means the Borrower and each Guarantor.

"Loans" means advances made by the Lenders to the Borrower pursuant to this Agreement.

"Material Adverse Effect" means, relative to any occurrence of whatever nature, a material adverse effect on (a) the business assets, liabilities or financial condition of the Borrower and the Subsidiaries taken as a whole, (b) the ability of the Borrower and the Guarantors, taken as a whole, to perform the Obligations or (c) the rights and remedies of the Administrative Agent or any Lender against the Borrower or, taken as a whole, the Guarantors, under any material provision of this Agreement or any other Loan Document.

"Material Subsidiary" means, as at any date of determination, any Subsidiary of the Borrower whose total tangible assets (for purposes of the below, when combined with the tangible assets of such Subsidiary's Subsidiaries, after eliminating intercompany obligations) as at such date of determination are greater than or equal to 5% of Consolidated Tangible Assets as of the last day of the fiscal quarter most recently ended for which financial statements have been delivered pursuant to Section 5.01(a) or (b) (the "Most Recent Financial Statement Date"), as the case may be; provided that if the aggregate total tangible assets of all Material Subsidiaries is less than 85% of Consolidated Tangible Assets as of the Most Recent Financial Statement Date, the Borrower shall designate Subsidiaries as "Material Subsidiaries" in writing to the Administrative Agent along with the delivery of the applicable financial statements pursuant to Section 5.01(a) or (b) such that the deficit described in this proviso ceases to exist; provided further that KML shall not be eligible to be considered as a Material Subsidiary (if applicable) until June 30, 2019.

"Maturity Date" means the earlier of (a) the Stated Maturity Date and (b) the acceleration of the Obligations pursuant to Section 7.01.

"Maximum Rate" has the meaning specified in Section 9.13.

"Moody's" means Moody's Investors Service, Inc.

"Most Recent Financial Statement Date" has the meaning specified in the definition of Material Subsidiary.

"Multiemployer Plan" means a multiemployer plan as defined in Section 4001(a)(3) of ERISA.

"Net Income" means with respect to any Person for any period that net income of such Person for such period determined in accordance with GAAP; *provided* that there shall be excluded, without duplication, from such net income (to the extent otherwise included therein).

(a) net extraordinary gains and losses (other than, in the case of losses, losses resulting from charges against net income to establish or increase reserves for potential environmental liabilities and reserves for exposure of such Person under rate cases);

(b) net gains or losses in respect of dispositions of assets other than in the ordinary course of business;

(c) any gains or losses attributable to write-ups or write-downs of assets; and

(d) proceeds of any key man insurance, or any insurance on property, plant or equipment.

"Net Worth" means, as to the Borrower at any date, the sum of the amount of shareholders' equity of the Borrower determined as of such date in accordance with GAAP, *provided* there shall be excluded, without duplication, from such determination (to the extent otherwise included therein) the amount of accumulated other comprehensive gain or loss as of such date.

"Non-Consenting Lender" means any Lender that does not approve any consent, waiver or amendment that (i) requires the approval of all Lenders or all affected Lenders in accordance with the terms of Section 9.02 and (ii) has been approved by the Required Lenders.

"Non-Defaulting Lender" means, at any time, each Lender that is not a Defaulting Lender at such time.

"Non-Guarantor Subsidiary" has the meaning specified in Section 6.01.

"Non-Wholly-owned Subsidiary" means any Subsidiary that is not a Wholly-owned Subsidiary.

"Note" means a Committed Note.

"Notice of Default" has the meaning specified in Section 7.01.

"Notice of Prepayment" has the meaning specified in Section 2.10(b).

"Obligations" means collectively:

(a) the payment of all indebtedness and liabilities by, and performance of all other obligations of, the Borrower in respect of the Loans;

(b) [reserved];

(c) the payment of all other indebtedness and liabilities by and performance of all other obligations of the Borrower to the Administrative Agent and the Lenders under, with respect to, and arising in connection with, the Loan Documents, and the payment of all indebtedness and liabilities of the Borrower to the Administrative Agent and the Lenders for fees, costs, indemnification and expenses (including reasonable attorneys' fees and expenses) under the Loan Documents;

(d) the reimbursement of all sums advanced and costs and expenses incurred by the Administrative Agent under any Loan Document (whether directly or indirectly) in connection with the Obligations or any part thereof or any renewal, extension or change of or substitution for the Obligations or, any part thereof, whether such advances, costs and expenses were made or incurred at the request of the Borrower or the Administrative Agent; and

(e) all renewals, extensions, amendments and changes of, or substitutions or replacements for, all or any part of the items described under clauses (a) through (d) above.

"OLP "B"" means Kinder Morgan Operating L.P. "B", a Delaware limited partnership.

"Operating Subsidiary" means any operating company that is a Subsidiary of the Borrower.

"Other Connection Taxes" means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or any Loan Document).

"Other Taxes" means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment (other than an assignment made pursuant to Section 2.18(b)).

"Participant" has the meaning assigned to such term in Section 9.05(c).

"Participant Register" has the meaning specified in Section 9.05(c).

"Patriot Act" has the meaning specified in Section 9.15.

"PBGC" means the Pension Benefit Guaranty Corporation referred to and defined in ERISA and any successor entity performing similar functions.

"Performance Level" means a reference to one of Performance Level I, Performance Level II, Performance Level III, Performance Level IV, Performance Level V or Performance Level VI.

"Performance Level I" means, at any date of determination, that the Borrower shall have a Borrower Debt Rating in effect on such date of at least A- by S&P or at least A3 by Moody's.

"Performance Level II" means, at any date of determination, (a) that the Performance Level does not meet the requirements of Performance Level I and (b) that the Borrower shall have a Borrower Debt Rating in effect on such date of at least BBB+ by S&P or at least Baa1 by Moody's.

"Performance Level III" means, at any date of determination, (a) that the Performance Level does not meet the requirements of Performance Level I or Performance Level II and (b) that the Borrower shall have a Borrower Debt Rating in effect on such date of at least BBB by S&P, or at least Baa2 by Moody's.

"Performance Level IV" means, at any date of determination, (a) that the Performance Level does not meet the requirements of Performance Level I, Performance Level II or Performance Level III and (b) that the Borrower shall have a Borrower Debt Rating in effect on such date of at least BBB- by S&P, or at least Baa3 by Moody's.

"Performance Level V" means, at any date of determination, (a) that the Performance Level does not meet the requirements of Performance Level I, Performance Level II, Performance Level III or Performance Level IV and (b) that the Borrower shall have a Borrower Debt Rating in effect on such date of at least BB+ by S&P, or at least Ba1 by Moody's.

"Performance Level VI" means, at any date of determination, that the Performance Level does not meet the requirements of Performance Level I, Performance Level II, Performance Level III, Performance Level IV or Performance Level V.

"Person" means any natural person, corporation, limited liability company, trust, joint venture, association, company, partnership, Governmental Authority or other entity.

"Plan" means any employee pension benefit plan (other than a Multiemployer Plan) subject to the provisions of Title IV of ERISA or Section 412 of the Code or Section 302 of ERISA, and in respect of which the Borrower or any member of its ERISA Group is (or, if such plan were terminated, would under Section 4069 of ERISA be deemed to be) an *"employer"* as defined in Section 3(5) of ERISA.

"Plan Asset Regulations" means 29 CFR § 2510.3-101 et seq., as modified by Section 3(42) of ERISA, as amended from time to time.

"Prime Rate" means the rate of interest last quoted by The Wall Street Journal as the "Prime Rate" in the U.S. or, if The Wall Street Journal ceases to quote such rate, the highest per annum interest rate published by the Federal Reserve Board in Federal Reserve Statistical Release H.15 (519) (Selected Interest Rates) as the "bank prime loan" rate or, if such rate is no longer quoted therein, any similar rate quoted therein (as determined by the Administrative Agent) or any similar release by the Federal Reserve Board (as determined by the Administrative Agent).

"Principal Office" means the principal office of the Administrative Agent, presently located in New York, New York, or such other location as designated by the Administrative Agent from time to time.

"Recipient" means (a) the Administrative Agent and (b) any Lender, as applicable.

"Register" has the meaning specified in Section 9.05(b).

"Regulation D" means Regulation D of the Board, as the same is from time to time in effect, and all official rulings and interpretations thereunder or thereof.

"Regulation T" means Regulation T of the Board, as the same is from time to time in effect, and all official rulings and interpretations thereunder or thereof.

"Regulation U" means Regulation U of the Board, as the same is from time to time in effect, and all official rulings and interpretations thereunder or thereof.

"Regulation X" means Regulation X of the Board, as the same is from time to time in effect, and all official rulings and interpretations thereunder or thereof.

"Related Parties" means, with respect to any Person, such Person's Affiliates and the partners, directors, officers, employees, agents, trustees, administrators, managers, advisors and representatives of such Person and of such Person's Affiliates.

"Required Lenders" means, at any time, subject to the provisions of Section 9.02(b), Lenders having Credit Exposure and unused Commitments representing more than 50% of the sum of the total Credit Exposures and unused Commitments at such time.

"Requirement of Law" means any law, statute, code, ordinance, order, determination, rule, regulation, judgment, decree, injunction, franchise, permit, certificate, license, authorization or other directive or requirement (whether or not having the force of law), including Environmental Laws, energy regulations and occupational, safety and health standards or controls, of any Governmental Authority.

"Reserve Requirement" means, for any day a fraction (expressed as a decimal), the numerator of which is the number one and the denominator of which is the number one minus the aggregate of the maximum reserve percentage (including any marginal, special, emergency or supplemental reserves) expressed as a decimal established by the Board or other Governmental Authority to which the Administrative Agent is subject with respect to the Adjusted LIBO Rate, for eurocurrency funding (currently referred to as "*Eurocurrency Liabilities*" in Regulation D of the Board). Such reserve percentage shall include those imposed pursuant to such Regulation D. Eurodollar Loans shall be deemed to constitute eurocurrency funding and to be subject to such reserve requirements without benefit of or credit for proration, exemptions or offsets that may be available from time to time to any Lender under such Regulation D or any comparable regulations. The Reserve Requirement shall be adjusted automatically on and as of the effective date of any change in any such reserve percentage.

"Responsible Officer" means, as used with respect to the Borrower, the Chairman, Vice Chairman, President, any Vice President, Chief Executive Officer, Chief Financial Officer, Controller or Treasurer of the Borrower.

"Restricted Payment" means any distribution (whether in cash, securities or other property) with respect to any Capital Stock in the Borrower, or any payment (whether in cash, securities or other property), including any deposit, on account of the purchase, redemption, retirement, acquisition, cancellation or termination of any such Capital Stock or any option or other right to acquire any such Capital Stock.

"S&P" means Standard & Poor's Ratings Group, a division of The McGraw-Hill Companies, Inc.

"Sanctioned Country" means, at any time, a country, region or territory which is itself the subject or target of any Sanctions (at the time of this Agreement, Crimea, Cuba, Iran, North Korea, and Syria).

"Sanctioned Person" means, at any time, (a) any Person listed in any Sanctions-related list of designated Persons maintained by the Office of Foreign Assets Control of the U.S. Department of the Treasury, the U.S. Department of State, (b) any Person operating, organized or resident in a Sanctioned Country or (c) any Person owned or controlled by any such Person or Persons described in the foregoing clauses (a) or (b).

"Sanctions" has the meaning specified in Section 4.14(a).

"SEC" means the Securities and Exchange Commission or any Governmental Authority succeeding to its function.

"Solvent" means, with respect to any Person as of any date, that as of such date, (a)(i) the sum of such Person's indebtedness (including contingent liabilities) does not exceed the present fair saleable value of such Person's present assets; (ii) such Person's capital is not unreasonably small in relation to its business as contemplated on such date; and (iii) such Person has not incurred, and does not intend to incur, or believe that it will incur indebtedness (including current obligations) beyond its ability to pay principal and interest on such indebtedness as it becomes due (whether at maturity or otherwise); and (b) such Person

is "solvent" within the meaning given that term and similar terms under applicable laws relating to fraudulent transfers and conveyances. For the purposes of this definition, the amount of any contingent liability at any time shall be computed as the amount that, in light of all the facts and circumstances existing at such time, represents the amount that can reasonably be expected to become an actual or matured liability (irrespective of whether such contingent liabilities meet the criteria for accrual under Statement of Financial Accounting Standard No. 5).

"Stated Maturity Date" means, for any Lender, the date that is 364 days following the Closing Date or, if such date is not a Business Day, the immediately preceding Business Day.

"Subsidiary" means, with respect to any Person (the "parent") at any date, any corporation, limited liability company, partnership, association or other entity the accounts of which would be consolidated with those of the parent in the parent's consolidated financial statements if such financial statements were prepared in accordance with GAAP as of such date, as well as any other corporation, limited liability company, partnership, association or other entity that is, as of such date, otherwise controlled, by the parent or one or more subsidiaries of the parent or by the parent and one or more subsidiaries of the parent. Unless the context otherwise clearly requires, references in this Agreement to a "Subsidiary" or the "Subsidiaries" refer to a Subsidiary or the Subsidiaries of the Borrower.

"Syndication Agent" means JPMorgan Chase Bank, N.A.

"Taxes" means all present or future taxes, levies, imposts, duties, deductions, or withholdings (including backup withholding) assets, fees or other charges imposed by any Governmental Authority including any interest, additions to tax or penalties applicable thereto.

"Total Capitalization" means, as to the Borrower at any date, the sum of Consolidated Net Indebtedness (determined at such date) and the Net Worth (determined as at the end of the most recent fiscal quarter of the Borrower for which financial statements pursuant to Section 5.01(a) or Section 5.01(b), as applicable, have been delivered).

"Total Commitment" means the sum of the Commitments of the Lenders.

"Transactions" has the meaning specified in the Preliminary Statements.

"Type", when used in reference to any Loan or Borrowing, refers to whether the rate of interest on such Loan, or on the Loans comprising such Borrowing, is determined by reference to the Adjusted LIBO Rate or the Alternate Base Rate.

"United States" and "U.S." each means United States of America.

"U.S. Person" means any Person that is a "*United States Person*" as defined in Section 7701(a)(30) of the Code.

"U.S. Tax Compliance Certificate" has the meaning specified in Section 2.16(g)(ii)(B)(3).

"Voting Stock" means, with respect to any Person, securities of any class or classes of Capital Stock in such Person entitling holders thereof (whether at all times or only so long as no senior class of stock has voting power by reason of any contingency) to vote in the election of members of the

Board of Directors or other governing body of such Person or its managing member or its general partner (or its managing general partner if there is more than one general partner).

"Wholly-owned Domestic Operating Subsidiary" means any Wholly-owned Subsidiary that constitutes (i) a Domestic Subsidiary and (ii) an Operating Subsidiary.

"Wholly-owned Subsidiary" means a Subsidiary of which all issued and outstanding Capital Stock (excluding in the case of a corporation, directors' qualifying shares) is directly or indirectly owned by the Borrower.

"Withdrawal Liability" means liability to a Multiemployer Plan as a result of a complete or partial withdrawal from such Multiemployer Plan, as such terms are defined in Part I of Subtitle E of Title IV of ERISA.

"Withholding Agent" means the Administrative Agent and the Borrower.

"Write-Down and Conversion Powers" means, with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule.

SECTION 1.02 Classification of Loans and Borrowings. For purposes of this Agreement, Loans and Borrowings may be classified and referred to by Type (*e.g.*, a "*Eurodollar Loan*" or "*Eurodollar Borrowing*" or an "*ABR Loan*" or "*ABR Borrowing*").

SECTION 1.03 Accounting Terms; Changes in GAAP. All accounting and financial terms used herein and not otherwise defined herein and the compliance with each covenant contained herein which relates to financial matters shall be determined in accordance with GAAP applied by the Borrower on a consistent basis, except to the extent that a deviation therefrom is expressly stated. Should there be a change in GAAP from that in effect on the Closing Date, such that any of the defined terms set forth in Section 1.01 and/or compliance with the covenants set forth in Article VI would then be calculated in a different manner or with different components or any of such covenants and/or defined terms used therein would no longer constitute meaningful criteria for evaluating the matters addressed thereby prior to such change in GAAP (a) the Borrower and the Required Lenders agree, within the 60-day period following any such change, to negotiate in good faith and enter into an amendment to this Agreement in order to modify the defined terms set forth in Section 1.01 or the covenants set forth in Article VI, or both, in such respects as shall reasonably be deemed necessary by the Required Lenders that the criteria for evaluating the matters addressed by such covenants are substantially the same criteria as were effective prior to any such change in GAAP, and (b) the Borrower shall be deemed to be in compliance with such covenants during the 60-day period following any such change, or until the earlier date of execution of such amendment, if and to the extent that the Borrower would have been in compliance therewith under GAAP as in effect immediately prior to such change; provided, however, that for the avoidance of doubt, any lease that was accounted for by the Borrower or the Subsidiaries as an operating lease as of the Closing Date and any other lease entered into after the Closing Date by the Borrower or any Subsidiary shall be accounted for as an operating lease and not a capital lease to the extent that such lease would have been characterized as an operating lease as of the Closing Date.

SECTION 1.04 Interpretation. In this Agreement, unless a clear contrary intention appears:

(a) the singular number includes the plural number and vice versa;

(b) reference to any gender includes each other gender;

(c) the words "*herein*", "*hereof*" and "*hereunder*" and other words of similar import refer to this Agreement as a whole and not to any particular Article, Section or other subdivision;

(d) reference to any Person includes such Person's successors and assigns but, if applicable, only if such successors and assigns are permitted by this Agreement, and reference to a Person in a particular capacity excludes such Person in any other capacity or individually; *provided* that nothing in this clause (d) is intended to authorize any assignment not otherwise permitted by this Agreement;

(e) except as expressly provided to the contrary herein, reference to any agreement, document or instrument (including this Agreement) means such agreement, document or instrument as amended, supplemented or modified, or extended, renewed, refunded, substituted or replaced, and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof, and reference to any Note or other note or Indebtedness or other indebtedness includes any note or indebtedness issued pursuant hereto in extension or renewal or refunding thereof or in substitution or replacement therefor;

(f) unless the context indicates otherwise, reference to any Article, Section, Schedule or Exhibit means such Article or Section hereof or such Schedule or Exhibit hereto;

(g) the word "*including*" (and with correlative meaning "*include*") means including, without limiting the generality of any description preceding such term;

(h) with respect to the determination of any period of time, except as expressly provided to the contrary, the word "*from*" means "*from and including*" and the word "*to*" means "*to but excluding*";

(i) reference to any law, rule or regulation means such as amended, modified, codified or reenacted, in whole or in part, and in effect from time to time; and

(j) the words "*asset*" and "*property*" shall be construed to have the same meaning and effect and refer to any and all tangible and intangible assets and properties.

ARTICLE II
THE CREDITS

SECTION 2.01 Commitments.

Subject to the terms and conditions set forth herein, each Lender agrees to make Committed Loans in U.S. dollars to the Borrower from time to time during the Availability Period in an aggregate principal amount that will not result in (i) such Lender's Credit Exposure exceeding such Lender's Commitment or (ii) the sum of the total Credit Exposures exceeding the Total Commitment. Within the foregoing limits and subject to the terms and conditions set forth herein, the Borrower may borrow, prepay and reborrow Committed Loans.

SECTION 2.02 Loans and Borrowings.

(a) Each Committed Loan shall be made as part of a Borrowing consisting of Committed Loans denominated in U.S. dollars made by the Lenders, ratably in accordance with their Applicable Percentage of the Total Commitment on the date such Loan is made hereunder. The failure of

any Lender to make any Loan required to be made by it shall not relieve any other Lender of its obligations hereunder; *provided* that the Commitments of the Lenders are several and no Lender shall be responsible for any other Lender's failure to make Loans as required.

(b) Subject to Section 2.13, each Borrowing shall be comprised entirely of ABR Loans or Eurodollar Loans as the Borrower may request in accordance herewith. Each Lender at its option may make any Eurodollar Loan by causing any domestic or foreign branch or Affiliate of such Lender to make such Loan; *provided* that any exercise of such option shall not affect the obligation of the Borrower to repay such Loan in accordance with the terms of this Agreement.

(c) At the commencement of each Interest Period for any Eurodollar Borrowing, such Borrowing shall be in an aggregate amount that is an integral multiple of $1,000,000 and not less than $3,000,000. At the time that each ABR Borrowing is made, such Borrowing shall be in an aggregate amount that is an integral multiple of $1,000,000 and not less than $1,000,000; *provided* that an ABR Borrowing may be in an aggregate amount that is equal to the entire unused balance of the Total Commitment.

(d) There shall not at any time be more than a total of twelve Eurodollar Borrowings outstanding.

(e) Notwithstanding any other provision of this Agreement, the Borrower shall not be entitled to request, or to elect to convert or continue, any Borrowing if the Interest Period requested with respect thereto would end after the Stated Maturity Date.

SECTION 2.03 Requests for Borrowings.

To request a Borrowing, the Borrower shall notify the Administrative Agent of such request (which request shall be in writing unless otherwise agreed to by the Administrative Agent) (a) in the case of a Eurodollar Borrowing, not later than 11:00 a.m., New York, New York time, three Business Days before the date of the proposed Borrowing and (b) in the case of an ABR Borrowing, not later than 10:00 a.m., New York, New York, time, on the date of the proposed Borrowing. Each such Borrowing Request shall be irrevocable and shall be made by hand delivery, telecopy or electronic communication (e-mail) to the Administrative Agent of a written Borrowing Request in a form of Exhibit 2.03 (a "Borrowing Request") and signed by the Borrower. Each such Borrowing Request shall specify the following information in compliance with Section 2.02:

(i) the aggregate amount of the requested Borrowing;

(ii) the date of such Borrowing, which shall be a Business Day;

(iii) whether such Borrowing is to be an ABR Borrowing or a Eurodollar Borrowing;

(iv) in the case of a Eurodollar Borrowing, the initial Interest Period to be applicable thereto, which shall be a period contemplated by the definition of the term *"Interest Period"*; and

(v) the location and number of the Borrower's account to which funds are to be disbursed, which shall comply with the requirements of Section 2.06;

If no election as to the Type of Borrowing is specified, then the requested Borrowing shall be an ABR Borrowing. If no Interest Period is specified with respect to any requested Eurodollar Borrowing, then the Borrower shall be deemed to have selected an Interest Period of one month's duration. Promptly following receipt of a Borrowing Request in accordance with this Section 2.03, the Administrative Agent shall advise each Lender in writing of the details thereof and of the amount of such Lender's Loan to be made as part of the requested Borrowing.

SECTION 2.04 [Reserved].

SECTION 2.05 [Reserved].

SECTION 2.06 Funding of Borrowings.

(a) Each Lender shall make each Loan to be made by it hereunder on the proposed date thereof by wire transfer of immediately available funds by 2:00 p.m., New York, New York time, to the account of the Administrative Agent most recently designated by it for such purpose by notice to the Lenders. The Borrower hereby irrevocably authorizes the Administrative Agent to disburse the proceeds of each Borrowing requested pursuant to Section 2.03 in immediately available funds by crediting or wiring such proceeds to the deposit account of the Borrower identified in the Borrowing Request or otherwise agreed upon by the Borrower and the Administrative Agent from time to time.

(b) Unless the Administrative Agent shall have received notice from a Lender prior to the proposed date of any Borrowing (or prior to 11:00 a.m., New York, New York, time, on such date in the case of an ABR Borrowing) that such Lender will not make available to the Administrative Agent such Lender's Applicable Percentage of such Borrowing, the Administrative Agent may assume that such Lender has made such Applicable Percentage of such Borrowing available on such date in accordance with Section 2.06(a) and may, in reliance upon such assumption, make available to the Borrower a corresponding amount. In such event, if a Lender has not in fact made its Applicable Percentage of the applicable Borrowing available to the Administrative Agent, then the applicable Lender and the Borrower severally agree to pay to the Administrative Agent forthwith on demand such corresponding amount with interest thereon, for each day from the date such amount is made available to the Borrower to the date of payment to the Administrative Agent, at (i) in the case of such Lender, the greater of the Federal Funds Effective Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation, or (ii) in the case of the Borrower, the interest rate applicable to ABR Loans. If the Borrower and such Lender shall pay such interest to the Administrative Agent for the same or an overlapping period, the Administrative Agent shall promptly remit to the Borrower the amount of such interest paid by the Borrower for such period. If such Lender pays its share of the applicable Borrowing to the Administrative Agent, then the amount so paid shall constitute such Lender's Loan included in such Borrowing. Any payment by the Borrower shall be without prejudice to any claim the Borrower may have against a Lender that shall have failed to make such payment to the Administrative Agent.

SECTION 2.07 Interest Elections.

(a) Subject to Section 2.13, each Borrowing initially shall be of the Type specified in the applicable Borrowing Request and, in the case of a Eurodollar Borrowing, shall have an initial Interest Period as specified in such Borrowing Request. Thereafter, subject to Section 2.13, the Borrower may elect to convert such Borrowing to a different Type or to continue such Borrowing and, in the case of a Eurodollar Borrowing, may elect Interest Periods therefor, all as provided in this Section 2.07. The Borrower may elect different options with respect to different portions of the affected Borrowing, in which case each such portion

shall be allocated ratably among the Lenders holding the Loans comprising such Borrowing, and the Loans comprising each such portion shall be considered a separate Borrowing.

(b) To make an election pursuant to this Section 2.07, the Borrower shall notify the Administrative Agent of such election (which notification shall be in writing unless otherwise agreed to by the Administrative Agent) by the time that a Borrowing Request would be required under Section 2.03 if the Borrower were requesting a Borrowing of the Type resulting from such election to be made on the effective date of such election. Each such Interest Election Request shall be irrevocable and shall be made by hand delivery or telecopy or by electronic communication (e-mail) to the Administrative Agent of an Interest Election Request in the form of Exhibit 2.07 (an "Interest Election Request").

(c) Each Interest Election Request shall specify the following information in compliance with Section 2.02:

(i) the Borrowing to which such Interest Election Request applies and, if different options are being elected with respect to different portions thereof, the portions thereof to be allocated to each resulting Borrowing (in which case the information to be specified pursuant to clauses (iii) and (iv) below shall be specified for each resulting Borrowing);

(ii) the effective date of the election made pursuant to such Interest Election Request, which shall be a Business Day;

(iii) whether the resulting Borrowing is to be an ABR Borrowing or a Eurodollar Borrowing; and

(iv) if the resulting Borrowing is a Eurodollar Borrowing, the Interest Period to be applicable thereto after giving effect to such election, which shall be a period contemplated by the definition of the term "*Interest Period*".

If any such Interest Election Request requests a Eurodollar Borrowing but does not specify an Interest Period, then the Borrower shall be deemed to have selected an Interest Period of one month's duration.

(d) Promptly following receipt of an Interest Election Request, the Administrative Agent shall advise each Lender in writing of the details thereof and of such Lender's portion of each resulting Borrowing.

(e) If the Borrower fails to deliver a timely Interest Election Request with respect to a Eurodollar Borrowing prior to the end of the Interest Period applicable thereto, then, unless such Borrowing is repaid as provided herein, at the end of such Interest Period such Borrowing shall be converted to an ABR Borrowing. Notwithstanding any contrary provision hereof, if and so long as an Event of Default is continuing and the Administrative Agent, at the request of the Required Lenders, so notifies the Borrower, then so long as an Event of Default has occurred and is continuing (i) no outstanding Borrowing may be converted to or continued as a Eurodollar Borrowing, and (ii) unless repaid, each Eurodollar Borrowing shall be converted to an ABR Borrowing at the end of the Interest Period applicable thereto.

SECTION 2.08 Termination and Reduction of Commitments; Mandatory Prepayments.

(a) Unless previously terminated, the Total Commitment shall terminate on the Maturity Date.

(b) The Borrower may at any time terminate, or from time to time reduce, the Total Commitment, in whole or in part; *provided* that (i) each partial reduction of the Total Commitment shall be in an amount that is an integral multiple of $1,000,000 and not less than $5,000,000 and (ii) the Borrower shall not terminate or reduce the Commitments if, after giving effect to any concurrent prepayment of the Loans in accordance with Section 2.10, the total Credit Exposures would exceed the Total Commitment.

(c) The Borrower shall notify the Administrative Agent of any election to terminate or reduce the Total Commitment under Section 2.08(a) at least three Business Days prior to the effective date of such termination or reduction, specifying such election and the effective date thereof. Promptly following receipt of any notice, the Administrative Agent shall advise the Lenders of the contents thereof. Each notice delivered by the Borrower pursuant to this Section 2.08 shall be irrevocable; *provided* that a notice of termination of the Total Commitment delivered by the Borrower may state that such notice is conditioned upon the effectiveness of other credit facilities or other event, in which case such notice may be revoked by the Borrower (by notice to the Administrative Agent on or prior to the specified effective date) if such condition is not satisfied. Any termination or reduction of the Total Commitment shall be permanent. Except as expressly provided in Section 2.19, each reduction of the Total Commitment shall be made ratably among the Lenders in accordance with their Applicable Percentages.

SECTION 2.09 Repayment of Loans; Evidence of Debt.

(a) The Borrower hereby unconditionally promises to pay to the Administrative Agent for the account of each Lender the then unpaid principal amount of each Committed Loan on the Maturity Date. In addition, if the total Credit Exposures exceeds the Total Commitment, the Borrower shall pay to the Administrative Agent for the account of each Lender an aggregate principal amount of Committed Loans sufficient to cause the total Credit Exposures not to exceed the Total Commitment; *provided*, *however*, if the repayment of the outstanding Committed Loans does not cause the total Credit Exposures, to be equal to or less than the Total Commitment, the Borrower shall deposit in an account with the Administrative Agent in the name of the Administrative Agent and for the benefit of the Lenders, an amount in cash equal to the amount by which the total Credit Exposures exceeds the Total Commitment, which cash deposit shall be held by the Administrative Agent for the payment of the Obligations of the Borrower under this Agreement and the other Loan Documents. The Administrative Agent shall have exclusive dominion and control, including the exclusive right of withdrawal, over such account other than any interest earned on the investment of such deposit (which investments shall be made at the option and sole discretion of the Administrative Agent, but only in investments rated at least AA (or equivalent) by at least one nationally recognized rating agency, unless an Event of Default shall have occurred and be continuing, and in any event at the Borrower's risk and expense). Interest or profits, if any, on such investments shall accumulate in such account. Moneys in such account shall be applied to satisfy other obligations of the Borrower under this Agreement and the other Loan Documents. At any time when the sum of the total Credit Exposures does not exceed the Total Commitment and so long as no Default under Section 7.01(b) or Event of Default shall then exist, upon the request of the Borrower the amount of such deposit (to the extent not applied as aforesaid) shall be returned to the Borrower within three Business Days after receipt of such request.

(b) Each Lender shall maintain in accordance with its usual practice an account or accounts evidencing the indebtedness of the Borrower to such Lender resulting from each Loan made by such Lender, including the amounts of principal and interest payable and paid to such Lender from time to time hereunder.

(c) The Administrative Agent shall maintain accounts in which it shall record (i) the amount of each Loan made hereunder, the Type thereof and the Interest Period applicable thereto, (ii) the amount of any principal or interest due and payable or to become due and payable from the Borrower to each Lender hereunder and (iii) the amount of any sum received by the Administrative Agent hereunder for the account of the Lenders and each Lender's share thereof.

(d) The entries made in the accounts maintained pursuant to Section 2.09(b) or (c) shall be prima facie evidence of the existence and amounts of the obligations recorded therein; *provided* that the failure of any Lender or the Administrative Agent to maintain such accounts or any error or conflict therein shall not in any manner affect the obligation of the Borrower to repay the Loans in accordance with the terms of this Agreement.

(e) Any Lender may request that Loans made by it be evidenced by a Committed Note. In such event, the Borrower shall prepare, execute and deliver to such Lender a Committed Note. Thereafter, the Loans evidenced by such Committed Note and interest thereon shall at all times (including after assignment pursuant to Section 9.05) be represented by one or more Committed Notes in such forms payable to the payee named therein.

SECTION 2.10 Voluntary Prepayment of Loans.

(a) The Borrower shall have the right at any time and from time to time to prepay any Borrowing in whole or in part, subject to prior notice in accordance with Section 2.10(b).

(b) The Borrower shall notify the Administrative Agent (which notice shall be made in writing by telecopy or electronic communication (e-mail) in the form of Exhibit 2.10 (a "Notice of Prepayment")) of any prepayment hereunder (i) in the case of prepayment of a Eurodollar Borrowing, not later than 11:00 a.m., New York, New York time, three Business Days before the date of prepayment or (ii) in the case of prepayment of an ABR Borrowing, not later than 11:00 a.m., New York, New York time, one Business Day prior to the date of prepayment. Each such notice shall be irrevocable and shall specify the prepayment date, Type and the principal amount of each Borrowing or portion thereof to be prepaid; *provided* that, if a notice of prepayment is given in connection with a conditional notice of termination of the Total Commitment as contemplated by Section 2.08, then such notice of prepayment may be revoked if such notice of termination of the Total Commitment is revoked in accordance with Section 2.08. Each partial prepayment shall be in an aggregate amount not less than, and shall be an integral multiple of, the amounts shown below with respect to the applicable Type of Loan or Borrowing:

Type of Loan/Borrowing	**Integral Multiple of**	**Minimum Aggregate Amount**
Eurodollar Borrowing	$1,000,000	$3,000,000
ABR Borrowing	$1,000,000	$1,000,000

Promptly following receipt of any such notice relating to a Borrowing, the Administrative Agent shall advise the Lenders in writing of the contents thereof. If the Borrower fails to designate the Type of Borrowings to be prepaid, partial prepayments shall be applied first to the outstanding ABR Borrowings until the outstanding principal amount of all ABR Borrowings is repaid in full, and then to the outstanding principal amount of Eurodollar Borrowings. Each partial prepayment of any Borrowing shall be in an amount that would be permitted in the case of an advance of a Borrowing of the same Type as provided in Section 2.02. Each prepayment of a Borrowing shall be applied to the Loans included in the prepaid Borrowing in accordance

with the Lenders' Applicable Percentage of such Borrowing. Prepayments shall be accompanied by accrued interest to the extent required by Section 2.12.

SECTION 2.11 Fees.

(a) The Borrower agrees to pay to the Administrative Agent for the account of each Lender (other than a Defaulting Lender) a commitment fee (the "Commitment Fee"), which shall be equal to (a) the Applicable Commitment Fee Rate times (b) the daily average undrawn portion of the such Lender's Commitment, during the period from the Closing Date to the later of (i) the date on which such Commitment terminates and (ii) the date on which the Loans are paid in full; *provided* that, if such Lender continues to have any Credit Exposure after its Commitment terminates, then such Commitment Fee shall continue to accrue on the daily amount of such Lender's Credit Exposure from the date on which its Commitment terminates to the date on which such Lender ceases to have any Credit Exposure. Accrued Commitment Fees shall be payable in arrears on the last Business Day of March, June, September and December of each year and on the date on which the Commitments terminate and the date the Loans are paid in full, commencing on the first such date to occur after the Closing Date. All Commitment Fees shall be computed on the basis of a year of 365 or 366 days, as the case may be, and shall be payable for the actual number of days elapsed (including the first day but excluding the last day).

(b) [Reserved].

(c) The Borrower agrees to pay, without duplication, to (i) the Administrative Agent and the Lenders, for their own accounts (or that of their applicable Affiliate), fees payable in the amounts and at the times specified in that letter agreement dated October 23, 2018 among the Borrower, Barclays Bank PLC and JPMorgan Chase Bank, N.A. (as from time to time amended, the "Fee Letter") and (ii) the Administrative Agent, for its own account (or that of its applicable Affiliate), fees payable in amounts and at the times specified in that letter agreement dated October 23, 2018 among the Borrower and Barclays Bank PLC (the "Administrative Agent Fee Letter").

(d) All fees payable hereunder shall be paid on the dates due, in immediately available funds, to the Administrative Agent (for distribution, in the case of Commitment Fees and participation fees, to the Lenders). Except as required by law, fees paid shall not be refundable under any circumstance.

SECTION 2.12 Interest.

(a) The Loans comprising each ABR Borrowing shall bear interest at a rate per annum equal to the *sum* of Alternate Base Rate *plus* the Applicable Margin.

(b) The Loans comprising each Eurodollar Borrowing shall bear interest at the Adjusted LIBO Rate for the Interest Period in effect for such Borrowing *plus* the Applicable Margin.

(c) Notwithstanding the foregoing, if any principal of or interest on any Loan or any fee or other amount payable by the Borrower hereunder is not paid when due, whether at stated maturity, upon acceleration or otherwise, such overdue amount shall bear interest, after as well as before judgment, at a rate per annum equal to (i) in the case of overdue principal of any Loan, 2% *plus* the rate otherwise applicable to such Loan as provided above or (ii) in the case of any other amount, 2% *plus* the Alternate Base Rate.

(d) Accrued interest on each Loan shall be payable in arrears on each Interest Payment Date for such Loan; *provided* that (i) interest accrued pursuant to Section 2.12(c) shall be payable on demand,

(ii) in the event of any repayment or prepayment of any Loan (other than a prepayment of an ABR Committed Loan prior to the end of the Availability Period), accrued interest on the principal amount repaid or prepaid shall be payable on the date of such repayment or prepayment, (iii) in the event of any conversion of any Eurodollar Committed Loan prior to the end of the current Interest Period therefor, accrued interest on such Loan shall be payable on the effective date of such conversion and (iv) all accrued interest shall be payable upon termination of the Total Commitment.

(e) All interest hereunder shall be computed on the basis of a year of 360-day year, except that interest computed by reference to the Alternate Base Rate at times when the Alternate Base Rate is based on the Prime Rate shall be computed on the basis of a year of 365 days (or 366 days in a leap year), and in each case shall be payable for the actual number of days elapsed (including the first day but excluding the last day). The applicable Alternate Base Rate, Adjusted LIBO Rate or LIBO Rate shall be determined by the Administrative Agent, and such determination shall be conclusive absent manifest error.

SECTION 2.13 Alternate Rate of Interest.

(a) If prior to the commencement of any Interest Period for a Eurodollar Borrowing:

(i) the Administrative Agent determines (which determination shall be conclusive absent manifest error) that adequate and reasonable means do not exist for ascertaining the Adjusted LIBO Rate or the LIBO Rate for such Interest Period; or

(ii) the Administrative Agent is advised by the Required Lenders that the Adjusted LIBO Rate or the LIBO Rate, as applicable, for such Interest Period will not adequately and fairly reflect the cost to such Lenders of making or maintaining their Loans included in such Borrowing for such Interest Period;

then the Administrative Agent shall give notice thereof to the Borrower and the Lenders in writing as promptly as practicable thereafter and, until the Administrative Agent notifies the Borrower and the Lenders in writing that the circumstances giving rise to such notice no longer exist, (i) any Interest Election Request that requests the conversion of any Borrowing to, or continuation of any Borrowing as, a Eurodollar Borrowing shall be ineffective, and (ii) if any Borrowing Request requests a Eurodollar Borrowing, such Borrowing shall be made as an ABR Borrowing.

(b) If at any time the Administrative Agent determines (which determination shall be conclusive absent manifest error) that (i) the circumstances set forth in clause (a)(i) have arisen and such circumstances are unlikely to be temporary or (ii) the circumstances set forth in clause (a)(i) have not arisen but the supervisor for the administrator of the LIBO Rate or a Governmental Authority having jurisdiction over the Administrative Agent has made a public statement identifying a specific date after which the LIBO Rate shall no longer be used for determining interest rates for loans, then the Administrative Agent and the Borrower shall endeavor to establish an alternate rate of interest to the LIBO Rate that gives due consideration to the then prevailing market convention for determining a rate of interest for syndicated loans in the United States at such time, and shall enter into an amendment to this Agreement to reflect such alternate rate of interest and such other related changes to this Agreement as may be applicable (but for the avoidance of doubt, such related changes shall not include a reduction of the Applicable Margin). Notwithstanding anything to the contrary in Section 9.02, such amendment shall become effective without any further action or consent of any other party to this Agreement so long as the Administrative Agent shall not have received, within five Business Days of the date notice of such alternate rate of interest is provided to the Lenders, a written notice from the Required Lenders stating that such Required Lenders object to such amendment. Until an alternate rate of interest shall be

determined in accordance with this clause (b) (but, in the case of the circumstances described in clause (ii) of the first sentence of this Section 2.13(b), only to the extent the LIBO Rate for such Interest Period is not available or published at such time on a current basis), (x) any Interest Election Request that requests the conversion of any Borrowing to, or continuation of any Borrowing as, a Eurodollar Borrowing shall be ineffective and (y) if any Borrowing Request requests a Eurodollar Borrowing, such Borrowing shall be made as an ABR Borrowing; provided that, if such alternate rate of interest shall be less than zero, such rate shall be deemed to be zero for the purposes of this Agreement.

SECTION 2.14 Increased Costs.

(a) If any Change in Law shall:

(i) impose, modify or deem applicable any reserve, special deposit or similar requirement against assets of, deposits with or for the account of, or credit extended by, any Lender (except any such reserve requirement reflected in the Adjusted LIBO Rate);

(ii) subject any Recipient to any Taxes (other than (A) Indemnified Taxes, (B) Taxes described in clauses (b) through (d) of the definition of Excluded Taxes and (C) Connection Income Taxes) on its Loans, loan principal, Commitments, or other Obligations, or its deposits, reserves, other liabilities or capital attributable thereto; or

(iii) impose on any Lender or the London interbank market any other condition, cost or expense (other than Taxes) affecting this Agreement or Eurodollar Loans made by such Lender;

and the result of any of the foregoing shall be to increase the cost to such Lender or such other Recipient of making, converting to, continuing or maintaining any Loan or of maintaining its obligation to make any such Loan, or to reduce the amount of any sum received or receivable by such Lender or other Recipient hereunder (whether of principal, interest or any other amount) then, upon request of such Lender or other Recipient, the Borrower will pay to such Lender or other Recipient, as the case may be, such additional amount or amounts as will compensate such Lender or other Recipient, as the case may be, for such additional costs incurred or reduction suffered.

(b) If any Lender determines that any Change in Law affecting such Lender or any lending office of such Lender or such Lender's holding company, if any, regarding capital or liquidity requirements, has or would have the effect of reducing the rate of return on such Lender's capital or on the capital of such Lender's holding company, if any, as a consequence of this Agreement, the Commitment of such Lender or the Loans made by such Lender, to a level below that which such Lender or such Lender's holding company could have achieved but for such Change in Law (taking into consideration such Lender's policies and the policies of such Lender's holding company with respect to capital adequacy and/or liquidity requirements), then from time to time the Borrower will pay to such Lender such additional amount or amounts as will compensate such Lender or such Lender's holding company for any such reduction suffered.

(c) A certificate of a Lender setting forth the amount or amounts necessary to compensate such Lender or its holding company, as the case may be, as specified in paragraph (a) or (b) of this Section 2.14 and delivered to the Borrower, shall be conclusive absent manifest error. The Borrower shall pay such Lender the amount shown as due on any such certificate within 10 Business Days after receipt thereof.

(d) Failure or delay on the part of any Lender to demand compensation pursuant to this Section 2.14 shall not constitute a waiver of such Lender's right to demand such compensation; *provided* that the Borrower shall not be required to compensate a Lender pursuant to this Section 2.14 for any increased costs or reductions incurred more than six months prior to the date that such Lender notifies the Borrower of the Change in Law giving rise to such increased costs or reductions and of such Lender's intention to claim compensation therefor (except that, if the Change in Law giving rise to such increased costs or reductions is retroactive, then the six-month period referred to above shall be extended to include the period of retroactive effect thereof).

SECTION 2.15 Break Funding Payments. In the event of (a) the payment of any principal of any Eurodollar Loan other than on the last day of an Interest Period applicable thereto (including as a result of an Event of Default), (b) the conversion of any Eurodollar Loan other than on the last day of the Interest Period applicable thereto, (c) the failure to borrow (unless such failure was caused by the failure of a Lender to make such Loan), convert, continue or prepay any Eurodollar Loan, or the failure to convert an ABR Loan to a Eurodollar Loan, on the date specified in any notice delivered pursuant hereto (regardless of whether such notice is permitted to be revocable under Section 2.08 and is revoked in accordance herewith), or (d) the assignment of any Eurodollar Loan other than on the last day of the Interest Period applicable thereto as a result of a request by the Borrower pursuant to Section 2.18, then, in any such event, the Borrower shall compensate each Lender for the loss, cost and expense attributable to such event. In the case of a Eurodollar Loan, the loss to any Lender attributable to any such event shall be deemed to include an amount determined by such Lender to be equal to the excess, if any, of (i) the amount of interest that such Lender would pay for a deposit equal to the principal amount of such Loan for the period from the date of such payment, conversion, failure or assignment to the last day of the then current Interest Period for such Loan (or, in the case of a failure to borrow, convert or continue, the duration of the Interest Period that would have resulted from such borrowing, conversion or continuation) if the interest rate payable on such deposit were equal to the Adjusted LIBO Rate for such Interest Period, over (ii) the amount of interest that such Lender would earn on such principal amount for such period if such Lender were to invest such principal amount for such period at the interest rate that would be bid by such Lender (or an affiliate of such Lender) for dollar deposits from other banks in the Eurodollar market at the commencement of such period. A certificate of any Lender setting forth any amount or amounts that such Lender is entitled to receive pursuant to this Section 2.15 shall be delivered to the Borrower and shall be conclusive absent manifest error. The Borrower shall pay such Lender the amount shown as due on any such certificate within 10 Business Days after receipt thereof.

SECTION 2.16 Taxes.

(a) Defined Terms. For purposes of this Section 2.16, the term "Requirement of Law" includes FATCA.

(b) Payments Free of Taxes. Any and all payments by or on account of any obligation of the Borrower under any Loan Document shall be made without deduction or withholding for any Taxes, except as required by a Requirement of Law. If any Requirement of Law (as determined in the good faith discretion of the Withholding Agent) requires the deduction or withholding of any Tax from any such payment by the Withholding Agent, then the Withholding Agent shall be entitled to make such deduction or withholding and shall timely pay the full amount deducted or withheld to the relevant Governmental Authority in accordance with applicable Requirement of Law and, if such Tax is an Indemnified Tax, then the sum payable by the Borrower shall be increased as necessary so that after such deduction or withholding has been made (including such deductions and withholdings applicable to additional sums payable under this Section 2.16) the applicable Recipient receives an amount equal to the sum it would have received had no such deduction or withholding been made.

(c) Payment of Other Taxes by the Borrower. Without duplication of any obligation under this Section 2.16, the Borrower shall timely pay to the relevant Governmental Authority in accordance with applicable Requirement of Law, or at the option of the Administrative Agent timely reimburse it for the payment of, any Other Taxes.

(d) Indemnification by the Borrower. Without duplication of any obligation under this Section 2.16, the Borrower shall indemnify each Recipient, within 10 days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient and any reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority; *provided, however*, the Borrower shall not be required to indemnify a Recipient pursuant to this Section 2.16(d) for any Indemnified Taxes unless such Recipient makes written demand on the Borrower for indemnification for such Indemnified Taxes no later than six months after the earlier of (i) the date on which such Recipient receives written demand from the relevant Governmental Authority for payment of such Indemnified Taxes or (ii) the date on which such Recipient has made payment of such Indemnified Taxes. A certificate as to the amount of such payment or liability delivered to the Borrower by a Lender (with a copy to the Administrative Agent), or by the Administrative Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.

(e) Indemnification by the Lenders. Each Lender shall severally indemnify the Administrative Agent, within 10 days after demand therefor, for (i) any Taxes attributable to such Lender (but only to the extent that the Borrower has not already indemnified the Administrative Agent for such Taxes and without limiting the obligation of the Borrower to do so), (ii) any Taxes attributable to such Lender's failure to comply with the provisions of Section 9.05(c) relating to the maintenance of a Participant Register and (iii) any Excluded Taxes attributable to such Lender, in each case, that are payable or paid by the Administrative Agent in connection with any Loan Document, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender by the Administrative Agent shall be conclusive absent manifest error. Each Lender hereby authorizes the Administrative Agent to set off and apply any and all amounts at any time owing to such Lender under any Loan Document or otherwise payable by the Administrative Agent to the Lender from any other source against any amount due to the Administrative Agent under this paragraph (e).

(f) Evidence of Payments. As soon as practicable after any payment of Taxes by the Borrower to a Governmental Authority pursuant to this Section 2.16, the Borrower shall deliver to the Administrative Agent the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to the Administrative Agent.

(g) Status of Lenders. (i) Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to the Borrower and the Administrative Agent, at the time or times reasonably requested by the Borrower or the Administrative Agent, such properly completed and executed documentation reasonably requested by the Borrower or the Administrative Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by the Borrower or the Administrative Agent, shall deliver such other documentation prescribed by applicable Requirement of Law or reasonably requested by the Borrower or the Administrative Agent as will enable the Borrower or the Administrative Agent to determine whether or not such Lender is subject to backup withholding or

information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in subsections (ii)(A), (ii)(B) and (ii)(D) below) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(ii) Without limiting the generality of the foregoing, in the event that the Borrower is a U.S. Borrower,

(A) any Lender that is a U.S. Person shall deliver to the Borrower and the Administrative Agent on or prior to the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), executed originals of IRS Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding Tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Administrative Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), whichever of the following is applicable:

(1) in the case of a Foreign Lender claiming the benefits of an income Tax treaty to which the United States is a party (x) executed originals of IRS Form W-8BEN or IRS Form W-8BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "interest" article of such Tax treaty and (y) IRS Form W-8BEN or IRS Form W-8BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "business profits" or "other income" article of such Tax treaty;

(2) executed originals of IRS Form W-8ECI;

(3) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate substantially in the form of Exhibit 2.16-A to the effect that such Foreign Lender is not a "bank" within the meaning of Section 881(c)(3)(A) of the Code, a "10 percent shareholder" of the Borrower within the meaning of Section 881(c)(3)(B) of the Code, or a "controlled foreign corporation" described in Section 881(c)(3)(C) of the Code (a "U.S. Tax Compliance Certificate") and (y) executed originals of IRS Form W-8BEN or IRS Form W-8BEN-E; or

(4) to the extent a Foreign Lender is not the beneficial owner, executed originals of IRS Form W-8IMY, accompanied by IRS Form W-8ECI, IRS Form W-8BEN or IRS Form W-8BEN-E, a U.S. Tax Compliance Certificate substantially in the form of Exhibit 2.16-B or Exhibit 2.16-C, IRS Form W-9, and/or other certification documents from each beneficial owner, as applicable; *provided* that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate substantially in the form of Exhibit 2.16-D on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Administrative Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), executed originals of any other form prescribed by applicable Requirement of Law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax, duly completed and executed, together with such supplementary documentation as may be prescribed by applicable Requirement of Law to permit the Borrower or the Administrative Agent to determine the withholding or deduction required to be made; and

(D) if a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to the Borrower and the Administrative Agent at the time or times prescribed by Requirement of Law and at such time or times reasonably requested by the Borrower or the Administrative Agent such documentation prescribed by applicable Requirement of Law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by the Borrower or the Administrative Agent as may be necessary for the Borrower and the Administrative Agent to comply with their obligations under FATCA and to determine that such Lender has complied with such Lender's obligations under FATCA or to determine the amount to deduct and withhold from such payment. Solely for purposes of this clause (D), "*FATCA*" shall include any amendments made to FATCA after the date of this Agreement.

Each Lender agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify the Borrower and the Administrative Agent in writing of its legal inability to do so.

(h) Treatment of Certain Refunds. If any party determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified pursuant to this Section 2.16 (including by the payment of additional amounts pursuant to this Section 2.16), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made under this Section with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of such indemnified party and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund). Such indemnifying party, upon the request of such indemnified party, shall repay to such indemnified party the amount paid over pursuant to this paragraph (h) (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) in the event that such indemnified party is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this paragraph (h), in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this paragraph (h) the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax had never been paid. This paragraph shall not be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to the indemnifying party or any other Person.

(i) On or before the date that Barclays Bank PLC (or any successor or replacement Administrative Agent) becomes the Administrative Agent hereunder, it shall deliver to the Borrower two duly executed originals of either (i) IRS Form W-9 (or any applicable successor form) certifying that the Administrative Agent is not subject to backup withholding, or (ii) IRS Form W-8IMY (or any applicable successor form) establishing that the Administrative Agent will act as a withholding agent for any U.S. federal withholding tax imposed with respect to any payments made to Lenders under any Loan Document.

(j) Survival. Each party's obligations under this Section 2.16 shall survive the resignation or replacement of the Administrative Agent or any assignment of rights by, or the replacement of, a Lender, the termination of the Commitments and the repayment, satisfaction or discharge of all obligations under any Loan Document.

SECTION 2.17 Payments Generally; Pro Rata Treatment; Sharing of Set-offs.

(a) The Borrower shall make each payment required to be made by the Borrower hereunder (whether of principal, interest or fees, or under Section 2.14, 2.15 or 2.16, or otherwise) prior to 12:00 noon, New York, New York time, on the date when due, in immediately available funds, without set-off or counterclaim. Any amounts received after such time on any date may, in the discretion of the Administrative Agent, be deemed to have been received on the next succeeding Business Day for purposes of calculating interest thereon. All such payments shall be made to the Administrative Agent at its Principal Office, except that payments pursuant to Sections 2.14, 2.15, 2.16 and 9.03 shall be made directly to the Persons entitled thereto. The Administrative Agent shall distribute any such payments received by it for the account of any other Person to the appropriate recipient promptly following receipt thereof. If any payment hereunder shall be due on a day that is not a Business Day, the date for payment shall be extended to the next succeeding Business Day, and, in the case of any payment accruing interest, interest thereon shall be payable for the period of such extension. All payments hereunder shall be made in dollars.

(b) If at any time insufficient funds are received by and available to the Administrative Agent to pay fully all amounts of principal, interest and fees then due hereunder, such funds shall be applied to pay interest and fees then due hereunder, ratably among the parties entitled thereto in accordance with the amounts of interest and fees then due to such parties.

(c) If any Lender shall, by exercising any right of setoff or counterclaim or otherwise, obtain payment in respect of any principal of or interest on any of its Loans or other obligations hereunder resulting in such Lender receiving payment of a proportion of the aggregate amount of its Loans and accrued interest thereon or other such obligations greater than its *pro rata* share thereof as provided herein, then the Lender receiving such greater proportion shall (a) notify the Administrative Agent of such fact, and (b) purchase (for cash at face value) participations in the Loans and such other obligations of the other Lenders, or make such other adjustments as shall be equitable, so that the benefit of all such payments shall be shared by the Lenders ratably in accordance with the aggregate amount of principal of and accrued interest on their respective Loans and other amounts owing them*; provided* that:

(i) if any such participations are purchased and all or any portion of the payment giving rise thereto is recovered, such participations shall be rescinded and the purchase price restored to the extent of such recovery, without interest; and

(ii) the provisions of this paragraph shall not be construed to apply to (x) any payment made by the Borrower pursuant to and in accordance with the express terms of this Agreement (including the application of funds arising from the existence of a Defaulting Lender), or (y) any payment obtained by a Lender as consideration for the assignment of or sale of a

participation in any of its Loans to any assignee or participant, other than to the Borrower or any Subsidiary thereof (as to which the provisions of this paragraph shall apply).

The Borrower consents to the foregoing and agrees, to the extent it may effectively do so under applicable law, that any Lender acquiring a participation pursuant to the foregoing arrangements may exercise against the Borrower rights of setoff and counterclaim with respect to such participation as fully as if such Lender were a direct creditor of the Borrower in the amount of such participation.

(d) Unless the Administrative Agent shall have received notice from the Borrower prior to the date on which any payment is due to the Administrative Agent for the account of the Lenders hereunder that the Borrower will not make such payment, the Administrative Agent may assume that the Borrower has made such payment on such date in accordance herewith and may, in reliance upon such assumption, distribute to the Lenders the amount due. In such event, if the Borrower has not in fact made such payment, then each of the Lenders severally agrees to repay to the Administrative Agent forthwith on demand the amount so distributed to such Lender with interest thereon, for each day from the date such amount is distributed to it to the date of payment to the Administrative Agent, at the greater of the Federal Funds Effective Rate and a rate determined by the Administrative Agent in accordance with banking industry rules or interbank compensation.

(e) If any Lender shall fail to make any payment required to be made by it pursuant to Section 2.06(b), 2.17(d) or 8.08, then the Administrative Agent may, in its discretion (notwithstanding any contrary provision hereof), (i) apply any amounts thereafter received by the Administrative Agent for the account of such Lender to satisfy such Lender's obligations under such Sections until all such unsatisfied obligations are fully paid and/or (ii) hold any such amounts in a segregated account as cash collateral for, and application to, any future funding obligations of such Lender under such Sections; in the case of each of (i) and (ii) above, in any order as determined by the Administrative Agent in its discretion.

SECTION 2.18 Mitigation of Obligations; Replacement of Lenders.

(a) Designation of a Different Lending Office. If any Lender requests compensation under Section 2.14, or requires the Borrower to pay any Indemnified Taxes or additional amounts to any Lender or any Governmental Authority for the account of any Lender pursuant to Section 2.16, then such Lender shall (at the request of the Borrower) use reasonable efforts to designate a different lending office for funding or booking its Loans hereunder or to assign its rights and obligations hereunder to another of its offices, branches or affiliates, if, in the judgment of such Lender, such designation or assignment (i) would eliminate or reduce amounts payable pursuant to Section 2.14 or 2.16, as the case may be, in the future, and (ii) would not subject such Lender to any unreimbursed cost or expense and would not otherwise be disadvantageous to such Lender. The Borrower hereby agrees to pay all reasonable costs and expenses incurred by any Lender in connection with any such designation or assignment.

(b) Replacement of Lenders. If any Lender requests compensation under Section 2.14, or if the Borrower is required to pay any Indemnified Taxes or additional amounts to any Lender or any Governmental Authority for the account of any Lender pursuant to Section 2.16 and, in each case, such Lender has declined or is unable to designate a different lending office in accordance with Section 2.18(a), or if any Lender is a Defaulting Lender or a Non-Consenting Lender, then the Borrower may, at its sole expense and effort, upon notice to such Lender and the Administrative Agent, require such Lender to assign and delegate, without recourse (in accordance with and subject to the restrictions contained in, and consents required by, Section 9.05), all of its interests, rights (other than its existing rights to payments pursuant to Section 2.14 or Section 2.16) and obligations under this Agreement and the related Loan Documents to an

Eligible Assignee that shall assume such obligations (which assignee may be another Lender, if a Lender accepts such assignment); *provided* that:

(i) the Borrower shall have paid to the Administrative Agent the assignment fee (if any) specified in Section 9.05;

(ii) such Lender shall have received payment of an amount equal to the outstanding principal of its Loans, accrued interest thereon, accrued fees and all other amounts payable to it hereunder and under the other Loan Documents (including any amounts under Section 2.15) from the assignee (to the extent of such outstanding principal and accrued interest and fees) or the Borrower (in the case of all other amounts);

(iii) in the case of any such assignment resulting from a claim for compensation under Section 2.14 or payments required to be made pursuant to Section 2.16, such assignment will result in a reduction in such compensation or payments thereafter;

(iv) such assignment does not conflict with applicable law; and

(v) in the case of any assignment resulting from a Lender becoming a Non-Consenting Lender, the applicable assignee shall have consented to the applicable amendment, waiver or consent.

A Lender shall not be required to make any such assignment or delegation if, prior thereto, as a result of a waiver by such Lender or otherwise, the circumstances entitling the Borrower to require such assignment and delegation cease to apply.

SECTION 2.19 Defaulting Lenders. (a) Notwithstanding anything to the contrary contained in this Agreement, if any Lender becomes a Defaulting Lender, then, until such time as such Lender is no longer a Defaulting Lender, to the extent permitted by applicable law:

(i) Such Defaulting Lender's right to approve or disapprove any amendment, waiver or consent with respect to this Agreement shall be restricted as set forth in Section 9.02.

(ii) Any payment of principal, interest, fees or other amounts received by the Administrative Agent for the account of such Defaulting Lender (whether voluntary or mandatory, at maturity, pursuant to Article VII or otherwise) or received by the Administrative Agent from a Defaulting Lender pursuant to Section 9.09 shall be applied at such time or times as may be determined by the Administrative Agent as follows: *first*, to the payment of any amounts owing by such Defaulting Lender to the Administrative Agent hereunder; *second*, as the Company may request (so long as no Default or Event of Default exists), to the funding of any Loan in respect of which such Defaulting Lender has failed to fund its portion thereof as required by this Agreement, as determined by the Administrative Agent; *third*, if so determined by the Administrative Agent and the Borrower, to be held in a deposit account and released *pro rata* in order to satisfy such Defaulting Lender's potential future funding obligations with respect to Loans under this Agreement; *fourth*, to the payment of any amounts owing to the Lenders as a result of any judgment of a court of competent jurisdiction obtained by any Lender against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement; *fifth,* so long as no Default or Event of Default exists, to the payment of any amounts owing to the Borrower as a result of any judgment of a court of competent jurisdiction obtained by the Borrower against such Defaulting Lender as a result of such Defaulting Lender's breach of its obligations under this Agreement; and

sixth, to such Defaulting Lender or as otherwise directed by a court of competent jurisdiction; *provided* that if (x) such payment is a payment of the principal amount of any Loans in respect of which such Defaulting Lender has not fully funded its appropriate share, and (y) such Loans were made at a time when the conditions set forth in Section 3.02 were satisfied or waived, such payment shall be applied solely to pay the Loans of all Non-Defaulting Lenders on a *pro rata* basis prior to being applied to the payment of any Loans of such Defaulting Lender until such time as all Loans are held by the Lenders *pro rata* in accordance with the Commitments. Any payments, prepayments or other amounts paid or payable to a Defaulting Lender that are applied (or held) to pay amounts owed by a Defaulting Lender shall be deemed paid to and redirected by such Defaulting Lender, and each Lender irrevocably consents hereto.

(iii) (A) Each Defaulting Lender shall be entitled to receive a Commitment Fee for any period during which that Lender is a Defaulting Lender only to extent allocable to the outstanding principal amount of the Loans funded by it.

(B) With respect to any Commitment Fee under Section 2.11(b) not required to be paid to any Defaulting Lender pursuant to clause (A) above, the Borrower shall not be required to pay the remaining amount of any such fee.

(b) If the Borrower and the Administrative Agent agree in writing that a Lender is no longer a Defaulting Lender, the Administrative Agent will so notify the parties hereto, whereupon as of the effective date specified in such notice and subject to any conditions set forth therein, that Lender will, to the extent applicable, purchase at par that portion of outstanding Loans of the other Lenders or take such other actions as the Administrative Agent may determine to be necessary to cause the Loans to be held *pro rata* by the Lenders in accordance with their respective Commitments, whereupon, that Lender will cease to be a Defaulting Lender; *provided* that no adjustments will be made retroactively with respect to fees accrued or payments made by or on behalf of the Borrower while that Lender was a Defaulting Lender; and *provided*, *further*, that except to the extent otherwise expressly agreed by the affected parties, no change hereunder from Defaulting Lender to Lender will constitute a waiver or release of any claim of any party hereunder arising from that Lender's having been a Defaulting Lender.

ARTICLE III
CONDITIONS PRECEDENT

SECTION 3.01 Conditions Precedent to the Closing Date. The obligations of the Lenders to make Loans hereunder shall not become effective until the date on which each of the following conditions is satisfied or waived in accordance with Section 9.02:

(a) The Administrative Agent shall have received the following, each dated as of the Closing Date:

(i) this Agreement executed by each party hereto;

(ii) the Guaranty executed by each party thereto;

(iii) a certificate of an officer and of the secretary or an assistant secretary of the Borrower and each Guarantor, certifying, *inter alia* (A) true and complete copies of each of the certificate of incorporation or other appropriate organizational document, as amended and in effect, of such Person, the bylaws or similar organizational document, as amended and in effect, of such Person and the resolutions adopted by the Board of Directors or similar governing body of such Person (1) authorizing the execution, delivery and performance by such Person of each Loan

Document to which such Person is or will be a party, (2) approving the Loan Documents to which such Person is or will be a party and (3) authorizing officers of such Person to execute and deliver the Loan Documents to which such Person is or will be a party and any related documents and (B) the incumbency and specimen signatures of the officers of such Person executing any documents on its behalf; provided, that there shall be no requirement to deliver such certificates for any Guarantor that is not a Material Subsidiary;

(iv) a certificate of a Responsible Officer of the Borrower certifying as to the satisfaction of the conditions in Sections 3.01(c) and (e); and

(v) signed opinions addressed to the Administrative Agent and the Lenders from legal counsel to the Borrower and the Guarantors covering the matters reasonably requested by the Administrative Agent; provided, that there shall be no requirement to deliver opinions of legal counsel for any Guarantor that is not a Material Subsidiary.

(b) The Administrative Agent shall have received a certificate of appropriate officials as to the existence and good standing of the Borrower and each Guarantor.

(c) There shall not have occurred any change, effect, event or occurrence since December 31, 2017 that, individually or in the aggregate, has had, or would reasonably be expected to have, a Material Adverse Effect.

(d) The Administrative Agent shall have received evidence that the Existing Credit Agreement has been, or substantially concurrently with the Closing Date will be, terminated and the obligations outstanding thereunder repaid in full pursuant to customary payoff documentation, including evidence of the release of Liens, if any, granted in connection therewith.

(e) The conditions precedent set forth in Sections 3.02(b) and (d) shall have theretofore been satisfied or waived in accordance with Section 9.02.

(f) (i) The Administrative Agent shall have received (for distribution to the Lenders so requesting) at least three business days prior to the Closing Date all documentation and other information about the Borrower and Guarantors as required by regulatory authorities under applicable "know your customer" and anti-money laundering rules and regulations, including without limitation the Patriot Act, to the extent reasonably requested by any Lender to the Administrative Agent and conveyed by the Administrative Agent to the Borrower in writing at least 10 days prior to the Closing Date and (ii) to the extent the Borrower qualifies as a "legal entity customer" under the Beneficial Ownership Regulation, at least five days prior to the Closing Date, any Lender that has requested, in a written notice to the Borrower at least 10 days prior to the Closing Date, a Beneficial Ownership Certification in relation to the Borrower shall have received such Beneficial Ownership Certification (provided that, upon the execution and delivery by such Lender of its signature page to this Agreement, the condition set forth in this clause (ii) shall be deemed to be satisfied).

(g) All fees required to be paid on the Closing Date pursuant to the Fee Letters referenced in Section 2.11(c) and all reasonable out-of-pocket expenses required to be paid on the Closing Date, to the extent invoiced at least two Business Days prior to the Closing Date shall have been paid.

The Administrative Agent shall notify the Borrower and the Lenders of the Closing Date in writing promptly upon such conditions precedent being satisfied (or waived in accordance with Section 9.02), and such notice shall be conclusive and binding.

SECTION 3.02 Conditions Precedent to Each Credit Event. The obligations of the Lenders to make Loans hereunder is subject to the satisfaction or waiver in accordance with Section 9.02 of the following conditions precedent:

(a) The conditions precedent set forth in Section 3.01 shall have theretofore been satisfied or waived in accordance with Section 9.02;

(b) The representations and warranties set forth in Article IV and in the other Loan Documents shall be true and correct in all material respects as of, and as if such representations and warranties were made on, the Borrowing Date of the proposed Loan (unless such representation and warranty expressly relates to an earlier date), and by the Borrower's delivery of a Borrowing Request, the Borrower shall be deemed to have certified to the Administrative Agent and the Lenders that such representations and warranties are true and correct in all material respects;

(c) The Company shall have complied with the provisions of Section 2.03;

(d) No Default or Event of Default shall have occurred and be continuing or would result from such Credit Event; and

(e) A Borrowing Request shall have been delivered in accordance with the terms of Section 2.03.

The acceptance by the Borrower of the benefits of each Credit Event shall constitute a representation and warranty by the Borrower to each of the Lenders that all of the conditions specified in this Section 3.02 above exist as of that time.

ARTICLE IV
REPRESENTATIONS AND WARRANTIES

On the Closing Date and on each Borrowing Date, the Borrower makes the following representations and warranties to the Administrative Agent and the Lenders:

SECTION 4.01 Organization and Qualification. The Borrower and each of the Material Subsidiaries (a) is a corporation, partnership or limited liability company duly organized or formed, validly existing and in good standing under the laws of the state of its incorporation, organization or formation, (b) has all requisite corporate, partnership, limited liability company or other power and all material governmental licenses, authorizations, consents and approvals required to carry on its business as now conducted and (c) is duly qualified to do business and is in good standing in every jurisdiction in which the failure to be so qualified would, individually or together with all such other failures of the Borrower and the Subsidiaries, have a Material Adverse Effect.

SECTION 4.02 Authorization, Validity, Etc. The Borrower and each Guarantor has all requisite corporate (or other organizational) power and authority to execute and deliver, and to incur and perform its obligations under this Agreement and under the other Loan Documents to which it is a party and, in the case of the Borrower, to make the Borrowings hereunder, and all such actions have been duly authorized by all necessary proceedings on its behalf. This Agreement and the other Loan Documents have been duly and validly executed and delivered by or on behalf of the Borrower (and, on the Closing Date, with respect to the Guaranty, each Guarantor) party thereto and constitute valid and legally binding agreements of the Borrower and each Guarantor, as applicable, enforceable against the Borrower or the Guarantor in accordance with the respective terms thereof, except (a) as may be limited by bankruptcy, insolvency, reorganization,

moratorium, fraudulent transfer, fraudulent conveyance or other similar laws relating to or affecting the enforcement of creditors' rights generally, and by general principles of equity (including principles of good faith, reasonableness, materiality and fair dealing) which may, among other things, limit the right to obtain equitable remedies (regardless of whether considered in a proceeding in equity or at law) and (b) as to the enforceability of provisions for indemnification for violation of applicable securities laws, limitations thereon arising as a matter of law or public policy.

SECTION 4.03 Governmental Consents, Etc. No authorization, consent, approval, license or exemption of or registration, declaration or filing with any Governmental Authority, is necessary for the valid execution and delivery of, or the incurrence and performance by the Borrower or each Guarantor of its obligations under, any Loan Document to which it is a party, except those that have been obtained and such matters relating to performance as would ordinarily be done in the ordinary course of business after the Closing Date.

SECTION 4.04 No Breach or Violation of Agreements or Restrictions, Etc. Neither the execution and delivery of, nor the incurrence and performance by any Loan Party of its obligations under, the Loan Documents to which it is a party, nor the extensions of credit contemplated by the Loan Documents, will (a) breach or violate any applicable Requirement of Law, (b) result in any breach or violation of any of the terms, covenants, conditions or provisions of, or constitute a default under, or result in the creation or imposition of (or the obligation to create or impose) any Lien upon any of its property or assets (other than Liens created or contemplated by this Agreement) pursuant to the terms of, any indenture, mortgage, deed of trust, agreement or other instrument to which it or any of the Subsidiaries is party or by which any of its properties or assets, or those of any of the Subsidiaries is bound or to which it is subject, except for breaches, violations and defaults under clauses (a) and (b) that neither individually nor in the aggregate could reasonably be expected to result in a Material Adverse Effect, or (c) violate any provision of the organizational documents of such Loan Party.

SECTION 4.05 Properties. Each of the Borrower and the Material Subsidiaries has good title to, or valid leasehold or other interests in, all its real and personal property material to its business free of all Liens securing Indebtedness except for such Liens permitted under Section 6.02.

SECTION 4.06 Litigation and Environmental Matters. (a) Except as disclosed in the most recent Annual Report on Form 10-K delivered by the Borrower to the Lenders, there is no action, suit or proceeding by or before any arbitrator or Governmental Authority pending against or, to the knowledge of the Borrower, threatened against or affecting the Borrower or any of the Material Subsidiaries as to which there is a reasonable possibility of an adverse determination and that, if adversely determined, could reasonably be expected to result in a Material Adverse Effect.

(b) Except as disclosed in the most recent Annual Report on Form 10-K delivered by the Borrower to the Lenders, the associated liabilities and costs of the Borrower's compliance with Environmental Laws (including any capital or operating expenditures required for clean-up or closure of properties currently or previously owned, any capital or operating expenditures required to achieve or maintain compliance with environmental protection standards imposed by Environmental Laws or as a condition of any license, permit or contract, any related constraints on operating activities, including any periodic or permanent shutdown of any facility or reduction in the level of or change in the nature of operations conducted thereat, any costs or liabilities in connection with off-site disposal of wastes or Hazardous Materials, and any actual or potential liabilities to third parties, including employees, and any related costs and expenses) are unlikely to result in a Material Adverse Effect.

SECTION 4.07 Financial Statements.

(a) The consolidated balance sheet of the Borrower and the Subsidiaries as at December 31, 2017 and the related consolidated statements of income, comprehensive income, shareholders' equity and cash flows of the Borrower and the Subsidiaries for the fiscal year ended on said date, with the opinion thereon of PricewaterhouseCoopers LLP and set forth in the Borrower's 2017 Annual Report on Form 10-K, as filed with the SEC, fairly present, in all material respects, the consolidated financial position of the Borrower and the Subsidiaries as of such date and their consolidated results of operations and cash flows for such fiscal year in accordance with GAAP.

(b) The unaudited consolidated balance sheets of the Borrower and the Subsidiaries as at March 31, 2018, June 30, 2018 and September 30, 2018 and the related consolidated statements of income and cash flows of the Borrower and the Subsidiaries for the three month period ended on such date and set forth in the Borrower's Quarterly Report on Form 10-Q for its fiscal quarter then ended, as filed with the SEC, fairly present, in all material respects, the consolidated financial position of the Borrower and the Subsidiaries as of such date and their consolidated results of their operations cash flows for the applicable time period ended on said date (subject to the absence of footnotes and to normal year-end and audit adjustments), in accordance with GAAP applied on a basis consistent with the financial statements referred to in Section 4.07(a).

(c) On the Closing Date and since the date of the Annual Report on Form 10-K delivered by the Borrower to the Lenders with respect to the fiscal year ended December 31, 2017, there has been no material adverse change in the business, assets, liabilities or financial condition of the Borrower and the Subsidiaries, taken as a whole.

SECTION 4.08 Disclosure.

(a) As of the Closing Date only, information heretofore furnished by the Borrower to the Administrative Agent or any Lender for purposes of or in connection with this Agreement or any transaction contemplated hereby, together with the Executive Summary is, when taken as a whole, true and accurate in all material respects on the date as of which such information is stated or certified. The Executive Summary and the reports, financial statements, certificates or other written information furnished by or on behalf of the Borrower to the Administrative Agent or any Lender in connection with the syndication or negotiation of this Agreement or delivered hereunder (as modified or supplemented by other information so furnished) on or prior to the Closing Date, when taken as a whole, do not contain any material misstatement of fact or omits to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; *provided* that, with respect to any projected financial information, the Borrower represents only that such information was prepared in good faith based upon assumptions believed by the Borrower to be reasonable at the time (it being recognized, however, that projections as to future events are not to be viewed as facts and that the actual results during the period or periods covered by any projects may materially different from the projected results).

(b) As of the Closing Date, to the knowledge of the Borrower, the information included in the Beneficial Ownership Certification provided on or prior to the Closing Date to any Lender in connection with this Agreement is true and correct in all respects.

SECTION 4.09 Investment Company Act. The Borrower is not, and no Loan Party is required to register as, an "*investment company*," as such term is defined in the Investment Company Act of 1940, as amended.

SECTION 4.10 ERISA. Each member of the ERISA Group has fulfilled its obligations under the minimum funding standards of ERISA and the Code with respect to each Plan and is in compliance

in all material respects with the presently applicable provisions of ERISA and the Code with respect to each Plan, except where the failure to so fulfill such obligations and such noncompliance individually, or together with all such failures to fulfill such obligations and all such noncompliance, could not reasonably be expected to result in a Material Adverse Effect. No member of the ERISA Group has (i) sought a waiver of the minimum funding standard under Section 412 of the Code in respect of any Plan, (ii) failed to make any contribution or payment to any Plan or Multiemployer Plan or in respect of any Benefit Arrangement, or made any amendment to any Plan or Benefit Arrangement, which has resulted or could result in the imposition of a Lien or the posting of a bond or other security under ERISA or the Code or (iii) incurred any liability under Title IV of ERISA other than a liability to the PBGC for premiums under Section 4007 of ERISA, which waiver, failure, amendment or liability individually, or collectively with all such waivers, failures, amendments or liabilities, could reasonably be expected to result in a Material Adverse Effect. Except where the failure to so fulfill such obligations and such noncompliance could individually, or together with all such failures to fulfill such obligations and all such noncompliance could reasonably be expected to result in a Material Adverse Effect, (i) no "reportable event", as defined in Section 4043 of ERISA or the regulations issued thereunder, has occurred with respect to a Plan (other than an event for which the 30 day notice period is waived),. (ii) neither the Borrower nor any member of its ERISA Group has received any notice from the PBGC or a plan administrator relating to an intention to terminate any Plan or Plans or to appoint a trustee to administer any Plan and (iii) neither the Borrower or any members of its ERISA Group has any liability with respect to the withdrawal or partial withdrawal from any Plan or Multiemployer Plan, nor has the Borrower, any members of its ERISA Group, or any Multiemployer Plan from the Borrower or member of its ERISA Group received any notice concerning the imposition of Withdrawal Liability or a determination that a Multiemployer Plan is, or is expected to be, insolvent within the meaning of Title IV of ERISA.

SECTION 4.11 Tax Returns and Payments. The Borrower and the Material Subsidiaries have caused to be filed all federal income Tax returns and other material Tax returns, statements and reports (or obtained extensions with respect thereto) which are required to be filed and have paid or deposited or made adequate provision in accordance with GAAP for the payment of all Taxes (including estimated Taxes shown on such returns, statements and reports) which are shown to be due pursuant to such returns, except for Taxes being contested in good faith by appropriate proceedings for which adequate reserves in accordance with GAAP have been created on the books of the Borrower and the Subsidiaries and where the failure to pay such Taxes (individually or in the aggregate for the Borrower and the Subsidiaries) would not have a Material Adverse Effect.

SECTION 4.12 Compliance with Laws and Agreements. Each of the Borrower and the Material Subsidiaries is in compliance with all laws, regulations and orders of any Governmental Authority applicable to it or its property and all indentures, agreements and other instruments binding upon it or its property, except where the failure to do so, individually or in the aggregate for the Borrower and the Material Subsidiaries, could not reasonably be expected to result in a Material Adverse Effect.

SECTION 4.13 Purpose of Loans.

(a) All proceeds of the Loans will be used for the purposes set forth in Section 5.07.

(b) Neither the Borrower nor any agent acting on its behalf has taken or will take any action which might cause this Agreement or any other Loan Document to violate Regulation T, Regulation U, Regulation X, or any other regulation of the Board or to violate the Exchange Act. Margin stock does not constitute more than 25% of the assets of the Borrower, or of the Borrower and the Subsidiaries on a consolidated basis, and the Borrower does not intend or foresee that it will ever do so.

SECTION 4.14 Foreign Assets Control Regulations, etc. (a) To the extent applicable, no part of the proceeds of the Loans will (i) be used to violate in any material respect the Trading with the Enemy Act, as amended, or (ii) be used, directly or indirectly or made available to any subsidiary, joint venture partner or any other Person to fund or support any activities or business of or with any Person, or in any country or territory, that, at the time of such funding or extension, is, or whose government is, at the time of making such Loans, the subject of any economic or financial sanctions or trade embargoes administered or enforced by the U.S. Government, including any enforced by the U.S. Department of Treasury's Office of Foreign Assets Control or the U.S. Department of State (collectively, "Sanctions").

(b) Neither the Borrower nor any Subsidiary, nor, to the knowledge of the Borrower, any director, officer, employee, agent, affiliate or representative of the Borrower or any Subsidiary is a Person that is, or is owned or controlled by, a Sanctioned Person. The Borrower and the Subsidiaries are in compliance, in all material respects, with the Patriot Act.

(c) No part of the proceeds of the Loans will be used, directly or indirectly, for any payments to any person in violation of any Anti-Corruption Laws, to the extent the Anti-Corruption Laws apply to the Borrower or one of the Subsidiaries.

SECTION 4.15 Solvency. On the Closing Date, after giving effect to the Transactions, the Borrower and its Subsidiaries, on a consolidated basis, are Solvent.

ARTICLE V
AFFIRMATIVE COVENANTS

From the Closing Date until the Commitments have expired or been terminated and principal of and interest on each Loan and all fees payable hereunder shall have been paid in full, the Borrower covenants and agrees with the Lenders that:

SECTION 5.01 Financial Statements and Other Information. The Borrower will furnish to the Administrative Agent:

(a) within ten days after the date in each fiscal year on which the Borrower is required to file its Annual Report on Form 10-K with the SEC or, if earlier, 100 days after the end of each fiscal year (i) such Annual Report, and (ii) its audited consolidated balance sheet and the related consolidated statements of income, comprehensive income, operations, shareholders' equity and cash flows as of the end of and for such year, setting forth in each case in comparative form the figures as of the end of and for the previous fiscal year, all reported on by, and accompanied by an opinion (without a "*going concern*" or like qualification or exception and without any qualification or exception as to the scope of their audit) of, PricewaterhouseCoopers LLP, or other independent public accountants of recognized national standing to the effect that such consolidated financial statements present fairly in all material respects the financial position, results of operations and cash flows of the Borrower and the Subsidiaries on a consolidated basis in accordance with GAAP; *provided*, *however*, that (x) the Borrower shall be deemed to have furnished said Annual Report on Form 10-K for purposes of clause (i) if it shall have timely made the same available on "EDGAR" and/or on its home page on the worldwide web (at the date of this Agreement located at http://www.kindermorgan.com) and complied with the last grammatical paragraph of this Section 5.01 in respect thereof, and (y) if said Annual Report contains such consolidated balance sheet and such consolidated statements of results of income, comprehensive income, shareholders' equity and cash flows, and the report thereon of such independent public accountants (without qualification or exception, and to the effect, as specified above), the Borrower shall not be required to comply with clause (ii);

(b) within five days after each date in each fiscal year on which the Borrower is required to file a Quarterly Report on Form 10-Q with the SEC or, if earlier, 50 days after the end of each fiscal quarter (i) such Quarterly Report, and (ii) its consolidated balance sheet and the related consolidated statements of income and cash flows as of the end of and for the fiscal quarter to which said Quarterly Report relates and the then elapsed portion of the fiscal year, setting forth in each case in comparative form the figures as of the end and for the corresponding period or periods of the previous fiscal year, all certified by a Responsible Officer as presenting fairly in all material respects the financial condition and results of operations of the Borrower and the Subsidiaries on a consolidated basis in accordance with GAAP, subject to normal year-end audit adjustments and the absence of footnotes; *provided*, *however*, that (x) the Borrower shall be deemed to have furnished said Quarterly Report for purposes of clause (i) if it shall have timely made the same available on "EDGAR" and/or on its home page on the worldwide web (at the date of this Agreement located at http://www.kindermorgan.com) and complied with the last grammatical paragraph of this Section 5.01 in respect thereof, and (y) if said Quarterly Report contains such consolidated balance sheet and consolidated statements of income and cash flows, and such certifications, the Borrower shall not be required to comply with clause (ii);

(c) simultaneously with the delivery of each set of financial statements referred to in clauses (a) and (b) above, a certificate in substantially the form of Exhibit 5.01 signed by an authorized financial or accounting officer of the Borrower (i) setting forth in reasonable detail the calculations required to establish whether the Borrower was in compliance with the requirements of Section 6.07, (ii) (A) in the case of the first set of financial statements delivered following the Closing Date, setting forth a list of the Material Subsidiaries, and (B) in the case of each set of financial statements delivered thereafter, an update of any change in the list of the Material Subsidiaries or stating that there has been no such change, and (iii) stating whether any Default or Event of Default exists on the date of such certificate and, if any Default or Event of Default then exists, setting forth the details thereof and the action which the Borrower is taking or proposes to take with respect thereto;

(d) prompt written notice of the following:

(i) the occurrence of any Default or Event of Default;

(ii) any other development that results in, or could reasonably be expected to result in, a Material Adverse Effect; and

(iii) any change in the information provided in the Beneficial Ownership Certification delivered to such Lender that would result in a change to the list of beneficial owners identified in such certification;

(each notice delivered under this Section 5.01(d) to be accompanied by a statement of a Responsible Officer setting forth the details of the event or development requiring such notice and any action taken or proposed to be taken with respect thereto);

(e) without duplication of any other requirement of this Section 5.01, promptly upon the mailing thereof to the public shareholders of the Borrower generally, copies of all financial statements, reports and proxy statements so mailed;

(f) promptly upon the filing thereof with the SEC, copies of all registration statements (other than the exhibits thereto and any registration statements on Form S-8 or its equivalent) and reports on Form 8-K which the Borrower shall have filed with the SEC;

(g) if and when any member of the ERISA Group (i) gives or is required to give notice to the PBGC of any "*reportable event*" (as defined in Section 4043 of ERISA) (other than such event as to which the 30-day notice requirement is waived) with respect to any Plan which would reasonably be expected to constitute grounds for a termination of such Plan under Title IV of ERISA, or knows that the plan administrator of any Plan has given or is required to give notice of any such reportable event, a copy of the notice of such reportable event given or required to be given to the PBGC; (ii) receives notice of complete or partial material Withdrawal Liability under Title IV of ERISA or notice that any Multiemployer Plan is insolvent, is in "endangered" or "critical" status (within the meaning of Section 432 of the Code or Section 305 of ERISA) or has been terminated, a copy of such notice; (iii) receives notice from the PBGC under Title IV of ERISA of an intent to terminate, impose liability (other than for premiums under Section 4007 of ERISA) in respect of, or appoint a trustee to administer any Plan, a copy of such notice; (iv) fails to satisfy, or applies for a waiver of, the minimum funding standard under Section 412 of the Code, a copy of such application; (v) gives notice of intent to terminate any Plan under Section 4041(c) of ERISA, a copy of such notice and other information filed with the PBGC; (vi) gives notice of withdrawal from any Plan pursuant to Section 4063 of ERISA, a copy of such notice; or (vii) fails to make any payment or contribution to any Plan or Multiemployer Plan or in respect of any Benefit Arrangement or makes any amendment to any Plan or Benefit Arrangement which has resulted or could result in the imposition of a Lien or the posting of a bond or other security, a certificate of the chief financial officer or the chief accounting officer of the Borrower setting forth details as to such occurrence and action, if any, which the Borrower or applicable member of the ERISA Group is required or proposes to take; and

(h) (x) from time to time such other information (other than projections) regarding the business, affairs or financial condition of the Borrower or any Subsidiary as the Required Lenders or the Administrative Agent may reasonably request and (y) promptly following any request therefor, information and documentation reasonably requested by the Administrative Agent for distribution to the Lenders so requesting for purposes of compliance with applicable "know your customer" and anti-money laundering rules and regulations, including the Patriot Act and the Beneficial Ownership Regulation.

Information required to be delivered pursuant to Section 5.01(a), 5.01(b) or 5.01(f) above shall be deemed to have been delivered on the date on which the Borrower provides notice to the Administrative Agent and the Lenders that such information has been posted on "EDGAR" or the Borrower's website or another website identified in such notice and accessible by the Administrative Agent and the Lenders without charge (and the Borrower hereby agrees to provide such notice); *provided* that such notice may be included in a certificate delivered pursuant to Section 5.01(c).

SECTION 5.02 Existence, Conduct of Business. The Borrower will, and will cause each of the Material Subsidiaries to, do or cause to be done all things necessary to preserve, renew and keep in full force and effect its legal existence and the rights, licenses, permits, privileges and franchises material to the conduct of its business, except where the failure to do so (individually or collectively with all such failures) could not reasonably expected to have a Material Adverse Effect; *provided* that the foregoing shall not prohibit any merger, consolidation, liquidation or dissolution permitted under Section 6.03.

SECTION 5.03 Payment of Obligations. The Borrower will, and will cause each of the Material Subsidiaries to, pay, before the same shall become delinquent or in default, its Indebtedness and Tax liabilities but excluding Indebtedness (other than the Obligations) that is not in excess of $150,000,000, except where (a) the validity or amount thereof is being contested in good faith by appropriate proceedings, (b) the Borrower or such Material Subsidiary has set aside on its books adequate reserves with respect thereto in accordance with GAAP or (c) the failure to make payment pending such contest could not reasonably be expected to result in a Material Adverse Effect.

SECTION 5.04 Maintenance of Properties; Insurance.

(a) The Borrower will keep, and will cause each Material Subsidiary to keep, all property material to the conduct its business (taken as a whole) in good working order and condition, ordinary wear and tear excepted, in the reasonable judgment of the Borrower.

(b) The Borrower will maintain or cause to be maintained with, in the good faith judgment of the Borrower, financially sound and reputable insurers, or through self-insurance, insurance with respect to its properties and business and the properties and businesses of the Subsidiaries against loss or damage of the kinds customarily insured against by business enterprises of established reputation engaged in the same or similar business and similarly situated, of such types and in such amounts as are customarily carried under similar circumstances by such other corporations. Such insurance may include self-insurance or be subject to co-insurance, deductibility or similar clauses which, in effect, result in self-insurance of certain losses, *provided* that such self-insurance is in accord with the approved practices of business enterprises of established reputation similarly situated and adequate insurance reserves are maintained in connection with such self-insurance, and, notwithstanding the foregoing provisions of this Section 5.04 the Borrower or any Subsidiary may effect workers' compensation or similar insurance in respect of operations in any state or other jurisdiction any through an insurance fund operated by such state or other jurisdiction or by causing to be maintained a system or systems of self-insurance in accord with applicable laws.

SECTION 5.05 Books and Records; Inspection Rights. The Borrower will, and will cause each of the Material Subsidiaries to, keep, in accordance with GAAP, books of record and account. The Borrower will, and will cause each of the Material Subsidiaries to, permit any representatives designated by the Administrative Agent or any Lender, upon reasonable prior notice during normal business hours, and, if the Borrower shall so request, in the presence of a Responsible Officer or an appointee of a Responsible Officer, at the expense of the Administrative Agent or such Lender (unless an Event of Default exists, in which event the expense shall be that of the Borrower) to visit and inspect its properties, to examine and make extracts from its books and records (subject to compliance with confidentiality agreements and applicable copyright law), and to discuss its affairs, finances and condition with its officers, all at such times, and as often, as reasonably requested, but unless an Event of Default exists, no more frequently than once during each calendar year.

SECTION 5.06 Compliance with Laws. The Borrower will, and will cause each of the Material Subsidiaries to, comply with all Requirements of Law applicable to it or its property, except where the failure to do so, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect. The Borrower will maintain in effect and enforce policies and procedures designed to ensure compliance by the Borrower, its Subsidiaries and their respective directors, officers, employees and agents with Anti-Corruption Laws and applicable Sanctions.

SECTION 5.07 Use of Proceeds. The proceeds of the Loans will be used for working capital and other general corporate purposes.

SECTION 5.08 Additional Guarantors. The Borrower shall cause each Subsidiary (including, without limitation, any Division Successor) (other than any Excluded Subsidiary) formed or otherwise purchased or acquired after the Closing Date (including each Subsidiary that ceases to constitute an Excluded Subsidiary after the Closing Date) to execute a supplement to the Guaranty and become a Guarantor within 45 days of the occurrence of the applicable event specified in this Section 5.08 (or such longer period of time as the Administrative Agent shall reasonably agree).

ARTICLE VI
NEGATIVE COVENANTS

From the Closing Date until the Commitments have expired or terminated and principal of and interest on each Loan and all fees payable hereunder have been paid in full, the Borrower covenants and agrees with the Lenders that:

SECTION 6.01 Indebtedness of Non-Guarantor Subsidiaries. The Borrower will not permit any Subsidiary that is not a Guarantor (each a "Non-Guarantor Subsidiary") to create, incur or assume Indebtedness other than the following:

(a) Indebtedness existing as of the Closing Date and set forth on Schedule 6.01 and any Indebtedness incurred to refund, extend, refinance or otherwise replace such Indebtedness; provided that the principal amount of such Indebtedness does not exceed the principal amount of Indebtedness refinanced (plus the amount of penalties, premiums, fees, accrued interest and reasonable expenses and other obligations incurred therewith) at the time of the refinancing;

(b) Indebtedness owing to the Borrower or its Subsidiaries;

(c) Indebtedness that is (or was) secured by Liens permitted pursuant to Section 6.02(b) or (c) and any Indebtedness incurred to refund, extend, refinance or otherwise replace such Indebtedness; provided, that the principal amount of such Indebtedness does not exceed the principal amount of Indebtedness refinanced (plus the amount of penalties, premiums, fees, accrued interest and reasonable expenses and other obligations incurred therewith) at the time of refinancing;

(d) (i) Indebtedness attaching to any property or asset prior to the acquisition thereof by any Non-Guarantor Subsidiary or of, or attaching to any property or asset of, any Person that becomes a Non-Guarantor Subsidiary after the date hereof prior to the time such Person becomes a Non-Guarantor Subsidiary, in each case, outstanding prior to the acquisition of such property or asset or such Person becoming a Non-Guarantor Subsidiary; *provided* that such Indebtedness was not incurred in contemplation of or in connection with such acquisition or such Person becoming a Non-Guarantor Subsidiary, as the case may be and (ii) and any Indebtedness incurred to refund, extend, refinance or otherwise replace such Indebtedness (plus the amount of penalties, premiums, fees, accrued interest and reasonable expenses and other obligations incurred therewith);

(e) Indebtedness of Foreign Subsidiaries; and

(f) Indebtedness of Non-Wholly-owned Subsidiaries.

SECTION 6.02 Liens. The Borrower will not, and will not permit any Subsidiary to, create, incur, assume or permit to exist any Lien securing Indebtedness on any property or asset now owned or hereafter acquired by it except:

(a) Liens existing as of the Closing Date (including any replacement, extension or renewal of any such Lien permitted upon or in the same assets (other than after acquired property that is affixed or incorporated into the property covered by such Lien) theretofore subject to such Lien or the replacement, extension or renewal (without increase in the amount or change in any direct or contingent obligor except to the extent otherwise permitted hereunder) of the Indebtedness secured thereby);

(b) Liens securing (A) Capital Lease Obligations, or (B) Indebtedness incurred to finance the acquisition, construction, expansion or improvement of any fixed or capital assets of the Borrower

or its Subsidiaries; *provided* that (x) such Liens attach at all times only to the assets so financed except for accessions to such property, improvements thereof and general intangibles relating thereto, and the proceeds and the products thereof and (y) individual financings of equipment provided by one lender may be cross collateralized to other financings of equipment provided by such lender;

(c) Liens existing on any property or asset prior to the acquisition thereof by the Borrower or any Subsidiary or existing on any property or asset of any Person that becomes a Subsidiary after the date hereof prior to the time such Person becomes a Subsidiary, in each case, pursuant to security documents in effect prior to the acquisition of such property or asset or such Person becoming a Subsidiary ("Existing Security Documents"), and securing Indebtedness whose incurrence, for purposes of this Agreement, by virtue of acquisition of such property or asset, or by virtue of such Person so becoming a Subsidiary, would not result in a violation of Section 6.07; *provided* that (i) such Lien is not created in contemplation of or in connection with such acquisition or such Person becoming a Subsidiary, as the case may be, (ii) such Lien shall not apply to any other property or assets of the Borrower or any Subsidiary except to the extent such Lien attaches to such property or assets pursuant to Existing Security Documents, (iii) such Lien shall secure only those obligations which it secures on the date of such acquisition or the date such Person becomes a Subsidiary, as the case may be, and extensions, renewals and replacements thereof that do not increase the outstanding principal amount thereof. For purposes of this Section 6.02(c), the Indebtedness so secured shall be deemed to have been incurred on the last day of the fiscal quarter then most recently ended; and

(d) Liens, not otherwise permitted by the foregoing clauses (a) and (b), securing Indebtedness in an aggregate amount not exceeding 15% of Consolidated Net Tangible Assets.

SECTION 6.03 Fundamental Changes. The Borrower will not, and will not permit any Material Subsidiary to, merge into or consolidate with any other Person, or permit any other Person to merge into or consolidate with it, or sell, transfer, lease or otherwise dispose of (including pursuant to a Division and whether in one transaction or in a series of transactions) all (or substantially all) of its assets, or all or substantially all of the stock of or other equity interest in any of the Material Subsidiaries (in each case, whether now owned or hereafter acquired), or liquidate or dissolve, unless: (a) at the time thereof and immediately after giving effect thereto no Event of Default or Default shall have occurred and be continuing; and (b) (i) the Borrower or a Material Subsidiary is the surviving entity or the recipient of the assets so sold, transferred, leased or otherwise disposed of in any such sale, transfer, lease or other disposition of assets, *provided,* that no such merger, consolidation, sale, transfer, lease or other disposition shall have the effect of releasing the Borrower from any of the Obligations or (ii) such merger, consolidation, sale, transfer, lease or other disposition, when taken together with all other consolidations, mergers or sales of assets by the Borrower or any Material Subsidiary since the Closing Date, shall not result in the disposition by the Borrower and the Material Subsidiaries of assets in an amount that would constitute all or substantially all of the consolidated assets of the Borrower and the Material Subsidiaries.

SECTION 6.04 Restricted Payments. The Borrower will not declare or make, or agree to pay or make, directly or indirectly, any Restricted Payment except (a) distributions with respect to the Capital Stock of the Borrower, so long as both before and after the making of such distribution, no Event of Default shall have occurred and be continuing, (b) any Capital Stock split, Capital Stock reverse split, dividend of Borrower Capital Stock or similar transaction will not constitute a Restricted Payment, and (c) acquisitions by officers, directors and employees of the Borrower of equity interests in the Borrower through cashless exercise of options pursuant to, and in accordance with the terms of, management and/or employee stock plans, stock subscription agreements or shareholder agreements.

SECTION 6.05 Transactions with Affiliates. The Borrower will conduct, and cause each of the Subsidiaries to conduct, all transactions with any of its Affiliates (other than the Borrower or the

Subsidiaries) on terms that are substantially as favorable to the Borrower or such Subsidiary as it would obtain in a comparable arm's-length transaction with a Person that is not an Affiliate, provided that the foregoing shall be deemed to be satisfied with respect to any transaction that is approved by a majority of the independent members of the Borrower's board of directors, or of a committee thereof consisting solely of independent directors, and provided, further that the foregoing restrictions shall not apply to:

(a) the payment of customary fees for management, consulting and financial services rendered to the Borrower and the Subsidiaries and (ii) customary investment banking fees paid for services rendered to the Borrower and the Subsidiaries in connection with divestitures, acquisitions, financings and other transactions;

(b) transactions permitted by Section 6.04;

(c) the payment of any fees or expenses incurred or paid by the Borrower or any of its Subsidiaries in connection with the Transactions, this Agreement and the other Loan Documents and the transactions contemplated hereby and thereby;

(d) the issuance of Capital Stock of the Borrower to the management of the Borrower or any of its Subsidiaries in connection with the Transactions or pursuant to arrangements described in clause (f) of this Section 6.05;

(e) loans, advances, provision of credit support and other investments by (or to) the Borrower and the Subsidiaries;

(f) employment and severance arrangements among the Borrower and the Subsidiaries and their respective officers and employees in the ordinary course of business;

(g) payments by the Borrower and the Subsidiaries pursuant to tax sharing agreements among the Borrower and the Subsidiaries on customary terms to the extent attributable to the ownership or operation of the Borrower and the Subsidiaries;

(h) the payment of customary fees and reasonable out of pocket costs to, and indemnities provided on behalf of, directors, managers, consultants, officers and employees of the Borrower and the Subsidiaries in the ordinary course of business to the extent attributable to the ownership or operation of the Borrower and the Subsidiaries; and

(i) transactions pursuant to agreements set forth on Schedule 6.05 or any amendment thereto to the extent such an amendment is not adverse, taken as a whole, to the Lenders in any material respect.

SECTION 6.06 Restrictive Agreements. The Borrower will not, and will not permit any of the Material Subsidiaries that are not Guarantors to, directly or indirectly, enter into, incur or permit to exist any agreement or other arrangement that prohibits, restricts or imposes any condition upon the ability of any non-Guarantor Material Subsidiary to pay dividends or other distributions with respect to any shares of its Capital Stock or to make or repay loans (including subordinate loans) or advances to the Borrower or any Guarantor, *provided* that the foregoing shall not apply to (a) restrictions and conditions imposed by law or by this Agreement, (b) customary restrictions and conditions contained in agreements relating to the sale of all or substantially all of the Capital Stock or assets of a Subsidiary pending such sale, *provided* such restrictions and conditions apply only to the Subsidiary that is to be sold and such sale is permitted hereunder, (c) restrictions and conditions existing on the date hereof identified on Schedule 6.06 (but shall apply to any extension or renewal of, or any amendment or modification expanding the scope of, any such restriction

or condition) and (d) restrictions or conditions contained in, or existing by reason of, any agreement or instrument relating to any Subsidiary at the time such Subsidiary was merged or consolidated with or into, or acquired by, the Borrower or a Subsidiary or became a Subsidiary and not created in contemplation thereof.

SECTION 6.07 Ratio of Consolidated Net Indebtedness to Consolidated EBITDA. Commencing with the last day of the first full fiscal quarter following the Closing Date and on the last day of each fiscal quarter ended thereafter, the Borrower will not permit the ratio of Consolidated Net Indebtedness to Consolidated EBITDA for the most recent four full fiscal quarters ended as of the last day of such applicable fiscal quarter, to exceed 5.50:1.00.

In addition, for purposes of this Section 6.07, Hybrid Securities up to an aggregate amount of 5% of Total Capitalization (after giving effect to the following exclusion) shall be excluded from Consolidated Net Indebtedness.

SECTION 6.08 Use of Proceeds. The Borrower will not request any Borrowing, and the Borrower shall not use, and shall procure that its Subsidiaries and its or their respective directors, officers, employees and agents shall not use, the proceeds of any Borrowing (A) in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any Person in violation of any Anti-Corruption Laws, (B) for the purpose of funding, financing or facilitating any activities, business or transaction of or with any Sanctioned Person, or in any Sanctioned Country, or (C) in any manner that would result in the violation of any Sanctions applicable to any party hereto.

ARTICLE VII
EVENTS OF DEFAULT

SECTION 7.01 Events of Default and Remedies. If any of the following events ("Events of Default") shall occur and be continuing:

(a) the principal of any Loan shall not be paid when and as the same shall become due and payable, whether at the due date thereof or at a date fixed for prepayment thereof or otherwise;

(b) any interest on any Loan or any fee or any other amount (other than an amount referred to in clause (a) of this Article) payable by a Loan Party under this Agreement or any other Loan Document shall not be paid, when and as the same shall become due and payable, and such failure shall continue unremedied for a period of five Business Days;

(c) any representation or warranty made or, for purposes of Article III, deemed made by or on behalf of the Borrower herein, at the direction of the Borrower or by any Loan Party in any other Loan Document or in any document, certificate or financial statement delivered in connection with this Agreement or any other Loan Document shall prove to have been incorrect in any material respect when made or deemed made or reaffirmed, as the case may be;

(d) the Borrower shall fail to observe or perform any covenant, condition or agreement contained in Section 5.01(d)(i), 5.02 (with respect to the Borrower's existence) or 5.07 or in Article VI;

(e) any Loan Party shall fail to perform or observe any other term, covenant or agreement contained in this Agreement (other than those specified in Section 7.01(a), Section 7.01(b) or Section 7.01(d)) or any other Loan Document to which it is a party and, in any event, such failure shall

remain unremedied for 30 calendar days after the earlier of (i) written notice of such failure shall have been given to the Borrower by the Administrative Agent or any Lender or, (ii) a Responsible Officer of the Borrower becomes aware of such failure;

(f) other than as specified in Section 7.01(a) or (b), (i) the Borrower or any Subsidiary fails to make (whether as primary obligor or as guarantor or other surety) any payment of principal of, or interest or premium, if any, on any item or items of Indebtedness (other than as specified in Section 7.01(a) or Section 7.01(b)) or any payment in respect of any Hedging Agreement, in each case when the same becomes due and payable (whether by scheduled maturity, required payment or prepayment, acceleration, demand or otherwise), beyond any period of grace provided with respect thereto (not to exceed 30 days); *provided* that the aggregate outstanding principal amount of all Indebtedness or payment obligations in respect of all Hedging Agreements as to which such a payment default shall occur and be continuing is equal to or exceeds $150,000,000, or (ii) the Borrower or any Subsidiary fails to duly observe, perform or comply with any agreement with any Person or any term or condition of any instrument, if such failure, either individually or in the aggregate, shall have resulted in the acceleration of the payment of Indebtedness with an aggregate face amount which is equal to or exceeds $150,000,000; *provided* that this Section 7.01(f) shall not apply to secured Indebtedness that becomes due as a result of the voluntary sale or transfer of the property or assets securing such Indebtedness, so long as such Indebtedness is paid in full when due;

(g) an involuntary case shall be commenced or an involuntary petition shall be filed seeking (i) liquidation, reorganization or other relief in respect of the Borrower or any Material Subsidiary or its debts, or of a substantial part of its assets, under any Debtor Relief Laws or (ii) the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for the Borrower or any Material Subsidiary or for a substantial part of its assets, and, in any such case, such proceeding or petition shall continue undismissed for 60 days or an order or decree approving or ordering any of the foregoing shall be entered;

(h) the Borrower or any Material Subsidiary shall (i) voluntarily commence any proceeding or file any petition seeking liquidation, winding-up, reorganization or other relief under any Debtor Relief Laws, (ii) consent to the institution of, or fail to contest in a timely and appropriate manner, any proceeding or petition described in Section 7.01(g), (iii) apply for or consent to the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for the Borrower or any Material Subsidiary or for a substantial part of its assets, (iv) file an answer admitting the material allegations of a petition filed against it in any such proceeding, (v) make a general assignment for the benefit of creditors or (vi) take any action for the purpose of effecting any of the foregoing;

(i) the Borrower or any Material Subsidiary shall become unable, admit in writing or fail generally to pay its debts as they become due;

(j) one or more judgments for the payment of money in an aggregate amount in excess of $150,000,000 shall be rendered against the Borrower, any Subsidiary or any combination thereof and the same shall (x) not be covered by insurance and (y) remain undischarged for a period of 60 consecutive days during which execution shall not be effectively stayed, or any action shall be legally taken by a judgment creditor to attach or levy upon any assets of the Borrower or any Subsidiary to enforce any such judgment;

(k) a Change in Control shall occur;

(l) any member of the ERISA Group shall fail to pay when due an amount which it shall have become liable to pay under Title IV of ERISA; or notice of intent to terminate a Plan shall be filed under Title IV of ERISA by any member of the ERISA Group, any plan administrator or any combination

of the foregoing; or the PBGC shall institute proceedings under Title IV of ERISA to terminate, to impose liability (other than for premiums under Section 4007 of ERISA) in respect of, or to cause a trustee to be appointed to administer any Plan; or a condition shall exist by reason of which the PBGC would be entitled to obtain a decree adjudicating that any Plan must be terminated; or there shall occur a complete or partial withdrawal from, or a default, within the meaning of Section 4219(c)(5) of ERISA, with respect to, one or more Multiemployer Plans which could cause one or more members of the ERISA Group to incur a current payment obligation; and in each of the foregoing instances such condition could reasonably be expected to result in a Material Adverse Effect;

then, and in any such event, and at any time thereafter (but for the avoidance of doubt, in each case, not prior to the Closing Date) if any Event of Default shall then be continuing, the Administrative Agent, may, and upon the written request of the Required Lenders shall, by written notice (including notice sent by telecopy or electronic mail) to the Borrower (a "Notice of Default") take any or all of the following actions, without prejudice to the rights of the Administrative Agent, any Lender or other holder of any of the Obligations to enforce its claims against the Borrower (*provided* that, if an Event of Default specified in Section 7.01(g) or Section 7.01(h) shall occur with respect to the Borrower or any Material Subsidiary, the actions described in clauses (i), (ii) and (v) below shall occur automatically without the giving of any Notice of Default): (i) declare the Total Commitment terminated, whereupon the Commitments of the Lenders shall forthwith terminate immediately and any accrued Commitment Fees shall forthwith become due and payable without any other notice of any kind; (ii) declare the principal of and any accrued interest in respect of all Loans, and all the other Obligations owing hereunder and under the other Loan Documents, to be, whereupon the same shall become, forthwith due and payable without presentment, demand, notice of demand or of dishonor and nonpayment, protest, notice of protest, notice of intent to accelerate, declaration or notice of acceleration or any other notice of any kind, all of which are hereby waived by the Borrower; and (iii) exercise any rights or remedies under the Loan Documents.

ARTICLE VIII
THE ADMINISTRATIVE AGENT

SECTION 8.01 Appointment and Authority. Each of the Lenders hereby irrevocably appoints Barclays Bank PLC to act on its behalf as the Administrative Agent hereunder and under the other Loan Documents and authorizes the Administrative Agent to take such actions on its behalf and to exercise such powers as are delegated to the Administrative Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto. The provisions of this Article are solely for the benefit of the Administrative Agent, the Lenders and, except as specifically provided in Section 8.06(a) and (b), the Borrower shall not have rights as a third-party beneficiary of any of such provisions. It is understood and agreed that the use of the term "agent" herein or in any other Loan Documents (or any other similar term) with reference to the Administrative Agent is not intended to connote any fiduciary or other implied (or express) obligations arising under agency doctrine of any applicable law. Instead such term is used as a matter of market custom, and is intended to create or reflect only an administrative relationship between contracting parties.

SECTION 8.02 Rights as a Lender. The Person serving as the Administrative Agent hereunder shall have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not the Administrative Agent, and the term *"Lender"* or *"Lenders"* shall, unless otherwise expressly indicated or unless the context otherwise requires, include the Person serving as the Administrative Agent hereunder in its individual capacity. Such Person and its Affiliates may accept deposits from, lend money to, own securities of, act as the financial advisor or in any other advisory capacity for, and generally engage in any kind of business with, the Borrower or any Subsidiary or other Affiliate

thereof as if such Person were not the Administrative Agent hereunder and without any duty to account therefor to the Lenders.

SECTION 8.03 Exculpatory Provisions.

(a) The Administrative Agent shall not have any duties or obligations except those expressly set forth herein and in the other Loan Documents, and its duties hereunder shall be administrative in nature. Without limiting the generality of the foregoing, the Administrative Agent:

(i) shall not be subject to any fiduciary or other implied duties, regardless of whether a Default or an Event of Default has occurred and is continuing;

(ii) shall not have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated hereby or by the other Loan Documents that the Administrative Agent is required to exercise as directed in writing by the Required Lenders (or such other number or percentage of the Lenders as shall be expressly provided for herein or in the other Loan Documents); *provided* that the Administrative Agent shall not be required to take any action that, in its opinion or the opinion of its counsel, may expose the Administrative Agent to liability or that is contrary to any Loan Document or applicable law, including for the avoidance of doubt any action that may be in violation of the automatic stay under any Debtor Relief Law or that may effect a forfeiture, modification or termination of property of a Defaulting Lender in violation of any Debtor Relief Law; and

(iii) shall not, except as expressly set forth herein and in the other Loan Documents, have any duty to disclose, and shall not be liable for the failure to disclose, any information relating to the Borrower or any of its Affiliates that is communicated to or obtained by the Person serving as the Administrative Agent or any of its Affiliates in any capacity.

(b) The Administrative Agent shall not be liable for any action taken or not taken by it (i) with the consent or at the request of the Required Lenders (or such other number or percentage of the Lenders as shall be necessary, or as the Administrative Agent shall believe in good faith shall be necessary, under the circumstances as provided in Sections 9.02 and 9.03) or (ii) in the absence of its own gross negligence or willful misconduct as determined by a court of competent jurisdiction by final and nonappealable judgment. The Administrative Agent shall be deemed not to have knowledge of any Default or Event of Default unless and until notice describing such Default is given to the Administrative Agent in writing by the Borrower or a Lender.

(c) The Administrative Agent shall not be responsible for or have any duty to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with this Agreement or any other Loan Document, (ii) the contents of any certificate, report or other document delivered hereunder or thereunder or in connection herewith or therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth herein or therein or the occurrence of any Default or Event of Default or the enforceability, effectiveness or genuineness of this Agreement, any other Loan Document or any other agreement, instrument or document, or (v) the satisfaction of any condition set forth in Article III or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to the Administrative Agent.

SECTION 8.04 Reliance by Administrative Agent. The Administrative Agent shall be entitled to rely upon, and shall not incur any liability for relying upon, any notice, request, certificate, consent, statement, instrument, document or other writing (including any electronic message, Internet or intranet

website posting or other distribution) believed by it to be genuine and to have been signed, sent or otherwise authenticated by the proper Person. The Administrative Agent also may rely upon any statement made to it orally or by telephone and believed by it to have been made by the proper Person, and shall not incur any liability for relying thereon. In determining compliance with any condition hereunder to the making or extension of a Loan that by its terms must be fulfilled to the satisfaction of a Lender, the Administrative Agent may presume that such condition is satisfactory to such Lender unless the Administrative Agent shall have received notice to the contrary from such Lender prior to the making or extension of such Loan. The Administrative Agent may consult with legal counsel (who may be counsel for the Borrower), independent accountants and other experts selected by it, and shall not be liable for any action taken or not taken by it in accordance with the advice of any such counsel, accountants or experts.

SECTION 8.05 Delegation of Duties. The Administrative Agent may perform any and all of its duties and exercise its rights and powers hereunder or under any other Loan Document by or through any one or more sub agents appointed by the Administrative Agent. The Administrative Agent and any such sub agent may perform any and all of its duties and exercise its rights and powers by or through their respective Related Parties. The exculpatory provisions of this Article shall apply to any such sub agent and to the Related Parties of the Administrative Agent and any such sub agent, and shall apply to their respective activities in connection with the syndication of the revolving credit facility provided for herein as well as activities as Administrative Agent. The Administrative Agent shall not be responsible for the negligence or misconduct of any sub-agents except to the extent that a court of competent jurisdiction determines in a final and nonappealable judgment that the Administrative Agent acted with gross negligence or willful misconduct in the selection of such sub agents.

SECTION 8.06 Resignation of Administrative Agent.

(a) The Administrative Agent may at any time give notice of its resignation to the Lenders and the Borrower. Upon receipt of any such notice of resignation, the Required Lenders shall have the right to appoint a successor, subject to (so long as no Default or Event of Default exists) the prior written consent of the Borrower (which consent will not be unreasonably withheld or delayed), which shall be a bank with an office in the United States, or an Affiliate of any such bank with an office in the United States. If no such successor shall have been so appointed by the Required Lenders and shall have accepted such appointment within 30 days after the retiring Administrative Agent gives notice of its resignation (or such earlier day as shall be agreed by the Required Lenders) (the "Resignation Effective Date"), then the retiring Administrative Agent may (but shall not be obligated to), subject to (so long as no Default or Event of Default exists) the prior written consent of the Borrower (which consent will not be unreasonably withheld), on behalf of the Lenders, appoint a successor Administrative Agent meeting the qualifications set forth above. Whether or not a successor has been appointed, such resignation shall become effective in accordance with such notice on the Resignation Effective Date.

(b) If the Person serving as Administrative Agent is a Defaulting Lender pursuant to clause (d) of the definition thereof, the Required Lenders may, to the extent permitted by applicable law, by notice in writing to the Borrower and such Person remove such Person as Administrative Agent and, subject to (so long as no Default or Event of Default exists) the prior written consent of the Borrower (which consent will not be unreasonably withheld or delayed), appoint a successor. If no such successor shall have been so appointed by the Required Lenders and shall have accepted such appointment within 30 days (or such earlier day as shall be agreed by the Required Lenders) (the "Removal Effective Date"), then such removal shall nonetheless become effective in accordance with such notice on the Removal Effective Date.

(c) With effect from the Resignation Effective Date or the Removal Effective Date (as applicable) (1) the retiring or removed Administrative Agent shall be discharged from its duties and

obligations hereunder and under the other Loan Documents (except that in the case of any collateral security held by the Administrative Agent on behalf of the Lenders under any of the Loan Documents, the retiring or removed Administrative Agent shall continue to hold such collateral security until such time as a successor Administrative Agent is appointed) and (2) except for any indemnity payments owed to the retiring or removed Administrative Agent, all payments, communications and determinations provided to be made by, to or through the Administrative Agent shall instead be made by or to each Lender directly, until such time, if any, as the Required Lenders appoint a successor Administrative Agent as provided for above. Upon the acceptance of a successor's appointment as Administrative Agent hereunder, such successor shall succeed to and become vested with all of the rights, powers, privileges and duties of the retiring or removed Administrative Agent (other than any rights to indemnity payments owed to the retiring or removed Administrative Agent), and the retiring or removed Administrative Agent shall be discharged from all of its duties and obligations hereunder or under the other Loan Documents. The fees payable by the Borrower to a successor Administrative Agent shall be the same as those payable to its predecessor unless otherwise agreed between the Borrower and such successor. After the retiring or removed Administrative Agent's resignation or removal hereunder and under the other Loan Documents, the provisions of this Article and Section 9.03 shall continue in effect for the benefit of such retiring or removed Administrative Agent, its sub agents and their respective Related Parties in respect of any actions taken or omitted to be taken by any of them while the retiring or removed Administrative Agent was acting as Administrative Agent.

SECTION 8.07 Non-Reliance on Administrative Agent and Other Lenders.

(a) Each Lender acknowledges that it has, independently and without reliance upon the Administrative Agent or any other Lender or any of their Related Parties and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Agreement. Each Lender also acknowledges that it will, independently and without reliance upon the Administrative Agent or any other Lender or any of their Related Parties and based on such documents and information as it shall from time to time deem appropriate, continue to make its own decisions in taking or not taking action under or based upon this Agreement, any other Loan Document or any related agreement or any document furnished hereunder or thereunder.

(b) Each Lender acknowledges that Simpson Thacher & Bartlett LLP is acting in this transaction as special legal counsel to the Administrative Agent only. Each Lender will consult with its own legal counsel to the extent it deems necessary with this Agreement and the other Loan Documents and the matters contemplated herein and therein.

SECTION 8.08 INDEMNIFICATION. **THE LENDERS AGREE TO INDEMNIFY THE ADMINISTRATIVE AGENT, THE ARRANGERS, THE SYNDICATION AGENT AND THE DOCUMENTATION AGENTS RATABLY IN ACCORDANCE WITH THEIR APPLICABLE PERCENTAGES FOR THE INDEMNITY MATTERS AS DESCRIBED IN SECTION 9.03 TO THE EXTENT NOT INDEMNIFIED OR REIMBURSED BY THE BORROWER UNDER SECTION 9.03, BUT WITHOUT LIMITING THE OBLIGATIONS OF THE BORROWER UNDER SAID SECTION 9.03 AND FOR ANY AND ALL OTHER LIABILITIES, OBLIGATIONS, LOSSES, DAMAGES, PENALTIES, ACTIONS, JUDGMENTS, SUITS, COSTS, EXPENSES OR DISBURSEMENTS OF ANY KIND AND NATURE WHATSOEVER WHICH MAY BE IMPOSED ON, INCURRED BY OR ASSERTED AGAINST THE ADMINISTRATIVE AGENT, ANY ARRANGER, THE SYNDICATION AGENT OR ANY DOCUMENTATION AGENT IN ANY WAY RELATING TO OR ARISING OUT OF: (A) THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT CONTEMPLATED BY OR REFERRED TO HEREIN OR THE TRANSACTIONS CONTEMPLATED HEREBY, BUT EXCLUDING, UNLESS A DEFAULT OR AN EVENT OF DEFAULT HAS OCCURRED AND IS CONTINUING, NORMAL ADMINISTRATIVE COSTS AND**

EXPENSES INCIDENT TO THE PERFORMANCE OF ITS AGENCY DUTIES, IF ANY, HEREUNDER OR UNDER ANY SUCH OTHER LOAN DOCUMENT OR (B) THE ENFORCEMENT OF ANY OF THE TERMS OF THIS AGREEMENT OR OF ANY OTHER LOAN DOCUMENT; WHETHER OR NOT ANY OF THE FOREGOING SPECIFIED IN THIS SECTION 8.08 ARISES FROM THE SOLE OR CONCURRENT NEGLIGENCE OF THE ADMINISTRATIVE AGENT, ANY ARRANGER, THE SYNDICATION AGENT OR ANY DOCUMENTATION AGENT, AS THE CASE MAY BE; *PROVIDED* THAT NO LENDER SHALL BE LIABLE FOR ANY OF THE FOREGOING TO THE EXTENT THEY ARISE FROM THE GROSS NEGLIGENCE, WILLFUL MISCONDUCT OR UNLAWFUL CONDUCT OF THE ADMINISTRATIVE AGENT, ANY ARRANGER, THE SYNDICATION AGENT OR ANY DOCUMENTATION AGENT AS DETERMINED BY A COURT OF COMPETENT JURISDICTION IN A FINAL AND NONAPPEALABLE JUDGMENT.

SECTION 8.09 No Reliance on Agents or other Lenders. Each Lender acknowledges and agrees that it has, independently and without reliance on the Administrative Agent, any Arranger, the Syndication Agent, any Documentation Agent or any other Lender, and based on such documents and information as it has deemed appropriate, made its own credit analysis of the Borrower and its Subsidiaries and its decision to enter into this Agreement, and that it will, independently and without reliance upon the Administrative Agent, any Arranger, the Syndication Agent, any Documentation Agent or any other Lender, and based on such documents and information as it shall deem appropriate at the time, continue to make its own analysis and decisions in taking or not taking action under this Agreement. None of the Administrative Agent, the Arrangers, the Syndication Agent or the Documentation Agents shall be required to keep itself informed as to the performance or observance by the Borrower of this Agreement, the other Loan Documents or any other document referred to or provided for herein or to inspect the properties or books of the Borrower. Except for notices, reports and other documents and information expressly required to be furnished to the Lenders by the Administrative Agent hereunder, none of the Administrative Agent, the Arrangers, the Syndication Agent or the Documentation Agents shall have any duty or responsibility to provide any Lender with any credit or other information concerning the affairs, financial condition or business of the Borrower (or any of its Affiliates) which may come into the possession of the Administrative Agent, any Arranger, the Syndication Agent, any Documentation Agent or any of their respective Affiliates. In this regard, each Lender acknowledges that Simpson Thacher & Bartlett LLP is acting in this transaction as special counsel to the Administrative Agent only. Each Lender will consult with its own legal counsel to the extent that it deems necessary in connection with this Agreement and other Loan Documents and the matters contemplated herein and therein.

SECTION 8.10 Duties of the Syndication Agent, Documentation Agents, Arrangers. Notwithstanding the indemnity of the Syndication Agent, the Documentation Agents and the Arrangers contained in Section 8.08 and in Section 9.03, nothing contained in this Agreement shall be construed to impose any obligation or duty whatsoever on any Person named on the cover of this Agreement or elsewhere in this Agreement as a Syndication Agent, a Documentation Agent, an Arranger, a "lead arranger" or a "bookrunner", other than those applicable to all Lenders as such.

SECTION 8.11 Certain ERISA Matters.

(a) Each Lender (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Administrative Agent and the Joint Lead Arrangers and their respective Affiliates, and not, for the avoidance of doubt, to or for the benefit of the Borrower or any other Loan Party, that at least one of the following is and will be true:

(i) such Lender is not using "plan assets" (within the meaning of the Plan Asset Regulations) of one or more Benefit Plans in connection with the Loans or the Commitments,

(ii) the transaction exemption set forth in one or more PTEs, such as PTE 84-14 (a class exemption for certain transactions determined by independent qualified professional asset managers), PTE 95-60 (a class exemption for certain transactions involving insurance company general accounts), PTE 90-1 (a class exemption for certain transactions involving insurance company pooled separate accounts), PTE 91-38 (a class exemption for certain transactions involving bank collective investment funds) or PTE 96-23 (a class exemption for certain transactions determined by in-house asset managers), is applicable with respect to such Lender's entrance into, participation in, administration of and performance of the Loans, the Commitments and this Agreement, and the conditions for exemptive relief thereunder are and will continue to be satisfied in connection therewith,

(iii) (A) such Lender is an investment fund managed by a "Qualified Professional Asset Manager" (within the meaning of Part VI of PTE 84-14), (B) such Qualified Professional Asset Manager made the investment decision on behalf of such Lender to enter into, participate in, administer and perform the Loans, the Commitments and this Agreement, (C) the entrance into, participation in, administration of and performance of the Loans, the Commitments and this Agreement satisfies the requirements of sub-sections (b) through (g) of Part I of PTE 84-14 and (D) to the best knowledge of such Lender, the requirements of subsection (a) of Part I of PTE 84-14 are satisfied with respect to such Lender's entrance into, participation in, administration of and performance of the Loans, the Commitments and this Agreement, or

(iv) such other representation, warranty and covenant as may be agreed in writing between the Administrative Agent, in its sole discretion, and such Lender.

(b) In addition, unless sub-clause (i) in the immediately preceding clause (a) is true with respect to a Lender or such Lender has not provided another representation, warranty and covenant as provided in sub-clause (iv) in the immediately preceding clause (a), such Lender further (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Administrative Agent and the Joint Lead Arrangers and their respective Affiliates, and not, for the avoidance of doubt, to or for the benefit of the Borrower or any other Loan Party, that none of the Administrative Agent or the Joint Leader Arrangers or any of their respective Affiliates is a fiduciary with respect to the assets of such Lender (including in connection with the reservation or exercise of any rights by the Administrative Agent under this Agreement, any Loan Document or any documents related to hereto or thereto),

(c) The Administrative Agent and the Joint Leader Arrangers hereby inform the Lenders that each such Person is not undertaking to provide impartial investment advice, or to give advice in a fiduciary capacity, in connection with the transactions contemplated hereby, and that such Person has a financial interest in the transactions contemplated hereby in that such Person or an Affiliate thereof (i) may receive interest or other payments with respect to the Loans, the Commitments and this Agreement, (ii) may recognize a gain if it extended the Loans or the Commitments for an amount less than the amount being paid for an interest in the Loans or the Commitments by such Lender or (iii) may receive fees or other payments in connection with the transactions contemplated hereby, the Loan Documents or otherwise, including structuring fees, commitment fees, arrangement fees, facility fees, upfront fees, underwriting fees, ticking fees, agency fees, administrative agent or collateral agent fees, utilization fees, minimum usage fees, letter of credit fees, fronting fees, deal-away or alternate transaction fees, amendment fees, processing fees, term

out premiums, banker's acceptance fees, breakage or other early termination fees or fees similar to the foregoing.

ARTICLE IX
MISCELLANEOUS

SECTION 9.01 Notices, Etc.

(a) All notices, consents, requests, approvals, demands and other communications (collectively "Communications") provided for herein shall be in writing (including facsimile Communications) and mailed, telecopied or delivered:

(i) if to the Borrower, to it at:

1001 Louisiana Street, Suite 1000
Houston, Texas 77002
Attention: Anthony Ashley
Telecopy No.: (713) 445-8302;

With a copy to:

1001 Louisiana Street, Suite 1000
Houston, Texas 77002
Attention: General Counsel
Telecopy No.: (713) 495-2877;

(ii) if to the Administrative Agent, to it at

c/o Barclays Bank PLC
745 Seventh Avenue
27th Floor
New York, NY 10019
Attention: Patrick Shields
Email: patrick.shields@barclays.com
Phone: 212-526-9531

(i) if to any other Lender, to it at its address (or telecopy number) set forth in the Administrative Questionnaire delivered by such Person to the Administrative Agent or in the Assignment and Acceptance executed by such Person;

or, in the case of any party hereto, such other address or telecopy number as such party may hereafter specify for such purpose by notice to the other parties.

(b) Communications to the Lenders hereunder may be delivered or furnished by electronic communications (including electronic mail and internet or intranet websites) pursuant to procedures approved by the Administrative Agent; *provided* that the foregoing shall not apply to notices pursuant to Article II unless otherwise agreed by the Administrative Agent and the applicable Lender. The Administrative Agent or the Borrower may, in its discretion, agree to accept notices and other communications to it hereunder by electronic communications pursuant to procedures approved by it; *provided* that approval of such procedures may be limited to particular notices or communications.

(c) Unless the Administrative Agent otherwise prescribes, (i) notices and other communications sent to an e-mail address shall be deemed received upon the sender's receipt of an acknowledgement from the intended recipient (such as by the "return receipt requested" function, as available, return e-mail or other written acknowledgement), and (ii) notices or communications posted to an Internet or intranet website shall be deemed received upon the deemed receipt by the intended recipient, at its e-mail address as described in the foregoing clause (i), of notification that such notice or communication is available and identifying the website address therefor; *provided* that, for both clauses (i) and (ii) above, if such notice, email or other communication is not sent during the normal business hours of the recipient, such notice or communication shall be deemed to have been sent at the opening of business on the next business day for the recipient.

(d) Any party hereto may change its address or telecopy number for notices and other communications hereunder by notice to the other parties hereto.

(e) Platform.

(i) The Borrower agrees that the Administrative Agent may, but shall not be obligated to, make the Communications available to the Lenders by posting the Communications on Debt Domain, Intralinks, Syndtrak or a substantially similar electronic transmission system (the "Platform").

The Platform is provided "*as is*" and "*as available*." The Agent Parties (as defined below) do not warrant the adequacy of the Platform and expressly disclaim liability for errors or omissions in the Electronic Communications (as defined below). No warranty of any kind, express, implied or statutory, including, without limitation, any warranty of merchantability, fitness for a particular purpose, non-infringement of third-party rights or freedom from viruses or other code defects, is made by any Agent Party in connection with the Communications or the Platform. In no event shall the Administrative Agent or any of its Related Parties (collectively, the "Agent Parties") have any liability to the Borrower, any Lender or any other Person or entity for damages of any kind, including, without limitation, direct or indirect, special, incidental or consequential damages, losses or expenses (whether in tort, contract or otherwise) arising out of the Borrower or the Administrative Agent's transmission of communications through the Platform. "Electronic Communications" means, collectively, any notice, demand, communication, information, document or other material provided by or on behalf of the Borrower pursuant to any Loan Document or the transactions contemplated therein which is distributed to the Administrative Agent or any Lender by means of electronic communications pursuant to this Section, including through the Platform.

SECTION 9.02 Waivers; Amendments; Releases.

(a) No failure or delay by the Administrative Agent or any Lender in exercising, and no course of dealing with respect to, any right or power hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such a right or power, preclude any other or further exercise thereof or the exercise of any other right or power. No notice to or demand on the Borrower in any case shall entitle the Borrower to any other or further notice or demand in similar or other circumstances. No waiver of any provision of this Agreement or consent to any departure therefrom shall in any event be effective unless the same shall be permitted by Section 9.02(b), and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. Without limiting the generality of the foregoing, the making of a Loan shall not be construed as a waiver of any Default or Event of Default, regardless of whether the Administrative Agent or any Lender may have had notice or knowledge of such Default at the time.

(b) No provision of this Agreement or any other Loan Document (other than each Fee Letter, which may be amended by the parties thereto) provision may be waived, amended or modified except pursuant to an agreement or agreements in writing entered into by the Borrower (or to the extent another Loan Party and not the Borrower is party thereto, such Loan Party) and the Required Lenders or by the Borrower and the Administrative Agent with the consent of the Required Lenders; *provided* that no such agreement shall (i) increase the Commitment of any Lender without the written consent of such Lender, (ii) reduce the principal amount of any Loan or reduce the rate of interest thereon, or reduce any fees payable hereunder, without the written consent of each Lender affected thereby (for the avoidance of doubt, any amendment imposing an alternative interest rate basis in accordance with Section 2.13(b) shall become effective as provided in Section 2.13(b)), (iii) postpone the scheduled date of payment of the principal amount of any Loan, or any interest thereon, or any fees or other amounts payable hereunder, or reduce the amount of, waive or excuse any such payment, or postpone the scheduled date of expiration of any Commitment, without the written consent of each Lender affected thereby, (iv) change Section 2.17(b) or (c) in a manner that would alter the *pro rata* sharing of payments required thereby, without the written consent of each Lender, (v) amend Section 2.19 without the consent of the Administrative Agent, in addition to the consent of the Required Lenders, (vi) release all or substantially all of the value of the Guarantees under the Guaranty or change any of the provisions of this Section 9.02(b), or the definition of "*Required Lenders*" or any other provision hereof specifying the number or percentage of Lenders required to waive, amend or modify any rights hereunder or make any determination or grant any consent hereunder, without the written consent of each Lender; *provided*, *further*, that no such agreement shall amend, modify or otherwise affect the rights or duties of the Administrative Agent hereunder without the prior written consent of the Administrative Agent. Except as provided herein, during such period as a Lender is a Defaulting Lender, to the fullest extent permitted by applicable law, such Lender will not be entitled to vote in respect of amendments and waivers hereunder and the Commitment and the outstanding Loans or other extensions of credit of such Lender hereunder will not be taken into account in determining whether the Required Lenders or all of the Lenders, as required, have approved any such amendment or waiver (and the definition of "*Required Lenders*" will automatically be deemed modified accordingly for the duration of such period); *provided* that any such amendment or waiver referred to in clauses (i) through (vi) or the first of this Section 9.02(b) above or that would alter the terms set forth in such proviso shall require the consent of such Defaulting Lender.

Notwithstanding the foregoing, the Administrative Agent and the Borrower may amend any Loan Document to correct any obvious errors, mistakes, omissions, defects or inconsistencies and such amendment shall become effective without any further consent of any other party to such Loan Document other than the Administrative Agent and the Borrower.

(c) The Lenders hereby irrevocably agree that any Guarantor shall be automatically released from the Guarantee upon consummation of any transaction not prohibited hereunder resulting in such Subsidiary ceasing to constitute a Subsidiary or upon any Subsidiary becoming an Excluded Subsidiary, provided that with respect to any Excluded Subsidiary that is a Guarantor on the Closing Date or that has become a Guarantor after the Closing Date at the request of the Borrower, such Excluded Subsidiary shall be automatically released from the Guaranty upon written notice thereof from a Responsible Officer of the Borrower to the Administrative Agent certifying that (i) such Excluded Subsidiary is an Excluded Subsidiary and (ii) on such date, or concurrently with such release, such Excluded Subsidiary shall be automatically released as a guarantor under the Cross Guarantee Agreement, dated as of November 26, 2014 (as amended, restated, supplemented or otherwise modified from time to time) entered by the Borrower and the other signatories party thereto, and is not a guarantor of the Bonds or any other material Indebtedness of the Borrower or any Subsidiary. The Lenders hereby authorize the Administrative Agent to execute and deliver any instruments, documents, and agreements necessary or desirable to evidence and confirm the release of any Guarantor pursuant to the foregoing provisions of this paragraph, all without the further consent or joinder of any Lender.

SECTION 9.03 Payment of Expenses, Indemnities, etc. The Borrower agrees:

(a) to pay (i) all reasonable out-of-pocket expenses incurred by the Administrative Agent and its Affiliates, including the reasonable fees, charges and disbursements of counsel for the Administrative Agent, in connection with the syndication of the credit facility provided for herein, the preparation and administration of this Agreement or any amendments, modifications or waivers of the provisions hereof and (ii) all out-of-pocket expenses incurred by the Administrative Agent or any Lender, including the fees, charges and disbursements of any counsel for the Administrative Agent or any Lender, in connection with the enforcement or protection of its rights in connection with this Agreement, including its rights under this Section, or in connection with the Loans made hereunder, including all such out-of-pocket expenses incurred during any workout, restructuring or negotiations in respect of such Loans.

(b) TO INDEMNIFY THE ADMINISTRATIVE AGENT, EACH ARRANGER, THE SYNDICATION AGENT, EACH DOCUMENTATION AGENT AND EACH LENDER AND EACH OF THEIR AFFILIATES AND EACH OF THEIR OFFICERS, DIRECTORS, EMPLOYEES, REPRESENTATIVES, AGENTS, ATTORNEYS, ACCOUNTANTS AND EXPERTS ("INDEMNIFIED PARTIES") FROM, HOLD EACH OF THEM HARMLESS AGAINST AND PROMPTLY UPON DEMAND PAY OR REIMBURSE EACH OF THEM FOR, THE INDEMNITY MATTERS WHICH MAY BE REASONABLY INCURRED BY OR ASSERTED AGAINST OR INVOLVE ANY OF THEM (WHETHER OR NOT ANY OF THEM IS DESIGNATED A PARTY THERETO AND WHETHER OR NOT THE CLAIM IS BROUGHT BY THE BORROWER OR A THIRD PARTY) AS A RESULT OF, ARISING OUT OF OR IN ANY WAY RELATED TO (I) ANY ACTUAL OR PROPOSED USE BY THE BORROWER OF THE PROCEEDS OF ANY OF THE LOANS, (II) THE EXECUTION, DELIVERY AND PERFORMANCE OF THE LOAN DOCUMENTS, (III) THE OPERATIONS OF THE BUSINESS OF THE BORROWER AND THE SUBSIDIARIES, (IV) THE FAILURE OF THE BORROWER OR ANY SUBSIDIARY TO COMPLY WITH THE TERMS OF THIS AGREEMENT, OR WITH ANY REQUIREMENT OF LAW, (V) ANY INACCURACY OF ANY REPRESENTATION OR ANY BREACH OF ANY WARRANTY OF THE BORROWER SET FORTH IN ANY OF THE LOAN DOCUMENTS OR (VI) ANY OTHER ASPECT OF THE LOAN DOCUMENTS, INCLUDING THE REASONABLE FEES AND DISBURSEMENTS OF COUNSEL AND ALL OTHER EXPENSES INCURRED IN CONNECTION WITH INVESTIGATING, DEFENDING OR PREPARING TO DEFEND ANY SUCH ACTION, SUIT, PROCEEDING (INCLUDING ANY INVESTIGATIONS, LITIGATION OR INQUIRIES) OR CLAIM AND INCLUDING ALL INDEMNITY MATTERS ARISING BY REASON OF THE ORDINARY NEGLIGENCE OF ANY INDEMNIFIED PARTY, BUT EXCLUDING ALL INDEMNITY MATTERS ARISING SOLELY (I) BY REASON OF CLAIMS BETWEEN THE LENDERS OR ANY LENDER AND THE ADMINISTRATIVE AGENT, ANY ARRANGER, THE SYNDICATION AGENT, ANY DOCUMENTATION AGENT, OR A LENDER'S SHAREHOLDERS AGAINST THE ADMINISTRATIVE AGENT OR LENDER (OTHER THAN CLAIMS IN ITS ROLE AS AGENT OR ARRANGER) OR (II) BY REASON OF THE GROSS NEGLIGENCE, WILLFUL MISCONDUCT OR UNLAWFUL CONDUCT ON THE PART OF THE INDEMNIFIED PARTY SEEKING INDEMNIFICATION AS DETERMINED BY A COURT OF COMPETENT JURISDICTION IN A FINAL AND NONAPPEALABLE JUDGMENT. FOR THE AVOIDANCE OF DOUBT, THIS SECTION 9.03(B) SHALL NOT APPLY WITH RESPECT TO TAXES OTHER THAN ANY TAXES THAT REPRESENT LOSSES, CLAIMS, DAMAGES, ETC. ARISING FROM ANY NON-TAX CLAIM.

(c) TO INDEMNIFY AND HOLD HARMLESS FROM TIME TO TIME THE INDEMNIFIED PARTIES FROM AND AGAINST ANY AND ALL LOSSES, CLAIMS, COST RECOVERY ACTIONS, ADMINISTRATIVE ORDERS OR PROCEEDINGS, DAMAGES AND

LIABILITIES TO WHICH ANY SUCH PERSON MAY BECOME SUBJECT (I) UNDER ANY ENVIRONMENTAL LAW APPLICABLE TO THE BORROWER OR ANY SUBSIDIARY OR ANY OF THEIR PROPERTIES OR ASSETS, INCLUDING THE TREATMENT OR DISPOSAL OF HAZARDOUS MATERIALS ON ANY OF THEIR PROPERTIES OR ASSETS, (II) AS A RESULT OF THE BREACH OR NON-COMPLIANCE BY THE BORROWER OR ANY SUBSIDIARY WITH ANY ENVIRONMENTAL LAW APPLICABLE TO THE BORROWER OR ANY SUBSIDIARY, (III) DUE TO PAST OWNERSHIP BY THE BORROWER OR ANY SUBSIDIARY OF ANY OF THEIR PROPERTIES OR ASSETS OR PAST ACTIVITY ON ANY OF THEIR PROPERTIES OR ASSETS WHICH, THOUGH LAWFUL AND FULLY PERMISSIBLE AT THE TIME, COULD RESULT IN PRESENT LIABILITY, (IV) THE PRESENCE, USE, RELEASE, STORAGE, TREATMENT OR DISPOSAL OF HAZARDOUS MATERIALS ON OR AT ANY OF THE PROPERTIES OWNED OR OPERATED BY THE BORROWER OR ANY SUBSIDIARY, OR (V) ANY OTHER ENVIRONMENTAL, HEALTH OR SAFETY CONDITION IN CONNECTION WITH THE LOAN DOCUMENTS (EXPRESSLY INCLUDING ANY SUCH CLAIM, DAMAGE LOSS, LIABILITY, COST, PENALTY, FEE OR EXPENSE ATTRIBUTABLE TO THE ORDINARY, SOLE OR CONTRIBUTORY NEGLIGENCE OF SUCH INDEMNIFIED PARTY, BUT EXCLUDING ANY SUCH CLAIM, DAMAGE, LOSS, LIABILITY, COST, PENALTY, FEE OR EXPENSE RESULTING FROM THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF SUCH INDEMNIFIED PARTY AS DETERMINED BY A COURT OF COMPETENT JURISDICTION IN A FINAL AND NONAPPEALABLE JUDGMENT). FOR THE AVOIDANCE OF DOUBT, THIS SECTION 9.03(C) SHALL NOT APPLY WITH RESPECT TO TAXES OTHER THAN ANY TAXES THAT REPRESENT LOSSES, CLAIMS, DAMAGES, ETC. ARISING FROM ANY NON-TAX CLAIM.

(d) No Indemnified Party may settle any claim to be indemnified without the consent of the indemnitor, such consent not to be unreasonably withheld; *provided* that the indemnitor may not reasonably withhold consent to any settlement that an Indemnified Party proposes, if the indemnitor does not have the financial ability to pay all its obligations outstanding and asserted against the indemnitor at that time, including the maximum potential claims against the Indemnified Party to be indemnified pursuant to this Section 9.03.

(e) In the case of any indemnification hereunder, the Indemnified Party, as appropriate, shall give notice to the Borrower of any such claim or demand being made against the Indemnified Party and the Borrower shall have the non-exclusive right to join in the defense against any such claim or demand; *provided* that if the Borrower provides a defense, the Indemnified Party shall bear its own cost of defense unless there is a conflict between the Borrower and such Indemnified Party.

(f) THE FOREGOING INDEMNITIES SHALL EXTEND TO THE INDEMNIFIED PARTIES NOTWITHSTANDING THE SOLE OR CONCURRENT NEGLIGENCE OF EVERY KIND OR CHARACTER WHATSOEVER, WHETHER ACTIVE OR PASSIVE, WHETHER AN AFFIRMATIVE ACT OR AN OMISSION, INCLUDING, ALL TYPES OF NEGLIGENT CONDUCT IDENTIFIED IN THE RESTATEMENT (SECOND) OF TORTS OF ONE OR MORE OF THE INDEMNIFIED PARTIES OR BY REASON OF STRICT LIABILITY IMPOSED WITHOUT FAULT ON ANY ONE OR MORE OF THE INDEMNIFIED PARTIES. TO THE EXTENT THAT AN INDEMNIFIED PARTY IS FOUND TO HAVE COMMITTED AN ACT OF GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OR ENGAGED IN UNLAWFUL CONDUCT (AS DETERMINED BY A COURT OF COMPETENT JURISDICTION IN A FINAL AND NONAPPEALABLE JUDGMENT), THIS CONTRACTUAL OBLIGATION OF INDEMNIFICATION SHALL CONTINUE BUT SHALL ONLY EXTEND TO THE PORTION OF THE CLAIM THAT IS DEEMED TO HAVE OCCURRED BY REASON OF EVENTS OTHER THAN THE GROSS NEGLIGENCE, WILLFUL MISCONDUCT OR UNLAWFUL CONDUCT OF THE INDEMNIFIED

PARTY (AS DETERMINED BY A COURT OF COMPETENT JURISDICTION IN A FINAL AND NONAPPEALABLE JUDGMENT).

(g) The Borrower's obligations under this Section 9.03 shall survive any termination of this Agreement, the payment of the Loans and shall continue thereafter in full force and effect.

(h) To the extent that the Borrower fails to pay any amount required to be paid by it to the Administrative Agent under this Section 9.03, each Lender severally agrees to pay to the Administrative Agent such Lender's Applicable Percentage (determined as of the time that the applicable unreimbursed expense or indemnity payment is sought) of such unpaid amount; *provided* that the unreimbursed expense or indemnified loss, claim, damage, liability or related expense, as the case may be, was incurred by or asserted against the Administrative Agent in its capacity as such.

(i) The Borrower shall pay any amounts due under this Section 9.03 within 30 days of the receipt by the Borrower of notice of the amount due.

(j) To the fullest extent permitted by applicable law, no party shall assert, and each party hereby waives, any claim against any other party, on any theory of liability, for special, indirect, consequential or punitive damages (as opposed to direct or actual damages) arising out of, in connection with, or as a result of this Agreement, any other Loan Document or any agreement or instrument contemplated hereby, the transactions contemplated hereby or thereby, any Loan or the use of the proceeds thereof; *provided, howeve*r, that the foregoing limitation shall not be deemed to impair or affect the indemnification obligations of the Borrower under the Loan Documents. No Indemnified Party referred to in paragraph (b) above shall be liable for any damages arising from the use by unintended recipients of any information or other materials distributed by it through telecommunications, electronic or other information transmission systems in connection with this Agreement or the other Loan Documents or the transactions contemplated hereby or thereby.

SECTION 9.04 Successors and Assigns Generally. The provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns permitted hereby, except that the Borrower may not assign or otherwise transfer any of its rights or obligations hereunder without the prior written consent of the Administrative Agent and each Lender, and no Lender may assign or otherwise transfer any of its rights or obligations hereunder except (i) to an assignee in accordance with the provisions of Section 9.05(a), (ii) by way of participation in accordance with the provisions of Section 9.05(c), or (iii) by way of pledge or assignment of a security interest subject to the restrictions of Section 9.05(d) (and any other attempted assignment or transfer by any party hereto shall be null and void). Nothing in this Agreement, expressed or implied, shall be construed to confer upon any Person (other than the parties hereto, their respective successors and assigns permitted hereby, Participants to the extent provided in Section 9.05(c) and, to the extent expressly contemplated hereby, the Related Parties of each of the Administrative Agent and the Lenders) any legal or equitable right, remedy or claim under or by reason of this Agreement.

SECTION 9.05 Assignments by Lenders.

(a) Any Lender may at any time assign to one or more assignees all or a portion of its rights and obligations under this Agreement (including all or a portion of its Commitment and the Loans at the time owing to it); *provided* that any such assignment shall be subject to the following conditions:

(i) (A) in the case of an assignment of the entire remaining amount of the assigning Lender's Commitment and/or the Loans at the time owing to it or contemporaneous

assignments to related Approved Funds that equal at least the amount specified in paragraph (a)(i)(B) of this Section; and

(B) in any case not described in the proviso to paragraph (a)(i)(A) of this Section, the aggregate amount of the Commitment (which for this purpose includes Loans outstanding thereunder) or, if the applicable Commitment is not then in effect, the principal outstanding balance of the Loans of the assigning Lender subject to each such assignment (determined as of the date the Assignment and Acceptance with respect to such assignment is delivered to the Administrative Agent or, if "Trade Date" is specified in the Assignment and Acceptance, as of the Trade Date) shall not be less than $5,000,000, unless each of the Administrative Agent and, so long as no Event of Default has occurred and is continuing, the Borrower otherwise consents (each such consent not to be unreasonably withheld or delayed); *provided*, however, in the case of an assignment to a Lender, an Affiliate of a Lender or an Approved Fund, no minimum amount need be assigned.

(ii) Each partial assignment shall be made as an assignment of a proportionate part of all the assigning Lender's rights and obligations under this Agreement with respect to the Loans or the Commitment assigned.

(iii) No consent shall be required for any assignment except to the extent required by paragraph (a)(i)(B) of this Section and, in addition:

(A) the consent of the Borrower (such consent not to be unreasonably withheld or delayed) shall be required unless (x) an Event of Default has occurred and is continuing at the time of such assignment or (y) such assignment is to a Lender, an Affiliate of a Lender or an Approved Fund, *provided* that the Borrower's consent shall not be required during the primary syndication of the credit facility evidenced by this Agreement; and

(B) the consent of the Administrative Agent (such consent not to be unreasonably withheld or delayed) shall be required for assignments if such assignment is to a Person that is not a Lender, an Affiliate of such Lender or an Approved Fund with respect to such Lender.

(iv) The parties to each assignment shall execute and deliver to the Administrative Agent an Assignment and Acceptance, together with a processing and recordation fee of $3,500; *provided* that the Administrative Agent may, in its sole discretion, elect to waive such processing and recordation fee in the case of any assignment. The assignee, if it is not a Lender, shall deliver to the Administrative Agent an Administrative Questionnaire.

(v) No such assignment shall be made to (A) the Borrower or any of the Borrower's Affiliates or Subsidiaries or (B) to any Defaulting Lender or any of its Subsidiaries, or any Person who, upon becoming a Lender hereunder, would constitute any of the foregoing Persons described in this clause (B).

(vi) No such assignment shall be made to a natural Person.

(vii) In connection with any assignment of rights and obligations of any Defaulting Lender hereunder, no such assignment shall be effective unless and until, in addition to the other conditions thereto set forth herein, the parties to the assignment shall make such additional payments to the Administrative Agent in an aggregate amount sufficient, upon distribution thereof

as appropriate (which may be outright payment, purchases by the assignee of participations or subparticipations, or other compensating actions, including funding, with the consent of the Borrower and the Administrative Agent, the applicable *pro rata* share of Loans previously requested but not funded by the Defaulting Lender, to each of which the applicable assignee and assignor hereby irrevocably consent), to (x) pay and satisfy in full all payment liabilities then owed by such Defaulting Lender to the Administrative Agent and each other Lender hereunder (and interest and fees accrued thereon), and (y) acquire (and fund as appropriate) its full *pro rata* share of all Loans in accordance with its Applicable Percentage. Notwithstanding the foregoing, in the event that any assignment of rights and obligations of any Defaulting Lender hereunder shall become effective under applicable law without compliance with the provisions of this paragraph, then the assignee of such interest shall be deemed to be a Defaulting Lender for all purposes of this Agreement until such compliance occurs.

Subject to acceptance and recording thereof by the Administrative Agent pursuant to paragraph (b) of this Section, from and after the effective date specified in each Assignment and Acceptance, the assignee thereunder shall be a party to this Agreement and, to the extent of the interest assigned by such Assignment and Acceptance, have the rights and obligations of a Lender under this Agreement, and the assigning Lender thereunder shall, to the extent of the interest assigned by such Assignment and Acceptance, be released from its obligations under this Agreement (and, in the case of an Assignment and Acceptance covering all of the assigning Lender's rights and obligations under this Agreement, such Lender shall cease to be a party hereto) but shall continue to be entitled to the benefits of Sections 2.14, 2.15 and 9.03 and with respect to facts and circumstances occurring prior to the effective date of such assignment; *provided*, that except to the extent otherwise expressly agreed by the affected parties, no assignment by a Defaulting Lender will constitute a waiver or release of any claim of any party hereunder arising from that Lender's having been a Defaulting Lender. Any assignment or transfer by a Lender of rights or obligations under this Agreement that does not comply with this paragraph shall be treated for purposes of this Agreement as a sale by such Lender of a participation in such rights and obligations in accordance with paragraph (c) of this Section.

(b) Upon its receipt of a duly completed Assignment and Acceptance executed by an assigning Lender and an assignee, the assignee's completed Administrative Questionnaire (unless the assignee shall already be a Lender hereunder), the processing and recordation fee, if any, referred to in Section 9.05(a) and any written consent to such assignment required by Section 9.05(a), the Administrative Agent shall accept such Assignment and Acceptance and record the information contained therein in the Register (as defined below). No assignment shall be effective for purposes of this Agreement unless it has been recorded in the Register as provided in this paragraph. The Administrative Agent, acting solely for this purpose as a non-fiduciary agent of the Borrower, shall maintain at one of its offices in New York, New York a copy of each Assignment and Acceptance delivered to it and a register for the recordation of the names and addresses of the Lenders, and the Commitments of, and principal amounts (and stated interest) of the Loans owing to, each Lender pursuant to the terms hereof from time to time (the "Register"). The entries in the Register shall be conclusive absent manifest error, and the Borrower, the Administrative Agent and the Lenders shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement. The Register shall be available for inspection by the Borrower and any Lender (with respect to its own interest only), at any reasonable time and from time to time upon reasonable prior notice.

(c) Any Lender may at any time, without the consent of, or notice to, the Borrower or the Administrative Agent, sell participations to any Person (other than a natural Person or the Borrower or any of the Borrower's Affiliates or Subsidiaries) (each, a "Participant") in all or a portion of such Lender's rights and/or obligations under this Agreement (including all or a portion of its Commitment

and/or the Loans owing to it); *provided* that (i) such Lender's obligations under this Agreement shall remain unchanged, (ii) such Lender shall remain solely responsible to the other parties hereto for the performance of such obligations, and (iii) the Borrower, the Administrative Agent and the Lenders shall continue to deal solely and directly with such Lender in connection with such Lender's rights and obligations under this Agreement. For the avoidance of doubt, each Lender shall be responsible for the indemnity under Section 8.08 with respect to any payments made by such Lender to its Participant(s).

Any agreement or instrument pursuant to which a Lender sells such a participation shall provide that such Lender shall retain the sole right to enforce this Agreement and to approve any amendment, modification or waiver of any provision of this Agreement; *provided* that such agreement or instrument may provide that such Lender will not, without the consent of the Participant, agree to any amendment, modification or waiver described in the first proviso Section 9.02(b) that affects such Participant. The Borrower agrees that each Participant shall be entitled to the benefits of Sections 2.14, 2.15 and 2.16 (subject to the requirements and limitations therein, including the requirements under Section 2.16 (it being understood that the documentation required under Section 2.16 shall be delivered to the participating Lender)) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to paragraph (a) of this Section; *provided* that such Participant (A) agrees to be subject to the provisions of Sections 2.18 as if it were an assignee under paragraph (a) of this Section; and (B) shall not be entitled to receive any greater payment under Sections 2.14 and 2.16, with respect to any participation, than its participating Lender would have been entitled to receive, except to the extent such entitlement to receive a greater payment results from a Change in Law that occurs after the Participant acquired the applicable participation. Each Lender that sells a participation agrees, at the Borrower's request and expense, to use reasonable efforts to cooperate with the Borrower to effectuate the provisions of Section 2.18 with respect to any Participant. To the extent permitted by law, each Participant also shall be entitled to the benefits of Section 9.09 as though it were a Lender; *provided* that such Participant agrees to be subject to Section 2.17 as though it were a Lender. Each Lender that sells a participation shall, acting solely for this purpose as a non-fiduciary agent of the Borrower, maintain a register on which it enters the name and address of each Participant and the principal amounts (and stated interest) of each Participant's interest in the Loans or other obligations under the Loan Documents (the "Participant Register"); *provided* that no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any Participant or any information relating to a Participant's interest in any commitments, loans, letters of credit or its other obligations under any Loan Document) to any Person except to the extent that such disclosure is necessary to establish that such commitment, loan, letter of credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary. For the avoidance of doubt, the Administrative Agent (in its capacity as Administrative Agent) shall have no responsibility for maintaining a Participant Register.

(d) Any Lender may at any time pledge or assign a security interest in all or any portion of its rights under this Agreement to secure obligations of such Lender, including any pledge or assignment to secure obligations to a Federal Reserve Bank or any central bank having jurisdiction over such Lender; *provided* that no such pledge or assignment shall release such Lender from any of its obligations hereunder or substitute any such pledgee or assignee for such Lender as a party hereto.

SECTION 9.06 Survival; Reinstatement.

(a) All covenants, agreements, representations and warranties made by the Borrower herein and in the certificates or other instruments delivered in connection with or pursuant to this Agreement shall be considered to have been relied upon by the other parties hereto and shall survive the execution and

delivery of this Agreement and the making of any Loans, regardless of any investigation made by any such other party or on its behalf and notwithstanding that the Administrative Agent or any Lender may have had notice or knowledge of any Default or Event of Default or incorrect representation or warranty at the time any credit is extended hereunder, and shall continue in full force and effect as long as the principal of or any accrued interest on any Loan or any fee or any other amount payable under this Agreement is outstanding and unpaid. The provisions of Sections 2.14, 2.15, 2.16 and 9.03 and Article VIII shall survive and remain in full force and effect regardless of the consummation of the transactions contemplated hereby, the repayment of the Loans, the expiration or termination of the Commitments or the termination of this Agreement or any provision hereof.

(b) To the extent that any payments on the Obligations are subsequently invalidated, declared to be fraudulent or preferential, set aside or required to be repaid to a trustee, debtor in possession, receiver or other Person under any bankruptcy law, common law or equitable cause, then to such extent, the Obligations so satisfied shall be revived and continue as if such payment or proceeds had not been received.

SECTION 9.07 Counterparts; Integration; Effectiveness; Electronic Execution.

(a) This Agreement may be executed in counterparts (and by different parties hereto on different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. This Agreement, the other Loan Documents and the Fee Letters constitute the entire contract among the parties hereto relating to the subject matter hereof and supersede any and all previous agreements and understandings, oral or written, relating to the subject matter hereof (including the Executive Summary). Except as provided in Section 3.01, this Agreement shall become effective when it shall have been executed by the Administrative Agent and when the Administrative Agent shall have received counterparts hereof which, when taken together, bear the signatures of each of the other parties hereto, and thereafter shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns. Delivery of an executed counterpart of a signature page of this Agreement by facsimile or electronic (*i.e.*, "*pdf*" or "*tif*") format shall be effective as delivery of a manually executed counterpart of this Agreement.

(b) The words "execution," "signed," "signature," and words of like import in any Assignment and Acceptance shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act.

SECTION 9.08 Severability. Any provision of this Agreement held to be invalid, illegal or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity, illegality or unenforceability without affecting the validity, legality and enforceability of the remaining provisions hereof; and the invalidity of a particular provision in a particular jurisdiction shall not invalidate such provision in any other jurisdiction.

SECTION 9.09 Right of Setoff. If an Event of Default shall have occurred and be continuing, each Lender and each of its respective Affiliates is hereby authorized at any time and from time to time, to the fullest extent permitted by applicable law, to set off and apply any and all deposits (general or special, time or demand, provisional or final, in whatever currency) at any time held, and other obligations (in whatever currency) at any time owing, by such Lender or any such Affiliate, to or for the credit or the account of a Loan Party against any and all of the obligations of a Loan Party now or hereafter existing under

this Agreement or any other Loan Document to such Lender or its respective Affiliates, irrespective of whether or not such Lender or Affiliate shall have made any demand under this Agreement or any other Loan Document and although such obligations of the Loan Parties may be contingent or unmatured or are owed to a branch, office or Affiliate of such Lender different from the branch, office or Affiliate holding such deposit or obligated on such indebtedness; *provided* that in the event that any Defaulting Lender shall exercise any such right of setoff, (x) all amounts so set off shall be paid over immediately to the Administrative Agent for further application in accordance with the provisions of Section 2.19 pending such payment, shall be segregated by such Defaulting Lender from its other funds and deemed held in trust for the benefit of the Administrative Agent and the Lenders, and (y) the Defaulting Lender shall provide promptly to the Administrative Agent a statement describing in reasonable detail the Obligations owing to such Defaulting Lender as to which it exercised such right of setoff. The rights of each Lender and its respective Affiliates under this Section are in addition to other rights and remedies (including other rights of setoff) that such Lender or its respective Affiliates may have. Each Lender agrees to notify the Borrower and the Administrative Agent promptly after any such setoff and application; *provided* that the failure to give such notice shall not affect the validity of such setoff and application. The rights of each Lender under this Section 9.09 are in addition to other rights and remedies (including other rights of setoff) which such Lender may have.

SECTION 9.10 Governing Law; Jurisdiction; Consent to Service of Process. (a) This Agreement and the other Loan Documents shall be construed in accordance with and governed by the laws of the State of New York.

(b) **ANY LEGAL ACTION OR PROCEEDING WITH RESPECT TO THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS SHALL BE BROUGHT IN THE COURTS OF THE STATE OF NEW YORK SITTING IN THE BOROUGH OF MANHATTAN OR OF THE UNITED STATES FOR THE SOUTHERN DISTRICT OF NEW YORK AND, BY EXECUTION AND DELIVERY OF THIS AGREEMENT, EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY ACCEPTS FOR ITSELF AND IN RESPECT OF ITS PROPERTY AND ASSETS, UNCONDITIONALLY, THE EXCLUSIVE JURISDICTION OF THE AFORESAID COURTS WITH RESPECT TO ANY SUCH ACTION OR PROCEEDING. THE BORROWER HEREBY IRREVOCABLY DESIGNATES, APPOINTS AND EMPOWERS C T CORPORATION SYSTEM, WITH OFFICES ON THE DATE HEREOF AT 111 8TH AVENUE, NEW YORK, NEW YORK 10011, AS ITS DESIGNEE, APPOINTEE AND AGENT TO RECEIVE AND ACCEPT FOR AND ON ITS BEHALF, AND IN RESPECT OF ITS PROPERTY, SERVICE OF ANY AND ALL LEGAL PROCESS, SUMMONS, NOTICES AND DOCUMENTS WHICH MAY BE SERVED IN ANY SUCH ACTION OR PROCEEDING. IF FOR ANY REASON SUCH DESIGNEE, APPOINTEE AND AGENT SHALL CEASE TO BE AVAILABLE TO ACT AS SUCH, THE BORROWER AGREES TO DESIGNATE A NEW DESIGNEE, APPOINTEE AND AGENT IN NEW YORK, NEW YORK ON THE TERMS AND FOR THE PURPOSES OF THIS PROVISION SATISFACTORY TO THE ADMINISTRATIVE AGENT. THE BORROWER FURTHER IRREVOCABLY CONSENTS TO THE SERVICE OF PROCESS OUT OF ANY OF THE AFOREMENTIONED COURTS IN ANY SUCH ACTION OR PROCEEDING BY THE MAILING OF COPIES THEREOF BY REGISTERED OR CERTIFIED MAIL, POSTAGE PREPAID, TO IT AT ITS ADDRESS PROVIDED IN SECTION 9.01, SUCH SERVICE TO BECOME EFFECTIVE THIRTY DAYS AFTER SUCH MAILING. NOTHING HEREIN SHALL AFFECT THE RIGHT OF THE ADMINISTRATIVE AGENT OR ANY LENDER TO SERVE PROCESS IN ANY OTHER MANNER PERMITTED BY LAW.**

(c) **THE BORROWER HEREBY IRREVOCABLY WAIVES ANY OBJECTION WHICH IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF VENUE OF ANY OF THE AFORESAID ACTIONS OR PROCEEDINGS ARISING OUT OF OR IN**

CONNECTION WITH THIS AGREEMENT BROUGHT IN THE COURTS REFERRED TO IN CLAUSE (b) ABOVE AND HEREBY FURTHER IRREVOCABLY WAIVES, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE RIGHT TO PLEAD OR CLAIM, AND AGREES NOT TO PLEAD OR CLAIM, THAT ANY SUCH ACTION OR PROCEEDING BROUGHT IN ANY SUCH COURT HAS BEEN BROUGHT IN AN INCONVENIENT FORUM.

(d) **EACH PARTY HERETO HEREBY (i) IRREVOCABLY WAIVES, TO THE MAXIMUM EXTENT PERMITTED BY LAW, ANY RIGHT IT MAY HAVE TO CLAIM OR RECOVER IN ANY SUCH LITIGATION ANY SPECIAL, EXEMPLARY, PUNITIVE OR CONSEQUENTIAL DAMAGES, OR DAMAGES OTHER THAN, OR IN ADDITION TO, ACTUAL DAMAGES; (ii) CERTIFIES THAT NO PARTY HERETO NOR ANY REPRESENTATIVE OR AGENT OR COUNSEL FOR ANY PARTY HERETO HAS REPRESENTED, EXPRESSLY OR OTHERWISE, OR IMPLIED THAT SUCH PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVERS, AND (iii) ACKNOWLEDGES THAT IT HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE TRANSACTIONS CONTEMPLATED HEREBY AND THEREBY BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS CONTAINED IN THIS SECTION 9.10.**

SECTION 9.11 **WAIVER OF JURY TRIAL. EACH PARTY HERETO HEREBY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 9.11.**

SECTION 9.12 Confidentiality. Each of the Administrative Agent and the Lenders agrees to maintain the confidentiality of the Information (as defined below), except that Information may be disclosed (a) to their Affiliates, to their and their Affiliates' directors, officers and employees and agents, including accountants, legal counsel and other advisors who have been informed of the confidential nature of the information provided, (b) disclosures in connection with any pledge or assignment permitted under Section 9.05(d) and, to the extent requested by any regulatory authority, including any self-regulatory authority such as the National Association of Insurance Commissioners or any similar organization, or any nationally recognized rating agency that requires access to information about a Lender's investment portfolio, (c) to the extent a Lender reasonably believes it is required by applicable laws or regulations or by any subpoena or similar legal process (and, to the extent not prohibited under applicable law), such Lender will provide prompt notice thereof to the Borrower), (d) to any other party to this Agreement, (e) in connection with the exercise of any remedies hereunder or any suit, action or proceeding relating to this Agreement or any other Loan Document or the enforcement of rights hereunder or thereunder, (f) subject to an understanding with such Person that such Person will comply with this Section 9.12, to (i) any assignee of or Participant in, or any prospective assignee of or Participant in, any of its rights or obligations under this Agreement or (ii) any actual or prospective party (or its Related Parties) to any swap, derivative, or other transaction under which payments are to be made by reference to the Borrower, and its obligations under this Agreement or the payments hereunder, (g) with the consent of the Borrower or (h) to the extent such Information (i) becomes publicly available other than as a result of a breach of this Section 9.12 or (ii) becomes available to the Administrative Agent or any Lender from a source other than the Borrower (unless such source is actually

known by the individual providing the information to be bound by a confidentiality agreement or other legal or contractual obligation of confidentiality with respect to such information). In addition, the Administrative Agent and the Lenders may disclose the existence of this Agreement and information about this Agreement to market data collectors, similar service providers to the lending industry and service providers to the Administrative Agent and the Lenders in connection with the administration of this Agreement, the other Loan Documents, and the Commitments. For the purposes of this Section 9.12, "Information" means all information received from the Borrower relating to the Borrower or its business, other than any such information that is known to a Lender, publicly known or otherwise available to the Administrative Agent or any Lender other than through disclosure (a) by the Borrower, or (b) from a source actually known to a Lender to be bound by a confidentiality agreement or other legal or contractual obligation of confidentiality with respect to such information. Any Person required to maintain the confidentiality of Information as provided in this Section 9.12 shall be considered to have complied with its obligation to do so if such Person maintains the confidentiality of such Information in accordance with procedures adopted in good faith to protect confidential Information of third parties delivered to a lender.

SECTION 9.13 Interest Rate Limitation. Notwithstanding anything herein to the contrary, if at any time the interest rate applicable to any Loan, together with all fees, charges and other amounts which are treated as interest on such Loan under applicable law (collectively the "Charges"), shall exceed the maximum lawful rate (the "Maximum Rate") which may be contracted for, charged, taken, received or reserved by the Lender holding such Loan in accordance with applicable law, the rate of interest payable in respect of such Loan hereunder, together with all Charges payable in respect thereof, shall be limited to the Maximum Rate and, to the extent lawful, the interest and Charges that would have been payable in respect of such Loan but were not payable as a result of the operation of this Section 9.13 shall be cumulated and the interest and Charges payable to such Lender in respect of other Loans or periods shall be increased (but not above the Maximum Rate therefor) until such cumulated amount, together with interest thereon at the Federal Funds Effective Rate to the date of repayment, shall have been received by such Lender.

SECTION 9.14 **EXCULPATION PROVISIONS**. EACH OF THE PARTIES HERETO SPECIFICALLY AGREES THAT IT HAS A DUTY TO READ THIS AGREEMENT, THE NOTES AND (IN THE CASE OF THE BORROWER AND THE ADMINISTRATIVE AGENT) THE FEE LETTERS AND AGREES THAT IT IS CHARGED WITH NOTICE AND KNOWLEDGE OF THE TERMS OF THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS; THAT IT HAS IN FACT READ THIS AGREEMENT AND IS FULLY INFORMED AND HAS FULL NOTICE AND KNOWLEDGE OF THE TERMS, CONDITIONS AND EFFECTS OF THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS; THAT IT HAS BEEN REPRESENTED BY INDEPENDENT LEGAL COUNSEL OF ITS CHOICE THROUGHOUT THE NEGOTIATIONS PRECEDING ITS EXECUTION OF THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS; AND HAS RECEIVED THE ADVICE OF ITS ATTORNEY IN ENTERING INTO THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS; AND THAT IT RECOGNIZES THAT CERTAIN OF THE TERMS OF THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS RESULT IN ONE PARTY ASSUMING THE LIABILITY INHERENT IN SOME ASPECTS OF THE TRANSACTION AND RELIEVING THE OTHER PARTY OF ITS RESPONSIBILITY FOR SUCH LIABILITY. EACH PARTY HERETO AGREES AND COVENANTS THAT IT WILL NOT CONTEST THE VALIDITY OR ENFORCEABILITY OF ANY EXCULPATORY PROVISION OF THIS AGREEMENT ON THE BASIS THAT THE PARTY HAD NO NOTICE OR KNOWLEDGE OF SUCH PROVISION OR THAT THE PROVISION IS NOT *"CONSPICUOUS."*

SECTION 9.15 U.S. Patriot Act. Each Lender that is subject to the requirements of the USA PATRIOT ACT (Title III of Pub. L. 107-56 (signed into law October 26, 2001)) (the "Patriot Act") and the Beneficial Ownership Regulation hereby notifies the Loan Parties that pursuant to the requirements of the Patriot Act and the Beneficial Ownership Regulation, it is required to obtain, verify, and record information that identifies the Loan Parties, which information includes the name and address of the Loan Parties and other information that will allow such Lender to identify the Loan Parties in accordance with the Patriot Act and the Beneficial Ownership Regulation.

SECTION 9.16 No Advisory or Fiduciary Responsibility. In connection with all aspects of each transaction contemplated hereby, the Borrower acknowledges and agrees, and acknowledges its Affiliates' understanding, that: (i) the credit facility provided for hereunder and any related arranging or other services in connection therewith (including in connection with any amendment, waiver or other modification hereof or of any other Loan Document) are an arm's-length commercial transaction between the Borrower, on the one hand, and the Administrative Agent, the Arrangers, the Syndication Agent, the Documentation Agents and the Lenders, on the other hand, and the Borrower is capable of evaluating and understanding and understands and accepts the terms, risks and conditions of the transactions contemplated hereby and by the other Loan Documents (including any amendments, waiver or other modification hereof or thereof); (ii) in connection with the process leading to such transaction, the Administrative Agent, the Arrangers, the Syndication Agent, the Documentation Agents and the Lenders are and have been acting solely as principals and are not the financial advisors, agents or fiduciaries, for the Borrower or any of its Affiliates, stockholders, creditors or employees or any other Person; (iii) the Administrative Agent, the Arrangers, Syndication Agent, the Documentation Agents and the Lenders have not assumed and will not assume an advisory, agency or fiduciary responsibility in favor of the Borrower with respect to any of the transactions contemplated hereby or the process leading thereto, including with respect to any amendment, waiver or other modification hereof or of any other Loan Document (irrespective of whether the Administrative Agent, any Arranger, the Syndication Agent, any Documentation Agent or any Lender advised or is currently advising the Borrower or any of its Affiliates on other matters) and the Administrative Agent, the Arrangers, the Syndication Agent, the Documentation Agents and the Lenders have no obligation to the Borrower or any of its Affiliates with respect to the transactions contemplated hereby except those obligations expressly set forth herein and in the other Loan Documents; (iv) the Administrative Agent, the Arrangers, the Syndication Agent, the Documentation Agents, the Lenders and their respective Affiliates may be engaged in a broad range of transactions that involve interests that differ from those of the Borrower and its Affiliates, and the Administrative Agent, the Arrangers, the Syndication Agent, the Documentation Agents and the Lenders have no obligation to disclose any of such interests by virtue of any advisory, agency or fiduciary relationship; and (v) the Administrative Agent, the Arrangers, the Syndication Agent, the Documentation Agents and the Lenders have not provided and will not provide any legal, accounting, regulatory or Tax advice with respect to any of the transactions contemplated hereby (including any amendment, waiver or other modification hereof or of any other Loan Document) and the Loan Parties have consulted its own legal, accounting, regulatory and Tax advisors to the extent it has deemed appropriate. Each Loan Parties hereby waive and release, to the fullest extent permitted by law, any claims that it may have against the Administrative Agent, the Arrangers, the Syndication Agent, the Documentation Agents or the Lenders with respect to any breach or alleged breach of agency or fiduciary duty.

SECTION 9.17 Headings. Section headings herein are included herein for convenience of reference only and shall not constitute a part hereof for any other purpose or be given any substantive effect.

SECTION 9.18 Acknowledgement and Consent to Bail-In of EEA Financial Institutions. (a) Notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any

liability of any EEA Financial Institution arising under any Loan Document, to the extent such liability is unsecured, may be subject to the write-down and conversion powers of an EEA Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by: (a) the application of any Write-Down and Conversion Powers by an EEA Resolution Authority to any such liabilities arising hereunder which may be payable to it by any party hereto that is an EEA Financial Institution; and

(b) the effects of any Bail-in Action on any such liability, including, if applicable:

(i) a reduction in full or in part or cancellation of any such liability;

(ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such EEA Financial Institution, its parent undertaking, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement or any other Loan Document; or

(iii) the variation of the terms of such liability in connection with the exercise of the write-down and conversion powers of any EEA Resolution Authority.

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The parties hereto have caused this Agreement to be duly executed as of the date and year first above written.

KINDER MORGAN, INC.,
as the Borrower

By: /s/ Anthony B. Ashley /s/
Name: Anthony B. Ashley
Title: Treasurer

BARCLAYS BANK PLC,
as the Administrative Agent and as a Lender

By: /s/ Sydney G. Dennis /s/
Name: Sydney G. Dennis
Title: Director

JPMORGAN CHASE BANK, N.A.,
as a Lender

By: /s/ Stephanie Balette /s/
Name: Stephanie Balette
Title: Authorized Officer

Bank of America, N.A.,
as a Lender

By: /s/ Tyler Ellis /s/
Name: Tyler Ellis
Title: Director

BMO Harris Bank, N.A.,
as a Lender

By: /s/ Melissa Guzman /s/
Name: Melissa Guzman
Title: Director

CITIBANK, N.A.,
as a Lender

By: /s/ Maureen Maroney /s/
Name: Maureen Maroney
Title: Vice President

CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH,
as a Lender

By: /s/ Nupur Kumar /s/
Name: Nupur Kumar
Title: Authorized Signatory

By: /s/ Christopher Zybrick /s/
Name: Christopher Zybrick
Title: Authorized Signatory

Mizuho Bank, Ltd.,
as a Lender

By: /s/ Donna DeMagistris /s/
Name: Donna DeMagistris
Title: Authorized Signatory

MUFG BANK, LTD.
as a Lender

By: /s/ Christopher Facenda /s/
Name: Christopher Facenda
Title: Director

ROYAL BANK OF CANADA,
as a Lender

By: /s/ Jason S. York /s/
Name: Jason S. York
Title: Authorized Signatory

The Bank of Nova Scotia, Houston Branch,
as a Lender

By: /s/ Alfredo Brahim /s/
Name: Alfredo Brahim
Title: Director

Wells Fargo Bank, N.A.,
as a Lender

By: /s/ Doug McDowell /s/
Name: Doug McDowell
Title: Managing Director

Commerzbank AG, New York Branch,
as a Lender

By: /s/ Barbara Stacks /s/
Name: Barbara Stacks
Title: Director

By: /s/ James Boyle /s/
Name: James Boyle
Title: Director

Sumitomo Mitsui Banking Corporation,
as a Lender

By: /s/ Katsuyuki Kubo /s/
Name: Katsuyuki Kubo
Title: Managing Director

CANADIAN IMPERIAL BANK OF COMMERCE,
New York Branch,
as a Lender

By: /s/ Donovan C. Broussard /s/
Name: Donovan C. Broussard
Title: Authorized Signatory

By: /s/ Trudy Nelson /s/
Name: Trudy Nelson
Title: Authorized Signatory

CREDIT AGRICOLE CORPORATE AND
INVESTMENT BANK,
as a Lender

By: /s/ Dixon Schultz /s/
Name: Dixon Schultz
Title: Managing Director

By: /s/ Michael Willis /s/
Name: Michael Willis
Title: Managing Director

SUNTRUST BANK,
as a Lender

By: /s/ Carmen Malizia /s/
Name: Carmen Malizia
Title: Director

PNC Bank, National Association,
as a Lender

By: /s/ Stephen Monto /s/
Name: Stephen Monto
Title: SVP

SOCIETE GENERALE,
as a Lender

By: /s/ Diego Medina /s/
Name: Diego Medina
Title: Director

THE TORONTO-DOMINION BANK, NEW YORK BRANCH
as a Lender

By: /s/ Annie Dorval /s/
Name: Annie Dorval
Title: Authorized Signatory

MORGAN STANLEY SENIOR FUNDING, INC.,
as a Lender

By: /s/ Michael King /s/
Name: Michael King
Title: Vice President

MORGAN STANLEY BANK, N.A.,
as a Lender

By: /s/ Michael King /s/
Name: Michael King
Title: Authorized Signatory

Compass Bank,
as a Lender

By: /s/ Mark H. Wolf /s/
Name: Mark H. Wolf
Title: Senior Vice President

ING Capital LLC,
as a Lender

By: /s/ Subha Pasumarti /s/
Name: Subha Pasumarti
Title: Managing Director

By: /s/ Tanja van der Woude /s/
Name: Tanja van der Woude
Title: Director

REGIONS BANK,
as a Lender

By: /s/ David Valentine /s/
Name: David Valentine
Title: Managing Director

Intesa Sanpaolo S.p.A. – New York Branch,
as a Lender

By: /s/ Christophe Hamonet /s/
Name: Christophe Hamonet
Title: Reginal Business Manager

By: /s/ Francesco Di Mario /s/
Name: Francesco Di Mario
Title: FVP – Head of Credit

NATIONAL BANK OF CANADA,
as a Lender

By: /s/ Rahul Rahul /s/
Name: Rahul Rahul
Title: Authorized Signatory

By: /s/ Mark Williamson /s/
Name: Mark Williamson
Title: Authorized Signatory

EXHIBIT 10.15

SCHEDULE 1.01
Commitments

Lender	Commitment
Barclays Bank PLC	$24,000,000
JPMorgan Chase Bank, N.A.	$24,000,000
Bank of America, N.A.	$24,000,000
BMO Harris Bank, N.A.	$24,000,000
Citibank, N.A.	$24,000,000
Credit Suisse AG, Cayman Islands Branch	$24,000,000
Mizuho Bank, Ltd.	$24,000,000
MUFG Bank, Ltd.	$24,000,000
Royal Bank of Canada	$24,000,000
The Bank of Nova Scotia, Houston Branch	$24,000,000
Wells Fargo Bank, N.A.	$24,000,000
Commerzbank AG, New York Branch	$17,500,000
Sumitomo Mitsui Banking Corporation	$17,500,000
Canadian Imperial Bank of Commerce, New York Branch	$17,500,000
Credit Agricole Corporate and Investment Bank	$17,500,000
SunTrust Bank	$17,500,000
PNC Bank, National Association	$17,500,000
Societe Generale	$17,500,000
The Toronto-Dominion Bank, New York Branch	$17,500,000
Morgan Stanley Senior Funding, Inc.	$16,000,000
Compass Bank	$16,000,000
ING Capital LLC	$16,000,000
Regions Bank	$16,000,000
Intesa Sanpaolo S.p.A.-New York Branch	$16,000,000
National Bank of Canada	$16,000,000
Total	**$500,000,000**

SCHEDULE 1.01A
Excluded Subsidiaries

ANR Real Estate Corporation
Calnev Pipeline LLC
Coastal Eagle Point Oil Company
Coastal Oil New England, Inc.
Colton Processing Facility
Coscol Petroleum Corporation
El Paso CGP Company, L.L.C.
El Paso Energy Argentina Service Company
El Paso Energy Capital Trust I
El Paso Energy E.S.T. Company
El Paso Energy International Company
El Paso Marketing Company, L.L.C.
El Paso Merchant Energy North America Company, L.L.C.
El Paso Merchant Energy-Petroleum Company
El Paso Reata Energy Company, L.L.C.
El Paso Remediation Company
El Paso Services Holding Company
EPC Building, LLC
EPC Property Holdings, Inc.
EPEC Corporation
EPEC Oil Company Liquidating Trust
EPEC Polymers, Inc.
EPEC Realty, Inc.
EPED Holding Company
I.M.T Land Corp.
International Marine Terminals Partnership
Kinder Morgan Foundation
Kinder Morgan G.P., Inc.
Kinder Morgan Mexico LLC
Kinder Morgan Services International LLC
Kinder Morgan Tejas Pipeline GP LLC
Kinder Morgan Urban Renewal, L.L.C.
Kinder Morgan Urban Renewal II, LLC
KM Express LLC
KM Insurance Texas Inc.
KN Capital Trust I
KN Capital Trust III
Mesquite Investors, L.L.C.
SFPP, L.P.

Note the Excluded Subsidiaries listed on this Schedule 1.01A may also be Excluded Subsidiaries pursuant to other exceptions set forth in the definition of “Excluded Subsidiary”.

EXHIBIT 10.15

SCHEDULE 6.01
Existing Non-Guarantor Indebtedness

- Certificate of Designations of Series A Fixed-to-Floating Rate Term Cumulative Preferred Stock due 2057 of Kinder Morgan G.P., Inc.
- EPC Building, LLC, promissory note, 3.967%, due 2013 through 2035
- K N Capital Trust I 8.56% capital trust securities due 2027
- K N Capital Trust III 7.63% capital trust securities due 2028
- El Paso Energy Capital Trust I 4.75% preferred securities due 2028
- International Marine Terminals Partnership 2002 floating rate notes due 2025

SCHEDULE 6.05
Existing Transactions with Affiliates

None.

SCHEDULE 6.06
Existing Restrictive Agreements

- Certificate of Designations of Series A Fixed-to-Floating Rate Term Cumulative Preferred Stock due 2057 of Kinder Morgan G.P., Inc.
- Constituent documents of Kinder Morgan Canada Limited and its subsidiaries, each as amended to date, setting forth terms related to Kinder Morgan Canada Limited's (i) Cumulative Redeemable Minimum Rate Reset Preferred Shares, Series 1; and (ii) Cumulative Redeemable Minimum Rate Reset Preferred Shares, Series 3:
    - Certificate and Articles of Incorporation of Kinder Morgan Canada Limited
    - Certificate and Articles of Incorporation of Kinder Morgan Canada GP Inc.
    - Certificate of Limited Partnership of Kinder Morgan Canada Limited Partnership
    - Second Amended and Restated Limited Partnership Agreement of Kinder Morgan Canada Limited Partnership
    - Articles of Association of Kinder Morgan Cochin ULC
- Credit Agreement, dated August 31, 2018, by and among Kinder Morgan Cochin ULC, Royal Bank of Canada and the lenders party thereto

EXHIBIT 10.15

EXHIBIT 1.01-A

FORM OF ASSIGNMENT AND ASSUMPTION

This Assignment and Assumption (the "Assignment and Assumption") is dated as of the Effective Date set forth below and is entered into by and between [the][each][1] Assignor identified in item 1 below ([the][each, an] "Assignor") and [the][each][2] Assignee identified in item 2 below ([the][each, an] "Assignee"). [It is understood and agreed that the rights and obligations of [the Assignors][the Assignees][3] hereunder are several and not joint.][4] Capitalized terms used but not defined herein shall have the meanings given to them in the 364-Day Credit Agreement identified below (as further restated, amended, modified, supplemented and in effect, the "364-Day Credit Agreement"), receipt of a copy of which is hereby acknowledged by [the][each] Assignee. The Standard Terms and Conditions set forth in Annex 1 attached hereto are hereby agreed to and incorporated herein by reference and made a part of this Assignment and Assumption as if set forth herein in full.

For an agreed consideration, [the][each] Assignor hereby irrevocably sells and assigns to [the Assignee][the respective Assignees], and [the][each] Assignee hereby irrevocably purchases and assumes from [the Assignor][the respective Assignors], subject to and in accordance with the Standard Terms and Conditions and the 364-Day Credit Agreement, as of the Effective Date inserted by the Administrative Agent as contemplated below (i) all of [the Assignor's][the respective Assignors'] rights and obligations in [its capacity as a Lender][their respective capacities as Lenders] under the 364-Day Credit Agreement and any other documents or instruments delivered pursuant thereto to the extent related to the amount and percentage interest identified below of all of such outstanding rights and obligations of [the Assignor][the respective Assignors] under the revolving credit facility identified below, and (ii) to the extent permitted to be assigned under applicable law, all claims, suits, causes of action and any other right of [the Assignor (in its capacity as a Lender)][the respective Assignors (in their respective capacities as Lenders)] against any Person, whether known or unknown, arising under or in connection with the 364-Day Credit Agreement, any other documents or instruments delivered pursuant thereto or the loan transactions governed thereby or in any way based on or related to any of the foregoing, including, but not limited to, contract claims, tort claims, malpractice claims, statutory claims and all other claims at law or in equity related to the rights and obligations sold and assigned pursuant to clause (i) above (the rights and obligations sold and assigned by [the][any] Assignor to [the][any] Assignee pursuant to clauses (i) and (ii) above being referred to herein collectively as [the][an] "Assigned Interest"). Each such sale and assignment is without recourse to [the][any] Assignor and, except as expressly provided in this Assignment and Assumption, without representation or warranty by [the][any] Assignor.

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1 For bracketed language here and elsewhere in this form relating to the Assignor(s), if the assignment is from a single Assignor, choose the first bracketed language. If the assignment is from multiple Assignors, choose the second bracketed language.

2 For bracketed language here and elsewhere in this form relating to the Assignee(s), if the assignment is to a single Assignee, choose the first bracketed language. If the assignment is to multiple Assignees, choose the second bracketed language.

3 Select as appropriate.

4 Include bracketed language if there are either multiple Assignors or multiple Assignees.

1. Assignor[s]: _____

_____

[Assignor [is] [is not] a Defaulting Lender]

2. Assignee[s]: _____

_____

[for each Assignee, indicate [Affiliate][Approved Fund] of [identify Lender]

3. Borrower: Kinder Morgan, Inc.

4. Administrative Agent: _____, as the administrative agent under the 364-Day Credit Agreement

5. 364-Day Credit Agreement: The Revolving Credit Agreement dated as of November 16, 2018 among Kinder Morgan, Inc., the Lenders parties thereto, Barclays Bank PLC, as Administrative Agent, and the other agents parties thereto

6. Assigned Interest[s]:

Assignor[s][5]	Assignee[s][6]	Aggregate Amount of Commitment/Loans for all Lenders[7]	Amount of Commitment/Loans Assigned[8]	Percentage Assigned of Commitment/ Loans[8]	CUSIP Number
		$	$	%	
		$	$	%	
		$	$	%	

[7. Trade Date: _____][9]

Effective Date: _____ ___, 20___ [TO BE INSERTED BY ADMINISTRATIVE AGENT AND WHICH SHALL BE THE EFFECTIVE DATE OF RECORDATION OF TRANSFER IN THE REGISTER THEREFOR.]

The terms set forth in this Assignment and Assumption are hereby agreed to:

---

5 List each Assignor, as appropriate.

6 List each Assignee, as appropriate.

7 Amount to be adjusted by the counterparties to take into account any payments or prepayments made between the Trade Date and the Effective Date.

8 Set forth, to at least 9 decimals, as a percentage of the Commitment/Loans of all Lenders thereunder.

[9] To be completed if the Assignor(s) and the Assignee(s) intend that the minimum assignment amount is to be determined as of the Trade Date.

ASSIGNOR[S][10]
[NAME OF ASSIGNOR]

By:_____
Title:

[NAME OF ASSIGNOR]

By:_____
Title:

ASSIGNEE[S][11]
[NAME OF ASSIGNEE]

By:_____
Title:

[NAME OF ASSIGNEE]

By:_____
Title:

[10] Add additional signature blocks as needed. Include both Fund/Pension Plan and manager making the trade (if applicable).

[11] Add additional signature blocks as needed. Include both Fund/Pension Plan and manager making the trade (if applicable).

[Consented to and][12] Accepted:

[NAME OF ADMINISTRATIVE AGENT], as
Administrative Agent

By: _____
Title:

[Consented to:][13]

[NAME OF THE RELEVANT PARTY]

By: _____
Title:

[12] To be added only if the consent of the Administrative Agent is required by the terms of the 364-Day Credit Agreement.

[13] To be added only if the consent of the Borrower and/or other parties is required by the terms of the 364-Day Credit Agreement.

ANNEX 1 TO ASSIGNMENT AND ASSUMPTION

STANDARD TERMS AND CONDITIONS FOR

ASSIGNMENT AND ASSUMPTION

1. Representations and Warranties.

1.1. Assignor. [The][Each] Assignor (a) represents and warrants that (i) it is the legal and beneficial owner of [the][[the relevant] Assigned Interest, (ii) [the][such] Assigned Interest is free and clear of any lien, encumbrance or other adverse claim and (iii) it has full power and authority, and has taken all action necessary, to execute and deliver this Assignment and Assumption and to consummate the transactions contemplated hereby; and (b) assumes no responsibility with respect to (i) any statements, warranties or representations made in or in connection with the 364-Day Credit Agreement or any other Loan Document, (ii) the execution, legality, validity, enforceability, genuineness, sufficiency or value of the Loan Documents or any collateral thereunder, (iii) the financial condition of the Borrower, any of its Subsidiaries or Affiliates or any other Person obligated in respect of any Loan Document or (iv) the performance or observance by the Borrower, any of its Subsidiaries or Affiliates or any other Person of any of their respective obligations under any Loan Document.

1.2. Assignee. [The][Each] Assignee (a) represents and warrants that (i) it has full power and authority, and has taken all action necessary, to execute and deliver this Assignment and Assumption and to consummate the transactions contemplated hereby and to become a Lender under the 364-Day Credit Agreement, (ii) it meets all the requirements to be an assignee under the paragraph following Section 9.05(a)(vii) and Section 9.05(b) of the 364-Day Credit Agreement (subject to such consents, if any, as may be required under Section 9.05(a)(iii) of the 364-Day Credit Agreement), (iii) from and after the Effective Date, it shall be bound by the provisions of the 364-Day Credit Agreement as a Lender thereunder and, to the extent of [the][the relevant] Assigned Interest, shall have the obligations of a Lender thereunder, (iv) it is sophisticated with respect to decisions to acquire assets of the type represented by [the][such] Assigned Interest and either it, or the Person exercising discretion in making its decision to acquire [the][such] Assigned Interest, is experienced in acquiring assets of such type, (v) it has received a copy of the 364-Day Credit Agreement, and has received or has been accorded the opportunity to receive copies of the most recent financial statements delivered pursuant to Section 5.01 of the 364-Day Credit Agreement, as applicable, and such other documents and information as it deems appropriate to make its own credit analysis and decision to enter into this Assignment and Assumption and to purchase [the][such] Assigned Interest, (vi) it has, independently and without reliance upon the Administrative Agent or any other Lender and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Assignment and Assumption and to purchase [the][such] Assigned Interest and (vii) attached to this Assignment and Assumption is any documentation required to be delivered by it pursuant to Section 2.16 of the 364-Day Credit Agreement; and (b) agrees that (i) it will, independently and without reliance upon the Administrative Agent, [the][any] Assignor or any other Lender, and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under the Loan Documents, and (ii) it will perform in accordance with their terms all of the obligations which by the terms of the Loan Documents are required to be performed by it as a Lender.

2. Payments. From and after the Effective Date, the Administrative Agent shall make all payments in respect of [the][each] Assigned Interest (including payments of principal, interest, fees and other

amounts) to [the][the relevant] Assignor for amounts which have accrued to but excluding the Effective Date and to [the][the relevant] Assignee for amounts which have accrued from and after the Effective Date.

3. General Provisions.

3.1. In accordance with Sections 9.04 and 9.05 of the 364-Day Credit Agreement, upon execution, delivery, acceptance and recording of this Assignment and Assumption, from and after the Effective Date, (a) the Assignee shall be a party to the 364-Day Credit Agreement and, to the extent provided in this Assignment and Assumption, have the rights and obligations of a Lender under the 364-Day Credit Agreement with a Commitment as set forth herein and (b) the Assignor shall, to the extent of the Assigned Interest assigned pursuant to this Assignment and Assumption, be released from its obligations under the 364-Day Credit Agreement (and, in the case of this Assignment and Assumption covers all of the Assignor's rights and obligations under the 364-Day Credit Agreement, the Assignor shall cease to be a party to the 364-Day Credit Agreement but shall continue to be entitled to the benefits of Sections 2.14, 2.15, 2.16 and 9.03 thereof).

3.2. This Assignment and Assumption shall be binding upon, and inure to the benefit of, the parties hereto and their respective successors and assigns. This Assignment and Assumption may be executed in any number of counterparts, which together shall constitute one instrument. Delivery of an executed counterpart of a signature page of this Assignment and Assumption by telecopy shall be effective as delivery of a manually executed counterpart of this Assignment and Assumption. This Assignment and Assumption shall be governed by, and construed in accordance with, the laws of the State of New York.

EXHIBIT 10.15

EXHIBIT 1.01-B

FORM OF GUARANTY AGREEMENT

[See attached.]

EXHIBIT 10.15

EXHIBIT 1.01-C

FORM OF COMMITTED NOTE

_____, _____

FOR VALUE RECEIVED, the undersigned, KINDER MORGAN, INC., a Delaware corporation (the "Borrower"), HEREBY PROMISES TO PAY to the order of _____ (the "Lender"), the lesser of (i) such Lender's Commitment and (ii) the aggregate amount of Committed Loans made by the Lender and outstanding on the Maturity Date. The principal amount of the Committed Loans made by the Lender to the Borrower shall be due and payable on the dates and in the amounts as are specified in that certain Revolving Credit Agreement, dated as of November 16, 2018 (as further restated, amended, modified, supplemented and in effect from time to time, the "364-Day Credit Agreement"), among the Borrower, the Lender, certain other lenders that are party thereto, Barclays Bank PLC, as Administrative Agent for the Lender and such other lenders, and the other agents named therein. All capitalized terms used herein and not otherwise defined shall have the meanings as defined in the 364-Day Credit Agreement.

The Borrower promises to pay interest on the unpaid principal amount of each Committed Loan outstanding from time to time from the date thereof until such principal amount is paid in full, at such interest rates and payable on such dates as are specified in the 364-Day Credit Agreement. Principal and interest are payable in same day funds in lawful money of the United States of America to the Administrative Agent at its Principal Office, or at such other place as the Administrative Agent shall designate in writing to the Borrower.

This Note is one of the Committed Notes referred to in, and this Note and all provisions herein are entitled to the benefits of, the 364-Day Credit Agreement. The 364-Day Credit Agreement, among other things (a) provides for the making of Committed Loans by the Lender and the other lenders to the Borrower from time to time, and (b) contains provisions for acceleration of the maturity hereof upon the happening of certain stated events, for prepayments on account of principal hereof prior to the maturity hereof upon the terms and conditions therein specified, and for limitations on the amount of interest paid such that no provision of the 364-Day Credit Agreement or this Note shall require the payment or permit the collection of interest in excess of the Maximum Rate.

This Note may be held by the Lender for the account of its applicable lending office and may be transferred from one lending office to another lending office from time to time as the Lender may determine.

The Borrower and any and all endorsers, guarantors and sureties severally waive grace, demand, presentment for payment, notice of dishonor, default or intent to accelerate, protest and notice of protest and diligence in collecting and bringing of suit against any party hereto, and agree to all renewals, extensions or partial payments hereon and to any release or substitution of security herefor, in whole or in part, with or without notice, before or after maturity.

This Note shall be governed by and construed under the laws of the State of New York and the applicable laws of the United States of America.

KINDER MORGAN, INC.,
as the Borrower

By: _____
Name:_____
Title:_____

EXHIBIT 10.15

EXHIBIT 2.03

FORM OF BORROWING REQUEST

Dated _____

Barclays Bank PLC,
1301 Sixth Avenue
New York, NY 10019
Attn: Bobby Fitzpatrick
Phone: 201-499-5043
E-mail: bobby.fitzpatrick@barclays.com and 12145455230@tls.ldsprod.com

Ladies and Gentlemen:

This Borrowing Request is delivered to you by Kinder Morgan, Inc. (the "Borrower"), a Delaware corporation, under Section 2.03 of the Revolving Credit Agreement, dated as of November 16, 2018 (as further restated, amended, modified, supplemented and in effect, the "364-Day Credit Agreement"), by and among the Borrower, the Lenders party thereto, Barclays Bank PLC, as Administrative Agent, and the other agents named therein.

1. The Borrower hereby requests that the Lenders make a Committed Loan or Loans in the aggregate principal amount of $_____.[1]

2. The Borrower hereby requests that the Committed Loan or Loans be made on the following Business Day: _____.[2]

3. The Borrower hereby requests that the Borrowing be [an ABR Borrowing] [a Eurodollar Borrowing].[3]

4. In the case of a Eurodollar Borrowing, the initial Interest Period shall be [one week] [one month] [two months] [three months] [six months].

5. The Borrower hereby requests that the funds from the requested Loan or Loans be disbursed to the following bank account: _____.

6. After giving effect to the requested Loan or Loans, the aggregate Credit Exposures outstanding as of the date hereof (including the requested Loans) does not exceed the maximum amount permitted to be outstanding pursuant to the terms of the 364-Day Credit Agreement.

7. The representations and warranties set forth in the 364-Day Credit Agreement and the other Loan Documents are true and correct in all material respects on and as of the date hereof (unless such representation and warranty expressly relates to an earlier date).

---

[1] Complete with an amount in accordance with Section 2.03 of the 364-Day Credit Agreement.

[2] Complete with a Business Day in accordance with Section 2.03 of the 364-Day Credit Agreement.

[3] If no election as to Type of Borrowing is made for a Committed Loan, the Requested Borrowing shall be an ABR Borrowing.

8. No Default or Event of Default has occurred and is continuing on the date hereof or would result after giving effect to the Loans requested hereby.

9. All capitalized undefined terms used herein have the meanings assigned thereto in the 364-Day Credit Agreement.

IN WITNESS WHEREOF, the undersigned have executed this Borrowing Request this _____ day of _____, _____.

KINDER MORGAN, INC.,
as the Borrower

By: _____
Name:_____
Title:_____

EXHIBIT 10.15

EXHIBIT 2.07

FORM OF INTEREST ELECTION REQUEST

Date: **[_____]**, 20**[__]**

Barclays Bank PLC,
1301 Sixth Avenue
New York, NY 10019
Attn: Bobby Fitzpatrick
Phone: 201-499-5043
E-mail: bobby.fitzpatrick@barclays.com and 12145455230@tls.ldsprod.com

Re: Kinder Morgan, Inc. – Interest Election Request

Ladies and Gentlemen:

Reference is made to the Revolving Credit Agreement, dated as of November 16, 2018 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "364-Day Credit Agreement"), among Kinder Morgan, Inc., a Delaware corporation (the "Borrower"), the Lenders party thereto from time to time, Barclays Bank PLC as Administrative Agent, and the other parties thereto from time to time. Capitalized terms used but not otherwise defined in this Interest Election Request shall have the meanings assigned to such terms in the 364-Day Credit Agreement.

1. Interest Election Request. This Interest Election Request relates to the Borrower's election to (i) continue a Eurodollar Borrowing, (ii) convert a Eurodollar Borrowing or (iii) convert a Base Rate Borrowing on _____ (the "Interest Election Date"), as indicated below (*check each that applies*):

☐ **Continuation of Eurodollar Borrowing**.

Pursuant to Section 2.07 of the 364-Day Credit Agreement, this Interest Election Request confirms our written election on the date hereof to continue the following outstanding Borrowing comprised of Eurodollar Loans on the Interest Election Date, as follows:

(A) Expiration date of current Interest Period: _____

(B) Aggregate amount of outstanding Borrowing: _____

(C) Aggregate amount to be continued as Eurodollar Loans: _____

(D) Elected Interest Period: _____

☐ **Conversion of Eurodollar Borrowing**.

Pursuant to Section 2.07 of the 364-Day Credit Agreement, this Interest Election Request confirms our written election on the date hereof to convert the following outstanding Borrowing

comprised of Eurodollar Loans to Borrowing(s) comprised of ABR Loans on the Interest Election Date, as follows:

(A) Expiration date of current Interest Period: _____

(B) Aggregate amount of outstanding Borrowing: _____

(C) Aggregate amount to be converted to ABR Loans: _____

☐ **Conversion of Base Rate Borrowing**.

Pursuant to Section 2.07 of the 364-Day Credit Agreement, this Interest Election Request confirms our written election on the date hereof that the following outstanding Borrowing comprised of ABR Loans be converted to a Borrowing comprised of Eurodollar Loans on the Interest Election Date, as follows:

(A) Date of Conversion: _____

(B) Aggregate amount of outstanding Borrowing: _____

(C) Aggregate amount to be converted to Eurodollar Loans: _____

(D) Elected Interest Period: _____

2. Certifications. The Borrower hereby represents and warrants to the Lenders that, as of the date of this Interest Election Request and after giving effect to the continuations or conversions being requested under Section 1 hereof, no Default or Event of Default has occurred and is continuing.

[*Signature page follows*]

IN WITNESS WHEREOF, the undersigned has executed this Interest Election Request this _____ day of _____, ____.

KINDER MORGAN, INC.,
as the Borrower

By: _____
Name:_____
Title:_____

EXHIBIT 10.15

EXHIBIT 2.10

FORM OF NOTICE OF PREPAYMENT

Date: _____, ____

To: Barclays Bank PLC,
1301 Sixth Avenue
New York, NY 10019
Attn: Patrick Shields
Phone: 212-526-9531
E-mail: bobby.fitzpatrick@barclays.com, 12145455230@tls.ldsprod.com and Patrick.shields@barclays.com

Ladies and Gentlemen:

Reference is made to that certain Revolving Credit Agreement, dated as of November 16, 2018 (as may be amended, restated, amended and restated, extended, supplemented or otherwise modified in writing from time to time in accordance with its terms, the "364-Day Credit Agreement"; the terms defined therein being used herein as therein defined), among Kinder Morgan, Inc., a Delaware corporation (the "Borrower"), the Lenders party thereto from time to time, Barclays Bank PLC, as Administrative Agent, and the other parties thereto. All capitalized terms used but not defined herein have the meanings assigned in the 364-Day Credit Agreement.

This Prepayment Notice is delivered to you pursuant to Section 2.10 of the Agreement. The Borrower hereby gives notice of a prepayment of Committed Loans as follows:

1. (select Type(s) of Loans)

☐ ABR Loans in the aggregate principal amount of $_____.

☐ Eurodollar Loans with an Interest Period ending _____, 201_ in the aggregate principal amount of $_____.

2. On _____, 201_ (a Business Day).

IN WITNESS WHEREOF, the undersigned have executed this Prepayment Notice this _____ day of _____, _____.

KINDER MORGAN, INC.,
as the Borrower

By: _____
Name:_____
Title:_____

EXHIBIT 2.16-A

[FORM OF]
U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Lenders That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Revolving Credit Agreement, dated as of November 16, 2018 (as further amended, supplemented or otherwise modified from time to time, the "364-Day Credit Agreement"), among Kinder Morgan, Inc. (the "Borrower"), Barclays Bank PLC, as administrative agent for the lenders party thereto (the "Lenders") and such Lenders.

Pursuant to the provisions of Section 2.16(g) of the 364-Day Credit Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the Loan(s) (as well as any Note(s) evidencing such Loan(s)) in respect of which it is providing this certificate, (ii) it is not a bank within the meaning of Section 881(c)(3)(A) of the Code, (iii) it is not a ten percent shareholder of the Borrower within the meaning of Section 881(c)(3)(B) of the Code and (iv) it is not a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished the Administrative Agent and the Borrower with a certificate of its non-U.S. Person status on IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform the Borrower and the Administrative Agent, and (2) the undersigned shall have at all times furnished the Borrower and the Administrative Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the 364-Day Credit Agreement and used herein shall have the meanings given to them in the 364-Day Credit Agreement.

[NAME OF LENDER]

By:
Name:
Title:

Date: _____ __, 20[ ]

EXHIBIT 2.16-B

[FORM OF]
U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Participants That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Revolving Credit Agreement, dated as of November 16, 2018 (as further amended, supplemented or otherwise modified from time to time, the "364-Day Credit Agreement"), among Kinder Morgan, Inc. (the "Borrower"), Barclays Bank PLC, as administrative agent for the lenders party thereto (the "Lenders") and such Lenders.

Pursuant to the provisions of Section 2.16(g) of the 364-Day Credit Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the participation in respect of which it is providing this certificate, (ii) it is not a bank within the meaning of Section 881(c)(3)(A) of the Code, (iii) it is not a ten percent shareholder of the Borrower within the meaning of Section 881(c)(3)(B) of the Code, and (iv) it is not a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with a certificate of its non-U.S. Person status on IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform such Lender in writing, and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the 364-Day Credit Agreement and used herein shall have the meanings given to them in the 364-Day Credit Agreement.

[NAME OF PARTICIPANT]

By:
Name:
Title:

Date: _____ __, 20[ ]

EXHIBIT 2.16-C

[FORM OF]
U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Participants That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Revolving Credit Agreement, dated as of November 16, 2018 (as further amended, supplemented or otherwise modified from time to time, the "364-Day Credit Agreement"), among Kinder Morgan, Inc. (the "Borrower), Barclays Bank PLC, as administrative agent for the lenders party thereto (the "Lenders") and such Lenders.

Pursuant to the provisions of Section 2.16(g) of the 364-Day Credit Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the participation in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such participation, (iii) with respect such participation, neither the undersigned nor any of its direct or indirect partners/members is a bank extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (iv) none of its direct or indirect partners/members is a ten percent shareholder of the Borrower within the meaning of Section 881(c)(3)(B) of the Code and (v) none of its direct or indirect partners/members is a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with IRS Form W-8IMY accompanied by one of the following forms from each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable, or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable, from each of such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform such Lender and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the 364-Day Credit Agreement and used herein shall have the meanings given to them in the 364-Day Credit Agreement.

[NAME OF PARTICIPANT]

By:
Name:
Title:

Date: _____ __, 20[ ]

EXHIBIT 2.16-D

[FORM OF]
U.S. TAX COMPLIANCE CERTIFICATE
(For Foreign Lenders That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Revolving Credit Agreement, dated as of November 16, 2018 (as further amended, supplemented or otherwise modified from time to time, the "364-Day Credit Agreement"), among Kinder Morgan, Inc. (the "Borrower"), Barclays Bank PLC, as administrative agent for the lenders party thereto (the "Lenders") and such Lenders.

Pursuant to the provisions of Section 2.16(g) of the 364-Day Credit Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the Loan(s) (as well as any Note(s) evidencing such Loan(s)) in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such Loan(s) (as well as any Note(s) evidencing such Loan(s)), (iii) with respect to the extension of credit pursuant to this 364-Day Credit Agreement or any other Loan Document, neither the undersigned nor any of its direct or indirect partners/members is a bank extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (iv) none of its direct or indirect partners/members is a ten percent shareholder of the Borrower within the meaning of Section 881(c)(3)(B) of the Code and (v) none of its direct or indirect partners/members is a controlled foreign corporation related to the Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished the Administrative Agent and the Borrower with IRS Form W-8IMY accompanied by one of the following forms from each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable, or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable, from each of such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided on this certificate changes, the undersigned shall promptly so inform the Borrower and the Administrative Agent, and (2) the undersigned shall have at all times furnished the Borrower and the Administrative Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the 364-Day Credit Agreement and used herein shall have the meanings given to them in the 364-Day Credit Agreement.

[NAME OF LENDER]

By:
Name:
Title:

Date: _____ __, 20[ ]

EXHIBIT 10.15

EXHIBIT 5.01

FORM OF COMPLIANCE CERTIFICATE

The undersigned hereby certifies that he is the _____ of KINDER MORGAN, INC., a Delaware corporation (the "Borrower"), and that as such he is authorized to execute this certificate on behalf of the Borrower. With reference to the Revolving Credit Agreement dated as of November 16, 2018 (as further restated, amended, modified, supplemented and in effect from time to time, the "364-Day Credit Agreement") among the Borrower, Barclays Bank PLC, as Administrative Agent, for the lenders (the "Lenders") and such Lenders, the undersigned represents and warrants as follows (each capitalized term used herein having the same meaning given to it in the 364-Day Credit Agreement unless otherwise specified);

Attached hereto as Annex I are the detailed computations necessary to determine whether the Borrower is in compliance with Section 6.07 of the 364-Day Credit Agreement as of the end of the [fiscal quarter][fiscal year] ending _____.

[Attached hereto as Annex II is a list of the Material Subsidiaries.][1]

[There has been no change in the list of Material Subsidiaries since [ ], the date of the last Compliance Certificate delivered prior to the date hereof.] [Attached hereto as Annex II is an update to the list of Material Subsidiaries to reflect changes in such list since [ ], the date of the last Compliance Certificate delivered prior to the date hereof.][2]

There does not exist any Default or Event of Default under the 364-Day Credit Agreement as of the date of this Compliance Certificate, except as set forth in a separate attachment, if any, to this Compliance Certificate, setting forth the details thereof and the action taken or proposed to be taken by the Borrower with respect thereto.

EXECUTED AND DELIVERED this _____ day of _____, _____.

KINDER MORGAN, INC.,
as the Borrower

By: _____
Name:_____
Title:_____

---

1 To be included in the compliance certificate delivered simultaneously with the first set of financial statements delivered following the Closing Date.

2 Select the appropriate option for each Compliance Certificate delivered simultaneously with the second set of financial statements delivered following the Closing Date and each set of financial statements delivered thereafter.

Exhibit 10.16

CROSS GUARANTEE AGREEMENT

This CROSS GUARANTEE AGREEMENT is dated as of November 26, 2014 (as amended, restated, supplemented or otherwise modified from time to time, this "Agreement"), by each of the signatories listed on the signature pages hereto and each of the other entities that becomes a party hereto pursuant to Section 19 (the "Guarantors" and individually, a "Guarantor"), for the benefit of the Guaranteed Parties (as defined below).

W I T N E S S E T H:

WHEREAS, Kinder Morgan, Inc., a Delaware corporation ("KMI"), and certain of its direct and indirect Subsidiaries have outstanding senior, unsecured Indebtedness and may from time to time issue additional senior, unsecured Indebtedness;

WHEREAS, each Guarantor, other than KMI, is a direct or indirect Subsidiary of KMI;

WHEREAS, each Guarantor desires to provide the guarantee set forth herein with respect to the Indebtedness of such Guarantors that constitutes the Guaranteed Obligations; and

WHEREAS, each Guarantor acknowledges that it will derive substantial direct and indirect benefit from the making of the guarantees hereby;

NOW, THEREFORE, in consideration of the premises, the Guarantors hereby agree with each other for the benefit of the Guaranteed Parties as follows:

1. Defined Terms.

(a) As used in this Agreement, the following terms have the meanings specified below:

"Agreement" has the meaning provided in the preamble hereto.

"Bankruptcy Code" means Title 11 of the United States Code, as now or hereafter in effect, or any successor thereto.

"Capital Stock" means, with respect to any Person, any and all shares, interests, rights to purchase, warrants, options, participations or other equivalents (however designated) of such Person's equity, including (i) all common stock and preferred stock, any limited or general partnership interest and any limited liability company member interest, (ii) beneficial interests in trusts, and (iii) any other interest or participation that confers upon a Person the right to receive a share of the profits and losses of, or distribution of assets of, the issuing Person.

"CFC" means a Person that is a "controlled foreign corporation" within the meaning of Section 957 of the Internal Revenue Code of 1986, as amended.

"Commodity Exchange Act" means the Commodity Exchange Act (7 U.S.C. § 1 et seq.), as amended from time to time, and any successor statute.

"Consolidated Assets" means, at the date of any determination thereof, the total assets of KMI and its Subsidiaries as set forth on a consolidated balance sheet of KMI and its Subsidiaries for their most recently completed fiscal quarter, prepared in accordance with GAAP.

"Consolidated Tangible Assets" means, at the date of any determination thereof, Consolidated Assets after deducting therefrom the value, net of any applicable reserves and accumulated

amortization, of all goodwill, trade names, trademarks, patents and other like intangible assets, all as set forth, or on a pro forma basis would be set forth, on a consolidated balance sheet of KMI and its Subsidiaries for their most recently completed fiscal quarter, prepared in accordance with GAAP.

"Domestic Subsidiary" means any Subsidiary of KMI organized under the laws of any jurisdiction within the United States.

"Excluded Subsidiary" means (i) any Subsidiary that is not a Wholly-owned Domestic Operating Subsidiary, (ii) any Domestic Subsidiary that is a Subsidiary of a CFC or any Domestic Subsidiary (including a disregarded entity for U.S. federal income tax purposes) substantially all of whose assets (held directly or through Subsidiaries) consist of Capital Stock of one or more CFCs or Indebtedness of such CFCs, (iii) any Immaterial Subsidiary, (iv) any Subsidiary listed on Schedule III, (v) each of Calnev Pipe Line LLC, SFPP, L.P., Kinder Morgan G.P., Inc. and EPEC Realty, Inc. and each of its Subsidiaries, (vi) any other Subsidiary that is not a Guarantor under the Revolving Credit Agreement Guarantee, (vii) any not-for-profit Subsidiary, (viii) any Subsidiary that is prohibited by a Requirement of Law from guaranteeing the Guaranteed Obligations, and (ix) any Subsidiary acquired by KMI or its Subsidiaries after the date of this Agreement to the extent, and so long as, the financing documentation governing any existing Indebtedness of such Subsidiary that survives such acquisition prohibits such Subsidiary from guaranteeing the Guaranteed Obligations; *provided*, that notwithstanding the foregoing, any Subsidiary that is party to the Revolving Credit Agreement Guarantee or that Guarantees any senior notes or senior debt securities issued by KMI (other than pursuant to this Agreement) shall not constitute an Excluded Subsidiary for so long as such Guarantee is in effect.

"Excluded Swap Obligation" means, with respect to any Guarantor, any Swap Obligation if, and to the extent that, all or a portion of the Guarantee of such Guarantor of such Swap Obligation (or any Guarantee thereof) is or becomes illegal under the Commodity Exchange Act or any rule, regulation or order of the Commodity Futures Trading Commission (or the application or official interpretation of any thereof) by virtue of such Guarantor's failure for any reason to constitute an "eligible contract participant" as defined in the Commodity Exchange Act and the regulations thereunder at the time the Guarantee of such Guarantor becomes effective with respect to such Swap Obligation. If a Swap Obligation arises under a master agreement governing more than one swap, such exclusion shall apply only to the portion of such Swap Obligation that is attributable to swaps for which such Guarantee is or becomes illegal.

"GAAP" means generally accepted accounting principles in the United States of America from time to time, including as set forth in the opinions, statements and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and the Financial Accounting Standards Board.

"Governmental Authority" means the government of the United States of America or any other nation, or of any political subdivision thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government (including any supra national bodies such as the European Union or the European Central Bank).

"Guarantee" of or by any Person (the "guarantor") means any obligation, contingent or otherwise, of the guarantor guaranteeing or having the economic effect of guaranteeing any Indebtedness or other obligation of any other Person (the "primary obligor") in any manner, whether directly or indirectly, and including any obligation of the guarantor, direct or indirect, (i) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness or other obligation or to purchase (or to advance or supply funds for the purchase of) any security for the payment thereof, (ii) to purchase or lease property, securities or services for the purpose of assuring the owner of such Indebtedness

or other obligation of the payment thereof, (iii) to maintain working capital, equity capital or any other financial statement condition or liquidity of the primary obligor so as to enable the primary obligor to pay such Indebtedness or other obligation or (iv) as an account party in respect of any letter of credit or letter of guaranty issued to support such Indebtedness or obligation; *provided* that the term Guarantee shall not include endorsements for collection or deposit in the ordinary course of business.

"Guarantee Termination Date" has the meaning set forth in Section 2(d).

"Guaranteed Obligations" means the Indebtedness set forth on Schedule I hereto, as such schedule may be amended from time to time in accordance with the terms of this Agreement; *provided* that the term "Guaranteed Obligations" shall exclude any Excluded Swap Obligations.

"Guaranteed Parties" means, collectively, (i) in the case of Guaranteed Obligations that are governed by trust indentures, the holders (as that term is defined in the applicable trust indenture) of such Guaranteed Obligations, (ii) in the case of Guaranteed Obligations that are governed by loan agreements, credit agreements, or similar agreements, the lenders providing such loans or credit, and (iii) in the case of Guaranteed Obligations with respect to Hedging Agreements, the counterparties under such agreements.

"Guarantor" has the meaning provided in the preamble hereto. Schedule II hereto, as such schedule may be amended from time to time in accordance with the terms of this Agreement, sets forth the name of each Guarantor.

"Hedging Agreement" means a financial instrument, agreement or security which hedges or is used to hedge or manage the risk associated with a change in interest rates, foreign currency exchange rates or commodity prices (but excluding any purchase, swap, derivative contract or similar agreement relating to power, electricity or any related commodity product).

"Immaterial Subsidiary" means any Subsidiary that is not a Material Subsidiary.

"Indebtedness" means, collectively, (i) any senior, unsecured obligation created or assumed by any Person for borrowed money, including all obligations of such Person evidenced by bonds, debentures, notes or similar instruments (other than surety, performance and guaranty bonds), and (ii) all payment obligations of any Person with respect to obligations under Hedging Agreements.

"Investment Grade Rating" means a rating equal to or higher than Baa3 by Moody's and BBB- by S&P; *provided, however,* that if (i) either of Moody's or S&P changes its rating system, such ratings shall be the equivalent ratings after such changes or (ii) Moody's or S&P shall not make a rating of a Guaranteed Obligation publicly available, the references above to Moody's or S&P or both of them, as the case may be, shall be to a nationally recognized U.S. rating agency or agencies, as the case may be, selected by KMI and the references to the ratings categories above shall be to the corresponding rating categories of such rating agency or rating agencies, as the case may be.

"Issuer" means the issuer, borrower, or other applicable primary obligor of a Guaranteed Obligation.

"KMI" has the meaning provided in the recitals hereto.

"Lien" means, with respect to any asset (i) any mortgage, deed of trust, lien, pledge, hypothecation, encumbrance, charge or security interest in, on or of such asset, and (ii) the interest of a vendor or a lessor under any conditional sale agreement, capital lease or title retention agreement (or any financing lease having substantially the same economic effect as any of the foregoing) relating to such asset.

"Material Subsidiary" means, as at any date of determination, any Subsidiary of KMI whose total tangible assets (for purposes of the below, when combined with the tangible assets of such Subsidiary's Subsidiaries, after eliminating intercompany obligations) as at such date of determination are greater than or equal to 5% of Consolidated Tangible Assets as of the last day of the fiscal quarter most recently ended for which financial statements of KMI have been filed with the SEC.

"Moody's" means Moody's Investors Service, Inc. and its successors.

"Operating Subsidiary" means any operating company that is a Subsidiary of KMI.

"Person" means any natural person, corporation, limited liability company, trust, joint venture, association, company, partnership, Governmental Authority or other entity.

"Qualified ECP Guarantor" means, in respect of any Swap Obligation, each Guarantor that has total assets exceeding $10,000,000 at the time the relevant Guarantee becomes effective with respect to such Swap Obligation or such other person as constitutes an "eligible contract participant" under the Commodity Exchange Act or any regulations promulgated thereunder and can cause another person to qualify as an "eligible contract participant" at such time by entering into a keepwell under Section 1a(18)(A)(v)(II) of the Commodity Exchange Act.

"Rating Agencies" means Moody's and S&P; *provided* that, if at the relevant time neither Moody's nor S&P shall be rating the relevant Guaranteed Obligation, then "Rating Agencies" shall mean another nationally recognized rating service that rates such Guaranteed Obligation.

"Rating Date" means the date immediately prior to the earlier of (i) the occurrence of a Release Event and (ii) public notice of the intention to effect a Release Event.

"Rating Decline" means, with respect to a Guaranteed Obligation, the occurrence of the following on, or within 90 days after, the date of the occurrence of a Release Event or of public notice of the intention to effect a Release Event (which period may be extended so long as the rating of such Guaranteed Obligation is under publicly announced consideration for possible downgrade by either of the Rating Agencies): (i) in the event such Guaranteed Obligation is assigned an Investment Grade Rating by both Rating Agencies on the Rating Date, the rating of such Guaranteed Obligation by one or both of the Rating Agencies shall be below an Investment Grade Rating; or (ii) in the event such Guaranteed Obligation is rated below an Investment Grade Rating by either of the Rating Agencies on the Rating Date, any such below-Investment Grade Rating of such Guaranteed Obligation shall be decreased by one or more gradations (including gradations within rating categories as well as between rating categories).

"Release Event" has the meaning set forth in Section 6(b).

"Requirement of Law" means any law, statute, code, ordinance, order, determination, rule, regulation, judgment, decree, injunction, franchise, permit, certificate, license, authorization or other directive or requirement (whether or not having the force of law), including environmental laws, energy regulations and occupational, safety and health standards or controls, of any Governmental Authority.

"Revolving Credit Agreement" means the Revolving Credit Agreement, dated as of September 19, 2014, among KMI, the lenders party thereto and Barclays Bank PLC, as administrative agent, as such credit agreement may be amended, modified, supplemented or restated from time to time, or refunded, refinanced, restructured, replaced, renewed, repaid or extended from time to time (whether with the original agents and lenders or other agents or lenders or trustee or otherwise, and whether provided under the original credit agreement or other credit agreements or note indentures or otherwise), including, without limitation, increasing the amount of available borrowings or other Indebtedness thereunder.

"Revolving Credit Agreement Guarantee" means the Guarantee Agreement, dated as of November 26, 2014, made by the Subsidiaries of KMI party thereto in favor of Barclays Bank PLC, as administrative agent, for the benefit of the lenders and the issuing banks under the Revolving Credit Agreement, as such guarantee agreement may be amended, modified, supplemented or restated from time to time, and as it may be replaced or renewed from time to time in connection with any amendment, modification, supplement, restatement, refunding, refinancing, restructuring, replacement, renewal, repayment, or extension of any Revolving Credit Agreement from time to time.

"S&P" means Standard & Poor's Rating Services, a division of The McGraw-Hill Companies, Inc., and its successors.

"SEC" means the United States Securities and Exchange Commission.

"Subsidiary" means, with respect to any Person (the "parent") at any date, any corporation, limited liability company, partnership, association or other entity the accounts of which would be consolidated with those of the parent in the parent's consolidated financial statements if such financial statements were prepared in accordance with GAAP as of such date, as well as any other corporation, limited liability company, partnership, association or other entity (a) of which securities or other ownership interests representing more than 50% of the equity or more than 50% of the ordinary voting power or, in the case of a partnership, more than 50% of the general partner interests are, as of such date, owned, controlled or held, or (b) that is, as of such date, otherwise controlled, by the parent or one or more Subsidiaries of the parent or by the parent and one or more Subsidiaries of the parent. Unless the context otherwise clearly requires, references in this Agreement to a "Subsidiary" or the "Subsidiaries" refer to a Subsidiary or the Subsidiaries of KMI. Notwithstanding the foregoing, Plantation Pipe Line Company, a Delaware and Virginia corporation, shall not be a Subsidiary of KMI until such time as its assets and liabilities, profit or loss and cash flow are required under GAAP to be consolidated with those of KMI.

"Swap Obligation" means, with respect to any Guarantor, any obligation to pay or perform under any agreement, contract or transaction that constitutes a "swap" within the meaning of Section 1a(47) of the Commodity Exchange Act.

"Wholly-owned Domestic Operating Subsidiary" means any Wholly-owned Subsidiary that constitutes (i) a Domestic Subsidiary and (ii) an Operating Subsidiary.

"Wholly-owned Subsidiary" means a Subsidiary of which all issued and outstanding Capital Stock (excluding in the case of a corporation, directors' qualifying shares) is directly or indirectly owned by KMI.

(b) The words "hereof", "herein" and "hereunder" and words of similar import when used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this

Agreement, and Section references are to Sections of this Agreement unless otherwise specified. The words "include", "includes" and "including" shall be deemed to be followed by the phrase "without limitation".

(c) The meanings given to terms defined herein shall be equally applicable to both the singular and plural forms of such terms.

2. Guarantee.

(a) Subject to the provisions of Section 2(b), each of the Guarantors hereby, jointly and severally, unconditionally and irrevocably, guarantees, as primary obligor and not merely as surety, for the benefit of the Guaranteed Parties, the prompt and complete payment when due (whether at the stated maturity, by acceleration or otherwise) of the Guaranteed Obligations; *provided* that each Guarantor shall be released from its respective guarantee obligations under this Agreement as provided in Section 6(b). Upon the failure of an Issuer to punctually pay any Guaranteed Obligation, each Guarantor shall, upon written demand by the applicable Guaranteed Party to such Guarantor, pay or cause to be paid such amounts.

(b) Anything herein to the contrary notwithstanding, the maximum liability of each Guarantor hereunder shall in no event exceed the amount that can be guaranteed by such Guarantor under the Bankruptcy Code or any applicable laws relating to fraudulent conveyances, fraudulent transfers or the insolvency of debtors after giving full effect to the liability under this Agreement and its related contribution rights set forth in this Section 2, but before taking into account any liabilities under any other Guarantees.

(c) Each Guarantor agrees that the Guaranteed Obligations may at any time and from time to time exceed the amount of the liability of such Guarantor hereunder (as a result of the limitations set forth in Section 2(b) or elsewhere in this Agreement) without impairing this Agreement or affecting the rights and remedies of any Guaranteed Party hereunder.

(d) No payment or payments made by any Issuer, any of the Guarantors, any other guarantor or any other Person or received or collected by any Guaranteed Party from any Issuer, any of the Guarantors, any other guarantor or any other Person by virtue of any action or proceeding or any set-off or appropriation or application at any time or from time to time in reduction of or in payment of any Guaranteed Obligation shall be deemed to modify, reduce, release or otherwise affect the liability of any Guarantor hereunder, which shall, notwithstanding any such payment or payments, other than payments made by such Guarantor in respect of such Guaranteed Obligation or payments received or collected from such Guarantor in respect of such Guaranteed Obligation, remain liable for the Guaranteed Obligations up to the maximum liability of such Guarantor hereunder until all Guaranteed Obligations (other than any contingent indemnity obligations not then due and any letters of credit that remain outstanding which have been fully cash collateralized or otherwise back-stopped to the reasonable satisfaction of the applicable issuing bank) shall have been discharged by payment in full or shall have been deemed paid and discharged by defeasance pursuant to the terms of the instruments governing such Guaranteed Obligations (the "Guarantee Termination Date").

(e) If and to the extent required in order for the obligations of any Guarantor hereunder to be enforceable under applicable federal, state and other laws relating to the insolvency of debtors, the maximum liability of such Guarantor hereunder shall be limited to the greatest amount which can lawfully be guaranteed by such Guarantor under such laws, after giving effect to any rights of contribution, reimbursement and subrogation arising hereunder. Each Guarantor acknowledges and agrees

that, to the extent not prohibited by applicable law, (i) such Guarantor (as opposed to its creditors, representatives of creditors or bankruptcy trustee, including such Guarantor in its capacity as debtor in possession exercising any powers of a bankruptcy trustee) has no personal right under such laws to reduce, or request any judicial relief that has the effect of reducing, the amount of its liability under this Agreement, (ii) such Guarantor (as opposed to its creditors, representatives of creditors or bankruptcy trustee, including such Guarantor in its capacity as debtor in possession exercising any powers of a bankruptcy trustee) has no personal right to enforce the limitation set forth in this Section 2(e) or to reduce, or request judicial relief reducing, the amount of its liability under this Agreement, and (iii) the limitation set forth in this Section 2(e) may be enforced only to the extent required under such laws in order for the obligations of such Guarantor under this Agreement to be enforceable under such laws and only by or for the benefit of a creditor, representative of creditors or bankruptcy trustee of such Guarantor or other Person entitled, under such laws, to enforce the provisions hereof.

3. Right of Contribution. Each Guarantor hereby agrees that to the extent that a Guarantor shall have paid more than its proportionate share of any payment made hereunder (including by way of set-off rights being exercised against it), such Guarantor shall be entitled to seek and receive contribution from and against any other Guarantor hereunder who has not paid its proportionate share of such payment as set forth in this Section 3. To the extent that any Guarantor shall be required hereunder to pay any portion of any Guaranteed Obligation guaranteed hereunder exceeding the greater of (a) the amount of the value actually received by such Guarantor and its Subsidiaries from such Guaranteed Obligation and (b) the amount such Guarantor would otherwise have paid if such Guarantor had paid the aggregate amount of such Guaranteed Obligation guaranteed hereunder (excluding the amount thereof repaid by the Issuer of such Guaranteed Obligation) in the same proportion as such Guarantor's net worth on the date enforcement is sought hereunder bears to the aggregate net worth of all the Guarantors on such date, then such Guarantor shall be reimbursed by such other Guarantors for the amount of such excess, pro rata, based on the respective net worth of such other Guarantors on such date; *provided* that any Guarantor's right of reimbursement shall be subject to the terms and conditions of Section 5 hereof. For purposes of determining the net worth of any Guarantor in connection with the foregoing, all Guarantees of such Guarantor other than pursuant to this Agreement will be deemed to be enforceable and payable after its obligations pursuant to this Agreement. The provisions of this Section 3 shall in no respect limit the obligations and liabilities of any Guarantor to the Guaranteed Parties, and each Guarantor shall remain liable to the Guaranteed Parties for the full amount guaranteed by such Guarantor hereunder.

4. No Right of Set-off. No Guaranteed Party shall have, as a result of this Agreement, any right of set-off against any amount owing by such Guaranteed Party to or for the credit or the account of a Guarantor.

5. No Subrogation. Notwithstanding any payment or payments made by any of the Guarantors hereunder, no Guarantor shall be entitled to be subrogated to any of the rights (or if subrogated by operation of law, such Guarantor hereby waives such rights to the extent permitted by applicable law) of any Guaranteed Party against any Issuer or any other Guarantor or any collateral security or guarantee or right of offset held by any Guaranteed Party for the payment of any Guaranteed Obligation, nor shall any Guarantor seek or be entitled to seek any contribution or reimbursement from any Issuer or any other Guarantor in respect of payments made by such Guarantor hereunder, until the Guarantee Termination Date. If any amount shall be paid to any Guarantor on account of such subrogation, contribution or reimbursement rights at any time prior to the Guarantee Termination Date, such amount shall be held by such Guarantor in trust for the applicable Guaranteed Parties, segregated from other funds of such Guarantor, and shall, forthwith upon receipt by such Guarantor, be turned over to the applicable Guaranteed Parties in the exact form received by such Guarantor (duly indorsed by such

Guarantor to the applicable Guaranteed Parties if required), to be applied against the applicable Guaranteed Obligation, whether due or to become due.

6. Amendments, etc. with Respect to the Guaranteed Obligations; Waiver of Rights; Release.

(a) Each Guarantor shall remain obligated hereunder notwithstanding that, without any reservation of rights against any Guarantor and without notice to or further assent by any Guarantor, (i) any demand for payment of any Guaranteed Obligation made by any Guaranteed Party may be rescinded by such party and any Guaranteed Obligation continued, (ii) a Guaranteed Obligation, or the liability of any other party upon or for any part thereof, or any collateral security or guarantee therefor or right of offset with respect thereto, may, from time to time, in whole or in part, be renewed, extended, amended, modified, accelerated, compromised, waived, allowed to lapse, surrendered or released by any Guaranteed Party, (iii) the instruments governing any Guaranteed Obligation may be amended, modified, supplemented or terminated, in whole or in part, and (iv) any collateral security, guarantee or right of offset at any time held by any Guaranteed Party for the payment of any Guaranteed Obligation may be sold, exchanged, waived, allowed to lapse, surrendered or released. No Guaranteed Party shall have any obligation to protect, secure, perfect or insure any Lien at any time held by it as security for the Guaranteed Obligations or for this Agreement or any property subject thereto. When making any demand hereunder against any Guarantor, a Guaranteed Party may, but shall be under no obligation to, make a similar demand on the Issuer of the applicable Guaranteed Obligation or any other Guarantor or any other person, and any failure by a Guaranteed Party to make any such demand or to collect any payments from such Issuer or any other Guarantor or any other person or any release of such Issuer or any other Guarantor or any other person shall not relieve any Guarantor in respect of which a demand or collection is not made or any Guarantor not so released of its several obligations or liabilities hereunder, and shall not impair or affect the rights and remedies, express or implied, or as a matter of law, of any Guaranteed Party against any Guarantor. For the purposes hereof "demand" shall include the commencement and continuance of any legal proceedings.

(b) A Guarantor shall be automatically released from its guarantee hereunder upon release of such Guarantor from the Revolving Credit Agreement Guarantee, including upon consummation of any transaction resulting in such Guarantor ceasing to constitute a Subsidiary or upon any Guarantor becoming an Excluded Subsidiary (such transaction or event, a "Release Event").

(c) Upon the occurrence of a Release Event, each Guaranteed Obligation for which such released Guarantor was the Issuer shall be automatically released from the provisions of this Agreement and shall cease to constitute a Guaranteed Obligation hereunder; *provided* that in the case of any Guaranteed Obligation that has been assigned an Investment Grade Rating by the Rating Agencies, such Guaranteed Obligation shall be so released, effective as of the 91st day after the occurrence of the Release Event, if and only if a Rating Decline with respect to such Guaranteed Obligation does not occur.

7. Guarantee Absolute and Unconditional.

(a) Each Guarantor waives any and all notice of the creation, contraction, incurrence, renewal, extension, amendment, waiver or accrual of any of the Guaranteed Obligations, and notice of or proof of reliance by any Guaranteed Party upon this Agreement or acceptance of this Agreement. To the fullest extent permitted by applicable law, each Guarantor waives diligence, promptness, presentment, protest and notice of protest, demand for payment or performance, notice of default or nonpayment, notice of acceptance and any other notice in respect of the Guaranteed Obligations or any part of them, and any defense arising by reason of any disability or other defense of any Issuer or any of the Guarantors

with respect to the Guaranteed Obligations. Each Guarantor understands and agrees that this Agreement shall be construed as a continuing, absolute and unconditional guarantee of payment without regard to (i) the validity, regularity or enforceability of any of the Guaranteed Obligations, the indenture, loan agreement, note or other instrument evidencing or governing any of the Guaranteed Obligations or any collateral security therefor or guarantee or right of offset with respect thereto at any time or from time to time held by any Guaranteed Party, (ii) any defense, set-off or counterclaim (other than a defense of payment or performance) that may at any time be available to or be asserted by any Issuer against any Guaranteed Party or (iii) any other circumstance whatsoever (with or without notice to or knowledge of any Issuer or such Guarantor) that constitutes, or might be construed to constitute, an equitable or legal discharge of any Issuer for any of the Guaranteed Obligations, or of such Guarantor under this Agreement, in bankruptcy or in any other instance. When pursuing its rights and remedies hereunder against any Guarantor, any Guaranteed Party may, but shall be under no obligation to, pursue such rights and remedies as it may have against the Issuer or any other Person or against any collateral security or guarantee for the Guaranteed Obligations or any right of offset with respect thereto, and any failure by any Guaranteed Party to pursue such other rights or remedies or to collect any payments from the Issuer or any such other Person or to realize upon any such collateral security or guarantee or to exercise any such right of offset, or any release of the Issuer or any such other Person or any such collateral security, guarantee or right of offset, shall not relieve such Guarantor of any liability hereunder, and shall not impair or affect the rights and remedies, whether express, implied or available as a matter of law, of the other Guaranteed Parties against such Guarantor.

(b) This Agreement shall remain in full force and effect and be binding in accordance with and to the extent of its terms upon each Guarantor and the successors and assigns thereof and shall inure to the benefit of the Guaranteed Parties and their respective successors, indorsees, transferees and assigns until the Guarantee Termination Date.

8. Reinstatement. This Agreement shall continue to be effective, or be reinstated, as the case may be, if at any time payment, or any part thereof, of any of the Guaranteed Obligations is rescinded or must otherwise be restored or returned by any Guaranteed Party upon the insolvency, bankruptcy, dissolution, liquidation or reorganization of any Issuer or any Guarantor, or upon or as a result of the appointment of a receiver, intervenor or conservator of, or trustee or similar officer for, any Issuer or any Guarantor or any substantial part of its property, or otherwise, all as though such payments had not been made.

9. Payments. Each Guarantor hereby guarantees that payments hereunder will be paid to the applicable Guaranteed Parties without set-off or counterclaim in dollars.

10. Representations and Warranties. Each Guarantor hereby represents and warrants to each Guaranteed Party that the following representations and warranties are true and correct in all material respects as of the date of this Agreement or as of the date such Guarantor became a party to this Agreement, as applicable:

(a) such Guarantor (i) is a corporation, partnership or limited liability company duly organized or formed, validly existing and in good standing under the laws of the state of its incorporation, organization or formation, (ii) has all requisite corporate, partnership, limited liability company or other power and all material governmental licenses, authorizations, consents and approvals required to carry on its business as now conducted and (iii) is duly qualified to do business and is in good standing in every jurisdiction in which the failure to be so qualified would have a material adverse effect on its ability to perform its obligations under this Agreement;

(b) such Guarantor has all requisite corporate (or other organizational) power and authority to execute and deliver and to perform its obligations under this Agreement, and all such actions have been duly authorized by all necessary proceedings on its behalf;

(c) this Agreement has been duly and validly executed and delivered by or on behalf of such Guarantor and constitutes the valid and legally binding agreement of such Guarantor, enforceable against such Guarantor in accordance with its terms, except (i) as may be limited by bankruptcy, insolvency, reorganization, moratorium, fraudulent transfer, fraudulent conveyance or other similar laws relating to or affecting the enforcement of creditors' rights generally, and by general principles of equity (including principles of good faith, reasonableness, materiality and fair dealing) which may, among other things, limit the right to obtain equitable remedies (regardless of whether considered in a proceeding in equity or at law) and (ii) as to the enforceability of provisions for indemnification for violation of applicable securities laws, limitations thereon arising as a matter of law or public policy;

(d) no authorization, consent, approval, license or exemption of or registration, declaration or filing with any Governmental Authority is necessary for the valid execution and delivery of, or the performance by such Guarantor of its obligations hereunder, except those that have been obtained and such matters relating to performance as would ordinarily be done in the ordinary course of business after the date of this Agreement or as of the date such Guarantor became a party to this Agreement, as applicable; and

(e) neither the execution and delivery of, nor the performance by such Guarantor of its obligations under, this Agreement will (i) breach or violate any applicable Requirement of Law, (ii) result in any breach or violation of any of the terms, covenants, conditions or provisions of, or constitute a default under, or result in the creation or imposition of (or the obligation to create or impose) any Lien upon any of its property or assets (other than Liens created or contemplated by this Agreement) pursuant to the terms of, any indenture, mortgage, deed of trust, agreement or other instrument to which it or any of its Subsidiaries is party or by which any of its properties or assets, or those of any of its Subsidiaries is bound or to which it is subject, except for breaches, violations and defaults under clauses (i) and (ii) that neither individually nor in the aggregate could reasonably be expected to result in a material adverse effect on its ability to perform its obligations under this Agreement, or (iii) violate any provision of the organizational documents of such Guarantor.

11. Rights of Guaranteed Parties. Each Guarantor acknowledges and agrees that any changes in the identity of the Persons from time to time comprising the Guaranteed Parties gives rise to an equivalent change in the Guaranteed Parties, without any further act. Upon such an occurrence, the persons then comprising the Guaranteed Parties are vested with the rights, remedies and discretions of the Guaranteed Parties under this Agreement.

12. Notices.

(a) All notices, requests, demands and other communications to any Guarantor pursuant hereto shall be in writing and mailed, telecopied or delivered to such Guarantor in care of KMI, 1001 Louisiana Street, Suite 1000, Houston, Texas 77002, Attention: Treasurer, Telecopy: (713) 445-8302.

(b) KMI will provide a copy of this Agreement, including the most recently amended schedules and supplements hereto, to any Guaranteed Party upon written request to the address set forth in Section 12(a); *provided, however*, that KMI's obligations under this Section 12(b) shall be deemed satisfied if KMI has filed a copy of this Agreement, including the most recently amended schedules and

supplements hereto, with the SEC within three months preceding the date on which KMI receives such written request.

13. Counterparts. This Agreement may be executed by one or more of the parties to this Agreement on any number of separate counterparts (including by facsimile or other electronic transmission), and all of said counterparts taken together shall be deemed to constitute one and the same instrument. A set of the copies of this Agreement signed by all the parties shall be lodged with KMI.

14. Severability. Any provision of this Agreement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction. The parties hereto shall endeavor in good-faith negotiations to replace the invalid, illegal or unenforceable provisions with valid provisions the economic effect of which comes as close as possible to that of the invalid, illegal or unenforceable provisions.

15. Integration. This Agreement represents the agreement of each Guarantor with respect to the subject matter hereof, and there are no promises, undertakings, representations or warranties by any Guaranteed Party relative to the subject matter hereof not expressly set forth or referred to herein.

16. Amendments; No Waiver; Cumulative Remedies.

(a) None of the terms or provisions of this Agreement may be waived, amended, supplemented or otherwise modified except by a written instrument executed by the affected Guarantors and KMI.

(b) The Guarantors may amend or supplement this Agreement by a written instrument executed by all Guarantors:

(i) to cure any ambiguity, defect or inconsistency;

(ii) to reflect a change in the Guarantors or the Guaranteed Obligations made in accordance with this Agreement;

(iii) to make any change that would provide any additional rights or benefits to the Guaranteed Parties or that would not adversely affect the legal rights hereunder of any Guaranteed Party in any material respect; or

(iv) to conform this Agreement to any change made to the Revolving Credit Agreement or to the Revolving Credit Agreement Guarantee.

Except as set forth in this clause (b) or otherwise provided herein, the Guarantors may not amend, supplement or otherwise modify this Agreement prior to the Guarantee Termination Date without the prior written consent of the holders of the majority of the outstanding principal amount of the Guaranteed Obligations (excluding obligations with respect to Hedging Agreements). Notwithstanding the foregoing, in the case of an amendment that would reasonably be expected to adversely, materially and disproportionately affect Guaranteed Parties with Guaranteed Obligations existing under Hedging Agreements relative to the other Guaranteed Parties, the foregoing exclusion of obligations with respect to Hedging Agreements shall not apply, and the outstanding principal amount attributable to each such Guaranteed Party's Guaranteed Obligations shall be deemed to be equal to the termination payment that

would be due to such Guaranteed Party as if the valuation date were an "Early Termination Date" under and calculated in accordance with each applicable Hedging Agreement.

(c) No Guaranteed Party shall by any act, delay, indulgence, omission or otherwise be deemed to have waived any right or remedy hereunder or to have acquiesced in any breach of any of the terms and conditions hereof. No failure to exercise, nor any delay in exercising, on the part of any Guaranteed Party, any right, power or privilege hereunder shall operate as a waiver thereof. No single or partial exercise of any right, power or privilege hereunder shall preclude any other or further exercise thereof or the exercise of any other right, power or privilege. A waiver by a Guaranteed Party of any right or remedy hereunder on any one occasion shall not be construed as a bar to any right or remedy that such Guaranteed Party would otherwise have on any future occasion.

(d) The rights, remedies, powers and privileges herein provided are cumulative, may be exercised singly or concurrently and are not exclusive of any other rights or remedies provided by law.

17. Section Headings. The Section headings used in this Agreement are for convenience of reference only and are not to affect the construction hereof or be taken into consideration in the interpretation hereof.

18. Successors and Assigns. This Agreement shall be binding upon the successors and assigns of each Guarantor and shall inure to the benefit of the Guaranteed Parties and their respective successors and permitted assigns, except that no Guarantor may assign, transfer or delegate any of its rights or obligations under this Agreement except pursuant to a transaction permitted by the Revolving Credit Agreement and in connection with a corresponding assignment under the Revolving Credit Agreement Guarantee.

19. Additional Guarantors.

(a) KMI shall cause each Subsidiary (other than any Excluded Subsidiary) formed or otherwise purchased or acquired after the date of this Agreement (including each Subsidiary that ceases to constitute an Excluded Subsidiary after the date of this Agreement) to execute a supplement to this Agreement and become a Guarantor within 45 days of the occurrence of the applicable event specified in this Section 19(a).

(b) Each Subsidiary of KMI that becomes, at the request of KMI, or that is required pursuant to Section 19(a) to become, a party to this Agreement shall become a Guarantor, with the same force and effect as if originally named as a Guarantor herein, for all purposes of this Agreement upon execution and delivery by such Subsidiary of a written supplement substantially in the form of Annex A hereto. The execution and delivery of any instrument adding an additional Guarantor as a party to this Agreement shall not require the consent of any other Guarantor hereunder. The rights and obligations of each Guarantor hereunder shall remain in full force and effect notwithstanding the addition of any new Guarantor as a party to this Agreement.

20. Additional Guaranteed Obligations. Any Indebtedness issued by a Guarantor or for which a Guarantor otherwise becomes obligated after the date of this Agreement shall become a Guaranteed Obligation upon the execution by all Guarantors of a notation of guarantee substantially in the form of Annex B hereto, which shall be affixed to the instrument or instruments evidencing such Indebtedness. Each such notation of guarantee shall be signed on behalf of each Guarantor by a duly authorized officer prior to the authentication or issuance of such Indebtedness.

21. **GOVERNING LAW. THIS AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.**

22. Keepwell. Each Qualified ECP Guarantor hereby jointly and severally absolutely, unconditionally and irrevocably undertakes to provide such funds or other support as may be needed from time to time by each other Guarantor to honor all of its obligations under this Agreement in respect of Swap Obligations (provided, however, that each Qualified ECP Guarantor shall only be liable under this Section 22 for the maximum amount of such liability that can be hereby incurred without rendering its obligations under this Section 22, or otherwise under this Agreement, voidable under applicable law relating to fraudulent conveyance or fraudulent transfer, and not for any greater amount). The obligations of each Qualified ECP Guarantor under this Section shall remain in full force and effect until the Guarantee Termination Date. Each Qualified ECP Guarantor intends that this Section 22 constitute, and this Section 22 shall be deemed to constitute, a "keepwell, support, or other agreement" for the benefit of each other Guarantor for all purposes of Section 1a(18)(A)(v)(II) of the Commodity Exchange Act.

[Signature pages follow]

IN WITNESS WHEREOF, each of the undersigned has caused this Agreement to be duly executed and delivered by its duly authorized officer or other representative as of the day and year first above written.

KINDER MORGAN, INC.

By: /s/ Anthony B. Ashley
Name: Anthony B. Ashley
Title: Treasurer

AGNES B CRANE, LLC
AMERICAN PETROLEUM TANKERS II LLC
AMERICAN PETROLEUM TANKERS III LLC
AMERICAN PETROLEUM TANKERS IV LLC
AMERICAN PETROLEUM TANKERS LLC
AMERICAN PETROLEUM TANKERS PARENT LLC
AMERICAN PETROLEUM TANKERS V LLC
AMERICAN PETROLEUM TANKERS VI LLC
AMERICAN PETROLEUM TANKERS VII LLC
APT FLORIDA LLC
APT INTERMEDIATE HOLDCO LLC
APT NEW INTERMEDIATE HOLDCO LLC
APT PENNSYLVANIA LLC
APT SUNSHINE STATE LLC
AUDREY TUG LLC
BEAR CREEK STORAGE COMPANY, L.L.C.
BETTY LOU LLC
CAMINO REAL GATHERING COMPANY, L.L.C.
CANTERA GAS COMPANY LLC
CDE PIPELINE LLC
CENTRAL FLORIDA PIPELINE LLC
CHEYENNE PLAINS GAS PIPELINE COMPANY, L.L.C.
CIG GAS STORAGE COMPANY LLC
CIG PIPELINE SERVICES COMPANY, L.L.C.
CIMMARRON GATHERING LLC
COLORADO INTERSTATE GAS COMPANY, L.L.C.
COLORADO INTERSTATE ISSUING CORPORATION
COPANO DOUBLE EAGLE LLC
COPANO ENERGY FINANCE CORPORATION
COPANO ENERGY, L.L.C.
COPANO ENERGY SERVICES/UPPER GULF COAST LLC
COPANO FIELD SERVICES GP, L.L.C.
COPANO FIELD SERVICES/NORTH TEXAS, L.L.C.
COPANO FIELD SERVICES/SOUTH TEXAS LLC
COPANO FIELD SERVICES/UPPER GULF COAST LLC
COPANO LIBERTY, LLC
COPANO NGL SERVICES (MARKHAM), L.L.C.
COPANO NGL SERVICES LLC
COPANO PIPELINES GROUP, L.L.C.

COPANO PIPELINES/NORTH TEXAS, L.L.C.
COPANO PIPELINES/ROCKY MOUNTAINS, LLC
COPANO PIPELINES/SOUTH TEXAS LLC
COPANO PIPELINES/UPPER GULF COAST LLC
COPANO PROCESSING LLC
COPANO RISK MANAGEMENT LLC
COPANO/WEBB-DUVAL PIPELINE LLC
CPNO SERVICES LLC
DAKOTA BULK TERMINAL, INC.
DELTA TERMINAL SERVICES LLC
EAGLE FORD GATHERING LLC
EL PASO CHEYENNE HOLDINGS, L.L.C.
EL PASO CITRUS HOLDINGS, INC.
EL PASO CNG COMPANY, L.L.C.
EL PASO ENERGY SERVICE COMPANY, L.L.C.
EL PASO LLC
EL PASO MIDSTREAM GROUP LLC
EL PASO NATURAL GAS COMPANY, L.L.C.
EL PASO NORIC INVESTMENTS III, L.L.C.
EL PASO PIPELINE CORPORATION
EL PASO PIPELINE GP COMPANY, L.L.C.
EL PASO PIPELINE HOLDING COMPANY, L.L.C.
EL PASO PIPELINE LP HOLDINGS, L.L.C.
EL PASO PIPELINE PARTNERS, L.P.
By El Paso Pipeline GP Company, L.L.C., its general partner
EL PASO PIPELINE PARTNERS OPERATING COMPANY, L.L.C.
EL PASO RUBY HOLDING COMPANY, L.L.C.
EL PASO TENNESSEE PIPELINE CO., L.L.C.
ELBA EXPRESS COMPANY, L.L.C.
ELIZABETH RIVER TERMINALS LLC
EMORY B CRANE, LLC
EPBGP CONTRACTING SERVICES LLC
EP ENERGY HOLDING COMPANY
EP RUBY LLC
EPTP ISSUING CORPORATION
FERNANDINA MARINE CONSTRUCTION MANAGEMENT LLC
FRANK L. CRANE, LLC
GENERAL STEVEDORES GP, LLC
GENERAL STEVEDORES HOLDINGS LLC
GLOBAL AMERICAN TERMINALS LLC
HAMPSHIRE LLC
HARRAH MIDSTREAM LLC
HBM ENVIRONMENTAL, INC.
ICPT, L.L.C
J.R. NICHOLLS LLC
JAVELINA TUG LLC
JEANNIE BREWER LLC
JV TANKER CHARTERER LLC
KINDER MORGAN (DELAWARE), INC.
KINDER MORGAN 2-MILE LLC
KINDER MORGAN ADMINISTRATIVE SERVICES TAMPA LLC
KINDER MORGAN ALTAMONT LLC

KINDER MORGAN AMORY LLC
KINDER MORGAN ARROW TERMINALS HOLDINGS, INC.
KINDER MORGAN ARROW TERMINALS, L.P.
By Kinder Morgan River Terminals, LLC, its general partner
KINDER MORGAN BALTIMORE TRANSLOAD TERMINAL LLC
KINDER MORGAN BATTLEGROUND OIL LLC
KINDER MORGAN BORDER PIPELINE LLC
KINDER MORGAN BULK TERMINALS, INC.
KINDER MORGAN CARBON DIOXIDE TRANSPORTATION COMPANY
KINDER MORGAN CO2 COMPANY, L.P.
By Kinder Morgan G.P., Inc., its general partner
KINDER MORGAN COCHIN LLC
KINDER MORGAN COLUMBUS LLC
KINDER MORGAN COMMERCIAL SERVICES LLC
KINDER MORGAN CRUDE & CONDENSATE LLC
KINDER MORGAN CRUDE OIL PIPELINES LLC
KINDER MORGAN CRUDE TO RAIL LLC
KINDER MORGAN CUSHING LLC
KINDER MORGAN DALLAS FORT WORTH RAIL TERMINAL LLC
KINDER MORGAN ENDEAVOR LLC
KINDER MORGAN ENERGY PARTNERS, L.P.
By Kinder Morgan G.P., Inc., its general partner
KINDER MORGAN EP MIDSTREAM LLC
KINDER MORGAN FINANCE COMPANY LLC
KINDER MORGAN FLEETING LLC
KINDER MORGAN FREEDOM PIPELINE LLC
KINDER MORGAN KEYSTONE GAS STORAGE LLC
KINDER MORGAN KMAP LLC
KINDER MORGAN LAS VEGAS LLC
KINDER MORGAN LINDEN TRANSLOAD TERMINAL LLC
KINDER MORGAN LIQUIDS TERMINALS LLC
KINDER MORGAN LIQUIDS TERMINALS ST. GABRIEL LLC
KINDER MORGAN MARINE SERVICES LLC
KINDER MORGAN MATERIALS SERVICES, LLC
KINDER MORGAN MID ATLANTIC MARINE SERVICES LLC
KINDER MORGAN NATGAS O&M LLC
KINDER MORGAN NORTH TEXAS PIPELINE LLC
KINDER MORGAN OPERATING L.P. “A”
By Kinder Morgan G.P., Inc., its general partner
KINDER MORGAN OPERATING L.P. “B”
By Kinder Morgan G.P., Inc., its general partner
KINDER MORGAN OPERATING L.P. “C”
By Kinder Morgan G.P., Inc., its general partner
KINDER MORGAN OPERATING L.P. “D”
By Kinder Morgan G.P., Inc., its general partner
KINDER MORGAN PECOS LLC
KINDER MORGAN PECOS VALLEY LLC
KINDER MORGAN PETCOKE GP LLC

KINDER MORGAN PETCOKE, L.P.
By Kinder Morgan Petcoke GP LLC, its general partner
KINDER MORGAN PETCOKE LP LLC
KINDER MORGAN PETROLEUM TANKERS LLC
KINDER MORGAN PIPELINE LLC
KINDER MORGAN PIPELINES (USA) INC.
KINDER MORGAN PORT MANATEE TERMINAL LLC
KINDER MORGAN PORT SUTTON TERMINAL LLC
KINDER MORGAN PORT TERMINALS USA LLC
KINDER MORGAN PRODUCTION COMPANY LLC
KINDER MORGAN RAIL SERVICES LLC
KINDER MORGAN RESOURCES II LLC
KINDER MORGAN RESOURCES III LLC
KINDER MORGAN RESOURCES LLC
KINDER MORGAN RIVER TERMINALS LLC
KINDER MORGAN SERVICES LLC
KINDER MORGAN SEVEN OAKS LLC
KINDER MORGAN SOUTHEAST TERMINALS LLC
KINDER MORGAN TANK STORAGE TERMINALS LLC
KINDER MORGAN TEJAS PIPELINE LLC
KINDER MORGAN TERMINALS, INC.
KINDER MORGAN TEXAS PIPELINE LLC
KINDER MORGAN TEXAS TERMINALS, L.P.
By General Stevedores GP, LLC, its general partner
KINDER MORGAN TRANSMIX COMPANY, LLC
KINDER MORGAN TREATING LP
By KM Treating GP LLC, its general partner
KINDER MORGAN URBAN RENEWAL, L.L.C.
KINDER MORGAN UTICA LLC
KINDER MORGAN VIRGINIA LIQUIDS TERMINALS LLC
KINDER MORGAN WINK PIPELINE LLC
KINDERHAWK FIELD SERVICES LLC
KM CRANE LLC
KM DECATUR, INC.
KM EAGLE GATHERING LLC
KM GATHERING LLC
KM KASKASKIA DOCK LLC
KM LIQUIDS TERMINALS LLC
KM NORTH CAHOKIA LAND LLC
KM NORTH CAHOKIA SPECIAL PROJECT LLC
KM NORTH CAHOKIA TERMINAL PROJECT LLC
KM SHIP CHANNEL SERVICES LLC
KM TREATING GP LLC
KM TREATING PRODUCTION LLC
KMBT LLC
KMGP CONTRACTING SERVICES LLC
KMGP SERVICES COMPANY, INC.
KN TELECOMMUNICATIONS, INC.
KNIGHT POWER COMPANY LLC
LOMITA RAIL TERMINAL LLC
MILWAUKEE BULK TERMINALS LLC
MJR OPERATING LLC
MOJAVE PIPELINE COMPANY, L.L.C.
MOJAVE PIPELINE OPERATING COMPANY, L.L.C.
MR. BENNETT LLC

MR. VANCE LLC
NASSAU TERMINALS LLC
NGPL HOLDCO INC.
NS 307 HOLDINGS INC.
PADDY RYAN CRANE, LLC
PALMETTO PRODUCTS PIPE LINE LLC
PI 2 PELICAN STATE LLC
PINNEY DOCK & TRANSPORT LLC
QUEEN CITY TERMINALS LLC
RAHWAY RIVER LAND LLC
RAZORBACK TUG LLC
RCI HOLDINGS, INC.
RIVER TERMINALS PROPERTIES GP LLC
RIVER TERMINAL PROPERTIES, L.P.
By River Terminals Properties GP LLC, its general partner
SCISSORTAIL ENERGY, LLC
SNG PIPELINE SERVICES COMPANY, L.L.C.
SOUTHERN GULF LNG COMPANY, L.L.C.
SOUTHERN LIQUEFACTION COMPANY LLC
SOUTHERN LNG COMPANY, L.L.C.
SOUTHERN NATURAL GAS COMPANY, L.L.C.
SOUTHERN NATURAL ISSUING CORPORATION
SOUTHTEX TREATERS LLC
SOUTHWEST FLORIDA PIPELINE LLC
SRT VESSELS LLC
STEVEDORE HOLDINGS, L.P.
By Kinder Morgan Petcoke GP LLC, its general partner
TAJON HOLDINGS, INC.
TEJAS GAS, LLC
TEJAS NATURAL GAS, LLC
TENNESSEE GAS PIPELINE COMPANY, L.L.C.
TENNESSEE GAS PIPELINE ISSUING CORPORATION
TEXAN TUG LLC
TGP PIPELINE SERVICES COMPANY, L.L.C.
TRANS MOUNTAIN PIPELINE (PUGET SOUND) LLC
TRANSCOLORADO GAS TRANSMISSION COMPANY LLC
TRANSLOAD SERVICES, LLC
UTICA MARCELLUS TEXAS PIPELINE LLC
WESTERN PLANT SERVICES, INC.
WYOMING INTERSTATE COMPANY, L.L.C.

By: /s/ Anthony B. Ashley
Anthony Ashley
Vice President

Exhibit 10.16

ANNEX A TO
THE CROSS GUARANTEE AGREEMENT

SUPPLEMENT NO. [ ] dated as of [ ] to the CROSS GUARANTEE AGREEMENT dated as of [ ] (the "Agreement"), among each of the Guarantors listed on the signature pages thereto and each of the other entities that becomes a party thereto pursuant to Section 19 of the Agreement (each such entity individually, a "Guarantor" and, collectively, the "Guarantors"). Unless otherwise defined herein, terms defined in the Agreement and used herein shall have the meanings given to them in the Agreement.

A. The Guarantors consist of Kinder Morgan, Inc., a Delaware corporation ("KMI"), and certain of its direct and indirect Subsidiaries, and the Guarantors have entered into the Agreement in order to provide guarantees of certain of the Guarantors' senior, unsecured Indebtedness outstanding from time to time.

B. Section 19 of the Agreement provides that additional Subsidiaries may become Guarantors under the Agreement by execution and delivery of an instrument in the form of this Supplement. Each undersigned Subsidiary (each a "New Guarantor") is executing this Supplement at the request of KMI or in accordance with the requirements of the Agreement to become a Guarantor under the Agreement.

Accordingly, each New Guarantor agrees as follows:

SECTION 1. In accordance with Section 19 of the Agreement, each New Guarantor by its signature below becomes a Guarantor under the Agreement with the same force and effect as if originally named therein as a Guarantor and each New Guarantor hereby (a) agrees to all the terms and provisions of the Agreement applicable to it as a Guarantor thereunder and (b) represents and warrants that the representations and warranties made by it as a Guarantor thereunder are true and correct on and as of the date hereof. Each reference to a Guarantor in the Agreement shall be deemed to include each New Guarantor. The Agreement is hereby incorporated herein by reference.

SECTION 2. Each New Guarantor represents and warrants to the Guaranteed Parties that this Supplement has been duly authorized, executed and delivered by it and constitutes its legal, valid and binding obligation, enforceable against it in accordance with its terms.

SECTION 3. This Supplement may be executed by one or more of the parties to this Supplement on any number of separate counterparts (including by facsimile or other electronic transmission), and all of said counterparts taken together shall be deemed to constitute one and the same instrument. A set of the copies of this Supplement signed by all the parties shall be lodged with KMI. This Supplement shall become effective as to each New Guarantor when KMI shall have received a counterpart of this Supplement that bears the signature of such New Guarantor.

SECTION 4. Except as expressly supplemented hereby, the Agreement shall remain in full force and effect.

SECTION 5. THIS SUPPLEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

SECTION 6. Any provision of this Supplement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof and in the Agreement, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction. The parties hereto shall endeavor in good-faith negotiations to replace the invalid, illegal or unenforceable provisions with valid provisions the economic effect of which comes as close as possible to that of the invalid, illegal or unenforceable provisions.

SECTION 7. All notices, requests and demands pursuant hereto shall be made in accordance with Section 12 of the Agreement. All communications and notices hereunder to each New Guarantor shall be given to it in care of KMI at the address set forth in Section 12 of the Agreement.

[Signature Pages Follow]

IN WITNESS WHEREOF, each New Guarantor has duly executed this Supplement to the Agreement as of the day and year first above written.

_____
as Guarantor

By:_____
Name:
Title:

Exhibit 10.16

ANNEX B TO
THE CROSS GUARANTEE AGREEMENT

FORM OF NOTATION OF GUARANTEE

Subject to the limitations set forth in the Cross Guarantee Agreement, dated as of [•] (the "Guarantee Agreement"), the undersigned Guarantors hereby certify that this [Indebtedness] constitutes a Guaranteed Obligation, entitled to all the rights as such set forth in the Guarantee Agreement. The Guarantors may be released from their guarantees upon the terms and subject to the conditions provided in the Guarantee Agreement. Capitalized terms used but not defined in this notation of guarantee have the meanings assigned such terms in the Guarantee Agreement, a copy of which will be provided to [a holder of this instrument] upon request to [Issuer].

Schedule I of the Guarantee Agreement is hereby deemed to be automatically updated to include this [Indebtedness] thereon as a Guaranteed Obligation.

[GUARANTORS],
as Guarantor

By: _____
Name:
Title:

Exhibit 10.16

SCHEDULE I

Guaranteed Obligations
Current as of: December 31, 2018

Issuer	Indebtedness	Maturity
Kinder Morgan, Inc.	3.05% notes	December 1, 2019
Kinder Morgan, Inc.	6.50% bonds	September 15, 2020
Kinder Morgan, Inc.	5.00% notes	February 15, 2021
Kinder Morgan, Inc.	1.500% notes	March 16, 2022
Kinder Morgan, Inc.	3.150% bonds	January 15, 2023
Kinder Morgan, Inc.	Floating rate bonds	January 15, 2023
Kinder Morgan, Inc.	5.625% notes	November 15, 2023
Kinder Morgan, Inc.	4.30% notes	June 1, 2025
Kinder Morgan, Inc.	6.70% bonds (Coastal)	February 15, 2027
Kinder Morgan, Inc.	2.250% notes	March 16, 2027
Kinder Morgan, Inc.	6.67% debentures	November 1, 2027
Kinder Morgan, Inc.	7.25% debentures	March 1, 2028
Kinder Morgan, Inc.	4.30% notes	March 1, 2028
Kinder Morgan, Inc.	6.95% bonds (Coastal)	June 1, 2028
Kinder Morgan, Inc.	8.05% bonds	October 15, 2030
Kinder Morgan, Inc.	7.80% bonds	August 1, 2031
Kinder Morgan, Inc.	7.75% bonds	January 15, 2032
Kinder Morgan, Inc.	5.30% notes	December 1, 2034
Kinder Morgan, Inc.	7.75% bonds (Coastal)	October 15, 2035
Kinder Morgan, Inc.	6.40% notes	January 5, 2036
Kinder Morgan, Inc.	7.42% bonds (Coastal)	February 15, 2037
Kinder Morgan, Inc.	5.55% notes	June 1, 2045
Kinder Morgan, Inc.	5.050% notes	February 15, 2046
Kinder Morgan, Inc.	5.20% notes	March 1, 2048
Kinder Morgan, Inc.	7.45% debentures	March 1, 2098
Kinder Morgan, Inc.	$100 Million Letter of Credit Facility	January 31, 2019
Kinder Morgan Energy Partners, L.P.	9.00% bonds	February 1, 2019
Kinder Morgan Energy Partners, L.P.	2.65% bonds	February 1, 2019
Kinder Morgan Energy Partners, L.P.	6.85% bonds	February 15, 2020
Kinder Morgan Energy Partners, L.P.	5.30% bonds	September 15, 2020
Kinder Morgan Energy Partners, L.P.	5.80% bonds	March 1, 2021
Kinder Morgan Energy Partners, L.P.	3.50% bonds	March 1, 2021
Kinder Morgan Energy Partners, L.P.	4.15% bonds	March 1, 2022
Kinder Morgan Energy Partners, L.P.	3.95% bonds	September 1, 2022
Kinder Morgan Energy Partners, L.P.	3.45% bonds	February 15, 2023
Kinder Morgan Energy Partners, L.P.	3.50% bonds	September 1, 2023
Kinder Morgan Energy Partners, L.P.	4.15% bonds	February 1, 2024
Kinder Morgan Energy Partners, L.P.	4.25% bonds	September 1, 2024
Kinder Morgan Energy Partners, L.P.	7.40% bonds	March 15, 2031
Kinder Morgan Energy Partners, L.P.	7.75% bonds	March 15, 2032
Kinder Morgan Energy Partners, L.P.	7.30% bonds	August 15, 2033
Kinder Morgan Energy Partners, L.P.	5.80% bonds	March 15, 2035
Kinder Morgan Energy Partners, L.P.	6.50% bonds	February 1, 2037
Kinder Morgan Energy Partners, L.P.	6.95% bonds	January 15, 2038
Kinder Morgan Energy Partners, L.P.	6.50% bonds	September 1, 2039

Schedule I
(Guaranteed Obligations)
Current as of: December 31, 2018

Issuer	Indebtedness	Maturity
Kinder Morgan Energy Partners, L.P.	6.55% bonds	September 15, 2040
Kinder Morgan Energy Partners, L.P.	6.375% bonds	March 1, 2041
Kinder Morgan Energy Partners, L.P.	5.625% bonds	September 1, 2041
Kinder Morgan Energy Partners, L.P.	5.00% bonds	August 15, 2042
Kinder Morgan Energy Partners, L.P.	5.00% bonds	March 1, 2043
Kinder Morgan Energy Partners, L.P.	5.50% bonds	March 1, 2044
Kinder Morgan Energy Partners, L.P.	5.40% bonds	September 1, 2044
Kinder Morgan Energy Partners, L.P.[(1)]	6.50% bonds	April 1, 2020
Kinder Morgan Energy Partners, L.P.[(1)]	5.00% bonds	October 1, 2021
Kinder Morgan Energy Partners, L.P.[(1)]	4.30% bonds	May 1, 2024
Kinder Morgan Energy Partners, L.P.[(1)]	7.50% bonds	November 15, 2040
Kinder Morgan Energy Partners, L.P.[(1)]	4.70% bonds	November 1, 2042
Tennessee Gas Pipeline Company, L.L.C.	7.00% bonds	March 15, 2027
Tennessee Gas Pipeline Company, L.L.C.	7.00% bonds	October 15, 2028
Tennessee Gas Pipeline Company, L.L.C.	8.375% bonds	June 15, 2032
Tennessee Gas Pipeline Company, L.L.C.	7.625% bonds	April 1, 2037
El Paso Natural Gas Company, L.L.C.	8.625% bonds	January 15, 2022
El Paso Natural Gas Company, L.L.C.	7.50% bonds	November 15, 2026
El Paso Natural Gas Company, L.L.C.	8.375% bonds	June 15, 2032
Colorado Interstate Gas Company, L.L.C.	4.15% notes	August 15, 2026
Colorado Interstate Gas Company, L.L.C.	6.85% bonds	June 15, 2037
El Paso Tennessee Pipeline Co. L.L.C.	7.25% bonds	December 15, 2025
Other	Cora industrial revenue bonds	April 1, 2024

[(1)] The original issuer, El Paso Pipeline Partners, L.P. merged with and into Kinder Morgan Energy Partners, L.P. effective January 1, 2015.

Schedule I
(Guaranteed Obligations)
Current as of: December 31, 2018

Hedging Agreements[1]

Issuer	Guaranteed Party	Date
Kinder Morgan, Inc.	Bank of America, N.A.	January 4, 2018
Kinder Morgan, Inc.	BNP Paribas	September 15, 2016
Kinder Morgan, Inc.	Citibank, N.A.	March 16, 2017
Kinder Morgan, Inc.	J. Aron & Company	December 23, 2011
Kinder Morgan, Inc.	SunTrust Bank	August 29, 2001
Kinder Morgan, Inc.	Barclays Bank PLC	November 26, 2014
Kinder Morgan, Inc.	Bank of Tokyo-Mitsubishi, Ltd., New York Branch	November 26, 2014
Kinder Morgan, Inc.	Canadian Imperial Bank of Commerce	November 26, 2014
Kinder Morgan, Inc.	Compass Bank	March 24, 2015
Kinder Morgan, Inc.	Credit Agricole Corporate and Investment Bank	November 26, 2014
Kinder Morgan, Inc.	Credit Suisse International	November 26, 2014
Kinder Morgan, Inc.	Deutsche Bank AG	November 26, 2014
Kinder Morgan, Inc.	ING Capital Markets LLC	November 26, 2014
Kinder Morgan, Inc.	JPMorgan Chase Bank, N.A.	February 19, 2015
Kinder Morgan, Inc.	Mizuho Capital Markets Corporation	November 26, 2014
Kinder Morgan, Inc.	Morgan Stanley Capital Services LLC	July 9, 2018
Kinder Morgan, Inc.	Royal Bank of Canada	November 26, 2014
Kinder Morgan, Inc.	SMBC Capital Markets, Inc.	April 26, 2017
Kinder Morgan, Inc.	The Bank of Nova Scotia	November 26, 2014
Kinder Morgan, Inc.	The Royal Bank of Scotland PLC	November 26, 2014
Kinder Morgan, Inc.	Societe Generale	November 26, 2014
Kinder Morgan, Inc.	The Toronto-Dominion Bank	October 2, 2017
Kinder Morgan, Inc.	UBS AG	November 26, 2014
Kinder Morgan, Inc.	Wells Fargo Bank, N.A.	November 26, 2014
Kinder Morgan Energy Partners, L.P.	Bank of America, N.A.	April 14, 1999
Kinder Morgan Energy Partners, L.P.	Bank of Tokyo-Mitsubishi, Ltd., New York Branch	November 23, 2004
Kinder Morgan Energy Partners, L.P.	Barclays Bank PLC	November 18, 2003
Kinder Morgan Energy Partners, L.P.	Canadian Imperial Bank of Commerce	August 4, 2011
Kinder Morgan Energy Partners, L.P.	Citibank, N.A.	March 14, 2002
Kinder Morgan Energy Partners, L.P.	Credit Agricole Corporate and Investment Bank	June 20, 2014
Kinder Morgan Energy Partners, L.P.	Credit Suisse International	May 14, 2010
Kinder Morgan Energy Partners, L.P.	Deutsche Bank AG	April 2, 2009
Kinder Morgan Energy Partners, L.P.	ING Capital Markets LLC	September 21, 2011

[1] Guaranteed Obligations with respect to Hedging Agreements include International Swaps and Derivatives Association Master Agreements ("ISDAs") and all transactions entered into pursuant to any ISDA listed on this Schedule I.

Schedule I
(Guaranteed Obligations)
Current as of: December 31, 2018

Hedging Agreements[1]

Issuer	Guaranteed Party	Date
Kinder Morgan Energy Partners, L.P.	J. Aron & Company	November 11, 2004
Kinder Morgan Energy Partners, L.P.	JPMorgan Chase Bank	August 29, 2001
Kinder Morgan Energy Partners, L.P.	Mizuho Capital Markets Corporation	July 11, 2014
Kinder Morgan Energy Partners, L.P.	Morgan Stanley Capital Services Inc.	March 10, 2010
Kinder Morgan Energy Partners, L.P.	Royal Bank of Canada	March 12, 2009
Kinder Morgan Energy Partners, L.P.	The Royal Bank of Scotland PLC	March 20, 2009
Kinder Morgan Energy Partners, L.P.	The Bank of Nova Scotia	August 14, 2003
Kinder Morgan Energy Partners, L.P.	Societe Generale	July 18, 2014
Kinder Morgan Energy Partners, L.P.	SunTrust Bank	March 14, 2002
Kinder Morgan Energy Partners, L.P.	UBS AG	February 23, 2011
Kinder Morgan Energy Partners, L.P.	Wells Fargo Bank, N.A.	July 31, 2007
Kinder Morgan Texas Pipeline LLC	Barclays Bank PLC	January 10, 2003
Kinder Morgan Texas Pipeline LLC	BNP Paribas	March 2, 2005
Kinder Morgan Texas Pipeline LLC	Canadian Imperial Bank of Commerce	December 18, 2006
Kinder Morgan Texas Pipeline LLC	Citibank, N.A.	February 22, 2005
Kinder Morgan Texas Pipeline LLC	Credit Suisse International	August 31, 2012
Kinder Morgan Texas Pipeline LLC	Deutsche Bank AG	June 13, 2007
Kinder Morgan Texas Pipeline LLC	ING Capital Markets LLC	April 17, 2014
Kinder Morgan Production LLC	J. Aron & Company	June 12, 2006
Kinder Morgan Texas Pipeline LLC	J. Aron & Company	June 8, 2000
Kinder Morgan Texas Pipeline LLC	JPMorgan Chase Bank, N.A.	September 7, 2006
Kinder Morgan Texas Pipeline LLC	Macquarie Bank Limited	September 20, 2010
Kinder Morgan Texas Pipeline LLC	Merrill Lynch Commodities, Inc.	October 24, 2001
Kinder Morgan Texas Pipeline LLC	Morgan Stanley Capital Group Inc.	January 15, 2004
Kinder Morgan Texas Pipeline LLC	Natixis	June 13, 2011
Kinder Morgan Texas Pipeline LLC	Phillips 66 Company	March 30, 2015
Kinder Morgan Texas Pipeline LLC	PNC Bank, National Association	July 11, 2018
Kinder Morgan Texas Pipeline LLC	Royal Bank of Canada	October 18, 2018
Kinder Morgan Texas Pipeline LLC	The Bank of Nova Scotia	May 8, 2014
Kinder Morgan Texas Pipeline LLC	Societe Generale	January 14, 2003
Kinder Morgan Texas Pipeline LLC	Wells Fargo Bank, N.A.	June 1, 2013
Copano Risk Management, LLC	Citibank, N.A.	July 21, 2008
Copano Risk Management, LLC	J. Aron & Company	December 12, 2005
Copano Risk Management, LLC	Morgan Stanley Capital Group Inc.	May 4, 2007
Copano Risk Management, LLC	Wells Fargo Bank, N.A.	October 19, 2007

[1] Guaranteed Obligations with respect to Hedging Agreements include International Swaps and Derivatives Association Master Agreements ("ISDAs") and all transactions entered into pursuant to any ISDA listed on this Schedule I.

SCHEDULE II

Guarantors
Current as of: December 31, 2018

Agnes B Crane, LLC
American Petroleum Tankers II LLC
American Petroleum Tankers III LLC
American Petroleum Tankers IV LLC
American Petroleum Tankers LLC
American Petroleum Tankers Parent LLC
American Petroleum Tankers V LLC
American Petroleum Tankers VI LLC
American Petroleum Tankers VII LLC
American Petroleum Tankers VIII LLC
American Petroleum Tankers IX LLC
American Petroleum Tankers X LLC
American Petroleum Tankers XI LLC
APT Florida LLC
APT Intermediate Holdco LLC
APT New Intermediate Holdco LLC
APT Pennsylvania LLC
APT Sunshine State LLC
Betty Lou LLC
Camino Real Gathering Company, L.L.C.
Cantera Gas Company LLC
CDE Pipeline LLC
Central Florida Pipeline LLC
Cheyenne Plains Gas Pipeline Company, L.L.C.
CIG Gas Storage Company LLC
CIG Pipeline Services Company, L.L.C.
Colorado Interstate Gas Company, L.L.C.
Colorado Interstate Issuing Corporation
Copano Double Eagle LLC
Copano Energy Finance Corporation
Copano Energy Services/Upper Gulf Coast LLC
Copano Energy, L.L.C.
Copano Field Services GP, L.L.C.
Copano Field Services/North Texas, L.L.C.
Copano Field Services/South Texas LLC
Copano Field Services/Upper Gulf Coast LLC
Copano Liberty, LLC
Copano Liquids Marketing LLC
Copano NGL Services (Markham), L.L.C.
Copano NGL Services LLC
Copano Pipelines Group, L.L.C.
Copano Pipelines/North Texas, L.L.C.
Copano Pipelines/Rocky Mountains, LLC
Copano Pipelines/South Texas LLC
Copano Pipelines/Upper Gulf Coast LLC
Copano Processing LLC
Copano Risk Management LLC
Copano/Webb-Duval Pipeline LLC
CPNO Services LLC
Dakota Bulk Terminal LLC
Delta Terminal Services LLC
Eagle Ford Gathering LLC
El Paso Cheyenne Holdings, L.L.C.
El Paso Citrus Holdings, Inc.
El Paso CNG Company, L.L.C.
El Paso Energy Service Company, L.L.C.
El Paso LLC
El Paso Midstream Group LLC
El Paso Natural Gas Company, L.L.C.
El Paso Noric Investments III, L.L.C.
El Paso Ruby Holding Company, L.L.C.
El Paso Tennessee Pipeline Co., L.L.C.
Elba Express Company, L.L.C.
Elizabeth River Terminals LLC
Emory B Crane, LLC
EP Ruby LLC
EPBGP Contracting Services LLC
EPTP Issuing Corporation
Frank L. Crane, LLC
General Stevedores GP, LLC
General Stevedores Holdings LLC
Glenpool West Gathering LLC
Harrah Midstream LLC
HBM Environmental LLC
Hiland Crude, LLC
Hiland Partners Finance Corp.
Hiland Partners Holdings LLC
HPH Oklahoma Gathering LLC
ICPT, L.L.C
Independent Trading & Transportation Company I, L.L.C.
JV Tanker Charterer LLC
Kinder Morgan 2-Mile LLC
Kinder Morgan Administrative Services Tampa LLC
Kinder Morgan Altamont LLC
Kinder Morgan Baltimore Transload Terminal LLC
Kinder Morgan Battleground Oil LLC
Kinder Morgan Border Pipeline LLC
Kinder Morgan Bulk Terminals LLC
Kinder Morgan Carbon Dioxide Transportation Company
Kinder Morgan CO2 Company, L.P.
Kinder Morgan Cochin LLC

Schedule II
(Guarantors)
Current as of: December 31, 2018

Kinder Morgan Commercial Services LLC
Kinder Morgan Contracting Services LLC
Kinder Morgan Crude & Condensate LLC
Kinder Morgan Crude Marketing LLC
Kinder Morgan Crude Oil Pipelines LLC
Kinder Morgan Crude to Rail LLC
Kinder Morgan Cushing LLC
Kinder Morgan Dallas Fort Worth Rail Terminal LLC
Kinder Morgan Deeprock North Holdco LLC
Kinder Morgan Endeavor LLC
Kinder Morgan Energy Partners, L.P.
Kinder Morgan EP Midstream LLC
Kinder Morgan Finance Company LLC
Kinder Morgan Freedom Pipeline LLC
Kinder Morgan Galena Park West LLC
Kinder Morgan IMT Holdco LLC
Kinder Morgan, Inc.
Kinder Morgan Keystone Gas Storage LLC
Kinder Morgan KMAP LLC
Kinder Morgan Las Vegas LLC
Kinder Morgan Linden Transload Terminal LLC
Kinder Morgan Liquids Terminals LLC
Kinder Morgan Liquids Terminals St. Gabriel LLC
Kinder Morgan Louisiana Pipeline Holding LLC
Kinder Morgan Louisiana Pipeline LLC
Kinder Morgan Marine Services LLC
Kinder Morgan Materials Services, LLC
Kinder Morgan Mid Atlantic Marine Services LLC
Kinder Morgan NatGas O&M LLC
Kinder Morgan NGPL Holdings LLC
Kinder Morgan North Texas Pipeline LLC
Kinder Morgan Operating L.P. “A”
Kinder Morgan Operating L.P. “B”
Kinder Morgan Operating L.P. “C”
Kinder Morgan Operating L.P. “D”
Kinder Morgan Pecos LLC
Kinder Morgan Pecos Valley LLC
Kinder Morgan Petcoke GP LLC
Kinder Morgan Petcoke LP LLC
Kinder Morgan Petcoke, L.P.
Kinder Morgan Petroleum Tankers LLC
Kinder Morgan Pipeline LLC
Kinder Morgan Port Manatee Terminal LLC
Kinder Morgan Port Sutton Terminal LLC
Kinder Morgan Port Terminals USA LLC
Kinder Morgan Production Company LLC
Kinder Morgan Products Terminals LLC
Kinder Morgan Rail Services LLC
Kinder Morgan Resources II LLC
Kinder Morgan Resources III LLC
Kinder Morgan Resources LLC
Kinder Morgan Seven Oaks LLC
Kinder Morgan SNG Operator LLC
Kinder Morgan Southeast Terminals LLC
Kinder Morgan Scurry Connector LLC
Kinder Morgan Tank Storage Terminals LLC
Kinder Morgan Tejas Pipeline LLC
Kinder Morgan Terminals, Inc.
Kinder Morgan Terminals Wilmington LLC
Kinder Morgan Texas Pipeline LLC
Kinder Morgan Texas Terminals, L.P.
Kinder Morgan Transmix Company, LLC
Kinder Morgan Treating LP
Kinder Morgan Urban Renewal, L.L.C.
Kinder Morgan Utica LLC
Kinder Morgan Vehicle Services LLC
Kinder Morgan Virginia Liquids Terminals LLC
Kinder Morgan Wink Pipeline LLC
KinderHawk Field Services LLC
KM Crane LLC
KM Decatur LLC
KM Eagle Gathering LLC
KM Gathering LLC
KM Kaskaskia Dock LLC
KM Liquids Terminals LLC
KM North Cahokia Land LLC
KM North Cahokia Special Project LLC
KM North Cahokia Terminal Project LLC
KM Ship Channel Services LLC
KM Treating GP LLC
KM Treating Production LLC
KMBT Legacy Holdings LLC
KMBT LLC
KMGP Services Company, Inc.
KN Telecommunications, Inc.
Knight Power Company LLC
Lomita Rail Terminal LLC
Milwaukee Bulk Terminals LLC
MJR Operating LLC
Mojave Pipeline Company, L.L.C.
Mojave Pipeline Operating Company, L.L.C.
Paddy Ryan Crane, LLC
Palmetto Products Pipe Line LLC
PI 2 Pelican State LLC
Pinney Dock & Transport LLC
Queen City Terminals LLC
Rahway River Land LLC
River Terminals Properties GP LLC
River Terminal Properties, L.P.

Schedule II
(Guarantors)
Current as of: December 31, 2018

ScissorTail Energy, LLC
SNG Pipeline Services Company, L.L.C.
Southern Dome, LLC
Southern Gulf LNG Company, L.L.C.
Southern Liquefaction Company LLC
Southern LNG Company, L.L.C.
Southern Oklahoma Gathering LLC
SouthTex Treaters LLC
Southwest Florida Pipeline LLC
SRT Vessels LLC
Stevedore Holdings, L.P.
Tejas Gas, LLC
Tejas Natural Gas, LLC
Tennessee Gas Pipeline Company, L.L.C.
Tennessee Gas Pipeline Issuing Corporation
Texan Tug LLC
TGP Pipeline Services Company, L.L.C.
TransColorado Gas Transmission Company LLC
Transload Services, LLC
Utica Marcellus Texas Pipeline LLC
Western Plant Services LLC
Wyoming Interstate Company, L.L.C.

Exhibit 10.16

SCHEDULE III

Excluded Subsidiaries

ANR Real Estate Corporation
Coastal Eagle Point Oil Company
Coastal Oil New England, Inc.
Colton Processing Facility
Coscol Petroleum Corporation
El Paso CGP Company, L.L.C.
El Paso Energy Capital Trust I
El Paso Energy E.S.T. Company
El Paso Energy International Company
El Paso Marketing Company, L.L.C.
El Paso Merchant Energy North America Company, L.L.C.
El Paso Merchant Energy-Petroleum Company
El Paso Reata Energy Company, L.L.C.
El Paso Remediation Company
El Paso Services Holding Company
EPEC Corporation
EPEC Oil Company Liquidating Trust
EPEC Polymers, Inc.
EPED Holding Company
KN Capital Trust I
KN Capital Trust III
Mesquite Investors, L.L.C.

Note: The Excluded Subsidiaries listed on this Schedule III may also be Excluded Subsidiaries pursuant to other exceptions set forth in the definition of “Excluded Subsidiary”.

Exhibit 21.1

Kinder Morgan, Inc.

Subsidiaries of the Registrant as of December 31, 2018

Entity Name	Place of Incorporation
2043155 Alberta Ltd.	Canada (Alberta)
Agnes B Crane, LLC	Louisiana
American Petroleum Tankers II LLC	Delaware
American Petroleum Tankers III LLC	Delaware
American Petroleum Tankers IV LLC	Delaware
American Petroleum Tankers IX LLC	Delaware
American Petroleum Tankers LLC	Delaware
American Petroleum Tankers Parent LLC	Delaware
American Petroleum Tankers V LLC	Delaware
American Petroleum Tankers VI LLC	Delaware
American Petroleum Tankers VII LLC	Delaware
American Petroleum Tankers VIII LLC	Delaware
American Petroleum Tankers X LLC	Delaware
American Petroleum Tankers XI LLC	Delaware
ANR Advance Holdings, Inc.	Delaware
ANR Real Estate Corporation	Delaware
APT Florida LLC	Delaware
APT Intermediate Holdco LLC	Delaware
APT New Intermediate Holdco LLC	Delaware
APT Pennsylvania LLC	Delaware
APT Sunshine State LLC	Delaware
Ascension Holding Company, L.L.C.	Delaware
Banquete Hub LLC	Delaware
Baseline Terminal East Limited Partnership	Canada (Manitoba)
Battleground Oil Specialty Terminal Company LLC	Delaware
Bear Creek Storage Company, L.L.C.	Louisiana
Berkshire Feedline Acquisition Limited Partnership	Massachusetts
Betty Lou LLC	Delaware
BHP Billiton Petroleum (Eagle Ford Gathering) LLC	Delaware
Bighorn Gas Gathering, L.L.C.	Delaware
Calnev Pipe Line LLC	Delaware
Camino Real Gathering Company, L.L.C.	Delaware
Cantera Gas Company LLC	Delaware
CDE Pipeline LLC	Delaware
Cedar Cove Midstream LLC	Delaware
Central Florida Pipeline LLC	Delaware
Cheyenne Plains Gas Pipeline Company, L.L.C.	Delaware
CIG Gas Storage Company LLC	Delaware
CIG Pipeline Services Company, L.L.C.	Delaware
Citrus Energy Services, Inc.	Delaware

Exhibit 21.1

Kinder Morgan, Inc.

Subsidiaries of the Registrant as of December 31, 2018

Entity Name	Place of Incorporation
Citrus LLC	Delaware
Cliffside Helium, LLC	Delaware
Cliffside Refiners, L.P.	Delaware
Coastal Eagle Point Oil Company	Delaware
Coastal Energy Resources Ltd.	Mauritius
Coastal Oil New England, Inc.	Massachusetts
Coastal Wartsila Petroleum Private Limited	India
Colorado Interstate Gas Company, L.L.C.	Delaware
Colorado Interstate Issuing Corporation	Delaware
Colton Processing Facility	[California]
Copano Double Eagle LLC	Delaware
Copano Energy Finance Corporation	Delaware
Copano Energy L.L.C.	Delaware
Copano Energy Services/Upper Gulf Coast LLC	Texas
Copano Field Services GP, L.L.C.	Delaware
Copano Field Services/North Texas, L.L.C.	Delaware
Copano Field Services/South Texas LLC	Texas
Copano Field Services/Upper Gulf Coast LLC	Texas
Copano Liberty, LLC	Delaware
Copano Liquids Marketing LLC	Delaware
Copano NGL Services (Markham), L.L.C.	Delaware
Copano NGL Services LLC	Texas
Copano Pipelines Group, L.L.C.	Delaware
Copano Pipelines/North Texas, L.L.C.	Delaware
Copano Pipelines/Rocky Mountains, LLC	Delaware
Copano Pipelines/South Texas LLC	Texas
Copano Pipelines/Upper Gulf Coast LLC	Texas
Copano Processing LLC	Texas
Copano Risk Management LLC	Texas
Copano/Webb-Duval Pipeline LLC	Delaware
Cortez Capital Corporation	Delaware
Cortez Expansion Capital Corporation	Delaware
Cortez Pipeline Company	Texas
Coscol Petroleum Corporation	Delaware
Coyote Gas Treating Limited Liability Company	Colorado
CPNO Services LLC	Texas
Cross Country Development L.L.C.	Delaware
Cypress Interstate Pipeline LLC	Delaware
Dakota Bulk Terminal LLC	Delaware
Deeprock Development, LLC	Delaware

Exhibit 21.1

Kinder Morgan, Inc.

Subsidiaries of the Registrant as of December 31, 2018

Entity Name	Place of Incorporation
Delta Terminal Services LLC	Delaware
Double Eagle Pipeline LLC	Delaware
Eagle Ford Gathering LLC	Delaware
El Paso Amazonas Energia Ltda.	Brazil
El Paso CGP Company, L.L.C.	Delaware
El Paso Cheyenne Holdings, L.L.C.	Delaware
El Paso Citrus Holdings, Inc.	Delaware
El Paso CNG Company, L.L.C.	Delaware
El Paso Energia do Brasil Ltda.	Brazil
El Paso Energy Argentina Service Company	Delaware
El Paso Energy Capital Trust I	Delaware
El Paso Energy E.S.T. Company	Delaware
El Paso Energy International Company	Delaware
El Paso Energy Marketing de Mexico, S. de R.L. de C.V.	Mexico
El Paso Energy Service Company, L.L.C.	Delaware
El Paso LLC	Delaware
El Paso Marketing Company, L.L.C.	Delaware
El Paso Merchant Energy North America Company, L.L.C.	Delaware
El Paso Merchant Energy-Petroleum Company	Delaware
El Paso Mexico Holding B.V.	Netherlands
El Paso Midstream Group LLC	Delaware
El Paso Natural Gas Company, L.L.C.	Delaware
El Paso Noric Investments III, L.L.C.	Delaware
El Paso Reata Energy Company, L.L.C.	Delaware
El Paso Remediation Company	Delaware
El Paso Rio Negro Energia Ltda.	Brazil
El Paso Ruby Holding Company, L.L.C.	Delaware
El Paso Services Holding Company	Delaware
El Paso Tennessee Pipeline Co., L.L.C.	Delaware
Elba Express Company, L.L.C.	Delaware
Elba Liquefaction Company, L.L.C.	Delaware
Elizabeth River Terminals LLC	Delaware
Emory B Crane, LLC	Louisiana
EP Ruby LLC	Delaware
EPBGP Contracting Services LLC	Delaware
EPC Building LLC	Delaware
EPC Property Holdings, Inc.	Delaware
EPEC Corporation	Delaware
EPEC Oil Company Liquidating Trust	Delaware Law
EPEC Polymers, Inc.	Delaware

Exhibit 21.1

Kinder Morgan, Inc.

Subsidiaries of the Registrant as of December 31, 2018

Entity Name	Place of Incorporation
EPEC Realty, Inc.	Delaware
EPED B Company	Cayman Islands
EPED Holding Company	Delaware
EPTP Issuing Corporation	Delaware
Fayetteville Express Pipeline LLC	Delaware
Fife Power	Scotland
Florida Gas Transmission Company, LLC	Delaware
Fort Union Gas Gathering, L.L.C.	Delaware
Frank L Crane, LLC	Louisiana
GEBF, L.L.C.	Louisiana
General Stevedores GP, LLC	Texas
General Stevedores Holdings LLC	Delaware
Glenpool West Gathering LLC	Delaware
Greens Port CBR, LLC	Delaware
Guilford County Terminal Company, LLC	North Carolina
Gulf Coast Express Pipeline LLC	Delaware
Gulf LNG Energy (Port), LLC	Delaware
Gulf LNG Energy, LLC	Delaware
Gulf LNG Holdings Group, LLC	Delaware
Gulf LNG Liquefaction Company, LLC	Delaware
Gulf LNG Pipeline, LLC	Delaware
Harrah Midstream LLC	Delaware
HBM Environmental LLC	Delaware
Hiland Crude, LLC	Oklahoma
Hiland Partners Finance Corp.	Delaware
Hiland Partners Holdings LLC	Delaware
Horizon Pipeline Company, L.L.C.	Delaware
HPH Oklahoma Gathering LLC	Delaware
I.M.T. Land Corp.	Louisiana
ICPT, L.L.C.	Louisiana
Independent Trading & Transportation Company I, L.L.C.	Oklahoma
Interenergy Company	Cayman Islands
International Marine Terminals Partnership	Louisiana
Johnston County Terminal, LLC	Delaware
JV Tanker Charterer LLC	Delaware
Kellogg Terminal, LLC	Delaware
Kinder Morgan 2-Mile LLC	Delaware
Kinder Morgan Administrative Services Tampa LLC	Delaware
Kinder Morgan Altamont LLC	Delaware
Kinder Morgan Baltimore Transload Terminal LLC	Delaware

Exhibit 21.1

Kinder Morgan, Inc.

Subsidiaries of the Registrant as of December 31, 2018

Entity Name	Place of Incorporation
Kinder Morgan Battleground Oil LLC	Delaware
Kinder Morgan Border Pipeline LLC	Delaware
Kinder Morgan Bulk Terminals LLC	Louisiana
Kinder Morgan Canada (Jet Fuel) Inc.	Canada (British Columbia)
Kinder Morgan Canada Company	Canada (Nova Scotia)
Kinder Morgan Canada GP Inc.	Canada (Alberta)
Kinder Morgan Canada Limited	Canada (Alberta)
Kinder Morgan Canada Limited Partnership	Canada (Alberta)
Kinder Morgan Canada Services Inc.	Canada (Alberta)
Kinder Morgan Carbon Dioxide Transportation Company	Delaware
Kinder Morgan CO2 Company, L.P.	Texas
Kinder Morgan Cochin LLC	Delaware
Kinder Morgan Cochin ULC	Canada (Nova Scotia)
Kinder Morgan Commercial Services LLC	Delaware
Kinder Morgan Contracting Services LLC	Delaware
Kinder Morgan Crude & Condensate LLC	Delaware
Kinder Morgan Crude Marketing LLC	Delaware
Kinder Morgan Crude Oil Pipelines LLC	Delaware
Kinder Morgan Crude to Rail LLC	Delaware
Kinder Morgan Cushing LLC	Delaware
Kinder Morgan Dallas Fort Worth Rail Terminal LLC	Delaware
Kinder Morgan Deeprock North Holdco LLC	Delaware
Kinder Morgan Endeavor LLC	Delaware
Kinder Morgan Energy Partners, L.P.	Delaware
Kinder Morgan EP Midstream LLC	Delaware
Kinder Morgan Finance Company LLC	Delaware
Kinder Morgan Foundation	Colorado
Kinder Morgan Freedom Pipeline LLC	Delaware
Kinder Morgan G.P., Inc.	Delaware
Kinder Morgan Galena Park West LLC	Delaware
Kinder Morgan Gas Natural de Mexico, S. de R.L. de C.V.	Mexico
Kinder Morgan Heartland ULC	Canada (Alberta)
Kinder Morgan Illinois Pipeline LLC	Delaware
Kinder Morgan IMT Holdco LLC	Delaware
Kinder Morgan Keystone Gas Storage LLC	Delaware
Kinder Morgan KMAP LLC	Delaware
Kinder Morgan Las Vegas LLC	Delaware
Kinder Morgan Linden Transload Terminal LLC	Delaware
Kinder Morgan Liquids Terminals LLC	Delaware
Kinder Morgan Liquids Terminals St. Gabriel LLC	Delaware

Exhibit 21.1

Kinder Morgan, Inc.

Subsidiaries of the Registrant as of December 31, 2018

Entity Name	Place of Incorporation
Kinder Morgan Louisiana Pipeline Holding LLC	Delaware
Kinder Morgan Louisiana Pipeline LLC	Delaware
Kinder Morgan Marine Services LLC	Delaware
Kinder Morgan Materials Services, LLC	Delaware
Kinder Morgan Mexico LLC	Delaware
Kinder Morgan Mid Atlantic Marine Services LLC	Delaware
Kinder Morgan NatGas O & M LLC	Delaware
Kinder Morgan NGPL Holdings LLC	Delaware
Kinder Morgan North Texas Pipeline LLC	Delaware
Kinder Morgan Operating L.P. "A"	Delaware
Kinder Morgan Operating L.P. "B"	Delaware
Kinder Morgan Operating L.P. "C"	Delaware
Kinder Morgan Operating L.P. "D"	Delaware
Kinder Morgan Pecos LLC	Delaware
Kinder Morgan Pecos Valley LLC	Delaware
Kinder Morgan Petcoke GP LLC	Delaware
Kinder Morgan Petcoke LP LLC	Delaware
Kinder Morgan Petcoke, L.P.	Delaware
Kinder Morgan Petroleum Tankers LLC	Delaware
Kinder Morgan Pipeline LLC	Delaware
Kinder Morgan Pipeline Servicios de Mexico S. de R.L. de C.V.	Mexico
Kinder Morgan Port Manatee Terminal LLC	Delaware
Kinder Morgan Port Sutton Terminal LLC	Delaware
Kinder Morgan Port Terminals USA LLC	Delaware
Kinder Morgan Production Company LLC	Delaware
Kinder Morgan Products Terminals LLC	Delaware
Kinder Morgan Rail Services LLC	Delaware
Kinder Morgan Resources II LLC	Delaware
Kinder Morgan Resources III LLC	Delaware
Kinder Morgan Resources LLC	Delaware
Kinder Morgan Scurry Connector LLC	Delaware
Kinder Morgan Services International LLC	Delaware
Kinder Morgan Seven Oaks LLC	Delaware
Kinder Morgan SNG Operator LLC	Delaware
Kinder Morgan Southeast Terminals LLC	Delaware
Kinder Morgan Tank Storage Terminals LLC	Delaware
Kinder Morgan Tejas Pipeline GP LLC	Delaware
Kinder Morgan Tejas Pipeline LLC	Delaware
Kinder Morgan Terminals Wilmington LLC	Delaware
Kinder Morgan Terminals, Inc.	Delaware

Exhibit 21.1

Kinder Morgan, Inc.

Subsidiaries of the Registrant as of December 31, 2018

Entity Name	Place of Incorporation
Kinder Morgan Texas Pipeline LLC	Delaware
Kinder Morgan Texas Terminals, L.P.	Delaware
Kinder Morgan Transmix Company, LLC	Delaware
Kinder Morgan Treating LP	Delaware
Kinder Morgan Urban Renewal II, LLC	New Jersey
Kinder Morgan Urban Renewal, L.L.C.	New Jersey
Kinder Morgan Utica LLC	Delaware
Kinder Morgan Utopia Holdco LLC	Delaware
Kinder Morgan Utopia LLC	Delaware
Kinder Morgan Utopia Ltd.	Canada (Alberta)
Kinder Morgan Vehicle Services LLC	Delaware
Kinder Morgan Virginia Liquids Terminals LLC	Delaware
Kinder Morgan Wink Pipeline LLC	Delaware
KinderHawk Field Services LLC	Delaware
Kiowa Lateral LLC	Delaware
KM Canada Edmonton North Rail Terminal Limited Partnership	Canada (Manitoba)
KM Canada Edmonton South Rail Terminal Limited Partnership	Canada (Manitoba)
KM Canada Marine Terminal Limited Partnership	Canada (British Columbia)
KM Canada North 40 Limited Partnership	Canada (Manitoba)
KM Canada Rail Holdings GP Limited	Canada (Alberta)
KM Canada Terminals GP ULC	Canada (Alberta)
KM Canada Terminals ULC	Canada (Alberta)
KM Crane LLC	Maryland
KM Decatur LLC	Delaware
KM Eagle Gathering LLC	Delaware
KM Express LLC	Delaware
KM Gathering LLC	Delaware
KM Insurance Texas Inc.	Texas
KM Kaskaskia Dock LLC	Delaware
KM Liquids Terminals LLC	Delaware
KM North Cahokia Land LLC	Delaware
KM North Cahokia Special Project LLC	Delaware
KM North Cahokia Terminal Project LLC	Delaware
KM Phoenix Holdings LLC	Delaware
KM Ship Channel Services LLC	Delaware
KM Treating GP LLC	Delaware
KM Treating Production LLC	Delaware
KMBT Legacy Holdings LLC	Tennessee
KMBT LLC	Delaware
KMGP Services Company, Inc.	Delaware

Exhibit 21.1

Kinder Morgan, Inc.

Subsidiaries of the Registrant as of December 31, 2018

Entity Name	Place of Incorporation
KN Telecommunications, Inc.	Colorado
Knight Power Company LLC	Delaware
KW Express, LLC	Delaware
Liberty Pipeline Group, LLC	Delaware
Lomita Rail Terminal LLC	Delaware
Mesquite Investors, L.L.C.	Delaware
Midco LLC	Delaware
Midcontinent Express Pipeline LLC	Delaware
Mid-Ship Group LLC	Delaware
Mid-Ship Oil Brokers LLC	Delaware
Milwaukee Bulk Terminals LLC	Wisconsin
MJR Operating LLC	Maryland
Mojave Pipeline Company, L.L.C.	Delaware
Mojave Pipeline Operating Company, L.L.C.	Texas
Natural Gas Pipeline Company of America LLC	Delaware
NGPL Finance LLC	Delaware
NGPL Holdings LLC	Delaware
NGPL Intermediate Holdings LLC	Delaware
NGPL PipeCo LLC	Delaware
North Cahokia Industrial, LLC	Delaware
North Cahokia Real Estate, LLC	Delaware
North Cahokia Terminal, LLC	Delaware
Paddy Ryan Crane, LLC	Louisiana
Palmetto Products Pipe Line LLC	Delaware
Permian Highway Pipeline LLC	Delaware
PI 2 Pelican State LLC	Delaware
Pinney Dock & Transport LLC	Delaware
Plantation Pipe Line Company	Delaware and Virginia
Plantation Services LLC	Delaware
Queen City Terminals LLC	Delaware
Rahway River Land LLC	Delaware
Red Cedar Gathering Company	Colorado
River Terminals Properties GP LLC	Delaware
River Terminals Properties, L.P.	Tennessee
Ruby Investment Company, L.L.C.	Delaware
Ruby Pipeline Holding Company, L.L.C.	Delaware
Ruby Pipeline, L.L.C.	Delaware
Sage Refined Products GP, LLC	Texas
Sage Refined Products, Ltd.	Texas
ScissorTail Energy, LLC	Delaware

Exhibit 21.1

Kinder Morgan, Inc.

Subsidiaries of the Registrant as of December 31, 2018

Entity Name	Place of Incorporation
SFPP, L.P.	Delaware
Sierrita Gas Pipeline LLC	Delaware
SNG Pipeline Services Company, L.L.C.	Delaware
Sonoran Pipeline LLC	Delaware
Southern Dome, LLC	Delaware
Southern Gulf LNG Company, L.L.C.	Delaware
Southern Liquefaction Company LLC	Delaware
Southern LNG Company, L.L.C.	Delaware
Southern Natural Gas Company, L.L.C.	Delaware
Southern Natural Issuing Corporation	Delaware
Southern Oklahoma Gathering LLC	Delaware
SouthTex Treaters LLC	Delaware
Southwest Florida Pipeline LLC	Delaware
SRT Vessels LLC	Delaware
Stevedore Holdings, L.P.	Delaware
Tejas Gas, LLC	Delaware
Tejas Natural Gas, LLC	Delaware
Tennessee Gas Pipeline Company, L.L.C.	Delaware
Tennessee Gas Pipeline Issuing Corporation	Delaware
Texan Tug LLC	Delaware
TGP Pipeline Services Company, L.L.C.	Delaware
The Pecos Carbon Dioxide Pipeline Company	Texas
TransColorado Gas Transmission Company LLC	Delaware
Transload Services, LLC	Illinois
Transport USA, Inc.	Pennsylvania
Utica Marcellus Texas Pipeline LLC	Delaware
Webb/Duval Gatherers	Texas
Western Plant Services LLC	Delaware
WYCO Development LLC	Colorado
Wyoming Interstate Company, L.L.C.	Delaware
Young Gas Storage Company, Ltd.	Colorado

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-172170, 333-172582, 333-172584, 333-172606, 333-181782 and 333-205430) of Kinder Morgan, Inc. of our report dated February 8, 2019 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Houston, Texas
February 8, 2019

Exhibit 31.1

KINDER MORGAN, INC. AND SUBSIDIARIES
CERTIFICATION PURSUANT TO RULE 13A-14(A) OR 15D-14(A)
OF THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Steven J. Kean, certify that:

1. I have reviewed this annual report on Form 10-K of Kinder Morgan, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States;

    c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 8, 2019

/s/ Steven J. Kean
Steven J. Kean
Chief Executive Officer

Exhibit 31.2

KINDER MORGAN, INC. AND SUBSIDIARIES
CERTIFICATION PURSUANT TO RULE 13A-14(A) OR 15D-14(A)
OF THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, David P. Michels, certify that:

1. I have reviewed this annual report on Form 10-K of Kinder Morgan, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States;

   c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 8, 2019

/s/ David P. Michels
David P. Michels
Vice President and Chief Financial Officer

Exhibit 32.1

KINDER MORGAN, INC. AND SUBSIDIARIES
CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906
OF THE
SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of Kinder Morgan, Inc. (the "Company") for the yearly period ended December 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, in the capacity and on the date indicated below, hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 8, 2019

/s/ Steven J. Kean
Steven J. Kean
Chief Executive Officer

Exhibit 32.2

KINDER MORGAN, INC.
CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906
OF THE
SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of Kinder Morgan, Inc. (the "Company") for the yearly period ended December 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, in the capacity and on the date indicated below, hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 8, 2019

/s/ David P. Michels
David P. Michels
Vice President and Chief Financial Officer