



Southern Company

2019 Annual Report

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THOMAS A. FANNING
Chairman, President & CEO,
Southern Company

Dear fellow shareholders,

By all accounts, 2019 was an outstanding year for Southern Company and our subsidiaries, as we performed well across a broad range of metrics. We reached all our major construction milestones for 2019 in the construction of new nuclear units 3 and 4 at Plant Vogtle. Operational performance at our state-regulated utilities was superb, with record generation and transmission performance. We concluded several key regulatory proceedings, including constructive base rate cases for Georgia Power, Nicor Gas and Atlanta Gas Light.

We continued to decarbonize our system's generating fleet in an economically responsible fashion, decreasing our coal generating capacity by 2,000 megawatts while simultaneously expanding our portfolio of renewable energy sources, which now account for 17% of our system's total generating capacity.

These and other accomplishments were acknowledged by the markets, as our share price increased 45% in 2019, with a \$22 billion increase in market capitalization.

However, as this annual report goes to press in March of 2020, I would be remiss not to acknowledge the tremendous challenge facing our nation in the form of the coronavirus (COVID-19) pandemic. Please rest assured that Southern Company and our subsidiaries are committed to our customers and we will work to deliver exceptional service and reliability during this unprecedented time of uncertainty, all while maintaining a laser focus on the safety of our employees and the communities we serve. Our people are already rising to the occasion to ensure that our vital service remains resilient, much as we have done on so many occasions in the wake of hurricanes, ice storms and other severe weather events.

Southern Company was ranked among America's Best Large Employers for 2019 by *Forbes* magazine, the top-ranked company in our industry and 14th overall in the United States. Earlier this year, we were named among the World's Most Admired Companies by *Fortune* magazine, based on feedback from more than 3,800 executives, directors and analysts.

In January of this year, we were pleased to announce a \$50 million multi-year initiative to provide students attending historically black colleges and universities (HBCUs) with scholarships, internships, leadership development and access to technology and innovation to support career readiness. This investment is consistent with Southern Company's commitment to diversity in all forms. In making this commitment, we hope to encourage additional giving from other corporations to increase HBCU funding.

The following is a brief review of progress achieved in each of our five strategic priorities.

Excel at the Fundamentals

Our state-regulated electric and gas subsidiaries continue to provide outstanding customer service. J.D. Power, which ranks companies based on power quality and reliability, price, billing and payment, corporate citizenship, communications and customer service, once again rated Georgia Power the number one large electric utility in the South for both residential and business customer satisfaction for the third and second consecutive years, respectively.

In 2019, transmission System Average Interruption Frequency Index (SAIFI), an industry index for measuring the number of

outages experienced by an average customer in a year, was the best in the history of the Southern Company system. In one of the coldest winters on record in northern Illinois, Nicor Gas was able to reliably deliver natural gas to customers despite unprecedented cold temperatures.

Achieve Success with Major Construction Projects

At Plant Vogtle, we established an aggressive site work plan as the strategy to achieve the November 2021 and November 2022 regulatory-approved in-service dates for new nuclear units 3 and 4. Executing this strategy resulted in substantial progress at the site, and we reached all major construction milestones in 2019. The aggressive site work plan set a goal of approaching 90% completion of Unit 3 direct construction by year-end 2019. Unit 3 direct construction was 85% complete at the end of February 2020.

Support the Building of a National Energy Policy

We continue to advocate for a comprehensive national energy policy through active engagement in public policy debate, working constructively with regulators and with legislators on both sides of the aisle. We believe good public policy can be a driving force to create jobs and personal income that will advance the prosperity of the American people. We support an energy policy that promotes innovation and benefits both our evolving industry and the customers and communities we serve.

Promote Energy Innovation

Even as our nation's first new nuclear units in more than 30 years are under construction at Plant Vogtle, Southern Company is innovating on other fronts, as well.

Our research and development (R&D) organization celebrated 50 years of industry-leading innovation to deliver more value to customers.

Our PowerSecure subsidiary is a leading provider of distributed energy infrastructure and energy efficiency solutions. According to Greentech Media, PowerSecure is the largest commercial microgrid developer in the U.S.

Southern Linc, our wireless communications subsidiary, completed their conversion to a Long-Term Evolution (LTE) network, providing enhanced reliability, redundancy and security for their customers.

We are also helping develop the next generation of technology innovators. The Alabama Power Foundation has partnered with Apple and TechAlabama to create Ed Farm, an organization that seeks to encourage and inspire children and adults to discover

and explore technology and pursue STEM (science, technology, engineering and math) careers. Ed Farm will provide rigorous challenge-based learning experiences that help solve community problems and build entrepreneurial skills.

Value and Develop Our People

In 2019, Southern Company was once again recognized as one of the top companies in the nation for diversity and inclusion. We were recognized as one of the Top 50 Companies for Diversity by both DiversityInc and *Black Enterprise* magazine. For the 10th consecutive year, the company was ranked as a Best for Vets Employer by *Military Times EDGE* magazine. The Disability Equality Index recognized Southern Company as one of the Best Places to Work for Disability Inclusion.

Once again, we earned a perfect score of 100 from the Human Rights Campaign on their 2020 Workplace Equality Index. We were named a Top 10 Military-Friendly Employer for 2020 by *G.I. Jobs* magazine, the 13th consecutive year to be so recognized.

We also created the Diversity and Inclusion Leadership Alliance, a group of senior company leaders who will collaborate to develop enterprise-wide solutions with a view to foster an even more inclusive workplace.

In closing, the foundation of our business remains strong with excellent fundamentals, as evidenced by customer satisfaction, operational excellence and constructive regulatory relationships. Our success in 2019 was the direct result of an unwavering focus on the core values that have shaped our company's identity since its inception. In 2020, we will continue to embrace these same values as we keep the lights on and the energy flowing for the duration of the COVID-19 health event.

Our customer-focused business model continues to be the cornerstone for delivering value to customers and shareholders alike, and our management team is experienced and motivated, with a long track record of successfully executing on this time-tested model. We believe our company is poised for continued success, both today and in the years ahead.

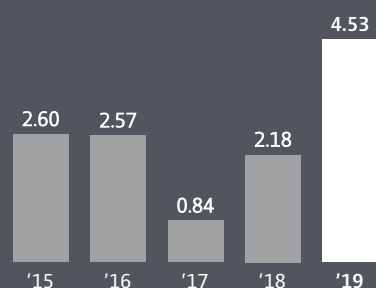
We are grateful for your continued confidence in Southern Company. It is a privilege to serve you.

Sincerely,

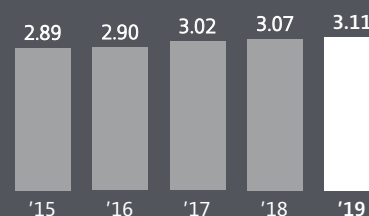


Thomas A. Fanning
March 26, 2020

Financial Highlights

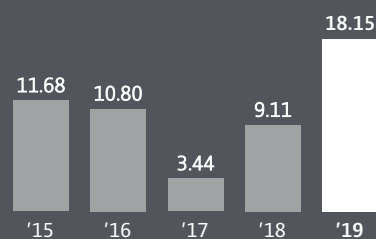


Basic Earnings Per Share
(in dollars)

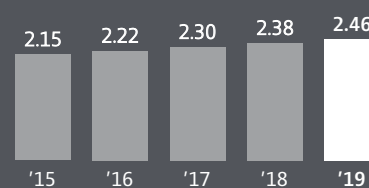


Basic Earnings Per Share - Excluding Items*
(in dollars)

* Not a financial measure under generally accepted accounting principles. See Reconciliation of Non-GAAP Financial Metric on page 11 for additional information and specific adjustments made to this measure by year.



Return On Average Common Equity
(percent)



Dividends Per Share
(in dollars)

	2019	2018	Change
Operating Revenues (in millions)	\$21,419	\$23,495	(8.8)%
Earnings (in millions)	\$4,739	\$2,226	112.9 %
Basic Earnings Per Share	\$4.53	\$2.18	107.8 %
Diluted Earnings Per Share	\$4.50	\$2.17	107.4 %
Dividends Per Share (amount paid)	\$2.46	\$2.38	3.4 %
Dividend Yield (year-end, percent)	3.9	5.4	(27.8)%
Average Shares Outstanding (in millions)	1,046	1,020	2.5 %
Return On Average Common Equity (percent)	18.15	9.11	99.2 %
Book Value Per Share	\$26.11	\$23.91	9.2 %
Market Price Per Share (year-end, closing)	\$63.70	\$43.92	45.0 %
Total Market Value Of Common Stock (year-end, in millions)	\$67,092	\$45,404	47.8 %
Total Assets (in millions)	\$118,700	\$116,914	1.5 %
Total Kilowatt-Hour Sales (in millions)	196,488	212,144	(7.4)%
Retail	148,461	162,181	(8.5)%
Wholesale	48,027	49,963	(3.9)%
Total Utility Customers (year-end, in thousands)	8,543	8,933	(4.4)%

Board of Directors



Thomas A. Fanning



Janaki Akella



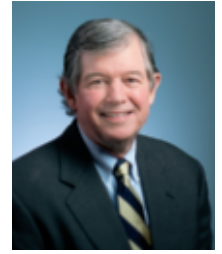
Juanita Powell Baranco



Jon A. Boscia



Henry A. Clark III



Anthony F. Earley, Jr.



David J. Grain



Donald M. James



John D. Johns



Dale E. Klein



Ernest J. Moniz



William G. Smith, Jr.



Steven R. Specker



Larry D. Thompson



E. Jenner Wood III

Management Council



Thomas A. Fanning



W. Paul Bowers



Stanley W. Connally, Jr.



Mark A. Crosswhite



Andrew W. Evans



Kimberly S. Greene



James Y. Kerr II



Stephen E. Kuczynski



Mark S. Lantrip



Anthony L. Wilson



Christopher C. Womack

Board of Directors

Thomas A. Fanning

Chairman, President and CEO, Southern Company
Atlanta, GA | Age 63 | elected 2010

Janaki Akella

Digital Transformation Leader
Google LLC (technology)
Palo Alto, CA | Age 59 | elected 2019

Juanita Powell Baranco

Executive Vice President and Chief Operating Officer
Baranco Automotive Group (automobile sales)
Atlanta, GA | Age 71 | elected 2006

Jon A. Boscia

Retired Founder and President
Boardroom Advisors, LLC (board governance consulting firm)
Sarasota, FL | Age 67 | elected 2007

Henry A. Clark III

Retired Senior Advisor, Evercore Inc.
(global independent investment advisory firm)
Hobe Sound, FL | Age 70 | elected 2009

Anthony F. Earley, Jr.

Retired Chairman, President and CEO
PG&E Corporation (utility)
Bloomfield Hills, MI | Age 70 | elected 2019

David J. Grain

CEO and Managing Director
Grain Management, LLC (private equity firm)
Sarasota, FL | Age 57 | elected 2012

Donald M. James

Retired Chairman and CEO, Vulcan Materials Company (construction materials)
Pensacola, FL | Age 71 | elected 1999

John D. Johns

Chairman of DLI North America Inc., the oversight company for
Protective Life Corporation (insurance)
Birmingham, AL | Age 68 | elected 2015

Dale E. Klein

Associate Vice Chancellor of Research, University of Texas System
Retired Chairman, U.S. Nuclear Regulatory Commission (energy)
Austin, TX | Age 72 | elected 2010

Ernest J. Moniz

Cecil and Ida Green Professor of Physics and Engineering Systems emeritus,
Massachusetts Institute of Technology
CEO and Co-Chair, Nuclear Threat Initiative (energy)
Former U.S. Secretary of Energy
Brookline, MA | Age 75 | elected 2018

William G. Smith, Jr.

Chairman, President and CEO, Capital City Bank Group, Inc. (banking)
Tallahassee, FL | Age 66 | elected 2006

Steven R. Specker

Lead Independent Director, Southern Company Board
Retired CEO, TAE Technologies, Inc. (energy technology)
Scottsdale, AZ | Age 74 | elected 2010

Larry D. Thompson

Counsel, Finch McCranie, LLP (attorney)
Atlanta, GA | Age 74 | elected 2014

E. Jenner Wood III

Corporate Executive Vice President—Wholesale Banking,
SunTrust Banks, Inc. (banking)
Atlanta, GA | Age 68 | elected 2012

Management Council

Thomas A. Fanning

Chairman, President and CEO
Fanning, 63, joined the company in 1980

W. Paul Bowers

Chairman, President and CEO, Georgia Power
Bowers, 63, joined the company in 1979

Stanley W. Connally, Jr.

Executive Vice President, Operations, Southern Company Services, Inc.
Connally, 50, joined the company in 1989

Mark A. Crosswhite

Chairman, President and CEO, Alabama Power
Crosswhite, 57, joined the company in 2004

Andrew W. Evans

Executive Vice President and Chief Financial Officer
Evans, 53, has held his current role since June 2018

Kimberly S. Greene

Chairman, President and CEO, Southern Company Gas
Greene, 53, has held her current role since June 2018

James Y. Kerr II

Executive Vice President, Chief Legal Officer and Chief Compliance Officer
Kerr, 56, joined the company in March 2014

Stephen E. Kuczynski

Chairman, President and CEO, Southern Nuclear
Kuczynski, 57, joined the company in July 2011

Mark S. Lantrip

Executive Vice President
Chairman, President and CEO, Southern Company Services, Inc.
Chairman and CEO, Southern Power
Lantrip, 65, joined the company in 1981

Anthony L. Wilson

Chairman, President and CEO, Mississippi Power
Wilson, 56, joined the company in 1984

Christopher C. Womack

Executive Vice President and President, External Affairs
Womack, 62, joined the company in 1988

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Definitions

2013 ARP

Alternate Rate Plan approved by the Georgia PSC in 2013 for Georgia Power for the years 2014 through 2016 and subsequently extended through 2019

2019 ARP

Alternate Rate Plan approved by the Georgia PSC in 2019 for Georgia Power for the years 2020 through 2022

AFUDC

Allowance for funds used during construction

Alabama Power

Alabama Power Company

Amended and Restated Loan Guarantee Agreement

Loan guarantee agreement entered into by Georgia Power with the DOE in 2014, as amended and restated on March 22, 2019, under which the proceeds of borrowings may be used to reimburse Georgia Power for Eligible Project Costs incurred in connection with its construction of Plant Vogtle Units 3 and 4

AOCI

Accumulated other comprehensive income

ARO

Asset retirement obligation

ASC

Accounting Standards Codification

ASU

Accounting Standards Update

Atlanta Gas Light

Atlanta Gas Light Company, a wholly-owned subsidiary of Southern Company Gas

Atlantic Coast Pipeline

Atlantic Coast Pipeline, LLC, a joint venture to construct and operate a natural gas pipeline in which Southern Company Gas has a 5% ownership interest

Bcf

Billion cubic feet

Bechtel

Bechtel Power Corporation, the primary contractor for the remaining construction activities for Plant Vogtle Units 3 and 4

Bechtel Agreement

The October 23, 2017 construction completion agreement between the Vogtle Owners and Bechtel

CCN

Certificate of convenience and necessity

CCR

Coal combustion residuals

CCR Rule

Disposal of Coal Combustion Residuals from Electric Utilities final rule published by the EPA in 2015

Chattanooga Gas

Chattanooga Gas Company, a wholly-owned subsidiary of Southern Company Gas

Clean Air Act

Clean Air Act Amendments of 1990

CO₂

Carbon dioxide

COD

Commercial operation date

Contractor Settlement Agreement

The December 31, 2015 agreement between Westinghouse and the Vogtle Owners resolving disputes between the Vogtle Owners and the EPC Contractor under the Vogtle 3 and 4 Agreement

Cooperative Energy

Electric cooperative in Mississippi

CPCN

Certificate of public convenience and necessity

CPP

Clean Power Plan, the final action published by the EPA in 2015 that established guidelines for states to develop plans to meet EPA-mandated CO₂ emission rates or emission reduction goals for existing electric generating units

CWIP

Construction work in progress

Dalton

City of Dalton, Georgia, an incorporated municipality in the State of Georgia, acting by and through its Board of Water, Light, and Sinking Fund Commissioners

Dalton Pipeline

A pipeline facility in Georgia in which Southern Company Gas has a 50% undivided ownership interest

DOE

U.S. Department of Energy

DSGP

Diamond State Generation Partners

ECO Plan

Mississippi Power's environmental compliance overview plan

Eligible Project Costs

Certain costs of construction relating to Plant Vogtle Units 3 and 4 that are eligible for financing under the loan guarantee program established under Title XVII of the Energy Policy Act of 2005

EPA

U.S. Environmental Protection Agency

EPC Contractor

Westinghouse and its affiliate, WECTEC Global Project Services Inc.; the former engineering, procurement, and construction contractor for Plant Vogtle Units 3 and 4

FASB

Financial Accounting Standards Board

FERC

Federal Energy Regulatory Commission

FFB

Federal Financing Bank

Definitions

Fitch

Fitch Ratings, Inc.

GAAP

U.S. generally accepted accounting principles

Georgia Power

Georgia Power Company

Georgia Power Tax Reform Settlement Agreement

A settlement agreement between Georgia Power and the staff of the Georgia PSC regarding the retail rate impact of the Tax Reform Legislation, as approved by the Georgia PSC in April 2018

GHG

Greenhouse gas

GRAM

Atlanta Gas Light's Georgia Rate Adjustment Mechanism

Guarantee Settlement Agreement

The June 9, 2017 settlement agreement between the Vogtle Owners and Toshiba related to certain payment obligations of the EPC Contractor guaranteed by Toshiba

Gulf Power

Gulf Power Company, until January 1, 2019 a wholly-owned subsidiary of Southern Company

Heating Degree Days

A measure of weather, calculated when the average daily temperatures are less than 65 degrees Fahrenheit

Heating Season

The period from November through March when Southern Company Gas' natural gas usage and operating revenues are generally higher

HLBV

Hypothetical liquidation at book value

IGCC

Integrated coal gasification combined cycle, the technology originally approved for Mississippi Power's Kemper County energy facility (Plant Ratcliffe)

IIC

Intercompany Interchange Contract

Illinois Commission

Illinois Commerce Commission

Internal Revenue Code

Internal Revenue Code of 1986, as amended

IPP

Independent power producer

IRP

Integrated resource plan

IRS

Internal Revenue Service

ITAAC

Inspections, Tests, Analyses, and Acceptance Criteria, standards established by the NRC

ITC

Investment tax credit

JEA

Jacksonville Electric Authority

KWH

Kilowatt-hour

LIBOR

London Interbank Offered Rate

LIFO

Last-in, first-out

LNG

Liquefied natural gas

LOCOM

Lower of weighted average cost or current market price

LTSA

Long-term service agreement

Marketers

Marketers selling retail natural gas in Georgia and certificated by the Georgia PSC

MEAG Power

Municipal Electric Authority of Georgia

Merger

The merger, effective July 1, 2016, of a wholly-owned, direct subsidiary of Southern Company with and into Southern Company Gas, with Southern Company Gas continuing as the surviving corporation

MGP

Manufactured gas plant

Mississippi Power

Mississippi Power Company

mmBtu

Million British thermal units

Moody's

Moody's Investors Service, Inc.

MPUS

Mississippi Public Utilities Staff

MRA

Municipal and Rural Associations

MW

Megawatt

MWH

Megawatt hour

natural gas distribution utilities

Southern Company Gas' natural gas distribution utilities (Nicor Gas, Atlanta Gas Light, Virginia Natural Gas, Elizabethtown Gas, Florida City Gas, Chattanooga Gas, and Elkton Gas through June 30, 2018) (Nicor Gas, Atlanta Gas Light, Virginia Natural Gas, and Chattanooga Gas after July 29, 2018)

NCCR

Georgia Power's Nuclear Construction Cost Recovery

Definitions

NDR

Alabama Power's Natural Disaster Reserve

NextEra Energy

NextEra Energy, Inc.

Nicor Gas

Northern Illinois Gas Company, a wholly-owned subsidiary of Southern Company Gas

NO_x

Nitrogen oxide

NRC

U.S. Nuclear Regulatory Commission

NYMEX

New York Mercantile Exchange, Inc.

NYSE

New York Stock Exchange

OCI

Other comprehensive income

OPC

Oglethorpe Power Corporation (an Electric Membership Corporation)

OTC

Over-the-counter

PennEast Pipeline

PennEast Pipeline Company, LLC, a joint venture to construct and operate a natural gas pipeline in which Southern Company Gas has a 20% ownership interest

PEP

Mississippi Power's Performance Evaluation Plan

Pivotal Home Solutions

Nicor Energy Services Company, until June 4, 2018 a wholly-owned subsidiary of Southern Company Gas, doing business as Pivotal Home Solutions

Pivotal LNG

Pivotal LNG, Inc., a wholly-owned subsidiary of Southern Company Gas

Pivotal Utility Holdings

Pivotal Utility Holdings, Inc., until July 29, 2018 a wholly-owned subsidiary of Southern Company Gas, doing business as Elizabethtown Gas (until July 1, 2018), Elkton Gas (until July 1, 2018), and Florida City Gas (until July 29, 2018)

PowerSecure

PowerSecure, Inc., a wholly-owned subsidiary of Southern Company

PowerSouth

PowerSouth Energy Cooperative

PPA

Power purchase agreements, as well as, for Southern Power, contracts for differences that provide the owner of a renewable facility a certain fixed price for the electricity sold to the grid

PRP

Pipeline Replacement Program, an Atlanta Gas Light infrastructure program through 2013

PSC

Public Service Commission

PTC

Production tax credit

Rate CNP

Alabama Power's Rate Certificated New Plant, consisting of Rate CNP New Plant, Rate CNP Compliance, and Rate CNP PPA

Rate ECR

Alabama Power's Rate Energy Cost Recovery

Rate NDR

Alabama Power's Rate Natural Disaster Reserve

Rate RSE

Alabama Power's Rate Stabilization and Equalization

Registrants

Southern Company, Alabama Power, Georgia Power, Mississippi Power, Southern Power Company, and Southern Company Gas

ROE

Return on equity

S&P

S&P Global Ratings, a division of S&P Global Inc.

SCS

Southern Company Services, Inc. (the Southern Company system service company and a wholly-owned subsidiary of Southern Company)

SEC

U.S. Securities and Exchange Commission

SEGCO

Southern Electric Generating Company, 50% owned by each of Alabama Power and Georgia Power

Sequent

Sequent Energy Management, L.P., a wholly-owned subsidiary of Southern Company Gas

SNG

Southern Natural Gas Company, L.L.C., a pipeline system in which Southern Company Gas has a 50% ownership interest

SO₂

Sulfur dioxide

Southern Company

The Southern Company

Southern Company Gas

Southern Company Gas and its subsidiaries

Southern Company Gas Capital

Southern Company Gas Capital Corporation, a 100%-owned subsidiary of Southern Company Gas

Southern Company Gas Dispositions

Southern Company Gas' disposition of Pivotal Home Solutions, Pivotal Utility Holdings' disposition of Elizabethtown Gas and Elkton Gas, and NUI Corporation's disposition of Pivotal Utility Holdings, which primarily consisted of Florida City Gas

Definitions

Southern Company power pool

The operating arrangement whereby the integrated generating resources of the traditional electric operating companies and Southern Power (excluding subsidiaries) are subject to joint commitment and dispatch in order to serve their combined load obligations

Southern Company system

Southern Company, the traditional electric operating companies, Southern Power, Southern Company Gas, SEGCO, Southern Nuclear, SCS, Southern Linc, PowerSecure, and other subsidiaries

Southern Holdings

Southern Company Holdings, Inc., a wholly-owned subsidiary of Southern Company

Southern Linc

Southern Communications Services, Inc., a wholly-owned subsidiary of Southern Company, doing business as Southern Linc

Southern Nuclear

Southern Nuclear Operating Company, Inc., a wholly-owned subsidiary of Southern Company

Southern Power

Southern Power Company and its subsidiaries

SouthStar

SouthStar Energy Services, LLC, a wholly-owned subsidiary of Southern Company Gas

SP Solar

SP Solar Holdings I, LP, a limited partnership indirectly owning substantially all of Southern Power's solar facilities, in which Southern Power has a 67% ownership interest

SP Wind

SP Wind Holdings II, LLC, a holding company owning a portfolio of eight operating wind facilities, in which Southern Power is the controlling partner in a tax equity arrangement

SRR

Mississippi Power's System Restoration Rider, a tariff for retail property damage reserve

Subsidiary Registrants

Alabama Power, Georgia Power, Mississippi Power, Southern Power, and Southern Company Gas

Tax Reform Legislation

The Tax Cuts and Jobs Act, which became effective on January 1, 2018

Toshiba

Toshiba Corporation, the parent company of Westinghouse

Toshiba Guarantee

Certain payment obligations of the EPC Contractor guaranteed by Toshiba

traditional electric operating companies

Alabama Power, Georgia Power, Gulf Power, and Mississippi Power through December 31, 2018; Alabama Power, Georgia Power, and Mississippi Power as of January 1, 2019

Triton

Triton Container Investments, LLC, an investment of Southern Company Gas through May 29, 2019

VCM

Vogtle Construction Monitoring

VIE

Variable interest entity

Virginia Commission

Virginia State Corporation Commission

Virginia Natural Gas

Virginia Natural Gas, Inc., a wholly-owned subsidiary of Southern Company Gas

Vogtle 3 and 4 Agreement

Agreement entered into with the EPC Contractor in 2008 by Georgia Power, acting for itself and as agent for the Vogtle Owners, and rejected in bankruptcy in July 2017, pursuant to which the EPC Contractor agreed to design, engineer, procure, construct, and test Plant Vogtle Units 3 and 4

Vogtle Owners

Georgia Power, Oglethorpe Power Corporation, MEAG Power, and Dalton

Vogtle Services Agreement

The June 2017 services agreement between the Vogtle Owners and the EPC Contractor, as amended and restated in July 2017, for the EPC Contractor to transition construction management of Plant Vogtle Units 3 and 4 to Southern Nuclear and to provide ongoing design, engineering, and procurement services to Southern Nuclear

WACOG

Weighted average cost of gas

Westinghouse

Westinghouse Electric Company LLC

Xcel

Xcel Energy Inc.

Reconciliation of Non-GAAP Financial Metric

(In millions, except earnings per share)	Year Ended December 31,				
	2019	2018	2017	2016	2015
Net Income – GAAP	\$ 4,739	\$ 2,226	\$ 842	\$ 2,448	\$ 2,367
Average Shares Outstanding	1,046	1,020	1,000	951	910
Basic Earnings Per Share	\$ 4.53	\$ 2.18	\$ 0.84	\$ 2.57	\$ 2.60
Net Income – GAAP	\$ 4,739	\$ 2,226	\$ 842	\$ 2,448	\$ 2,367
Less Non-GAAP Excluding Items:					
Acquisition, Disposition, and Integration Impacts ⁽¹⁾	2,516	35	(35)	(120)	(41)
Tax Impact	(1,081)	(294)	(12)	38	10
Estimated Loss on Plants Under Construction ⁽²⁾	(27)	(1,102)	(3,366)	(428)	(365)
Tax Impact	—	376	975	164	139
Loss on Plant Scherer Unit 3 ⁽³⁾	—	—	(33)	—	—
Tax Impact	—	—	13	—	—
Wholesale Gas Services ⁽⁴⁾	215	42	(57)	(4)	—
Tax Impact	(52)	(4)	—	4	—
Asset Impairment ⁽⁵⁾	(108)	—	—	—	—
Tax Impact	26	—	—	—	—
Litigation Settlement Costs (Proceeds) ⁽⁶⁾	—	24	—	—	(7)
Tax Impact	—	(6)	—	—	3
Earnings Guidance Comparability Items:⁽⁷⁾					
Equity Return Related to Kemper IGCC Schedule Extension	—	—	47	29	—
Tax Impact	—	—	9	5	—
Adoption of Tax Reform	—	27	284	—	—
Net Income – Excluding Items	\$ 3,250	\$ 3,128	\$ 3,017	\$ 2,760	\$ 2,628
Basic Earnings Per Share – Excluding Items	\$ 3.11	\$ 3.07	\$ 3.02	\$ 2.90	\$ 2.89

- (1) Net income for the year ended December 31, 2019 includes: (i) a \$2.6 billion pre-tax (\$1.4 billion after-tax) gain on the sale of Gulf Power; (ii) a \$23 million pre-tax (\$88 million after-tax) gain on the sale of Plant Nacagdoches; and (iii) \$18 million pre tax (\$11 million after tax) of other acquisition, disposition, and integration impacts, partially offset by: (i) a \$58 million pre-tax (\$52 million after-tax) net loss, including impairment charges, associated with the sales of PowerSecure's utility infrastructure services and lighting businesses and (ii) a \$24 million pre-tax (\$17 million after-tax) impairment charge in contemplation of the pending sale of Pivotal LNG and Atlantic Coast Pipeline. Net income for the year ended December 31, 2018 includes: (i) a net combined \$249 million pre-tax gain (\$93 million after-tax loss) on the sales of Elizabethtown Gas, Elkton Gas, Florida City Gas, and Pivotal Home Solutions, including a related impairment charge; (ii) a \$119 million pre-tax (\$89 million after tax) impairment charge associated with the sales of Plants Stanton and Oleander; and (iii) \$95 million pre tax (\$77 million after tax) of other acquisition, disposition, and integration costs. Net income for the years ended December 31, 2017, 2016, and 2015 includes costs related to the acquisition and integration of Southern Company Gas and net income for the year ended December 31, 2017 also includes costs related to the dispositions of Elizabethtown Gas and Elkton Gas. Additionally, net income for the year ended December 31, 2016 includes costs related to the acquisitions of PowerSecure International, Inc. and the 50% interest in SNG. Further impacts are expected to be recorded in 2020 in connection with the sale of Plant Mankato and the pending sale of Pivotal LNG and Atlantic Coast Pipeline.
- (2) Net income for all periods presented includes charges, associated legal expenses, and tax impacts related to Mississippi Power's construction and abandonment of the Kemper IGCC. Additionally, the year ended December 31, 2018 includes a \$95 million credit to net income primarily resulting from the reduction of a related state income tax valuation allowance recorded in 2017. Net income for the year ended December 31, 2018 also includes a \$1.1 billion charge (\$0.8 billion after tax) for an estimated probable loss on Georgia Power's construction of Plant Vogtle Units 3 and 4. These items significantly impacted net income and earnings per share. Mississippi Power expects to substantially complete mine reclamation activities in 2020 and dismantlement of the abandoned gasifier-related assets and site restoration activities by 2024. The additional pre-tax period costs associated with these activities, including related costs for compliance and safety, asset retirement obligation accretion, and property taxes, are estimated to total \$17 million in 2020, \$15 to \$16 million annually in 2021 through 2023, and \$5 million in 2024. Further charges related to Plant Vogtle Units 3 and 4 may occur; however, the amount and timing of any such charges are uncertain.
- (3) Net income for the year ended December 31, 2017 includes a \$32.5 million write-down (\$20 million after tax) of Gulf Power's ownership of Plant Scherer Unit 3 as the result of a retail rate case settlement.
- (4) Net income for the years ended December 31, 2019, 2018, 2017, and 2016 includes the Wholesale Gas Services business. Presenting net income and earnings per share excluding Wholesale Gas Services provides an additional measure of operating performance that excludes the volatility resulting from mark-to-market and lower of weighted average cost or current market price accounting adjustments.
- (5) Net income for the year ended December 31, 2019 includes a pre-tax impairment charges associated with a natural gas storage facility and a leveraged lease. Additional impairment charges associated with other natural gas storage facilities or this leveraged lease investment may occur; however, the amount and timing of any such charges are uncertain.
- (6) Net income for the year ended December 31, 2018 includes the settlement proceeds of Mississippi Power's claim for lost revenue resulting from the 2010 Deepwater Horizon oil spill. Additionally, net income for the year ended December 31, 2015 includes additional costs associated with the discontinued operations of Mirant Corporation and a related March 2009 litigation settlement.
- (7) Net income for the years ended December 31, 2017 and 2016 includes AFUDC equity as a result of extending the schedule for the Kemper IGCC construction project beyond the dates assumed when Southern Company's 2016 and 2017 earnings guidance was initially presented. AFUDC equity ceased in connection with the project's suspension in June 2017. Net income for the years ended December 31, 2018 and 2017 includes net tax benefits as a result of implementing the Tax Reform Legislation. During 2018, Southern Company obtained and analyzed additional information that was not initially available or reported as provisional amounts at December 31, 2017. Additional adjustments are not expected.

Cautionary Statement Regarding Forward-Looking Statements

Southern Company's Annual Report contains forward-looking statements. Forward-looking statements include, among other things, statements concerning regulated rates, the strategic goals for the business, customer and sales growth, economic conditions, fuel and environmental cost recovery and other rate actions, projected equity ratios, current and proposed environmental regulations and related compliance plans and estimated expenditures, pending or potential litigation matters, access to sources of capital, projections for the qualified pension plans, postretirement benefit plans, and nuclear decommissioning trust fund contributions, financing activities, completion dates and costs of construction projects, matters related to the abandonment of the Kemper IGCC, completion of announced acquisitions and dispositions, filings with state and federal regulatory authorities, federal and state income tax benefits, estimated sales and purchases under power sale and purchase agreements, and estimated construction plans and expenditures. In some cases, forward-looking statements can be identified by terminology such as "may," "will," "could," "would," "should," "expects," "plans," "anticipates," "believes," "estimates," "projects," "predicts," "potential," or "continue" or the negative of these terms or other similar terminology. There are various factors that could cause actual results to differ materially from those suggested by the forward-looking statements; accordingly, there can be no assurance that such indicated results will be realized. These factors include:

- the impact of recent and future federal and state regulatory changes, including tax, environmental, and other laws and regulations to which Southern Company and its subsidiaries are subject, as well as changes in application of existing laws and regulations;
- the extent and timing of costs and legal requirements related to CCR;
- current and future litigation or regulatory investigations, proceedings, or inquiries, including litigation and other disputes related to the Kemper County energy facility;
- the effects, extent, and timing of the entry of additional competition in the markets in which Southern Company's subsidiaries operate, including from the development and deployment of alternative energy sources;
- variations in demand for electricity and natural gas;
- available sources and costs of natural gas and other fuels;
- the ability to complete necessary or desirable pipeline expansion or infrastructure projects, limits on pipeline capacity, and operational interruptions to natural gas distribution and transmission activities;
- transmission constraints;
- effects of inflation;
- the ability to control costs and avoid cost and schedule overruns during the development, construction, and operation of facilities or other projects, including Plant Vogtle Units 3 and 4, which includes components based on new technology that only within the last few years began initial operation in the global nuclear industry at this scale, and including changes in labor costs, availability, and productivity; challenges with management of contractors or vendors; subcontractor performance; adverse weather conditions; shortages, delays, increased costs, or inconsistent quality of equipment, materials, and labor; contractor or supplier delay; delays due to judicial or regulatory action; nonperformance under construction, operating, or other agreements; operational readiness, including specialized operator training and required site safety programs; engineering or design problems; design and other licensing-based compliance matters, including, for nuclear units, the timely submittal by Southern Nuclear of the ITAAC documentation for each unit and the related reviews and approvals by the NRC necessary to support NRC authorization to load fuel; challenges with start-up activities, including major equipment failure, system integration, or regional transmission upgrades; and/or operational performance;
- the ability to overcome or mitigate the current challenges at Plant Vogtle Units 3 and 4, as described in Note 2 to the financial statements under "Georgia Power – Nuclear Construction" herein, that could impact the cost and schedule for the project;
- legal proceedings and regulatory approvals and actions related to construction projects, such as Plant Vogtle Units 3 and 4 and pipeline projects, including PSC approvals and FERC and NRC actions;
- under certain specified circumstances, a decision by holders of more than 10% of the ownership interests of Plant Vogtle Units 3 and 4 not to proceed with construction and the ability of other Vogtle Owners to tender a portion of their ownership interests to Georgia Power following certain construction cost increases;
- in the event Georgia Power becomes obligated to provide funding to MEAG Power with respect to the portion of MEAG Power's ownership interest in Plant Vogtle Units 3 and 4 involving JEA, any inability of Georgia Power to receive repayment of such funding;
- the ability to construct facilities in accordance with the requirements of permits and licenses (including satisfaction of NRC requirements), to satisfy any environmental performance standards and the requirements of tax credits and other incentives, and to integrate facilities into the Southern Company system upon completion of construction;
- the potential effects of the continued outbreak of the novel coronavirus (COVID-19), including disruptions to supply chains, reduced labor availability or productivity, and reduced economic activity, which could have a variety of adverse impacts, including reduced demand for energy and a negative impact on the ability to develop, construct, and operate facilities;
- investment performance of the employee and retiree benefit plans and nuclear decommissioning trust funds;
- advances in technology;
- performance of counterparties under ongoing renewable energy partnerships and development agreements;

Cautionary Statement Regarding Forward-Looking Statements (continued)

- state and federal rate regulations and the impact of pending and future rate cases and negotiations, including rate actions relating to ROE, equity ratios, additional generating capacity, and fuel and other cost recovery mechanisms;
- the ability to successfully operate the electric utilities' generating, transmission, and distribution facilities and Southern Company Gas' natural gas distribution and storage facilities and the successful performance of necessary corporate functions;
- the inherent risks involved in operating and constructing nuclear generating facilities;
- the inherent risks involved in transporting and storing natural gas;
- the performance of projects undertaken by the non-utility businesses and the success of efforts to invest in and develop new opportunities;
- internal restructuring or other restructuring options that may be pursued;
- potential business strategies, including acquisitions or dispositions of assets or businesses, including the pending disposition by Southern Company Gas of its interests in Pivotal LNG and Atlantic Coast Pipeline, which cannot be assured to be completed or beneficial to Southern Company or its subsidiaries;
- the ability of counterparties of Southern Company and its subsidiaries to make payments as and when due and to perform as required;
- the ability to obtain new short- and long-term contracts with wholesale customers;
- the direct or indirect effect on the Southern Company system's business resulting from cyber intrusion or physical attack and the threat of physical attacks;
- interest rate fluctuations and financial market conditions and the results of financing efforts;
- access to capital markets and other financing sources;
- changes in Southern Company's and any of its subsidiaries' credit ratings;
- changes in the method of determining LIBOR or the replacement of LIBOR with an alternative reference rate;
- the ability of Southern Company's electric utilities to obtain additional generating capacity (or sell excess generating capacity) at competitive prices;
- catastrophic events such as fires, earthquakes, explosions, floods, tornadoes, hurricanes and other storms, droughts, pandemic health events, or other similar occurrences;
- the direct or indirect effects on the Southern Company system's business resulting from incidents affecting the U.S. electric grid, natural gas pipeline infrastructure, or operation of generating or storage resources;
- impairments of goodwill or long-lived assets;
- the effect of accounting pronouncements issued periodically by standard-setting bodies; and
- other factors discussed elsewhere herein and in other reports filed by the Registrants from time to time with the SEC.

Southern Company expressly disclaims any obligation to update any forward-looking statements.

Available Information

Southern Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2019 (Form 10-K), as well as other documents filed by Southern Company pursuant to the Securities Exchange Act of 1934, as amended, are available electronically at <http://www.sec.gov>.

A copy of the Form 10-K as filed with the Securities and Exchange Commission will be provided without charge upon written request to the office of the Corporate Secretary. Requests for copies should be directed to the Corporate Secretary, 30 Ivan Allen Jr. Blvd., N.W., Atlanta, GA 30308.

The "Management's Discussion and Analysis of Financial Condition and Results of Operations" herein generally discusses 2019 and 2018 items and year-to-year comparisons between 2019 and 2018. Discussions of 2017 items and year-to-year comparisons between 2018 and 2017 that are not included in this Annual Report can be found in Item 7 of Southern Company's Annual Report on Form 10-K for the year ended December 31, 2018, which was filed with the SEC on February 19, 2019.

Southern Company Business

Southern Company is a holding company that owns all of the outstanding common stock of Alabama Power, Georgia Power, and Mississippi Power, each of which is an operating public utility company. These traditional electric operating companies supply electric service in the states of Alabama, Georgia, and Mississippi. These traditional electric operating companies are vertically integrated utilities that own generation, transmission, and distribution facilities.

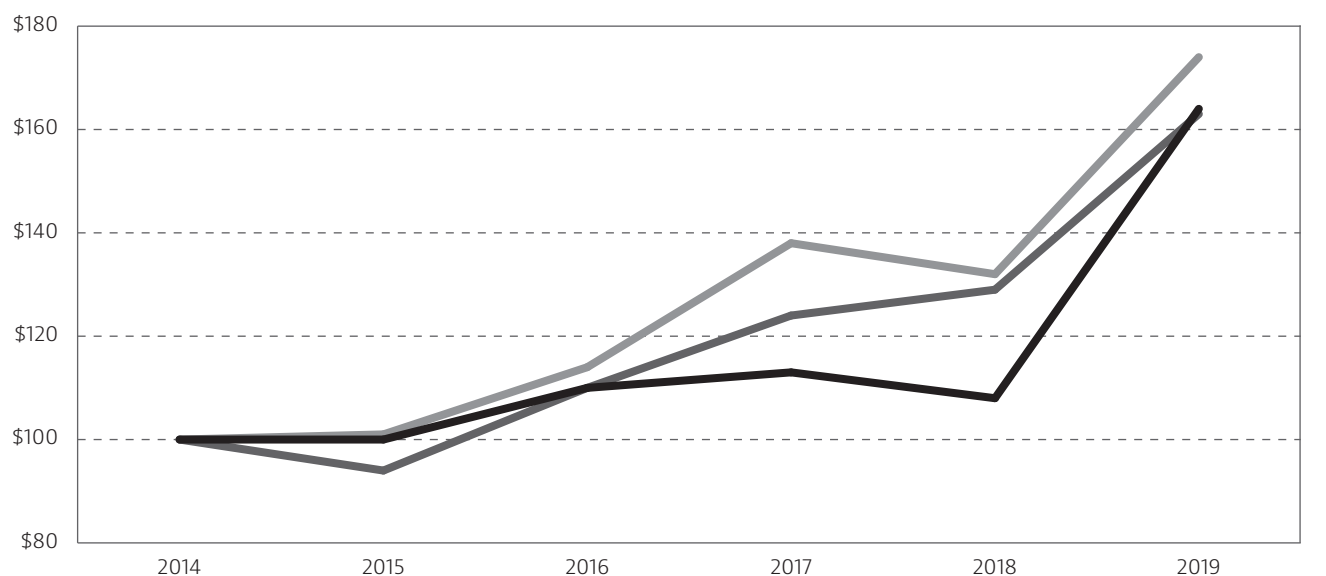
Southern Company owns all of the common stock of Southern Power Company, which is also an operating public utility company. Southern Power develops, constructs, acquires, owns, and manages power generation assets, including renewable energy projects, and sells electricity at market-based rates in the wholesale market.

Southern Company Gas, which was acquired by Southern Company in July 2016, is an energy services holding company whose primary business is the distribution of natural gas in four states – Illinois, Georgia, Virginia, and Tennessee – through the natural gas distribution utilities. Southern Company Gas is also involved in several other businesses that are complementary to the distribution of natural gas.

Southern Company also owns all of the outstanding common stock or membership interests of SCS, Southern Linc, Southern Holdings, Southern Nuclear, PowerSecure, and other direct and indirect subsidiaries. SCS, the system service company, has contracted with Southern Company, each traditional electric operating company, Southern Power, Southern Company Gas, Southern Nuclear, SEGCO, and other subsidiaries to furnish, at direct or allocated cost and upon request, the following services: general executive and advisory, general and design engineering, operations, purchasing, accounting, finance, treasury, legal, tax, information technology, marketing, auditing, insurance and pension administration, human resources, systems and procedures, digital wireless communications, cellular tower space, and other services with respect to business and operations, construction management, and Southern Company power pool transactions. Southern Linc provides digital wireless communications for use by Southern Company and its subsidiary companies and also markets these services to the public and provides fiber optics services within the Southeast. Southern Holdings is an intermediate holding company subsidiary, primarily for Southern Company's leveraged lease and other investments. Southern Nuclear operates and provides services to the Southern Company system's nuclear power plants and is currently managing construction of and developing Plant Vogtle Units 3 and 4, which are co-owned by Georgia Power. PowerSecure provides energy solutions to electric utilities and their customers in the areas of distributed generation, energy storage and renewables, and energy efficiency.

Five Year Cumulative Performance Graph

This performance graph compares the cumulative total shareholder return on Southern Company's common stock with the Standard & Poor's 500 index and the Philadelphia Utility Index for the past five years. The graph assumes that \$100 was invested on December 31, 2014 in Southern Company's common stock and each of the indices and that all dividends were reinvested. The stockholder return shown for the five-year historical period may not be indicative of future performance.



	2014	2015	2016	2017	2018	2019
— Southern Company	100	100	110	113	108	164
— Philadelphia Utilities Index	100	94	110	124	129	163
— S&P 500	100	101	114	138	132	174

Management's Report on Internal Control over Financial Reporting

The management of Southern Company is responsible for establishing and maintaining an adequate system of internal control over financial reporting as required by the Sarbanes-Oxley Act of 2002 and as defined in Exchange Act Rule 13a-15(f). A control system can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

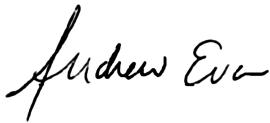
Under management's supervision, an evaluation of the design and effectiveness of Southern Company's internal control over financial reporting was conducted based on the framework in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management concluded that Southern Company's internal control over financial reporting was effective as of December 31, 2019.

Deloitte & Touche LLP, as auditors of Southern Company's financial statements, has issued an attestation report on the effectiveness of Southern Company's internal control over financial reporting as of December 31, 2019, which is included herein.



Thomas A. Fanning

Chairman, President, and Chief Executive Officer



Andrew W. Evans

Executive Vice President and Chief Financial Officer

February 19, 2020

Report of Independent Registered Public Accounting Firm

To the stockholders and the Board of Directors of The Southern Company and Subsidiary Companies

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets and consolidated statements of capitalization of The Southern Company and subsidiary companies (Southern Company) as of December 31, 2019 and 2018, the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2019, and the related notes (collectively referred to as the "financial statements"). We also have audited Southern Company's internal control over financial reporting as of December 31, 2019, 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 financial statements referred to above present fairly, in all material respects, the financial position of Southern Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, Southern Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by COSO.

Basis for Opinions

Southern Company's management is responsible for these 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 the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on these financial statements and an opinion on Southern 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 Southern 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 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 financial statements, whether due to error or fraud, and performing procedures to respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the 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 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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) 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 (3) 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.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the Audit Committee of Southern Company's Board of Directors and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Report of Independent Registered Public Accounting Firm

Impact of Rate Regulation on the Financial Statements – Refer to Note 1 (Summary of Significant Accounting Policies – Regulatory Assets and Liabilities) and Note 2 (Regulatory Matters) to the financial statements

Critical Audit Matter Description

Southern Company's traditional electric operating companies and natural gas distribution utilities (the "regulated utility subsidiaries"), which represent approximately 87% of Southern Company's consolidated operating revenues for the year ended December 31, 2019 and 84% of its consolidated total assets at December 31, 2019, are subject to rate regulation by their respective state Public Service Commissions or other applicable state regulatory agencies and wholesale regulation by the Federal Energy Regulatory Commission (the "Commissions"). Management has determined that the regulated utility subsidiaries meet the requirements under accounting principles generally accepted in the United States of America to utilize specialized rules to account for the effects of rate regulation in the preparation of its financial statements. Accounting for the economics of rate regulation impacts multiple financial statement line items and disclosures, including, but not limited to, property, plant, and equipment; other regulatory assets; other regulatory liabilities; other cost of removal obligations; deferred charges and credits related to income taxes; under and over recovered regulatory clause revenues; operating revenues; operations and maintenance expenses; and depreciation.

The Commissions set the rates the regulated utility subsidiaries are permitted to charge customers based on allowable costs, including a reasonable return on equity. Rates are determined and approved in regulatory proceedings based on an analysis of the applicable regulated subsidiary's costs to provide utility service and a return on, and recovery of, its investment in the utility business. Current and future regulatory decisions can have an impact on the recovery of costs, the rate of return earned on investments, and the timing and amount of assets to be recovered by rates. The Commissions' regulation of rates is premised on the full recovery of prudently incurred costs and a reasonable rate of return on invested capital. While Southern Company's regulated utility subsidiaries expect to recover costs from customers through regulated rates, there is a risk that the Commissions will not approve: (1) full recovery of the costs of providing utility service, or (2) full recovery of all amounts invested in the utility business and a reasonable return on that investment.

We identified the impact of rate regulation as a critical audit matter due to the significant judgments made by management to support its assertions about impacted account balances and disclosures (e.g., asset retirement costs, property damage reserves, and net book value of retired assets) and the high degree of subjectivity involved in assessing the potential impact of future regulatory orders on the financial statements. Management judgments include assessing the likelihood of (1) recovery in future rates of incurred costs, (2) a disallowance of part of the cost of recently completed plant or plant under construction, and/or (3) a refund to customers. Given that management's accounting judgments are based on assumptions about the outcome of future decisions by the Commissions, auditing these judgments required specialized knowledge of accounting for rate regulation and the rate setting process due to its inherent complexities and significant auditor judgment to evaluate management estimates and the subjectivity of audit evidence.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the uncertainty of future decisions by the Commissions included the following, among others:

- We tested the effectiveness of management's controls over the evaluation of the likelihood of (1) the recovery in future rates of costs incurred as property, plant, and equipment and deferred as regulatory assets, and (2) a refund or a future reduction in rates that should be reported as regulatory liabilities. We also tested the effectiveness of management's controls over the initial recognition of amounts as property, plant, and equipment; regulatory assets or liabilities; and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates or of a future reduction in rates.
- We read relevant regulatory orders issued by the Commissions for the regulated utility subsidiaries, regulatory statutes, interpretations, procedural memorandums, filings made by intervenors, and other publicly available information to assess the likelihood of recovery in future rates or of a future reduction in rates based on precedence of the Commissions' treatment of similar costs under similar circumstances. We evaluated the external information and compared it to management's recorded regulatory asset and liability balances for completeness.
- For regulatory matters in process, we inspected filings with the Commissions by both Southern Company's regulated utility subsidiaries and other interested parties that may impact the regulated utility subsidiaries' future rates for any evidence that might contradict management's assertions.
- We evaluated regulatory filings for any evidence that intervenors are challenging full recovery of the cost of any capital projects. We tested selected costs included in the capitalized project costs for completeness and accuracy.
- We obtained representation from management regarding probability of recovery for regulatory assets or refund or future reduction in rates for regulatory liabilities to assess management's assertion that amounts are probable of recovery, refund, or a future reduction in rates.
- We evaluated Southern Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.

Report of Independent Registered Public Accounting Firm

Disclosure of Uncertainties – Plant Vogtle Units 3 and 4 Construction – Refer to Note 2 (Regulatory Matters – Georgia Power – Nuclear Construction) to the financial statements

Critical Audit Matter Description

As discussed in Note 2 to the financial statements, the ultimate recovery of Georgia Power Company's (Georgia Power) investment in the construction of Plant Vogtle Units 3 and 4 is subject to multiple uncertainties. Such uncertainties include the potential impact of future decisions by Georgia Power's regulators (particularly the Georgia Public Service Commission), actions by the co-owners of the Vogtle project, and litigation or other legal proceedings involving the project. In addition, Georgia Power's ability to meet its cost and schedule forecasts could impact its capacity to fully recover its investment in the project. While the project is not subject to a cost cap, Georgia Power's cost and schedule forecasts are subject to numerous uncertainties which could impact cost recovery, including challenges with management of contractors and vendors; subcontractor performance; supervision of craft labor and related craft labor productivity, particularly in the installation of electrical and mechanical commodities, ability to attract and retain craft labor, and/or related cost escalation; procurement, fabrication, delivery, assembly, installation, system turnover, and the initial testing and start-up, including any required engineering changes or any remediation related thereto, of plant systems, structures, or components (some of which are based on new technology that only within the last few years began initial operation in the global nuclear industry at this scale), or regional transmission upgrades, any of which may require additional labor and/or materials; or other issues that could arise and change the projected schedule and estimated cost. The ultimate recovery of Georgia Power's investment in Plant Vogtle Units 3 and 4 is subject to the outcome of future assessments by management as well as Georgia Public Service Commission decisions in future regulatory proceedings.

Management has disclosed the status, risks, and uncertainties associated with Plant Vogtle Units 3 and 4, including (1) the status of construction; (2) challenges to the achievement of Georgia Power's cost and schedule forecasts; (3) the status of regulatory proceedings; (4) the status of legal actions or issues involving the co-owners of the project; and (5) other matters which could impact the ultimate recoverability of Georgia Power's investment in the project. We identified as a critical audit matter the evaluation of these disclosures which involved significant audit effort requiring specialized industry and construction expertise, extensive knowledge of rate regulation, and difficult and subjective judgments.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the disclosure of the status, risks, and uncertainties of the nuclear construction at Plant Vogtle Units 3 and 4 included the following, among others:

- We tested the effectiveness of internal controls over the on-going evaluation and monitoring of the construction schedule and capital cost forecast and over the disclosure of matters related to the construction and ultimate cost recovery of Plant Vogtle Units 3 and 4.
- We involved construction specialists to assist in our evaluation of Georgia Power's processes for on-going evaluation and monitoring of the construction schedule and cost forecast and to assess the disclosures of challenges to the achievement of such forecasts.
- We attended meetings with Georgia Power and Southern Company officials, project managers (including contractors), independent regulatory monitors, and co-owners of the project to evaluate and monitor construction status and identify cost and schedule challenges.
- We read reports of external independent monitors employed by the Georgia Public Service Commission to monitor the status of construction at Plant Vogtle Units 3 and 4 to evaluate the completeness of Georgia Power's disclosure of challenges to the achievement of cost and schedule forecasts.
- We inquired of Georgia Power and Southern Company officials and project managers regarding the status of construction, the construction schedule, and cost forecasts to assess the financial statement disclosures with respect to project status and potential risks and uncertainties to the achievement of such forecasts.
- We inspected regulatory filings and transcripts of Georgia Public Service Commission hearings regarding the construction of Plant Vogtle Units 3 and 4 to identify potential challenges to the recovery of Georgia Power's construction costs and to evaluate the disclosures with respect to such uncertainties.
- We inquired of Georgia Power and Southern Company management and internal and external legal counsel regarding any potential legal actions or issues arising from project construction or issues involving the co-owners of the project.
- We compared the financial statement disclosures relating to this matter to the information gathered through the conduct of all our procedures to evaluate whether there were omissions relating to significant facts or uncertainties regarding the status of construction or other factors which could impact the ultimate cost recovery of Plant Vogtle Units 3 and 4.
- We obtained representation from management regarding disclosure of all matters related to the cost and/or status, including matters related to a co-owner or regulatory development, that could result in a potential disallowance of costs related to the construction of Plant Vogtle Units 3 and 4.

Deloitte & Touche LLP

Atlanta, Georgia
February 19, 2020

We have served as Southern Company's auditor since 2002.

Management's Discussion and Analysis of Financial Condition and Results of Operations

OVERVIEW

Business Activities

Southern Company is a holding company that owns all of the common stock of three traditional electric operating companies, as well as the parent entities of Southern Power and Southern Company Gas, and owns other direct and indirect subsidiaries. The primary businesses of the Southern Company system are electricity sales by the traditional electric operating companies and Southern Power and the distribution of natural gas by Southern Company Gas. Southern Company's reportable segments are the sale of electricity by the traditional electric operating companies, the sale of electricity in the competitive wholesale market by Southern Power, and the sale of natural gas and other complementary products and services by Southern Company Gas.

- The traditional electric operating companies – Alabama Power, Georgia Power, and Mississippi Power – are vertically integrated utilities providing electric service to retail customers in three Southeastern states in addition to wholesale customers in the Southeast.
- Southern Power develops, constructs, acquires, owns, and manages power generation assets, including renewable energy projects, and sells electricity at market-based rates in the wholesale market. Southern Power continually seeks opportunities to execute its strategy to create value through various transactions including acquisitions, dispositions, and sales of partnership interests, development and construction of new generating facilities, and entry into PPAs primarily with investor-owned utilities, IPPs, municipalities, electric cooperatives, and other load-serving entities, as well as commercial and industrial customers. In general, Southern Power commits to the construction or acquisition of new generating capacity only after entering into or assuming long-term PPAs for the new facilities.
- Southern Company Gas is an energy services holding company whose primary business is the distribution of natural gas. Southern Company Gas owns natural gas distribution utilities in four states – Illinois, Georgia, Virginia, and Tennessee – and is also involved in several other complementary businesses. Southern Company Gas manages its business through four reportable segments – gas distribution operations, gas pipeline investments, wholesale gas services, which includes Sequent, a natural gas asset optimization company, and gas marketing services, which includes SouthStar, a provider of energy-related products and services to natural gas markets – and one non-reportable segment, all other. See Notes 7 and 16 to the financial statements for additional information.

Many factors affect the opportunities, challenges, and risks of the Southern Company system's electric service and natural gas businesses. These factors include the ability to maintain constructive regulatory environments, to maintain and grow sales and customers, and to effectively manage and secure timely recovery of prudently-incurred costs. These costs include those related to projected long-term demand growth; stringent environmental standards, including CCR rules; safety; system reliability and resilience; fuel; natural gas; restoration following major storms; and capital expenditures, including constructing new electric generating plants and expanding and improving the electric transmission and electric and natural gas distribution systems.

The traditional electric operating companies and natural gas distribution utilities have various regulatory mechanisms that address cost recovery. Effectively operating pursuant to these regulatory mechanisms and appropriately balancing required costs and capital expenditures with customer prices will continue to challenge the Southern Company system for the foreseeable future. See Note 2 to the financial statements for additional information.

Southern Power's future earnings will depend upon the parameters of the wholesale market and the efficient operation of its wholesale generating assets, as well as Southern Power's ability to execute its growth strategy and to develop and construct generating facilities. In addition, Southern Power's future earnings will depend upon the availability of federal and state ITCs and PTCs on its renewable energy projects, which could be impacted by future tax legislation. See FUTURE EARNINGS POTENTIAL – "Acquisitions and Dispositions," "Construction Programs," and "Income Tax Matters" herein and Notes 10 and 15 to the financial statements for additional information.

Southern Company's other business activities include providing energy solutions to electric utilities and their customers in the areas of distributed generation, energy storage and renewables, and energy efficiency. Other business activities also include investments in telecommunications, leveraged lease projects, and gas storage facilities. Management continues to evaluate the contribution of each of these activities to total shareholder return and may pursue acquisitions, dispositions, and other strategic ventures or investments accordingly.

Recent Developments

Southern Company

On January 1, 2019, Southern Company completed the sale of Gulf Power to NextEra Energy for an aggregate cash purchase price of approximately \$5.8 billion (less \$1.3 billion of indebtedness assumed), including the final working capital adjustments. The gain associated with the sale of Gulf Power totaled \$2.6 billion pre-tax (\$1.4 billion after tax).

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Alabama Power

On September 6, 2019, Alabama Power filed a petition for a CCN with the Alabama PSC for authorization to procure additional generating capacity through the turnkey construction of a new combined cycle facility and long-term contracts for the purchase of power from others, as well as the acquisition of an existing combined cycle facility for a total capital investment of approximately \$1.1 billion. The related costs would be recovered through existing rate mechanisms. In addition, Alabama Power will pursue approximately 200 MWs of certain demand side management and distributed energy resource programs. See FUTURE EARNINGS POTENTIAL – “Regulatory Matters – Alabama Power” herein for additional information.

Georgia Power

Rate Case

On December 17, 2019, the Georgia PSC voted to approve the 2019 ARP, including estimated rate increases totaling \$342 million, \$181 million, and \$386 million effective January 1, 2020, January 1, 2021, and January 1, 2022, respectively. See FUTURE EARNINGS POTENTIAL – “Regulatory Matters – Georgia Power – Rate Plans – 2019 ARP” herein for additional information.

Plant Vogtle Units 3 and 4 Status

In 2009, the Georgia PSC certified construction of Plant Vogtle Units 3 and 4 (with electric generating capacity of approximately 1,100 MWs each). Georgia Power holds a 45.7% ownership interest in Plant Vogtle Units 3 and 4. In March 2017, the EPC Contractor filed for bankruptcy protection under Chapter 11 of the U.S. Bankruptcy Code. In December 2017, the Georgia PSC approved Georgia Power's recommendation to continue construction. The current expected in-service dates remain November 2021 for Unit 3 and November 2022 for Unit 4.

In the second quarter 2018, Georgia Power revised its total project capital cost forecast to complete construction and start-up of Plant Vogtle Units 3 and 4 to \$8.4 billion (net of \$1.7 billion received under the Guarantee Settlement Agreement and approximately \$188 million in related customer refunds), with respect to Georgia Power's ownership interest. As of December 31, 2019, approximately \$140 million of the \$366 million construction contingency estimate established in the second quarter 2018 was allocated to the base capital cost forecast.

As a result of the increase in the total project capital cost forecast and Georgia Power's decision not to seek rate recovery of the increase in the base capital costs, the holders of at least 90% of the ownership interests in Plant Vogtle Units 3 and 4 were required to vote to continue construction. In September 2018, the Vogtle Owners unanimously voted to continue construction of Plant Vogtle Units 3 and 4. Following the vote to continue construction, Georgia Power entered into agreements to take certain actions which partially mitigate potential financial exposure for the other Vogtle Owners and to provide funding with respect to a MEAG Power wholly-owned subsidiary's ownership interest in Plant Vogtle Units 3 and 4 under certain circumstances.

As part of its ongoing processes, Southern Nuclear continues to evaluate cost and schedule forecasts on a regular basis to incorporate current information available, particularly in the areas of commodity installation, system turnovers, and workforce statistics. In February 2020, Southern Nuclear updated its cost and schedule forecast, which did not change the projected overall capital cost forecast and confirmed the expected in-service dates of November 2021 for Unit 3 and November 2022 for Unit 4.

In March 2019, Georgia Power entered into the Amended and Restated Loan Guarantee Agreement with the DOE, under which the proceeds of borrowings may be used to reimburse Georgia Power for Eligible Project Costs incurred in connection with its construction of Plant Vogtle Units 3 and 4, up to approximately \$5.130 billion. At December 31, 2019, Georgia Power had a total of \$3.8 billion of borrowings outstanding under the related multi-advance credit facilities.

The ultimate outcome of these matters cannot be determined at this time.

See FUTURE EARNINGS POTENTIAL – “Construction Programs – Nuclear Construction” herein and Note 8 to the financial statements under “Long-term Debt – DOE Loan Guarantee Borrowings” for additional information.

Mississippi Power

In 2019, Mississippi Power recorded pre-tax and after-tax charges to income of \$24 million related to the Kemper County energy facility, which was suspended in 2017, primarily associated with the expected close out of a DOE contract related to the Kemper County energy facility, as well as other abandonment and related closure costs and ongoing period costs, net of salvage proceeds, for the mine and gasifier-related assets. The after-tax amount for 2019 includes an adjustment related to the tax abandonment of the Kemper IGCC following the filing of the 2018 tax return. In December 2019, Mississippi Power transferred ownership of the CO₂ pipeline to an unrelated gas pipeline company, with no resulting impact on income. Mine reclamation activities are expected to be substantially completed in 2020 and dismantlement of the abandoned gasifier-related assets and site restoration activities are expected to be completed in 2024.

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The additional pre-tax period costs associated with dismantlement and site restoration activities, including related costs for compliance and safety, ARO accretion, and property taxes, are estimated to total \$17 million in 2020, \$15 million to \$16 million annually in 2021 through 2023, and \$5 million in 2024. See Note 2 to the financial statements under "Mississippi Power – Kemper County Energy Facility" and Note 3 to the financial statements for additional information, including remaining contingencies related to the Kemper IGCC.

On November 26, 2019, Mississippi Power filed a base rate case (Mississippi Power 2019 Base Rate Case) with the Mississippi PSC. The filing includes a requested annual decrease in Mississippi Power's retail rates of \$5.8 million, or 0.6%, which is driven primarily by changes in the amortization rates of certain regulatory assets and liabilities and cost reductions, partially offset by an increase in Mississippi Power's requested return on investment and depreciation associated with the filing of an updated depreciation study. The revenue requirements included in the filing are based on a 53% average equity ratio and a 7.728% return on investment. On December 10, 2019, the Mississippi PSC suspended the base rate case filing through no later than March 25, 2020. If no further action is taken by the Mississippi PSC, the proposed rates may be effective beginning on March 26, 2020. The ultimate outcome of this matter cannot be determined at this time. See Note 2 to the financial statements under "Mississippi Power – 2019 Base Rate Case" for additional information.

Southern Power

During 2019, Southern Power completed construction and achieved commercial operation of the 100-MW Wildhorse Mountain wind facility, acquired and continued construction of the 136-MW Skookumchuck wind facility, and continued construction of the 200-MW Reading wind facility. In addition, Southern Power acquired a majority interest in DSGP, an affiliate of Bloom Energy, that owns and operates fuel cell generation facilities, for a total purchase price of approximately \$167 million.

On June 13, 2019, Southern Power completed the sale of its equity interests in Plant Nacogdoches, a 115-MW biomass facility located in Nacogdoches County, Texas, to Austin Energy, for a purchase price of approximately \$461 million, including working capital adjustments.

On January 17, 2020, Southern Power completed the sale of its equity interests in Plant Mankato (including the 385-MW expansion unit completed in May 2019) to a subsidiary of Xcel for a purchase price of approximately \$663 million, including estimated working capital adjustments.

Southern Power calculates an investment coverage ratio for its generating assets, including those owned with various partners, based on the ratio of investment under contract to total investment using the respective generation facilities' net book value (or expected in-service value for facilities under construction) as the investment amount. With the inclusion of investments associated with the wind facilities currently under construction, as well as other capacity and energy contracts, and excluding Plant Mankato, which was sold on January 17, 2020, Southern Power's average investment coverage ratio at December 31, 2019 was 93% through 2024 and 90% through 2029, with an average remaining contract duration of approximately 14 years.

See FUTURE EARNINGS POTENTIAL – "Acquisitions and Dispositions – Southern Power" and Construction Programs – Southern Power" herein for additional information.

Southern Company Gas

During 2019, the natural gas distribution utilities have been involved in the following regulatory proceedings:

- On September 25, 2019, the Virginia Commission approved Virginia Natural Gas' Steps to Advance Virginia's Energy (SAVE) program request to amend and extend the program through 2024 with estimated capital spend totaling approximately \$365 million.
- On October 2, 2019, the Illinois Commission approved a \$168 million annual base rate increase for Nicor Gas, including \$65 million related to the recovery of investments under the Investing in Illinois program, which became effective October 8, 2019.
- On December 19, 2019, the Georgia PSC approved a \$65 million annual base rate increase for Atlanta Gas Light, effective January 1, 2020.

See FUTURE EARNINGS POTENTIAL – "Regulatory Matters – Southern Company Gas – Rate Proceedings" herein and Note 2 to the financial statements under "Southern Company Gas – Rate Proceedings" for additional information.

Also during 2019, Southern Company Gas recorded a pre-tax impairment charge of \$91 million (\$69 million after tax) related to a natural gas storage facility in Louisiana. See Note 3 to the financial statements under "Other Matters – Southern Company Gas" for additional information.

On February 7, 2020, Southern Company Gas entered into agreements with Dominion Modular LNG Holdings, Inc. and Dominion Atlantic Coast Pipeline, LLC for the sale of its interests in Pivotal LNG and Atlantic Coast Pipeline, respectively, for an aggregate purchase price of \$165 million, including estimated working capital and timing adjustments. Southern Company Gas may also receive two payments of \$5 million each, contingent upon certain milestones related to Pivotal LNG being met by Dominion Modular LNG Holdings, Inc. after the completion of the sale. Based on the terms of these pending transactions, Southern Company Gas recorded an asset impairment

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charge, exclusive of the contingent payments, for Pivotal LNG of approximately \$24 million (\$17 million after tax) as of December 31, 2019. The completion of each transaction is subject to the satisfaction or waiver of certain conditions, including, among other customary closing conditions, the completion of the other transaction and, for the sale of the interest in Atlantic Coast Pipeline, the expiration or termination of any applicable waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976. The transactions are expected to be completed in the first half of 2020; however, the ultimate outcome cannot be determined at this time. The assets and liabilities of Pivotal LNG and the interest in Atlantic Coast Pipeline are classified as held for sale as of December 31, 2019. See Notes 3, 7, and 15 to the financial statements under "Southern Company Gas – Gas Pipeline Projects," "Southern Company Gas – Equity Method Investments," and "Southern Company Gas – Proposed Sale of Pivotal LNG and Atlantic Coast Pipeline," respectively, for additional information.

See FUTURE EARNINGS POTENTIAL – "Acquisitions and Dispositions – Southern Company Gas" herein for information regarding Southern Company Gas' 2018 disposition activity.

Key Performance Indicators

In striving to achieve attractive risk-adjusted returns while providing cost-effective energy to more than eight million electric and gas utility customers collectively, the traditional electric operating companies and Southern Company Gas continue to focus on several key performance indicators. These indicators include, but are not limited to, customer satisfaction, plant availability, electric and natural gas system reliability, and execution of major construction projects. In addition, Southern Company and the Subsidiary Registrants focus on earnings per share (EPS) and net income, respectively, as a key performance indicator. See RESULTS OF OPERATIONS herein for information on the Registrants' financial performance. See RESULTS OF OPERATIONS – "Southern Company Gas – Operating Metrics" for additional information on Southern Company Gas' operating metrics, including Heating Degree Days, customer count, and volumes of natural gas sold.

The financial success of the traditional electric operating companies and Southern Company Gas is directly tied to customer satisfaction. Key elements of ensuring customer satisfaction include outstanding service, high reliability, and competitive prices. The traditional electric operating companies use customer satisfaction surveys to evaluate their results and generally target the top quartile of these surveys in measuring performance. Reliability indicators are also used to evaluate results. See FUTURE EARNINGS POTENTIAL – "Regulatory Matters – Alabama Power – Rate RSE" and " – Mississippi Power – Performance Evaluation Plan" herein for additional information on Alabama Power's Rate RSE and Mississippi Power's PEP rate plan, respectively, both of which contain mechanisms that directly tie customer service indicators to the allowed equity return.

Southern Power continues to focus on several key performance indicators, including, but not limited to, the equivalent forced outage rate and contract availability to evaluate operating results and help ensure its ability to meet its contractual commitments to customers.

RESULTS OF OPERATIONS

Southern Company

Consolidated net income attributable to Southern Company was \$4.7 billion in 2019, an increase of \$2.5 billion, or 112.9%, from the prior year. The increase was primarily due to the \$2.6 billion (\$1.4 billion after tax) gain on the sale of Gulf Power in 2019 and a \$1.1 billion (\$0.8 billion after tax) charge in the second quarter 2018 for an estimated probable loss related to Georgia Power's construction of Plant Vogtle Units 3 and 4. See "Electricity Business – Estimated Loss on Plants Under Construction" herein and Notes 2 and 15 to the financial statements under "Georgia Power – Nuclear Construction" and "Southern Company," respectively, for additional information.

Basic EPS was \$4.53 in 2019 and \$2.18 in 2018. Diluted EPS, which factors in additional shares related to stock-based compensation, was \$4.50 in 2019 and \$2.17 in 2018. EPS for 2019 and 2018 was negatively impacted by \$0.11 and \$0.04 per share, respectively, as a result of increases in the average shares outstanding. See Note 8 to the financial statements under "Outstanding Classes of Capital Stock – Southern Company" for additional information.

Southern Company has paid dividends on its common stock since 1948. Dividends paid per share of common stock were \$2.46 in 2019 and \$2.38 in 2018. In January 2020, Southern Company declared a quarterly dividend of 62 cents per share. For 2019, the dividend payout ratio was 54% compared to 109% for 2018. The decrease was due to the increase in earnings in 2019.

Discussion of Southern Company's results of operations is divided into three parts – the Southern Company system's primary business of electricity sales, its gas business, and its other business activities.

	2019	2018
	<i>(in millions)</i>	
Electricity business	\$3,268	\$2,304
Gas business	585	372
Other business activities	886	(450)
Net Income	\$4,739	\$2,226

Management's Discussion and Analysis of Financial Condition and Results of Operations

Electricity Business

Southern Company's electric utilities generate and sell electricity to retail and wholesale customers. The results of operations discussed below include the results of Gulf Power through December 31, 2018. See Note 15 to the financial statements under "Southern Company" for additional information.

A condensed statement of income for the electricity business follows:

	2019	Increase (Decrease) from 2018
	<i>(in millions)</i>	
Electric operating revenues	\$17,095	\$ (1,476)
Fuel	3,622	(1,015)
Purchased power	816	(155)
Cost of other sales	76	10
Other operations and maintenance	4,479	(156)
Depreciation and amortization	2,472	(93)
Taxes other than income taxes	1,011	(87)
Estimated loss on plants under construction	24	(1,073)
Impairment charges	3	(153)
(Gain) loss on dispositions, net	(21)	(21)
Total electric operating expenses	12,482	(2,743)
Operating income	4,613	1,267
Allowance for equity funds used during construction	121	(10)
Interest expense, net of amounts capitalized	987	(48)
Other income (expense), net	234	90
Income taxes	708	501
Net income	3,273	894
Less:		
Dividends on preferred and preference stock of subsidiaries	15	(1)
Net income (loss) attributable to noncontrolling interests	(10)	(69)
Net Income Attributable to Southern Company	\$ 3,268	\$ 964

Electric Operating Revenues

Electric operating revenues for 2019 were \$17.1 billion, reflecting a \$1.5 billion decrease from 2018. Details of electric operating revenues were as follows:

	2019	2018
	<i>(in millions)</i>	
Retail electric — prior year	\$15,222	
Estimated change resulting from —		
Rates and pricing	581	
Sales decline	(143)	
Weather	29	
Fuel and other cost recovery	(392)	
Gulf Power disposition	(1,213)	
Retail electric — current year	14,084	\$15,222
Wholesale electric revenues	2,152	2,516
Other electric revenues	636	664
Other revenues	223	169
Electric operating revenues	\$17,095	\$18,571
Percent change	(7.9)%	0.2%

Management's Discussion and Analysis of Financial Condition and Results of Operations

Retail electric revenues decreased \$1.1 billion, or 7.5%, in 2019 as compared to the prior year. The significant factors driving this change are shown in the preceding table. The increase in rates and pricing in 2019 was primarily due to the impacts of Alabama Power's customer bill credits issued in 2018 related to the Tax Reform Legislation, additional capital investments recovered through Rate CNP Compliance, and lower Rate RSE customer refund in 2019 as compared to the prior year; Georgia Power's higher contributions from commercial and industrial customers with variable demand-driven pricing, NCCR rate increase effective January 1, 2019, and pricing effects associated with a milder winter in 2019 compared to 2018; and Mississippi Power's PEP and ECO Plan rate increases effective for the first billing cycle of September 2018.

Electric rates for the traditional electric operating companies include provisions to adjust billings for fluctuations in fuel costs, including the energy component of purchased power costs. Under these provisions, fuel revenues generally equal fuel expenses, including the energy component of PPA costs, and do not affect net income. The traditional electric operating companies each have one or more regulatory mechanisms to recover other costs such as environmental and other compliance costs, storm damage, new plants, and PPA capacity costs.

See Note 2 to the financial statements under "Alabama Power," "Georgia Power," and "Mississippi Power" for additional information. Also see "Energy Sales" below for a discussion of changes in the volume of energy sold, including changes related to sales growth (decline) and weather.

Wholesale electric revenues consist of PPAs and short-term opportunity sales. Wholesale electric revenues from PPAs (other than solar and wind PPAs) have both capacity and energy components. Capacity revenues generally represent the greatest contribution to net income and are designed to provide recovery of fixed costs plus a return on investment. Energy revenues will vary depending on fuel prices, the market prices of wholesale energy compared to the Southern Company system's generation, demand for energy within the Southern Company system's electric service territory, and the availability of the Southern Company system's generation. Increases and decreases in energy revenues that are driven by fuel prices are accompanied by an increase or decrease in fuel costs and do not have a significant impact on net income. Energy sales from solar and wind PPAs do not have a capacity charge and customers either purchase the energy output of a dedicated renewable facility through an energy charge or through a fixed price related to the energy. As a result, the ability to recover fixed and variable operations and maintenance expenses is dependent upon the level of energy generated from these facilities, which can be impacted by weather conditions, equipment performance, transmission constraints, and other factors. Wholesale electric revenues at Mississippi Power include FERC-regulated MRA sales as well as market-based sales. Short-term opportunity sales are made at market-based rates that generally provide a margin above the Southern Company system's variable cost to produce the energy.

Wholesale electric revenues from power sales were as follows:

	2019	2018
	<i>(in millions)</i>	
Capacity and other	\$ 529	\$ 620
Energy	1,623	1,896
Total	\$2,152	\$2,516

In 2019, wholesale revenues decreased \$364 million, or 14.5%, as compared to the prior year due to decreases of \$273 million in energy revenues and \$91 million in capacity revenues. Excluding the \$28 million decrease associated with the sale of Gulf Power, energy revenues decreased \$165 million at Southern Power and \$80 million at the traditional electric operating companies. The decrease at Southern Power related to a \$113 million decrease primarily in non-PPA short-term sales and a decrease in the market price of energy, as well as a \$51 million decrease primarily in sales under PPAs from natural gas facilities. The decrease at the traditional electric operating companies was primarily due to lower natural gas prices. Excluding the \$26 million decrease associated with the sale of Gulf Power, the decrease in capacity revenues was primarily related to the sales of Southern Power's Plant Oleander and Plant Stanton Unit A (together, the Florida Plants) in December 2018 and Southern Power's Plant Nacogdoches in June 2019. See Note 15 to the financial statements for additional information.

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Other Electric Revenues

Other electric revenues decreased \$28 million, or 4.2%, in 2019 as compared to the prior year. The decrease was primarily due to a decrease of \$66 million related to the sale of Gulf Power, partially offset by increases at Georgia Power of \$13 million in regulated power delivery construction and maintenance contracts and \$11 million from outdoor lighting LED conversions and sales, as well as an increase at Alabama Power of \$9 million from pole attachment agreements.

Energy Sales

Changes in revenues are influenced heavily by the change in the volume of energy sold from year to year. KWH sales for 2019 and the percent change from the prior year were as follows:

	2019				
	Total KWHs	Total KWH Percent Change	Weather-Adjusted Percent Change ^(a)	Adjusted ^(b)	
				Total KWH Percent Change	Weather-Adjusted Percent Change ^(a)
	<i>(in billions)</i>				
Residential	48.5	(11.1)%	(10.7)%	(1.1)%	(0.8)%
Commercial	49.1	(8.1)	(8.6)	(1.1)	(1.6)
Industrial	50.1	(6.1)	(6.1)	(2.9)	(2.9)
Other	0.8	(9.1)	(9.0)	(5.8)	(5.7)
Total retail	148.5	(8.5)	(8.4)%	(1.7)	(1.8)%
Wholesale	48.0	(3.9)		(2.6)	
Total energy sales	196.5	(7.4)%		(1.9)%	

(a) Weather-adjusted KWH sales are estimated by removing from KWH sales the effect of deviations from normal temperature conditions, based on statistical models of the historical relationship between temperatures and energy sales. Normal temperature conditions are defined as those experienced in the applicable service territory over a specified historical period. This metric is useful because it allows trends in historical operations to be evaluated apart from the influence of weather conditions. Management also considers this metric in developing long-term capital and financial plans.

(b) Kilowatt-hour sales comparisons to the prior year were significantly impacted by the disposition of Gulf Power on January 1, 2019. These changes exclude Gulf Power.

Changes in retail energy sales are generally the result of changes in electricity usage by customers, changes in weather, and changes in the number of customers. Excluding the impact of the Gulf Power disposition on January 1, 2019, weather-adjusted retail energy sales decreased 2.7 billion KWHs in 2019 as compared to the prior year primarily due to lower customer usage. Weather-adjusted residential usage decreases are primarily attributable to an increase in energy-efficient residential appliances and energy saving initiatives, partially offset by customer growth. Weather-adjusted commercial usage decreases are primarily attributable to an increase in energy saving initiatives and an ongoing migration to the electronic commerce business model. Industrial usage decreases are a result of changes in production levels primarily in the primary metals, paper, chemicals, and textiles sectors.

See "Electric Operating Revenues" above for a discussion of significant changes in wholesale revenues related to changes in price and KWH sales.

Other Revenues

Other revenues increased \$54 million, or 32.0%, in 2019 as compared to the prior year. The increase was primarily due to increases at Georgia Power of \$20 million from unregulated sales associated with new energy conservation projects and \$14 million from unregulated power delivery construction and maintenance contracts, as well as an increase at Alabama Power of \$11 million in unregulated sales of products and services.

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Fuel and Purchased Power Expenses

The mix of fuel sources for the generation of electricity is determined primarily by demand, the unit cost of fuel consumed, and the availability of generating units. Additionally, the electric utilities purchase a portion of their electricity needs from the wholesale market.

Details of the Southern Company system's generation and purchased power were as follows:

	2019	2018 ^(a)
Total generation (in billions of KWHs)	187	191
Total purchased power (in billions of KWHs)	18	14
Sources of generation (percent) —		
Gas	52	48
Coal	22	27
Nuclear	16	16
Hydro	3	3
Other	7	6
Cost of fuel, generated (in cents per net KWH) —		
Gas	2.36	2.76
Coal	2.87	2.93
Nuclear	0.79	0.80
Average cost of fuel, generated (in cents per net KWH)	2.20	2.46
Average cost of purchased power (in cents per net KWH) ^(b)	5.01	5.94

(a) Excludes Gulf Power, which was sold on January 1, 2019.

(b) Average cost of purchased power includes fuel purchased by the Southern Company system for tolling agreements where power is generated by the provider.

In 2019, total fuel and purchased power expenses were \$4.4 billion, a decrease of \$1.2 billion, or 20.9%, as compared to the prior year. Excluding approximately \$511 million associated with the sale of Gulf Power, the decrease was primarily the result of a \$575 million decrease in the average cost of fuel and purchased power and an \$84 million net decrease in the volume of KWHs generated and purchased.

Fuel and purchased power energy transactions at the traditional electric operating companies are generally offset by fuel revenues and do not have a significant impact on net income. See FUTURE EARNINGS POTENTIAL – “Regulatory Matters” herein for additional information. Fuel expenses incurred under Southern Power's PPAs are generally the responsibility of the counterparties and do not significantly impact net income.

Fuel

In 2019, fuel expense was \$3.6 billion, a decrease of \$1.0 billion, or 21.9%, as compared to the prior year. Excluding approximately \$309 million related to Gulf Power in 2018, the decrease was primarily due to an 18.1% decrease in the volume of KWHs generated by coal, a 14.5% decrease in the average cost of natural gas per KWH generated, and a 2.1% decrease in the average cost of coal per KWH generated, partially offset by a 5.0% increase in the volume of KWHs generated by natural gas.

Purchased Power

In 2019, purchased power expense was \$816 million, a decrease of \$155 million, or 16.0%, as compared to the prior year. Excluding approximately \$202 million associated with the sale of Gulf Power, the change was primarily due to a 9.6% increase in the volume of KWHs purchased, partially offset by a 15.7% decrease in the average cost of KWH purchased.

Energy purchases will vary depending on demand for energy within the Southern Company system's electric service territory, the market prices of wholesale energy as compared to the cost of the Southern Company system's generation, and the availability of the Southern Company system's generation.

Other Operations and Maintenance Expenses

Other operations and maintenance expenses decreased \$156 million, or 3.4%, in 2019 as compared to the prior year. The decrease reflects approximately \$356 million related to Gulf Power in 2018 and \$17 million related to the dispositions of Southern Power's Florida Plants and Plant Nacogdoches, partially offset by additional accruals of \$123 million to the NDR at Alabama Power, \$21 million of increased transmission and distribution expenses primarily due to overhead line maintenance and vegetation management at the traditional electric operating companies, \$18 million from costs associated with unregulated sales at Georgia Power primarily associated with new energy

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conservation projects and power delivery construction and maintenance contracts, and \$16 million related to an adjustment for FERC fees at Georgia Power following the conclusion of a multi-year audit of headwater benefits associated with hydro facilities. See Notes 2 and 15 to the financial statements under "Alabama Power – Rate NDR" and "Southern Power – Sales of Natural Gas and Biomass Plants," respectively, for additional information.

Depreciation and Amortization

Depreciation and amortization decreased \$93 million, or 3.6%, in 2019 as compared to the prior year. The decrease was primarily due to a decrease of \$191 million related to Gulf Power in 2018, partially offset by an increase in depreciation of \$62 million primarily resulting from additional plant in service and an increase in the amortization of regulatory assets of \$47 million primarily at Mississippi Power and Georgia Power. See Note 2 to the financial statements under "Southern Company – Regulatory Assets and Liabilities" and Note 5 to the financial statements under "Depreciation and Amortization" for additional information.

Taxes Other Than Income Taxes

Taxes other than income taxes decreased \$87 million, or 7.9%, in 2019 as compared to the prior year primarily due to a decrease of \$118 million related to the sale of Gulf Power, partially offset by higher property taxes of \$30 million primarily at Georgia Power.

Estimated Loss on Plants Under Construction

The \$1.1 billion charge in 2018 reflects Georgia Power's revised estimate to complete construction and start-up of Plant Vogtle Units 3 and 4. The 2019 charges of \$24 million were associated with abandonment and closure activities for the mine and gasifier-related assets of the Kemper IGCC at Mississippi Power, net of sales proceeds. See Note 2 to the financial statements under "Georgia Power – Nuclear Construction" and "Mississippi Power – Kemper County Energy Facility" for additional information.

Impairment Charges

In the second quarter 2018, Southern Power recorded a \$119 million asset impairment charge related to the sale of the Florida Plants and in the third quarter 2018 recorded a \$36 million asset impairment charge on wind turbine equipment held for development projects. Asset impairment charges recorded in 2019 were immaterial. See Note 15 to the financial statements under "Southern Power – Sales of Natural Gas and Biomass Plants" and " – Development Projects" for additional information.

(Gain) Loss on Dispositions, Net

Gain on dispositions, net increased \$21 million in 2019 as compared to the prior year primarily due to Southern Power's sale of Plant Nacogdoches in the second quarter 2019. See Note 15 to the financial statements under "Southern Power – Sales of Natural Gas and Biomass Plants" for additional information.

Interest Expense, Net of Amounts Capitalized

Interest expense, net of amounts capitalized decreased \$48 million, or 4.6%, in 2019 as compared to the prior year primarily related to the sale of Gulf Power.

Other Income (Expense), Net

Other income (expense), net increased \$90 million, or 62.5%, in 2019 as compared to the prior year primarily due to a \$36 million gain arising from the Roserock solar facility litigation settlement at Southern Power in 2019, \$37 million from decreased charitable donations in 2019 at the traditional electric operating companies, \$23 million of increased non-service cost-related retirement benefits income, and \$16 million of increased interest income primarily associated with a new tolling arrangement accounted for as a sales-type lease at Mississippi Power as well as temporary cash investments, primarily at Alabama Power. These increases were partially offset by \$24 million related to the settlement of Mississippi Power's Deepwater Horizon claim in 2018 and a \$14 million gain from a joint-development wind project at Southern Power in 2018 attributable to its partner in the project. See Note 3 to the financial statements under "General Litigation Matters – Southern Power" and "Other Matters – Mississippi Power" and Note 11 to the financial statements under "Pension Plans" for additional information.

Income Taxes

Income taxes increased \$501 million, or 242.0%, in 2019 as compared to the prior year. Excluding an income tax benefit of approximately \$20 million related to Gulf Power in 2018, income taxes increased \$481 million. The increase was primarily due to increases in pre-tax earnings, including the \$1.1 billion charge in 2018 associated with Plant Vogtle Units 3 and 4 construction at Georgia Power. See Notes 10 and 15 to the financial statements for additional information.

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Net Income Attributable to Noncontrolling Interests

Substantially all noncontrolling interests relate to renewable projects at Southern Power. Net income attributable to noncontrolling interests decreased \$69 million, or 116.9%, in 2019, as compared to the prior year. The decrease was primarily due to \$92 million of losses attributable to noncontrolling interests related to the tax equity partnerships entered into in 2018 and \$14 million attributable to a joint-development wind project in 2018, partially offset by an allocation of approximately \$29 million of income to the noncontrolling interest partner related to the Roserock solar facility litigation settlement. See Note 3 to the financial statements under "General Litigation Matters – Southern Power" and Note 7 to the financial statements under "Southern Power" for additional information regarding the litigation settlement and tax equity partnerships, respectively.

Gas Business

Southern Company Gas distributes natural gas through utilities in four states and is involved in several other complementary businesses including gas pipeline investments, wholesale gas services, and gas marketing services.

A condensed statement of income for the gas business follows:

	2019	Increase (Decrease) from 2018
	<i>(in millions)</i>	
Operating revenues	\$3,792	\$(117)
Cost of natural gas	1,319	(220)
Cost of other sales	—	(12)
Other operations and maintenance	888	(93)
Depreciation and amortization	487	(13)
Taxes other than income taxes	213	2
Impairment charges	115	73
(Gain) loss on dispositions, net	—	291
Total operating expenses	3,022	28
Operating income	770	(145)
Earnings from equity method investments	157	9
Interest expense, net of amounts capitalized	232	4
Other income (expense), net	20	19
Income taxes	130	(334)
Net income	\$ 585	\$ 213

The Southern Company Gas Dispositions were completed by July 29, 2018 and represent the primary variance driver for 2019 compared to 2018. Detailed variance explanations are provided herein. See Note 15 to the financial statements under "Southern Company Gas" for additional information on the Southern Company Gas Dispositions.

Seasonality of Results

During the period from November through March when natural gas usage and operating revenues are generally higher (Heating Season), more customers are connected to Southern Company Gas' distribution systems and natural gas usage is higher in periods of colder weather. Occasionally in the summer, operating revenues are impacted due to peak usage by power generators in response to summer energy demands. Southern Company Gas' base operating expenses, excluding cost of natural gas, bad debt expense, and certain incentive compensation costs, are incurred relatively equally over any given year. Thus, operating results can vary significantly from quarter to quarter as a result of seasonality. For 2019, the percentage of operating revenues and net income generated during the Heating Season (January through March and November through December) were 68.7% and 86.8%, respectively. For 2018, the percentage of operating revenues and net income generated during the Heating Season were 68.7% and 96.0%, respectively.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Operating Revenues

Operating revenues in 2019 were \$3.8 billion, a \$117 million decrease compared to 2018. Details of operating revenues were as follows:

	2019
	<i>(in millions)</i>
Operating revenues – prior year	\$3,909
Estimated change resulting from –	
Infrastructure replacement programs and base rate changes	96
Gas costs and other cost recovery	(89)
Wholesale gas services	150
Southern Company Gas Dispositions ^(*)	(300)
Other	26
Operating revenues – current year	\$3,792
Percent change	(3.0)%

(*) Includes a \$245 million decrease related to natural gas revenues, including alternative revenue programs, and a \$55 million decrease related to other revenues. See Note 15 to the financial statements under "Southern Company Gas" for additional information.

Revenues from infrastructure replacement programs and base rate changes increased in 2019 compared to the prior year primarily due to increases of \$74 million at Nicor Gas and \$16 million at Atlanta Gas Light. These amounts include the natural gas distribution utilities' continued investments recovered through infrastructure replacement programs and base rate increases as well as customer refunds in 2018 as a result of the Tax Reform Legislation. See Note 2 to the financial statements under "Southern Company Gas" for additional information.

Revenues attributable to gas costs and other cost recovery decreased in 2019 compared to the prior year primarily due to lower natural gas prices and decreased volumes of natural gas sold. Natural gas distribution rates include provisions to adjust billings for fluctuations in natural gas costs. Therefore, gas costs recovered through natural gas revenues generally equal the amount expensed in cost of natural gas and do not affect net income from the natural gas distribution utilities.

Revenues from wholesale gas services increased in 2019 primarily due to derivative gains, partially offset by decreased commercial activity.

Other natural gas revenues increased in 2019 primarily due to increases in customers at the natural gas distribution utilities and recovery of prior period hedge losses at gas marketing services.

Cost of Natural Gas

Excluding Atlanta Gas Light, which does not sell natural gas to end-use customers, the natural gas distribution utilities charge their utility customers for natural gas consumed using natural gas cost recovery mechanisms set by the applicable state regulatory agencies. Under these mechanisms, all prudently-incurred natural gas costs are passed through to customers without markup, subject to regulatory review. The natural gas distribution utilities defer or accrue the difference between the actual cost of natural gas and the amount of commodity revenue earned in a given period. The deferred or accrued amount is either billed or refunded to customers prospectively through adjustments to the commodity rate. Deferred natural gas costs are reflected as regulatory assets and accrued natural gas costs are reflected as regulatory liabilities. Therefore, gas costs recovered through natural gas revenues generally equal the amount expensed in cost of natural gas and do not affect net income from the natural gas distribution utilities. Cost of natural gas at the natural gas distribution utilities represented 84.5% of the total cost of natural gas for 2019.

Gas marketing services customers are charged for actual and estimated natural gas consumed. Cost of natural gas includes the cost of fuel and associated transportation costs, lost and unaccounted for gas, adjustments to reduce the value of inventories to market value, if applicable, and gains and losses associated with certain derivatives.

In 2019, cost of natural gas was \$1.3 billion, a decrease of \$220 million, or 14.3%, compared to the prior year. Excluding a \$106 million decrease related to the Southern Company Gas Dispositions, cost of natural gas decreased by \$114 million, which reflects a 14.8% decrease in natural gas prices compared to 2018.

Cost of Other Sales

Cost of other sales related to Pivotal Home Solutions, which was sold on June 4, 2018. See Note 15 to the financial statements under "Southern Company Gas – Sale of Pivotal Home Solutions" for additional information.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Other Operations and Maintenance Expenses

Other operations and maintenance expenses decreased \$93 million, or 9.5%, in 2019 compared to the prior year. Excluding a \$65 million decrease related to the Southern Company Gas Dispositions, other operations and maintenance expenses decreased \$28 million. This decrease was primarily due to \$28 million of disposition-related costs incurred during 2018, a \$12 million adjustment in 2018 for the adoption of a new paid time off policy, an \$11 million expense for a litigation settlement to facilitate the sale of Pivotal Home Solutions in 2018, and a \$7 million decrease in compensation and benefits costs, partially offset by a \$22 million increase in rider expenses, primarily at Nicor Gas, passed through directly to customers. See FUTURE EARNINGS POTENTIAL – “Southern Company Gas – Utility Regulation and Rate Design” herein for additional information.

Depreciation and Amortization

Depreciation and amortization decreased \$13 million, or 2.6%, in 2019 compared to the prior year. Excluding a \$27 million decrease related to the Southern Company Gas Dispositions, depreciation and amortization increased \$14 million. This increase was primarily due to continued infrastructure investments at the natural gas distribution utilities, partially offset by accelerated depreciation related to assets retired in 2018. See Note 2 to the financial statements under “Southern Company Gas – Infrastructure Replacement Programs and Capital Projects” for additional information.

Impairment Charges

In 2019, Southern Company Gas recorded impairment charges of \$91 million related to a natural gas storage facility in Louisiana and \$24 million in contemplation of the sale of its interests in Pivotal LNG and Atlantic Coast Pipeline. In 2018, a goodwill impairment charge of \$42 million was recorded in contemplation of the sale of Pivotal Home Solutions. See Notes 1, 3, and 15 to the financial statements under “Goodwill and Other Intangible Assets and Liabilities,” “Other Matters – Southern Company Gas,” and “Southern Company Gas,” respectively, for additional information.

(Gain) Loss on Dispositions, Net

Gain on dispositions, net was \$291 million in 2018 and was associated with the Southern Company Gas Dispositions. The income tax expense on these gains included income tax expense on goodwill not deductible for tax purposes and for which a deferred tax liability had not been recorded previously.

Earnings from Equity Method Investments

Earnings from equity method investments increased \$9 million, or 6.1%, in 2019 compared to the prior year and reflect higher earnings from SNG as a result of rate increases that became effective September 2018, partially offset by a \$6 million pre-tax loss on the sale of Triton in May 2019. See Note 7 to the financial statements under “Southern Company Gas” for additional information.

Other Income (Expense), Net

Other income (expense), net increased \$19 million in 2019 compared to the prior year. This increase primarily resulted from a \$23 million decrease in charitable donations in 2019.

Income Taxes

Income taxes decreased \$334 million, or 72.0%, in 2019 compared to the prior year. This decrease primarily reflects a reduction of \$348 million related to the Southern Company Gas Dispositions, as well as \$29 million in benefits associated with impairment charges in 2019 and additional benefits from the flowback of excess deferred income taxes in 2019 primarily at Atlanta Gas Light as previously authorized by the Georgia PSC, partially offset by \$48 million of additional taxes associated with increased pre-tax earnings at wholesale gas services.

See FUTURE EARNINGS POTENTIAL – “Income Tax Matters” herein and Note 10 to the financial statements for additional information. Also see Notes 2, 3, and 15 to the financial statements under “Southern Company Gas,” “Other Matters – Southern Company Gas,” and “Southern Company Gas – Proposed Sale of Pivotal LNG and Atlantic Coast Pipeline,” respectively, for additional information on Atlanta Gas Light’s regulatory treatment of the impacts of the Tax Reform Legislation and the impairment charges.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Other Business Activities

Southern Company's other business activities primarily include the parent company (which does not allocate operating expenses to business units); PowerSecure, a provider of energy solutions to electric utilities and their customers in the areas of distributed generation, energy storage and renewables, and energy efficiency; Southern Holdings, which invests in various projects, including leveraged lease projects; and Southern Linc, which provides digital wireless communications for use by the Southern Company system and also markets these services to the public and provides fiber optics services within the Southeast.

A condensed statement of income for Southern Company's other business activities follows:

	2019	Increase (Decrease) from 2018
		<i>(in millions)</i>
Operating revenues	\$ 532	\$ (483)
Cost of other sales	359	(369)
Other operations and maintenance	233	(40)
Depreciation and amortization	79	13
Taxes other than income taxes	6	—
Impairment charges	50	38
(Gain) loss on dispositions, net	(2,548)	(2,548)
Total operating expenses	(1,821)	(2,906)
Operating income (loss)	2,353	2,423
Interest expense	517	(62)
Other income (expense), net	10	33
Income taxes (benefit)	960	1,182
Net income (loss)	\$ 886	\$ 1,336

Operating Revenues

Southern Company's operating revenues for these other business activities decreased \$483 million, or 47.6%, in 2019 as compared to the prior year primarily related to PowerSecure's 2018 storm restoration services in Puerto Rico and the sale of PowerSecure's utility infrastructure services business in June 2019.

Cost of Other Sales

Cost of other sales for these other business activities decreased \$369 million, or 50.7%, in 2019 as compared to the prior year primarily related to PowerSecure's 2018 storm restoration services in Puerto Rico and the sale of PowerSecure's utility infrastructure services business in June 2019.

Other Operations and Maintenance Expenses

Other operations and maintenance expenses for these other business activities decreased \$40 million, or 14.7%, in 2019 as compared to the prior year. The decrease was primarily due to PowerSecure's lower employee compensation and benefits in 2019 and 2018 storm restoration services in Puerto Rico.

Impairment Charges

In 2019, goodwill and asset impairment charges totaling \$50 million were recorded related to the sale of PowerSecure's utility infrastructure services and lighting businesses. In 2018, asset impairment charges of \$12 million associated with Southern Linc's tower leases were recorded in contemplation of the sale of Gulf Power.

(Gain) Loss on Dispositions, Net

The 2019 gain on dispositions, net primarily relates to the gain of \$2.6 billion (\$1.4 billion after tax) on the sale of Gulf Power. See Note 15 to the financial statements under "Southern Company" for additional information.

Interest Expense

Interest expense for these other business activities decreased \$62 million, or 10.7%, in 2019 as compared to the prior year primarily due to a decrease in average outstanding long-term debt at the parent company. See Note 8 to the financial statements for additional information.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Other Income (Expense), Net

Other income (expense), net for these other business activities increased \$33 million in 2019 as compared to the prior year primarily due to a \$43 million decrease in charitable donations at the parent company, partially offset by a \$17 million impairment charge associated with a leveraged lease at Southern Holdings in 2019. See Notes 1 and 3 to the financial statements under "Leveraged Leases" and "Other Matters – Southern Company," respectively, for additional information.

Income Taxes (Benefit)

The income tax for these other business activities increased \$1.2 billion in 2019 as compared to the prior year primarily due to the tax impacts related to the sale of Gulf Power. See Note 10 to the financial statements and Note 15 to the financial statements under "Southern Company" for additional information.

Effects of Inflation

The traditional electric operating companies and the natural gas distribution utilities are subject to rate regulation that is generally based on the recovery of historical and projected costs. The effects of inflation can create an economic loss since the recovery of costs could be in dollars that have less purchasing power. Southern Power is party to long-term contracts reflecting market-based rates, including inflation expectations. Any adverse effect of inflation on the Registrants' results of operations has not been substantial in recent years. See Note 2 to the financial statements for additional information on rate regulation.

FUTURE EARNINGS POTENTIAL

General

Prices for electric service provided by the traditional electric operating companies and natural gas distributed by the natural gas distribution utilities to retail customers are set by state PSCs or other applicable state regulatory agencies under cost-based regulatory principles. Retail rates and earnings are reviewed and may be adjusted periodically within certain limitations. Prices for wholesale electricity sales, interconnecting transmission lines, and the exchange of electric power are regulated by the FERC. Southern Power continues to focus on long-term PPAs. See ACCOUNTING POLICIES – "Application of Critical Accounting Policies and Estimates – Utility Regulation" herein and Note 2 to the financial statements for additional information about regulatory matters.

Each Registrant's results of operations are not necessarily indicative of its future earnings potential. Recent disposition activities described under "Acquisitions and Dispositions" herein and in Note 15 to the financial statements will impact future earnings for the applicable Registrants. The level of the Registrants' future earnings depends on numerous factors that affect the opportunities, challenges, and risks of the Registrants' primary businesses of selling electricity and/or distributing natural gas, as described further herein.

For the traditional electric operating companies, these factors include the ability to maintain constructive regulatory environments that allow for the timely recovery of prudently-incurred costs during a time of increasing costs, continued customer growth, and the trend of reduced electricity usage per customer, especially in residential and commercial markets. Other major factors include Plant Vogtle Units 3 and 4 construction and rate recovery related thereto for Georgia Power and the ability to prevail against legal challenges associated with the Kemper County energy facility for Mississippi Power.

Earnings in the electricity business will also depend upon maintaining and growing sales, considering, among other things, the adoption and/or penetration rates of increasingly energy-efficient technologies, increasing volumes of electronic commerce transactions, and, for Georgia Power, more multi-family home construction, all of which could contribute to a net reduction in customer usage.

The level of future earnings for Southern Power's competitive wholesale electric business depends on numerous factors including Southern Power's ability to execute its growth strategy through the development or acquisition of renewable facilities and other energy projects while containing costs, as well as regulatory matters, creditworthiness of customers, total electric generating capacity available in Southern Power's market areas, and Southern Power's ability to successfully remarket capacity as current contracts expire. In addition, renewable portfolio standards, transmission constraints, cost of generation from units within the Southern Company power pool, and operational limitations could influence Southern Power's future earnings.

The level of future earnings for Southern Company Gas' primary business of distributing natural gas and its complementary businesses in the gas pipeline investments, wholesale gas services, and gas marketing services sectors depends on numerous factors. These factors include the natural gas distribution utilities' ability to maintain constructive regulatory environments that allow for the timely recovery of prudently-incurred costs, the completion and subsequent operation of ongoing infrastructure and other construction projects, creditworthiness of customers, and Southern Company Gas' ability to optimize its transportation and storage positions and to re-contract storage rates at favorable prices. The volatility of natural gas prices has an impact on Southern Company Gas' customer rates, its long-term competitive position against other energy sources, and the ability of Southern Company Gas' gas marketing services and wholesale gas

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services businesses to capture value from locational and seasonal spreads. Additionally, changes in commodity prices subject a portion of Southern Company Gas' operations to earnings variability. Over the longer term, volatility is expected to be low to moderate and locational and/or transportation spreads are expected to decrease as new pipelines are built to reduce the existing supply constraints in the shale areas of the Northeast U.S. To the extent these pipelines are further delayed or not built, volatility could increase. See "Construction Programs" herein for additional information on permitting challenges experienced by the Atlantic Coast Pipeline and the PennEast Pipeline. Additional economic factors may contribute to this environment, including a significant drop in oil and natural gas prices, which could lead to consolidation of natural gas producers or reduced levels of natural gas production. Further, if economic conditions continue to improve, the demand for natural gas may increase, which may cause natural gas prices to rise and drive higher volatility in the natural gas markets on a longer-term basis.

Earnings for both the electricity and natural gas businesses are subject to a variety of other factors. These factors include weather, competition, developing new and maintaining existing energy contracts and associated load requirements with wholesale customers, energy conservation practiced by customers, the use of alternative energy sources by customers, the prices of electricity and natural gas, and the price elasticity of demand. Demand for electricity and natural gas in the Registrants' service territories is primarily driven by the pace of economic growth or decline that may be affected by changes in regional and global economic conditions, which may impact future earnings.

Mississippi Power provides service under long-term contracts with rural electric cooperative associations and municipalities located in southeastern Mississippi under cost-based electric tariffs which are subject to regulation by the FERC. The contracts with these wholesale customers represented 15.7% of Mississippi Power's total operating revenues in 2019 and are generally subject to 10-year rolling cancellation notices. Historically, these wholesale customers have acted as a group and any changes in contractual relationships for one customer are likely to be followed by the other wholesale customers.

As part of its ongoing effort to adapt to changing market conditions, Southern Company continues to evaluate and consider a wide array of potential business strategies. These strategies may include business combinations, partnerships, and acquisitions involving other utility or non-utility businesses or properties, disposition of certain assets or businesses, internal restructuring, or some combination thereof. Furthermore, Southern Company may engage in new business ventures that arise from competitive and regulatory changes in the utility industry. Pursuit of any of the above strategies, or any combination thereof, may significantly affect the business operations, risks, and financial condition of Southern Company. In addition, Southern Power and Southern Company Gas regularly consider and evaluate joint development arrangements as well as acquisitions and dispositions of businesses and assets as part of their business strategies. See "Acquisitions and Dispositions" herein and Note 15 to the financial statements for additional information.

Acquisitions and Dispositions

See Note 15 to the financial statements for additional information.

Southern Company

On January 1, 2019, Southern Company completed the sale of Gulf Power to NextEra Energy for an aggregate cash purchase price of approximately \$5.8 billion (less \$1.3 billion of indebtedness assumed), including the final working capital adjustments. The gain associated with the sale of Gulf Power totaled \$2.6 billion pre-tax (\$1.4 billion after tax). In 2018, net income attributable to Gulf Power was \$160 million.

Alabama Power

On September 6, 2019, Alabama Power entered into a purchase and sale agreement (Autauga Combined Cycle Acquisition) to acquire all of the equity interests in Tenaska Alabama II Partners, L.P. Tenaska Alabama II Partners, L.P. owns and operates an approximately 885-MW combined cycle generation facility in Autauga County, Alabama. The transaction is expected to close by September 1, 2020. As part of the Autauga Combined Cycle Acquisition, Alabama Power will assume an existing power sales agreement under which the full output of the generating facility remains committed to another third party for its remaining term of approximately three years. The estimated revenues from the power sales agreement are expected to offset the associated costs of operation during the remaining term.

The completion of the Autauga Combined Cycle Acquisition is subject to the satisfaction or waiver of certain conditions, including, among other customary conditions, approval by the Alabama PSC and the FERC. Alabama Power expects to obtain all regulatory approvals by the end of the third quarter 2020.

The ultimate outcome of this matter cannot be determined at this time.

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Southern Power

Acquisitions

During 2019, Southern Power acquired a controlling interest in the fuel cell generation facility listed below and acquired the Skookumchuck wind facility discussed under "Construction Programs – Southern Power" herein. Acquisition-related costs were expensed as incurred and were not material.

Project Facility	Resource	Approximate Nameplate Capacity (MW)	Location	Southern Power Ownership Percentage	COD	PPA Counterparty	PPA Remaining Period
DSGP ^(a)	Fuel Cell	28	Delaware	100% of Class B	N/A ^(b)	Delmarva Power & Light	15 years

(a) During 2019, Southern Power made a total investment of approximately \$167 million in DSGP and now holds a controlling interest and consolidates 100% of DSGP's operating results. Southern Power records net income attributable to noncontrolling interests for approximately 10 MWs of the facility.

(b) Southern Power's 18-MW share of the facility was repowered between June and August 2019. In December 2019, a Class C member joined the existing partnership between the Class A member and Southern Power and made an investment to repower the remaining 10 MWs. In connection with the Class C member joining the partnership, the original fuel cells (before repower), which had a carrying value of approximately \$55 million, were distributed to the Class A member in a non-cash transaction that was excluded from the statements of cash flows.

Development Projects

Southern Power continues to evaluate and refine the deployment of the remaining wind turbine equipment purchased in 2016 and 2017 to development and construction projects. Wind projects utilizing equipment purchased in 2016 and 2017, and reaching commercial operation by the end of 2020 and 2021, are expected to qualify for 100% and 80% PTCs, respectively. The significant majority of this equipment either has been deployed to completed projects, projects under construction, or projects that are probable of being completed or has been sold to third parties. Sales during 2019 resulted in gains totaling approximately \$17 million.

Sales of Renewable Facility Interests

In May 2018, Southern Power completed the sale of a noncontrolling 33% equity interest in SP Solar, a limited partnership indirectly owning substantially all of Southern Power's solar facilities, to Global Atlantic for approximately \$1.2 billion. Since Southern Power retained control of the limited partnership through its wholly-owned general partner, the sale was recorded as an equity transaction. Cash distributions from SP Solar are allocated 67% to Southern Power and 33% to Global Atlantic in accordance with their partnership ownership interests.

In December 2018, Southern Power completed the sale of a noncontrolling tax equity interest in SP Wind, which owns a portfolio of eight operating wind facilities, to three financial investors for approximately \$1.2 billion. The tax equity investors together will generally receive 40% of the cash distributions from available cash and will receive 99% of the tax attributes, including future PTCs.

Southern Power consolidates each entity, as the primary beneficiary of the VIE, since it controls the most significant activities, including operating and maintaining the assets.

Sales of Natural Gas and Biomass Plants

In December 2018, Southern Power completed the sale of all of its equity interests in the Florida Plants to NextEra Energy for \$203 million, including working capital adjustments. In contemplation of this sale transaction, Southern Power recorded an asset impairment charge of approximately \$119 million (\$89 million after tax) in May 2018. Pre-tax net income for the Florida Plants was \$49 million for the period from January 1, 2018 to December 4, 2018.

On June 13, 2019, Southern Power completed the sale of its equity interests in Plant Nacogdoches, a 115-MW biomass facility located in Nacogdoches County, Texas, to Austin Energy, for a purchase price of approximately \$461 million, including working capital adjustments. Southern Power recorded a gain of \$23 million (\$88 million after tax) on the sale. The pre-tax net income for Plant Nacogdoches was \$13 million and \$27 million for the period from January 1, 2019 to June 13, 2019 and for the year ended 2018, respectively.

On January 17, 2020, Southern Power completed the sale of its equity interests in Plant Mankato (including the 385-MW expansion unit completed in May 2019) to a subsidiary of Xcel for a purchase price of approximately \$663 million, including estimated working capital adjustments. The sale resulted in a gain of approximately \$39 million (\$23 million after tax) in 2020. Pre-tax net income for Plant Mankato was \$29 million and immaterial for the years ended December 31, 2019 and 2018, respectively. The assets and liabilities of Plant Mankato are classified as held for sale as of December 31, 2019 and 2018.

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Southern Company Gas

In June 2018, Southern Company Gas completed the stock sale of Pivotal Home Solutions to American Water Enterprises LLC. Southern Company Gas and American Water Enterprises LLC entered into a transition services agreement whereby Southern Company Gas provided certain administrative and operational services through November 4, 2018.

In July 2018, a Southern Company Gas subsidiary, Pivotal Utility Holdings, completed the sales of the assets of two of its natural gas distribution utilities, Elizabethtown Gas and Elkton Gas, to South Jersey Industries, Inc. Southern Company Gas and South Jersey Industries, Inc. entered into transition services agreements whereby Southern Company Gas will provide certain administrative and operational services through no later than July 31, 2020.

In July 2018, Southern Company Gas and its wholly-owned direct subsidiary, NUI Corporation, completed the stock sale of Pivotal Utility Holdings, which primarily consisted of Florida City Gas, to NextEra Energy. Southern Company Gas and NextEra Energy entered into a transition services agreement whereby Southern Company Gas will provide certain administrative and operational services through no later than July 29, 2020.

The Southern Company Gas Dispositions resulted in a net loss of \$51 million in 2018, which includes \$342 million of tax expense. The after-tax impacts of these dispositions included income tax expense on goodwill not deductible for tax purposes and for which a deferred tax liability had not been recorded previously. In addition, a goodwill impairment charge of \$42 million was recorded during 2018 in contemplation of the sale of Pivotal Home Solutions.

The Southern Company Gas Dispositions materially decreased Southern Company Gas' subsequent earnings and cash flows. For the year ended December 31, 2018, pre-tax earnings attributable to these dispositions were \$297 million, which includes a \$291 million gain on dispositions, net and a \$42 million goodwill impairment. Due to the seasonal nature of the natural gas business and other factors including, but not limited to, weather, regulation, competition, customer demand, and general economic conditions, these results are not necessarily indicative of the results to be expected for any other period.

On May 29, 2019, Southern Company Gas sold its investment in Triton, a cargo container leasing company. This disposition resulted in a pre-tax loss of \$6 million and a net after-tax gain of \$7 million as a result of reversing a \$13 million federal income tax valuation allowance.

On February 7, 2020, Southern Company Gas entered into agreements with Dominion Modular LNG Holdings, Inc. and Dominion Atlantic Coast Pipeline, LLC for the sale of its interests in Pivotal LNG and Atlantic Coast Pipeline, respectively, for an aggregate purchase price of \$165 million, including estimated working capital and timing adjustments. Southern Company Gas may also receive two payments of \$5 million each, contingent upon certain milestones related to Pivotal LNG being met by Dominion Modular LNG Holdings, Inc. after the completion of the sale. Based on the terms of these pending transactions, Southern Company Gas recorded an asset impairment charge, exclusive of the contingent payments, for Pivotal LNG of approximately \$24 million (\$17 million after tax) as of December 31, 2019. The completion of each transaction is subject to the satisfaction or waiver of certain conditions, including, among other customary closing conditions, the completion of the other transaction and, for the sale of the interest in Atlantic Coast Pipeline, the expiration or termination of any applicable waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976. The transactions are expected to be completed in the first half of 2020; however, the ultimate outcome cannot be determined at this time. The assets and liabilities of Pivotal LNG and the interest in Atlantic Coast Pipeline are classified as held for sale as of December 31, 2019. See Notes 3, 7, and 15 to the financial statements under "Southern Company Gas – Gas Pipeline Projects," "Southern Company Gas – Equity Method Investments," and "Southern Company Gas – Proposed Sale of Pivotal LNG and Atlantic Coast Pipeline," respectively, for additional information.

Environmental Matters

The Southern Company system's operations are regulated by state and federal environmental agencies through a variety of laws and regulations governing air, water, land, and other natural resources. The Southern Company system maintains comprehensive environmental compliance and GHG strategies to assess both current and upcoming requirements and compliance costs associated with these environmental laws and regulations. The costs required to comply with environmental laws and regulations and to achieve stated goals, including capital expenditures, operations and maintenance costs, and costs reflected in ARO liabilities, may impact future electric generating unit retirement and replacement decisions, results of operations, cash flows, and/or financial condition. Related costs may result from the installation of additional environmental controls, closure and monitoring of CCR facilities, unit retirements, or changing fuel sources for certain existing units, as well as related upgrades to the Southern Company system's transmission and distribution (electric and natural gas) systems. A major portion of these costs is expected to be recovered through retail and wholesale rates, including existing ratemaking and billing provisions. The ultimate impact of environmental laws and regulations and the GHG goals discussed herein will depend on various factors, such as state adoption and implementation of requirements, the availability and cost of any deployed technology, fuel prices, and the outcome of pending and/or future legal challenges.

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New or revised environmental laws and regulations could affect many areas of operations for the Subsidiary Registrants. The impact of any such changes cannot be determined at this time. Environmental compliance costs could affect earnings if such costs cannot continue to be recovered on a timely basis in rates for the traditional electric operating companies and the natural gas distribution utilities or through long-term wholesale agreements for the traditional electric operating companies and Southern Power.

Alabama Power and Mississippi Power recover environmental compliance costs through separate mechanisms, Rate CNP Compliance and the ECO Plan, respectively. Georgia Power's base rates include an Environmental Compliance Cost Recovery (ECCR) tariff that allows for the recovery of environmental compliance costs. The natural gas distribution utilities of Southern Company Gas generally recover environmental remediation expenditures through rate mechanisms approved by their applicable state regulatory agencies. See Notes 2 and 3 to the financial statements for additional information.

Southern Power's PPAs generally contain provisions that permit charging the counterparty with some of the new costs incurred as a result of changes in environmental laws and regulations. Since Southern Power's units are newer natural gas and renewable generating facilities, costs associated with environmental compliance for these facilities have been less significant than for similarly situated coal or older natural gas generating facilities. Environmental, natural resource, and land use concerns, including the applicability of air quality limitations, the potential presence of wetlands or threatened and endangered species, the availability of water withdrawal rights, uncertainties regarding impacts such as increased light or noise, and concerns about potential adverse health impacts can, however, increase the cost of siting and operating any type of future electric generating facility. The impact of such laws, regulations, and other considerations on Southern Power and subsequent recovery through PPA provisions cannot be determined at this time.

Further, increased costs that are recovered through regulated rates could contribute to reduced demand for electricity and natural gas, which could negatively affect results of operations, cash flows, and/or financial condition. Additionally, many commercial and industrial customers may also be affected by existing and future environmental requirements, which for some may have the potential to affect their demand for electricity and natural gas.

Although the timing, requirements, and estimated costs could change as environmental laws and regulations are adopted or modified, as compliance plans are revised or updated, and as legal challenges to rules are initiated or completed, estimated capital expenditures through 2024 based on the current environmental compliance strategy for the Southern Company system and the traditional electric operating companies are as follows:

	2020	2021	2022	2023	2024	Total
	<i>(in millions)</i>					
Southern Company	\$223	\$250	\$244	\$214	\$131	\$1,062
Alabama Power	80	77	82	97	103	439
Georgia Power	115	156	152	105	23	551
Mississippi Power	28	17	10	12	5	72

These estimates do not include any costs associated with potential regulation of GHG emissions. See "Global Climate Issues" herein for additional information. The Southern Company system also anticipates substantial expenditures associated with ash pond closure and ground water monitoring under the CCR Rule and related state rules, which are reflected in the applicable Registrants' ARO liabilities. See FINANCIAL CONDITION AND LIQUIDITY – "Capital Requirements" herein and Note 6 to the financial statements for additional information.

Environmental Laws and Regulations

Air Quality

The Southern Company system reduced SO₂ and NO_x air emissions by 98% and 88%, respectively, from 1990 to 2018. The Southern Company system reduced mercury air emissions by over 96% from 2005 to 2018.

The EPA finalized regional haze regulations in 2005 and 2017. These regulations require states, tribal governments, and various federal agencies to develop and implement plans to reduce pollutants that impair visibility and demonstrate reasonable progress toward the goal of restoring natural visibility conditions in certain areas, including national parks and wilderness areas. States are required to submit state implementation plans for the second ten-year planning period (2018 through 2028) by July 31, 2021. These plans could require further reductions in particulate matter, SO₂, and/or NO_x, which could result in increased compliance costs at affected electric generating units.

Water Quality

In 2014, the EPA finalized requirements under Section 316(b) of the Clean Water Act (CWA) to regulate cooling water intake structures (CWIS) to minimize their effects on fish and other aquatic life at existing power plants. The regulation requires plant-specific studies to determine applicable CWIS changes to protect organisms. The Southern Company system is conducting these studies and currently

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anticipates applicable CWIS changes may include fish-friendly CWIS screens with fish return systems and minor additions of monitoring equipment at certain plants. The impact of this rule will depend on the outcome of these plant-specific studies, any additional protective measures required to be incorporated into each plant's National Pollutant Discharge Elimination System (NPDES) permit based on site-specific factors, and the outcome of any legal challenges.

In 2015, the EPA finalized the steam electric effluent limitations guidelines (ELG) rule (2015 ELG Rule) that set national standards for wastewater discharges from new and existing steam electric generating units generating greater than 50 MWs. The 2015 ELG Rule prohibits effluent discharges of certain waste streams and imposes stringent limits on flue gas desulfurization (scrubber) wastewater discharges. The 2015 technology-based limits and the CCR Rule require extensive changes to existing ash and wastewater management systems or the installation and operation of new ash and wastewater management systems. Compliance with the 2015 ELG Rule is expected to require capital expenditures and increased operational costs for the traditional electric operating companies' coal-fired electric generation. State environmental agencies will incorporate specific compliance applicability dates in the NPDES permitting process for each ELG waste stream. On November 22, 2019, the EPA published a proposed rule that changes certain requirements in the 2015 ELG Rule, including adjusting compliance limits and providing certain exemptions for boilers that are expected to be retired by December 31, 2028 and for low utilization boilers (876,000 MWh/year or less). The proposal also extends the latest applicability date for flue gas desulfurization wastewater to December 31, 2025 but retains the latest applicability date of December 31, 2023 for bottom ash transport water. The impact of any changes to the 2015 ELG Rule will depend on the content of a new final rule, which the EPA plans to finalize by August 2020, and the outcome of any legal challenges.

Coal Combustion Residuals

In 2015, the EPA finalized non-hazardous solid waste regulations for the disposal of CCR, including coal ash and gypsum, in landfills and surface impoundments (ash ponds) at active electric generating power plants. The CCR Rule requires landfills and ash ponds to be evaluated against a set of performance criteria and potentially closed if certain criteria are not met. Closure of existing landfills and ash ponds requires installation of equipment and infrastructure to manage CCR in accordance with the CCR Rule. In addition to the CCR Rule, the States of Alabama and Georgia finalized state regulations regarding the handling of CCR within their respective states. The State of Georgia received approval from the EPA on its partial permit program implementing the state CCR permit program in lieu of the federal self-implementing rule in accordance with the Water Infrastructure Improvements for the Nation Act. The State of Alabama also submitted its state CCR program for the EPA's review and approval. The State of Mississippi has not yet developed a state CCR permit program.

The EPA is in the process of amending portions of the CCR Rule. Most recently, on December 2, 2019, the EPA published a proposed rule that would require facilities to cease placement of both CCR and non-CCR waste in unlined surface impoundments as soon as technically feasible, no later than August 31, 2020. This proposed rule also includes extensions beyond August 31, 2020, provided that certain conditions are met. Impacts of the proposed rule to the Southern Company system are expected to be limited, as the traditional electric operating companies and SEGCO stopped sending coal ash from most of the generating units to unlined ponds in April 2019 and expect to stop sending coal ash from the remaining generating units within the timeframes and associated extensions allowed in the proposed rule.

Based on cost estimates for closure and monitoring of landfills and ash ponds pursuant to the CCR Rule, the Southern Company system recorded/revised AROs for each CCR unit in 2015 and has continued to update these cost estimates and ARO liabilities in subsequent years. The traditional electric operating companies expect to continue updating these estimates periodically as additional information related to ash pond closure methodologies, schedules, and/or costs becomes available. Alabama Power anticipates increasing the ARO for one of its ash ponds within the next nine months upon completion of a feasibility study and the related cost estimate, and the increase could be material. Additionally, the closure designs and plans in the States of Alabama and Georgia are subject to approval by environmental regulatory agencies. Absent continued recovery of ARO costs through regulated rates, results of operations, cash flows, and financial condition for Southern Company and the traditional electric operating companies could be materially impacted. See FINANCIAL CONDITION AND LIQUIDITY – "Capital Requirements" and FUTURE EARNINGS POTENTIAL – "Regulatory Matters – Georgia Power – Integrated Resource Plan" herein and Note 6 to the financial statements for additional information.

The ultimate outcome of these matters cannot be determined at this time.

Environmental Remediation

The Southern Company system must comply with environmental laws and regulations governing the handling and disposal of waste and releases of hazardous substances. Under these various laws and regulations, the Southern Company system could incur substantial costs to clean up affected sites. The traditional electric operating companies and Southern Company Gas conduct studies to determine the extent of any required cleanup and have recognized the estimated costs to clean up known impacted sites in their financial statements. Amounts for cleanup and ongoing monitoring costs were not material for any year presented. The traditional electric operating companies and the natural gas distribution utilities in Illinois and Georgia (which represent substantially all of Southern Company Gas' accrued remediation costs) have all received authority from their respective state PSCs or other applicable state regulatory agencies to recover approved

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environmental compliance costs through regulatory mechanisms. These regulatory mechanisms are adjusted annually or as necessary within limits approved by the state PSCs or other applicable state regulatory agencies. The traditional electric operating companies and Southern Company Gas may be liable for some or all required cleanup costs for additional sites that may require environmental remediation. See Note 3 to the financial statements under "Environmental Remediation" for additional information.

Global Climate Issues

On July 8, 2019, the EPA published the final Affordable Clean Energy rule (ACE Rule) to repeal and replace the CPP. The ACE Rule requires states to develop unit-specific CO₂ emission rate standards for existing coal-fired units based on heat-rate efficiency improvements. The ACE Rule is being challenged in the D.C. Circuit Court of Appeals and Georgia Power is an intervenor in the litigation in support of the rule, as are other industry parties. The ultimate impact of the ACE Rule to the Southern Company system will depend on state implementation plan requirements and the outcome of associated legal challenges and cannot be determined at this time.

Additional GHG policies, including legislation, may emerge in the future requiring the United States to transition to a lower GHG emitting economy; however, associated impacts are currently unknown. The Southern Company system has transitioned from an electric generating mix of 70% coal and 15% natural gas in 2007 to a mix of 22% coal and 52% natural gas in 2019, along with over 8,300 MWs of renewable resources. This transition has been supported in part by the Southern Company system retiring over 5,600 MWs of coal- and oil-fired generating capacity since 2010 and converting over 3,400 MWs of generating capacity from coal to natural gas since 2015. In addition, Southern Company Gas has replaced approximately 5,600 miles of bare steel and cast-iron pipe, resulting in removal of approximately 2.5 million metric tons of GHG from its natural gas distribution system since 1998.

The following table provides the Registrants' 2018 and preliminary 2019 GHG emissions based on ownership or financial control of facilities:

	2018	Preliminary 2019
	<i>(in million metric tons of CO₂ equivalent)</i>	
Southern Company ^{(a)(b)}	102	88
Alabama Power	36	32
Georgia Power	30	27
Mississippi Power	8	9
Southern Power ^(b)	14	13
Southern Company Gas ^(b)	1	1

(a) Includes non-registrant subsidiaries.

(b) The 2018 and preliminary 2019 amounts include GHG emissions attributable to disposed assets through the date of the applicable disposition. See Note 15 to the financial statements for additional information regarding disposition activities.

Based on the preliminary 2019 amount above, the Southern Company system has achieved an estimated GHG emission reduction of 44% since 2007. In April 2018, Southern Company established an intermediate goal of a 50% reduction in carbon emissions from 2007 levels by 2030 and a long-term goal of low- to no-carbon operations by 2050. The Southern Company system's ability to achieve these goals depends on many external factors, including supportive national energy policies, low natural gas prices, and the development, deployment, and advancement of relevant energy technologies. The Southern Company system expects to continue cost-effectively growing its renewable energy portfolio, optimizing technology advancements to modernize its transmission and distribution systems, increasing the use of natural gas for generation, completing Plant Vogtle Units 3 and 4, investing in energy efficiency, and continuing research and development efforts focused on technologies to lower GHG emissions. The Southern Company system is also evaluating methods of removing carbon from the atmosphere.

Regulatory Matters

Alabama Power

Alabama Power's revenues from regulated retail operations are collected through various rate mechanisms subject to the oversight of the Alabama PSC. Alabama Power currently recovers its costs from the regulated retail business primarily through Rate RSE, Rate CNP, Rate ECR, and Rate NDR. In addition, the Alabama PSC issues accounting orders to address current events impacting Alabama Power. See Note 2 to the financial statements under "Alabama Power" for additional information regarding Alabama Power's rate mechanisms and accounting orders.

Petition for Certificate of Convenience and Necessity

On September 6, 2019, Alabama Power filed a petition for a CCN with the Alabama PSC for authorization to procure additional generating capacity through the turnkey construction of a new combined cycle facility and long-term contracts for the purchase of power from others, both as more fully described below, as well as the Autauga Combined Cycle Acquisition. In addition, Alabama Power will pursue

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approximately 200 MWs of certain demand side management and distributed energy resource programs. This filing was predicated on the results of Alabama Power's 2019 IRP provided to the Alabama PSC, which identified an approximately 2,400-MW resource need for Alabama Power, driven by the need for additional winter reserve capacity. See Note 15 to the financial statements under "Alabama Power" for additional information regarding the Autauga Combined Cycle Acquisition.

The procurement of these resources is subject to the satisfaction or waiver of certain conditions, including, among other customary conditions, approval by the Alabama PSC. The completion of the Autauga Combined Cycle Acquisition is also subject to approval by the FERC. Alabama Power expects to obtain all regulatory approvals by the end of the third quarter 2020.

On May 8, 2019, Alabama Power entered into an Agreement for Engineering, Procurement, and Construction with Mitsubishi Hitachi Power Systems Americas, Inc. and Black & Veatch Construction, Inc. to construct an approximately 720-MW combined cycle facility at Plant Barry (Plant Barry Unit 8), which is expected to be placed in service by the end of 2023.

The capital investment associated with the construction of Plant Barry Unit 8 and the Autauga Combined Cycle Acquisition is currently estimated to total approximately \$1.1 billion.

Alabama Power entered into additional long-term PPAs totaling approximately 640 MWs of generating capacity consisting of approximately 240 MWs of combined cycle generation expected to begin later in 2020 and approximately 400 MWs of solar generation coupled with battery energy storage systems (solar/battery systems) expected to begin in 2022 through 2024. The terms of the agreements for the solar/battery systems permit Alabama Power to use the energy and retire the associated renewable energy credits (REC) in service of customers or to sell RECs, separately or bundled with energy.

Upon certification, Alabama Power expects to recover costs associated with Plant Barry Unit 8 pursuant to its Rate CNP New Plant. Additionally, Alabama Power expects to recover costs associated with the Autauga Combined Cycle Acquisition through the inclusion in Rate RSE of revenues from the existing power sales agreement and, on expiration of that agreement, pursuant to Rate CNP New Plant. The recovery of costs associated with laws, regulations, and other such mandates directed at the utility industry are expected to be recovered through Rate CNP Compliance. Alabama Power expects to recover the capacity-related costs associated with the PPAs through its Rate CNP PPA. In addition, fuel and energy-related costs are expected to be recovered through Rate ECR. Any remaining costs associated with the Autauga Combined Cycle Acquisition and Plant Barry Unit 8 will be incorporated through the annual filing of Rate RSE.

The ultimate outcome of these matters cannot be determined at this time.

Construction Work in Progress Accounting Order

On October 1, 2019, the Alabama PSC acknowledged that Alabama Power would begin certain limited preparatory activities associated with Plant Barry Unit 8 construction to meet the target in-service date by authorizing Alabama Power to record the related costs as CWIP prior to the issuance of an order on the CCN petition. Should a CCN not be granted and Alabama Power does not proceed with the related construction of Plant Barry Unit 8, Alabama Power may transfer those costs and any costs that directly result from the non-issuance of the CCN to a regulatory asset which would be amortized over a five-year period. If the balance of incurred costs reaches 5% of the estimated in-service cost of the total project prior to issuance of an order on the CCN petition, Alabama Power will confer with the Alabama PSC regarding the appropriateness of additional authorization. The Sierra Club subsequently filed a petition for reconsideration of the accounting order. The Alabama PSC voted to deny the petition for reconsideration on January 7, 2020.

Rate RSE

The Alabama PSC has adopted Rate RSE that provides for periodic annual adjustments based upon Alabama Power's projected weighted common equity return (WCER) compared to an allowable range. Rate RSE adjustments are based on forward-looking information for the applicable upcoming calendar year. Rate RSE adjustments for any two-year period, when averaged together, cannot exceed 4.0% and any annual adjustment is limited to 5.0%. When the projected WCER is under the allowed range, there is an adjusting point of 5.98% and eligibility for a performance-based adder of seven basis points, or 0.07%, to the WCER adjusting point if Alabama Power (i) has an "A" credit rating equivalent with at least one of the recognized rating agencies or (ii) is in the top one-third of a designated customer value benchmark survey. If Alabama Power's actual retail return is above the allowed WCER range, the excess will be refunded to customers unless otherwise directed by the Alabama PSC; however, there is no provision for additional customer billings should the actual retail return fall below the WCER range. Prior to January 2019, retail rates remained unchanged when the WCER range was between 5.75% and 6.21%.

In May 2018, the Alabama PSC approved modifications to Rate RSE and other commitments designed to position Alabama Power to address the growing pressure on its credit quality resulting from the Tax Reform Legislation, without increasing retail rates under Rate RSE in the near term. Alabama Power plans to reduce growth in total debt by increasing equity, with corresponding reductions in debt issuances, thereby de-leveraging its capital structure. Alabama Power's goal is to achieve an equity ratio of approximately 55% by the end of 2025. At December 31, 2019, Alabama Power's equity ratio was approximately 50%.

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The approved modifications to Rate RSE began for billings in January 2019. The modifications include reducing the top of the allowed WCER range from 6.21% to 6.15% and modifications to the refund mechanism applicable to prior year actual results. The modifications to the refund mechanism allow Alabama Power to retain a portion of the revenue that causes the actual WCER for a given year to exceed the allowed range.

Generally, during a year without a Rate RSE upward adjustment, if Alabama Power's actual WCER is between 6.15% and 7.65%, customers will receive 25% of the amount between 6.15% and 6.65%, 40% of the amount between 6.65% and 7.15%, and 75% of the amount between 7.15% and 7.65%. Customers will receive all amounts in excess of an actual WCER of 7.65%. During a year with a Rate RSE upward adjustment, if Alabama Power's actual WCER exceeds 6.15%, customers receive 50% of the amount between 6.15% and 6.90% and all amounts in excess of an actual WCER of 6.90%.

In conjunction with these modifications to Rate RSE, in May 2018, Alabama Power consented to a moratorium on any upward adjustments under Rate RSE for 2019 and 2020 and to return \$50 million to customers through bill credits in 2019.

On November 27, 2019, Alabama Power made its required annual Rate RSE submission to the Alabama PSC of projected data for calendar year 2020. Projected earnings were within the specified range; therefore, retail rates under Rate RSE remain unchanged for 2020.

During 2019, Alabama Power provided to the Alabama PSC and the Alabama Office of the Attorney General information related to the operation and utilization of Rate RSE, in accordance with the rules governing the operation of Rate RSE. The ultimate outcome of this matter cannot be determined at this time.

At December 31, 2019, Alabama Power's WCER exceeded 6.15%, resulting in Alabama Power establishing a current regulatory liability of \$53 million for Rate RSE refunds, which will be refunded to customers through bill credits in April 2020.

Rate CNP New Plant

Rate CNP New Plant allows for recovery of Alabama Power's retail costs associated with newly developed or acquired certificated generating facilities placed into retail service. No adjustments to Rate CNP New Plant occurred during the period 2017 through 2019. See Note 2 to the financial statements under "Alabama Power – Petition for Certificate of Convenience and Necessity" for additional information.

Rate CNP PPA

Rate CNP PPA allows for the recovery of Alabama Power's retail costs associated with certificated PPAs. No adjustments to Rate CNP PPA occurred during the period 2017 through 2019 and no adjustment is expected for 2020.

Rate CNP Compliance

Rate CNP Compliance allows for the recovery of Alabama Power's retail costs associated with laws, regulations, and other such mandates directed at the utility industry involving the environment, security, reliability, safety, sustainability, or similar considerations impacting Alabama Power's facilities or operations. Rate CNP Compliance is based on forward-looking information and provides for the recovery of these costs pursuant to factors that are calculated and submitted to the Alabama PSC by December 1 with rates effective for the following calendar year. Compliance costs to be recovered include operations and maintenance expenses, depreciation, and a return on certain invested capital. Revenues for Rate CNP Compliance, as recorded on the financial statements, are adjusted for differences in actual recoverable costs and amounts billed in current regulated rates. Accordingly, changes in the billing factor will have no significant effect on Southern Company's or Alabama Power's revenues or net income, but will affect annual cash flow. Changes in Rate CNP Compliance-related operations and maintenance expenses and depreciation generally will have no effect on net income.

On November 27, 2019, Alabama Power submitted calculations associated with its cost of complying with governmental mandates, as provided under Rate CNP Compliance. The filing reflected a projected over recovered retail revenue requirement for governmental mandates, which resulted in a rate decrease of approximately \$68 million that became effective for the billing month of January 2020.

Rate ECR

Rate ECR recovers Alabama Power's retail energy costs based on an estimate of future energy costs and the current over or under recovered balance. Revenues recognized under Rate ECR and recorded on the financial statements are adjusted for the difference in actual recoverable fuel costs and amounts billed in current regulated rates. The difference in the recoverable fuel costs and amounts billed gives rise to the over or under recovered amounts recorded as regulatory assets or liabilities. Alabama Power, along with the Alabama PSC, continually monitors the over or under recovered cost balance to determine whether an adjustment to billing rates is required. Changes in the Rate ECR factor have no significant effect on Southern Company's or Alabama Power's net income but will impact operating cash flows. The Alabama PSC may approve billing rates under Rate ECR of up to 5.910 cents per KWH.

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On December 3, 2019, the Alabama PSC approved a decrease to Rate ECR from 2.353 to 2.160 cents per KWH, equal to 1.82%, or approximately \$102 million annually, effective January 1, 2020. The rate will adjust to 5.910 cents per KWH in January 2021 absent a further order from the Alabama PSC.

Tax Reform Accounting Order

In May 2018, the Alabama PSC approved an accounting order that authorized Alabama Power to defer the benefits of federal excess deferred income taxes associated with the Tax Reform Legislation for the year ended December 31, 2018 as a regulatory liability and to use up to \$30 million of such deferrals to offset under recovered amounts under Rate ECR. The final excess deferred tax liability for the year ended December 31, 2018 totaled approximately \$69 million, of which \$30 million was used to offset the Rate ECR under recovered balance. On December 3, 2019, the Alabama PSC issued an order authorizing Alabama Power to apply the remaining deferred balance of approximately \$39 million to increase the balance in the NDR. See "Rate NDR" herein and Note 10 to the financial statements under "Current and Deferred Income Taxes" for additional information.

Plant Greene County

Alabama Power jointly owns Plant Greene County with an affiliate, Mississippi Power. See Note 5 to the financial statements under "Joint Ownership Agreements" for additional information regarding the joint ownership agreement. On December 31, 2019, Mississippi Power updated its proposed Reserve Margin Plan (RMP), originally filed in August 2018 with the Mississippi PSC. The RMP proposed a four-year acceleration of the retirement of Plant Greene County Units 1 and 2 to the third quarter 2021 and the third quarter 2022, respectively. Mississippi Power's proposed Plant Greene County unit retirements would require the completion of proposed transmission and system reliability improvements, as well as agreement by Alabama Power. Alabama Power will continue to monitor the status of Mississippi Power's proposed RMP and associated regulatory process as well as the proposed transmission and system reliability improvements. Alabama Power will review all the facts and circumstances and will evaluate all its alternatives prior to reaching a final determination on the ongoing operations of Plant Greene County. The ultimate outcome of this matter cannot be determined at this time.

Rate NDR

Based on an order from the Alabama PSC, Alabama Power maintains a reserve for operations and maintenance expenses to cover the cost of damages from major storms to its transmission and distribution facilities. The order approves a separate monthly Rate NDR charge to customers consisting of two components. The first component is intended to establish and maintain a reserve balance for future storms and is an on-going part of customer billing. When the reserve balance falls below \$50 million, a reserve establishment charge will be activated (and the on-going reserve maintenance charge concurrently suspended) until the reserve balance reaches \$75 million.

The second component of the Rate NDR charge is intended to allow recovery of any existing deferred storm-related operations and maintenance costs and any future reserve deficits over a 24-month period. The Alabama PSC order gives Alabama Power authority to record a deficit balance in the NDR when costs of storm damage exceed any established reserve balance. Absent further Alabama PSC approval, the maximum total Rate NDR charge consisting of both components is \$10 per month per non-residential customer account and \$5 per month per residential customer account. Alabama Power has the authority, based on an order from the Alabama PSC, to accrue certain additional amounts as circumstances warrant. The order allows for reliability-related expenditures to be charged against the additional accruals when the NDR balance exceeds \$75 million. Alabama Power may designate a portion of the NDR to reliability-related expenditures as a part of an annual budget process for the following year or during the current year for identified unbudgeted reliability-related expenditures that are incurred. Accruals that have not been designated can be used to offset storm charges. Additional accruals to the NDR enhance Alabama Power's ability to mitigate the financial effects of future natural disasters, promote system reliability, and offset costs retail customers would otherwise bear.

As discussed herein under "Tax Reform Accounting Order," in accordance with an Alabama PSC order issued on December 3, 2019, Alabama Power applied the remaining excess deferred income tax regulatory liability balance of approximately \$39 million to increase the balance in the NDR. Alabama Power also accrued an additional \$84 million to the NDR in December 2019 resulting in an accumulated balance of \$150 million at December 31, 2019. Of this amount, Alabama Power designated \$37 million to be applied to budgeted reliability-related expenditures for 2020, which is included in other regulatory liabilities, current. The remaining NDR balance of \$113 million is included in other regulatory liabilities, deferred on the balance sheet.

In December 2017, the reserve maintenance charge was suspended and the reserve establishment charge was activated and collected approximately \$16 million annually through 2019. Effective with the March 2020 billings, the reserve establishment charge will be suspended and the reserve maintenance charge will be activated as a result of the NDR balance exceeding \$75 million. Alabama Power expects to collect approximately \$5 million in 2020 and \$3 million annually thereafter unless the NDR balance falls below \$50 million.

As revenue from the Rate NDR charge is recognized, an equal amount of operations and maintenance expenses related to the NDR will also be recognized. As a result, the Rate NDR charge will not have an effect on net income but will impact operating cash flows.

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Environmental Accounting Order

Based on an order from the Alabama PSC (Environmental Accounting Order), Alabama Power is allowed to establish a regulatory asset to record the unrecovered investment costs, including the unrecovered plant asset balance and the unrecovered costs associated with site removal and closure associated with future unit retirements caused by environmental regulations. The regulatory asset is being amortized and recovered over the affected unit's remaining useful life, as established prior to the decision regarding early retirement through Rate CNP Compliance.

On April 15, 2019, Alabama Power retired Plant Gorgas Units 8, 9, and 10 and reclassified approximately \$654 million of the unrecovered asset balances to regulatory assets, which are being recovered over the units' remaining useful lives, the latest being through 2037, as established prior to the decision to retire. At December 31, 2019, the related regulatory assets totaled \$649 million. Additionally, approximately \$700 million of net capitalized asset retirement costs were reclassified to a regulatory asset in accordance with accounting guidance provided by the Alabama PSC. The asset retirement costs are being recovered through 2055. See Note 2 to the financial statements under "Alabama Power" and Note 6 to the financial statements for additional information.

Georgia Power

Georgia Power's revenues from regulated retail operations are collected through various rate mechanisms subject to the oversight of the Georgia PSC. Georgia Power currently recovers its costs from the regulated retail business through an alternate rate plan, which includes traditional base tariffs, Demand-Side Management (DSM) tariffs, the ECCR tariff, and Municipal Franchise Fee (MFF) tariffs. In addition, financing costs on certified construction costs of Plant Vogtle Units 3 and 4 are being collected through the NCCR tariff and fuel costs are collected through a separate fuel cost recovery tariff. See Note 2 to the financial statements under "Georgia Power – Rate Plans," " – Fuel Cost Recovery," and " – Nuclear Construction" for additional information.

Rate Plans

2019 ARP

On December 17, 2019, the Georgia PSC voted to approve the 2019 ARP, under which Georgia Power increased its rates on January 1, 2020 and will increase rates annually for 2021 and 2022 as detailed below based on compliance filings to be made at least 90 days prior to the effective date. Georgia Power will recover estimated increases through its existing tariffs as follows:

Tariff	2020	2021	2022
		<i>(in millions)</i>	
Traditional base	\$ —	\$120	\$192
ECCR ^(a)	318	55	184
DSM	12	1	1
MFF	12	4	9
Total ^(b)	\$342	\$181	\$386

(a) Effective January 1, 2020, CCR AROs will be recovered through the ECCR tariff. See "Integrated Resource Plan" herein for additional information on recovery of compliance costs for CCR AROs.

(b) Totals may not add due to rounding.

Further, under the 2019 ARP, Georgia Power's retail ROE is set at 10.50%, and earnings will be evaluated against a retail ROE range of 9.50% to 12.00%. The Georgia PSC also approved an increase in the retail equity ratio to 56% from 55%. Any retail earnings above 12.00% will be shared, with 40% being applied to reduce regulatory assets, 40% directly refunded to customers, and the remaining 20% retained by Georgia Power. There will be no recovery of any earnings shortfall below 9.50% on an actual basis. However, if at any time during the term of the 2019 ARP, Georgia Power projects that its retail earnings will be below 9.50% for any calendar year, it could petition the Georgia PSC for implementation of the Interim Cost Recovery (ICR) tariff to adjust Georgia Power's retail rates to achieve a 9.50% ROE. The Georgia PSC would have 90 days to rule on Georgia Power's request. The ICR tariff would expire at the earlier of January 1, 2023 or the end of the calendar year in which the ICR tariff becomes effective. In lieu of requesting implementation of an ICR tariff, or if the Georgia PSC chooses not to implement the ICR tariff, Georgia Power may file a full rate case.

Additionally, under the 2019 ARP and pursuant to the sharing mechanism approved in the 2013 ARP whereby two-thirds of any earnings above the top of the allowed ROE range are shared with Georgia Power's customers, (i) Georgia Power used 50% (approximately \$50 million) of the customer share of earnings above the band in 2018 to reduce regulatory assets and 50% (approximately \$50 million) will be refunded to customers in 2020 and (ii) Georgia Power will forgo its share of 2019 earnings in excess of the earnings band so that 50% (approximately \$60 million) of all earnings over the 2019 band will be refunded to customers and 50% (approximately \$60 million) were used to reduce regulatory assets.

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Except as provided above, Georgia Power will not file for a general base rate increase while the 2019 ARP is in effect. Georgia Power is required to file a general base rate case by July 1, 2022, in response to which the Georgia PSC would be expected to determine whether the 2019 ARP should be continued, modified, or discontinued.

2013 ARP

Pursuant to the terms and conditions of a settlement agreement related to Southern Company's acquisition of Southern Company Gas approved by the Georgia PSC in 2016, the 2013 ARP continued in effect until December 31, 2019. Furthermore, through December 31, 2019, Georgia Power retained its merger savings, net of transition costs, as defined in the settlement agreement; through December 31, 2022, such net merger savings will be shared on a 60/40 basis with customers; thereafter, all merger savings will be retained by customers.

There were no changes to Georgia Power's traditional base tariffs, ECCR tariff, DSM tariffs, or MFF tariffs in 2017, 2018, or 2019.

Under the 2013 ARP, Georgia Power's retail ROE was set at 10.95% and earnings were evaluated against a retail ROE range of 10.00% to 12.00%. Two-thirds of any earnings above 12.00% were to be directly refunded to customers, with the remaining one-third retained by Georgia Power. On February 5, 2019, the Georgia PSC approved a settlement between Georgia Power and the staff of the Georgia PSC under which Georgia Power's retail ROE for 2017 was stipulated to exceed 12.00% and Georgia Power reduced certain regulatory assets by approximately \$4 million in lieu of providing refunds to retail customers. In 2019 and 2018, Georgia Power's retail ROE exceeded 12.00% and, under the modified sharing mechanism pursuant to the 2019 ARP, Georgia Power has reduced regulatory assets by a total of approximately \$110 million and expects to refund a total of approximately \$110 million to customers, subject to review and approval by the Georgia PSC. See "2019 ARP" and "Integrated Resource Plan" herein for additional information.

Tax Reform Settlement Agreement

In April 2018, the Georgia PSC approved the Georgia Power Tax Reform Settlement Agreement. To reflect the federal income tax rate reduction impact of the Tax Reform Legislation, Georgia Power issued bill credits of approximately \$95 million and \$130 million in 2019 and 2018, respectively, and is issuing bill credits of approximately \$105 million in February 2020, for a total of \$330 million. In addition, Georgia Power deferred as a regulatory liability (i) the revenue equivalent of the tax expense reduction resulting from legislation lowering the Georgia state income tax rate from 6.00% to 5.75% in 2019 and (ii) the entire benefit of federal and state excess accumulated deferred income taxes. At December 31, 2019, the related regulatory liability balance totaled \$659 million, which is being amortized over a three-year period ending December 31, 2022 in accordance with the 2019 ARP.

To address some of the negative cash flow and credit quality impacts of the Tax Reform Legislation, the Georgia PSC also approved an increase in Georgia Power's retail equity ratio to the lower of (i) Georgia Power's actual common equity weight in its capital structure or (ii) 55%, until the Georgia PSC approved the 2019 ARP. Benefits from reduced federal income tax rates in excess of the amounts refunded to customers were retained by Georgia Power to cover the carrying costs of the incremental equity in 2018 and 2019.

See "2019 ARP" herein for additional information.

Integrated Resource Plan

See "Environmental Matters" herein for additional information regarding proposed and final EPA rules and regulations, including revisions to ELG for steam electric power plants and additional regulations of CCR and CO₂.

On July 16, 2019, the Georgia PSC voted to approve Georgia Power's modified triennial IRP (Georgia Power 2019 IRP). In the Georgia Power 2019 IRP, the Georgia PSC approved the decertification and retirement of Plant Hammond Units 1 through 4 (840 MWs) and Plant McIntosh Unit 1 (142.5 MWs) effective July 29, 2019. In accordance with the 2019 ARP, the remaining net book values at December 31, 2019 of \$488 million for the Plant Hammond units are being recovered over a period equal to the respective unit's remaining useful life, which varies between 2024 and 2035, and \$30 million for Plant McIntosh Unit 1 is being recovered over a three-year period ending December 31, 2022. In addition, approximately \$20 million of related unusable materials and supplies inventory balances and approximately \$295 million of net capitalized asset retirement costs were reclassified to a regulatory asset. In accordance with the modifications to the earnings sharing mechanism approved in the 2019 ARP, Georgia Power fully amortized the regulatory assets associated with these unusable materials and supplies inventory balances as well as a regulatory asset of approximately \$50 million related to costs for a future generation site in Stewart County, Georgia. See "Rate Plans – 2019 ARP" herein for additional information.

Also in the Georgia Power 2019 IRP, the Georgia PSC approved Georgia Power's proposed environmental compliance strategy associated with ash pond and certain landfill closures and post-closure care in compliance with the CCR Rule and the related state rule. In the 2019 ARP, the Georgia PSC approved recovery of the estimated under recovered balance of these compliance costs at December 31, 2019 over a three-year period ending December 31, 2022 and recovery of estimated compliance costs for 2020, 2021, and 2022 over three-year periods ending December 31, 2022, 2023, and 2024, respectively, with recovery of construction contingency beginning in the year following actual expenditure. The under recovered balance at December 31, 2019 was \$175 million and the estimated compliance costs

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expected to be incurred in 2020, 2021, and 2022 are \$265 million, \$290 million, and \$390 million, respectively. The ECCR tariff is expected to be revised for actual expenditures and updated estimates through future annual compliance filings. See "Environmental Matters – Environmental Laws and Regulations – Coal Combustion Residuals" and FINANCIAL CONDITION AND LIQUIDITY – "Capital Requirements" and "Contractual Obligations" herein and Note 6 to the financial statements for additional information regarding Georgia Power's AROs.

On February 4, 2020, the Georgia PSC voted to deny a motion for reconsideration filed by the Sierra Club regarding the Georgia PSC's decision in the 2019 ARP allowing Georgia Power to recover compliance costs for CCR AROs.

Additionally, the Georgia PSC rejected a request to certify approximately 25 MWs of capacity at Plant Scherer Unit 3 for the retail jurisdiction beginning January 1, 2020 following the expiration of a wholesale PPA. Georgia Power may offer such capacity in the wholesale market or to the retail jurisdiction in a future IRP.

The Georgia PSC also approved Georgia Power to (i) issue requests for proposals (RFP) for capacity beginning in 2022 or 2023 and in 2026, 2027, or 2028; (ii) procure up to an additional 2,210 MWs of renewable resources through competitive RFPs; and (iii) invest in a portfolio of up to 80 MWs of battery energy storage technologies.

Fuel Cost Recovery

Georgia Power has established fuel cost recovery rates approved by the Georgia PSC. Georgia Power is scheduled to file its next fuel case no later than March 16, 2020, with new rates, if any, to be effective June 1, 2020. Georgia Power continues to be allowed to adjust its fuel cost recovery rates under an interim fuel rider prior to the next fuel case if the under or over recovered fuel balance exceeds \$200 million. At December 31, 2019, Georgia Power's over recovered fuel balance was \$73 million.

Georgia Power's fuel cost recovery mechanism includes costs associated with a natural gas hedging program, as revised and approved by the Georgia PSC, allowing the use of an array of derivative instruments within a 48-month time horizon.

Fuel cost recovery revenues as recorded on the financial statements are adjusted for differences in actual recoverable fuel costs and amounts billed in current regulated rates. Accordingly, changes in the billing factor will not have a significant effect on Southern Company's or Georgia Power's revenues or net income but will affect operating cash flows.

Storm Damage Recovery

Beginning January 1, 2020, Georgia Power is recovering \$213 million annually through December 31, 2022, as provided in the 2019 ARP, for incremental operations and maintenance costs of damage from major storms to its transmission and distribution facilities. At December 31, 2019, the balance in the regulatory asset related to storm damage was \$410 million. The rate of storm damage cost recovery is expected to be adjusted in future regulatory proceedings as necessary. As a result of this regulatory treatment, costs related to storms are not expected to have a material impact on Southern Company's or Georgia Power's financial statements. See Note 2 to the financial statements under "Georgia Power – Storm Damage Recovery" for additional information regarding Georgia Power's storm damage reserve.

Mississippi Power

Mississippi Power's rates and charges for service to retail customers are subject to the regulatory oversight of the Mississippi PSC. Mississippi Power's rates are a combination of base rates and several separate cost recovery clauses for specific categories of costs. These separate cost recovery clauses address such items as fuel and purchased power, energy efficiency programs, ad valorem taxes, property damage, and the costs of compliance with environmental laws and regulations. Costs not addressed through one of the specific cost recovery clauses are expected to be recovered through Mississippi Power's base rates. See Note 2 to the financial statements under "Mississippi Power" for additional information.

2019 Base Rate Case

On November 26, 2019, Mississippi Power filed the Mississippi Power 2019 Base Rate Case with the Mississippi PSC. The filing includes a requested annual decrease in Mississippi Power's retail rates of \$5.8 million, or 0.6%, which is driven primarily by changes in the amortization rates of certain regulatory assets and liabilities and cost reductions, partially offset by an increase in Mississippi Power's requested return on investment and depreciation associated with the filing of an updated depreciation study. The revenue requirements included in the filing are based on a projected test year period of January 1, 2020 through December 31, 2020, a 53% average equity ratio, and a 7.728% return on investment. The filing reflects the elimination of separate rates for costs associated with the Kemper County energy facility and energy efficiency initiatives; those costs are proposed to be included in the PEP, ECO Plan, and ad valorem tax adjustment factor, as applicable. On December 10, 2019, the Mississippi PSC suspended the base rate case filing through no later than March 25, 2020. If no further action is taken by the Mississippi PSC, the proposed rates may be effective beginning on March 26, 2020. The ultimate outcome of this matter cannot be determined at this time.

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Operations Review

In August 2018, the Mississippi PSC began an operations review of Mississippi Power, for which the final report is expected prior to the conclusion of the Mississippi Power 2019 Base Rate Case. The review includes, but is not limited to, a comparative analysis of its costs, its cost recovery framework, and ways in which it may streamline management operations for the reasonable benefit of ratepayers. The ultimate outcome of this matter cannot be determined at this time.

Reserve Margin Plan

On December 31, 2019, Mississippi Power updated its proposed RMP, originally filed in August 2018, as required by the Mississippi PSC. In 2018, Mississippi Power had proposed alternatives to reduce its reserve margin and lower or avoid operating costs, with the most economic alternatives being the two-year and seven-year acceleration of the retirement of Plant Watson Units 4 and 5, respectively, to the first quarter 2022 and the four-year acceleration of the retirement of Plant Greene County Units 1 and 2 to the third quarter 2021 and the third quarter 2022, respectively. The December 2019 update noted that Plant Daniel Units 1 and 2 currently have long-term economics similar to Plant Watson Unit 5. The Plant Greene County unit retirements would require the completion by Alabama Power of proposed transmission and system reliability improvements, as well as agreement by Alabama Power. The RMP filing also states that, in the event the Mississippi PSC ultimately approves an alternative that includes an accelerated retirement, Mississippi Power would require authorization to defer in a regulatory asset for future recovery the remaining net book value of the units at the time of retirement. A decision by the Mississippi PSC that does not include recovery of the remaining book value of any generating units retired could have a material impact on Southern Company's and Mississippi Power's financial statements. The ultimate outcome of this matter cannot be determined at this time. See Note 3 to the financial statements under "Other Matters – Mississippi Power" for additional information on Plant Daniel Units 1 and 2.

Performance Evaluation Plan

Mississippi Power's retail base rates generally are set under the PEP, a rate plan approved by the Mississippi PSC. In recognition that Mississippi Power's long-term financial success is dependent upon how well it satisfies its customers' needs, PEP includes performance indicators that directly tie customer service indicators to Mississippi Power's allowed ROE. PEP measures Mississippi Power's performance on a 10-point scale as a weighted average of results in three areas: average customer price, as compared to prices of other regional utilities (weighted at 40%); service reliability, measured in percentage of time customers had electric service (40%); and customer satisfaction, measured in a survey of residential customers (20%). Typically, two PEP filings are made for each calendar year: the PEP projected filing, which is typically filed prior to the beginning of the year based on a projected revenue requirement, and the PEP lookback filing, which is filed after the end of the year and allows for review of the actual revenue requirement compared to the projected filing.

In February 2018, Mississippi Power revised its annual projected PEP filing for 2018 to reflect the impacts of the Tax Reform Legislation. The revised filing requested an increase of \$26 million in annual revenues, based on a performance adjusted ROE of 9.33% and an increased equity ratio of 55%. In July 2018, Mississippi Power and the MPUS entered into a settlement agreement, which was approved by the Mississippi PSC in August 2018 (PEP Settlement Agreement). Rates under the PEP Settlement Agreement became effective with the first billing cycle of September 2018. The PEP Settlement Agreement provided for an increase of approximately \$21.6 million in annual base retail revenues, which excluded certain compensation costs contested by the MPUS, as well as approximately \$2 million subsequently approved for recovery through the 2018 Energy Efficiency Cost Rider. Under the PEP Settlement Agreement, Mississippi Power deferred a portion of the contested compensation costs for 2018 and 2019 as a regulatory asset, which totaled \$4 million as of December 31, 2019 and is included in other regulatory assets, deferred on the balance sheet. The Mississippi PSC is expected to rule on the appropriate treatment for such costs in connection with the Mississippi Power 2019 Base Rate Case. The ultimate outcome of this matter cannot be determined at this time.

Pursuant to the PEP Settlement Agreement, Mississippi Power's performance-adjusted allowed ROE is 9.31% and its allowed equity ratio is capped at 51%, pending further review by the Mississippi PSC. In lieu of the requested equity ratio increase, Mississippi Power retained \$44 million of excess accumulated deferred income taxes resulting from the Tax Reform Legislation until the conclusion of the Mississippi Power 2019 Base Rate Case. Further, Mississippi Power agreed to seek equity contributions sufficient to restore its equity ratio to 50% by December 31, 2018. Since Mississippi Power's actual average equity ratio for 2018 was more than 1% lower than the 50% target, Mississippi Power deferred the corresponding difference in its revenue requirement of approximately \$4 million as a regulatory liability for resolution in the Mississippi Power 2019 Base Rate Case. Pursuant to the PEP Settlement Agreement, PEP proceedings are suspended until after the conclusion of the Mississippi Power 2019 Base Rate Case and Mississippi Power was not required to make any PEP filings for regulatory years 2018, 2019, and 2020.

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Energy Efficiency

On February 5, 2019, the Mississippi PSC issued an order approving Mississippi Power's Energy Efficiency Cost Rider 2019 compliance filing, which included a slight decrease in annual retail revenues, effective with the first billing cycle in March 2019.

As part of the Mississippi Power 2019 Base Rate Case, Mississippi Power has proposed that the Energy Efficiency Cost Rider be eliminated and those costs be included in the PEP. The ultimate outcome of this matter cannot be determined at this time.

Environmental Compliance Overview Plan

In accordance with a 2011 accounting order from the Mississippi PSC, Mississippi Power has the authority to defer in a regulatory asset for future recovery all plant retirement- or partial retirement-related costs resulting from environmental regulations. The Mississippi PSC approved \$41 million and \$17 million of costs that were reclassified to regulatory assets associated with the fuel conversion of Plant Watson and Plant Greene County, respectively, for amortization over five-year periods ending in July 2021 and July 2022, respectively.

In August 2018, the Mississippi PSC approved an annual increase in revenues related to the ECO Plan of approximately \$17 million, effective with the first billing cycle for September 2018. This increase represented the maximum 2% annual increase in revenues and primarily related to the carryforward from the prior year.

The increase was the result of Mississippi PSC approval of an agreement between Mississippi Power and the MPUS to settle the 2018 ECO Plan filing (ECO Settlement Agreement) and was sufficient to recover costs through 2019, including remaining amounts deferred from prior years along with the related carrying costs. In accordance with the ECO Settlement Agreement, ECO Plan proceedings are suspended until after the conclusion of the Mississippi Power 2019 Base Rate Case and Mississippi Power was not required to make any ECO Plan filings for 2018, 2019, and 2020, with any necessary adjustments reflected in the Mississippi Power 2019 Base Rate Case. The ECO Settlement Agreement contains the same terms as the PEP Settlement Agreement described herein with respect to allowed ROE and equity ratio. At December 31, 2019, Mississippi Power has recorded \$2 million in other regulatory liabilities, deferred on the balance sheet related to the actual December 31, 2018 average equity ratio differential from target applicable to the ECO Plan.

On October 24, 2019, the Mississippi PSC approved Mississippi Power's July 9, 2019 request for a CPCN to complete certain environmental compliance projects, primarily associated with the Plant Daniel coal units co-owned 50% with Gulf Power. The total estimated cost is approximately \$125 million, with Mississippi Power's share of approximately \$66 million being proposed for recovery through its ECO Plan. Approximately \$17 million of Mississippi Power's share is associated with ash pond closure and is reflected in Mississippi Power's ARO liabilities. See Note 6 to the financial statements for additional information on AROs and Note 3 to the financial statements under "Other Matters – Mississippi Power" for additional information on Gulf Power's ownership in Plant Daniel.

Fuel Cost Recovery

Mississippi Power annually establishes and is required to file for an adjustment to the retail fuel cost recovery factor that is approved by the Mississippi PSC. The Mississippi PSC approved decreases of \$35 million and \$24 million, effective in February 2019 and 2020, respectively. At December 31, 2019 and 2018, over recovered retail fuel costs included in other current liabilities on Southern Company's balance sheets and over recovered regulatory clause liabilities on Mississippi Power's balance sheets were approximately \$23 million and \$8 million, respectively.

Mississippi Power has wholesale MRA and Market Based (MB) fuel cost recovery factors. Effective with the first billing cycle for January 2019, the wholesale MRA fuel rate increased \$16 million annually and the wholesale MB fuel rate decreased by an immaterial amount. Effective January 1, 2020, the wholesale MRA fuel rate increased \$1 million annually and the wholesale MB fuel rate decreased by an immaterial amount. At December 31, 2019 and 2018, over recovered wholesale MRA fuel costs included in other current liabilities on Southern Company's balance sheets and over recovered regulatory clause liabilities on Mississippi Power's balance sheets were approximately \$6 million. At December 31, 2019 and 2018, over/under recovered wholesale MB fuel costs included in the balance sheets were immaterial.

Mississippi Power's operating revenues are adjusted for differences in actual recoverable fuel cost and amounts billed in accordance with the currently approved cost recovery rate. Accordingly, changes in the billing factor should have no significant effect on Mississippi Power's revenues or net income but will affect operating cash flows.

Kemper County Energy Facility

Overview

The Kemper County energy facility was designed to utilize IGCC technology with an expected output capacity of 582 MWs and to be fueled by locally mined lignite (an abundant, lower heating value coal) from a mine owned by Mississippi Power and situated adjacent to the Kemper County energy facility.

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Schedule and Cost Estimate

In 2012, the Mississippi PSC issued an order confirming the CPCN originally approved by the Mississippi PSC in 2010 authorizing the acquisition, construction, and operation of the Kemper County energy facility. The order approved a construction cost cap of up to \$2.88 billion, with recovery of prudently-incurred costs subject to approval by the Mississippi PSC. The Kemper County energy facility was originally projected to be placed in service in May 2014. Mississippi Power placed the combined cycle and the associated common facilities portion of the Kemper County energy facility in service in August 2014. The combined cycle and associated common facilities portions of the Kemper County energy facility were dedicated as Plant Ratcliffe in April 2018.

In June 2017, the Mississippi PSC stated its intent to issue an order, which occurred in July 2017, directing Mississippi Power to pursue a settlement under which the Kemper County energy facility would be operated as a natural gas plant, rather than an IGCC plant, and address all issues associated with the Kemper County energy facility. The order established a new docket for the purpose of pursuing a global settlement of the related costs (Kemper Settlement Docket). In June 2017, Mississippi Power notified the Mississippi PSC that it would begin a process to suspend operations and start-up activities on the gasifier portion of the Kemper County energy facility, given the uncertainty as to its future.

At the time of project suspension in June 2017, the total cost estimate for the Kemper County energy facility was approximately \$7.38 billion, including approximately \$5.95 billion of costs subject to the construction cost cap, net of \$137 million in additional grants from the DOE received in April 2016. In the aggregate, Mississippi Power had recorded charges to income of \$3.07 billion (\$1.89 billion after tax) as a result of changes in the cost estimate above the cost cap for the Kemper IGCC through May 2017.

Given the Mississippi PSC's stated intent regarding no further rate increase for the Kemper County energy facility and the subsequent suspension, cost recovery of the gasifier portions became no longer probable; therefore, Mississippi Power recorded an additional charge to income in June 2017 of \$2.8 billion (\$2.0 billion after tax), which included estimated costs associated with the gasification portions of the plant and lignite mine. During the third and fourth quarters of 2017, Mississippi Power recorded charges to income of \$242 million (\$206 million after tax), including \$164 million for ongoing project costs, estimated mine and gasifier-related costs, and certain termination costs during the suspension period prior to conclusion of the Kemper Settlement Docket, as well as the charge associated with the Kemper Settlement Agreement discussed below.

In 2019, Mississippi Power recorded pre-tax and after-tax charges to income of \$24 million, primarily associated with the expected close out of a related DOE contract, as well as other abandonment and related closure costs and ongoing period costs, net of salvage proceeds, for the mine and gasifier-related assets. The after-tax amount for 2019 includes an adjustment related to the tax abandonment of the Kemper IGCC following the filing of the 2018 tax return. In 2018, Mississippi Power recorded pre-tax charges to income of \$37 million (\$68 million benefit after tax), primarily associated with abandonment and related closure costs and ongoing period costs, net of salvage proceeds, for the mine and gasifier-related assets, as well as the impact of a change in the valuation allowance for the related state income tax NOL carryforward.

Mississippi Power expects to substantially complete mine reclamation activities in 2020 and dismantlement of the abandoned gasifier-related assets and site restoration activities are expected to be completed in 2024. The additional pre-tax period costs associated with dismantlement and site restoration activities, including related costs for compliance and safety, ARO accretion, and property taxes, are estimated to total \$17 million in 2020, \$15 million to \$16 million annually in 2021 through 2023, and \$5 million in 2024.

See Note 10 to the financial statements for additional information.

Rate Recovery

In February 2018, the Mississippi PSC voted to approve a settlement agreement related to cost recovery for the Kemper County energy facility among Mississippi Power, the MPUS, and certain intervenors (Kemper Settlement Agreement), which resolved all cost recovery issues, modified the CPCN to limit the Kemper County energy facility to natural gas combined cycle operation, and provided for an annual revenue requirement of approximately \$99.3 million for costs related to the Kemper County energy facility, which included the impact of the Tax Reform Legislation. The revenue requirement was based on (i) a fixed ROE for 2018 of 8.6% excluding any performance adjustment, (ii) a ROE for 2019 calculated in accordance with PEP, excluding the performance adjustment, (iii) for future years, a performance-based ROE calculated pursuant to PEP, and (iv) amortization periods for the related regulatory assets and liabilities of eight years and six years, respectively. The revenue requirement also reflects a disallowance related to a portion of Mississippi Power's investment in the Kemper County energy facility requested for inclusion in rate base, which was recorded in the fourth quarter 2017 as an additional charge to income of approximately \$78 million (\$85 million net of accumulated depreciation of \$7 million) pre-tax (\$48 million after tax).

Under the Kemper Settlement Agreement, retail customer rates were reduced by approximately \$26.8 million annually, effective with the first billing cycle of April 2018, and include no recovery for costs associated with the gasifier portion of the Kemper County energy facility in 2018 or at any future date.

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On November 26, 2019, Mississippi Power filed the Mississippi Power 2019 Base Rate Case, which reflects the elimination of separate rates for costs associated with the Kemper County energy facility; these costs are proposed to be included in rates for PEP, ECO Plan, and ad valorem tax adjustment factor, as applicable. The ultimate outcome of this matter cannot be determined at this time.

Lignite Mine and CO₂ Pipeline Facilities

Mississippi Power owns the lignite mine and equipment and mineral reserves located around the Kemper County energy facility site. The mine started commercial operation in June 2013. In connection with the Kemper County energy facility construction, Mississippi Power also constructed a pipeline for the transport of captured CO₂.

In 2010, Mississippi Power executed a management fee contract with Liberty Fuels Company, LLC (Liberty Fuels), a wholly-owned subsidiary of The North American Coal Corporation, which developed, constructed, and is responsible for the mining operations through the end of the mine reclamation. As the mining permit holder, Liberty Fuels has a legal obligation to perform mine reclamation and Mississippi Power has a contractual obligation to fund all reclamation activities. As a result of the abandonment of the Kemper IGCC, final mine reclamation began in 2018 and is expected to be substantially completed in 2020, with monitoring expected to continue through 2027. See Note 6 to the financial statements for additional information.

On December 31, 2019, Mississippi Power transferred ownership of the CO₂ pipeline to an unrelated gas pipeline company, with no resulting impact on income. In conjunction with the transfer of the CO₂ pipeline, the parties agreed to enter into a 15-year firm transportation agreement, which is expected to be signed by March 2020, providing for the conversion by the pipeline company of the CO₂ pipeline to a natural gas pipeline to be used for the delivery of natural gas to Plant Ratcliffe. The agreement will be treated as a finance lease for accounting purposes upon commencement, which is expected to occur by August 2020. See Note 9 to the financial statements for additional information.

Government Grants

In 2010, the DOE, through a cooperative agreement with SCS, agreed to fund \$270 million of the Kemper County energy facility through the grants awarded to the project by the DOE under the Clean Coal Power Initiative Round 2. In 2016, additional DOE grants in the amount of \$137 million were awarded to the Kemper County energy facility. Through December 31, 2018, Mississippi Power received total DOE grants of \$387 million, of which \$382 million reduced the construction costs of the Kemper County energy facility and \$5 million reimbursed Mississippi Power for expenses associated with DOE reporting. In December 2018, Mississippi Power filed with the DOE its request for property closeout certification under the contract related to the \$387 million of grants received. Mississippi Power expects to close out the DOE contract related to the Kemper County energy facility in 2020. In connection with the DOE closeout discussions, on April 29, 2019, the Civil Division of the Department of Justice informed Southern Company and Mississippi Power of an investigation related to the Kemper County energy facility. The ultimate outcome of this matter cannot be determined at this time; however, it could have a material impact on Southern Company's and Mississippi Power's financial statements.

Municipal and Rural Associations Tariff

Mississippi Power provides wholesale electric service to Cooperative Energy, East Mississippi Electric Power Association, and the City of Collins, all located in southeastern Mississippi, under a long-term, cost-based, FERC-regulated MRA tariff.

In 2017, Mississippi Power and Cooperative Energy executed, and the FERC accepted, a Shared Service Agreement (SSA), as part of the MRA tariff, under which Mississippi Power and Cooperative Energy will share in providing electricity to the Cooperative Energy delivery points under the tariff, effective January 1, 2018. The SSA may be cancelled by Cooperative Energy with 10 years notice after December 31, 2020. As of December 31, 2019, Cooperative Energy has the option to decrease its use of Mississippi Power's generation services under the MRA tariff up to 2.5% annually, with required notice, up to a maximum total reduction of 11%, or approximately \$9 million in cumulative annual base revenues.

On May 7, 2019, the FERC accepted Mississippi Power's requested \$3.7 million annual decrease in MRA base rates effective January 1, 2019, as agreed upon in the MRA Settlement Agreement, resolving all matters related to the Kemper County energy facility, similar to the retail rate settlement agreement approved by the Mississippi PSC in February 2018, and reflecting the impacts of the Tax Reform Legislation.

Cooperative Energy Power Supply Agreement

Effective April 1, 2018, Mississippi Power and Cooperative Energy amended and extended a previous power supply agreement through March 31, 2021, which was subsequently extended through May 31, 2021. The amendment increased the total capacity from 86 MWs to 286 MWs.

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Cooperative Energy also has a 10-year network integration transmission service agreement (NITSA) with SCS for transmission service to certain delivery points on Mississippi Power's transmission system through March 31, 2021. As a result of the PSA amendment, Cooperative Energy and SCS also amended the terms of the NITSA, which the FERC approved, to provide for the purchase of incremental transmission capacity from April 1, 2018 through March 31, 2021.

Southern Company Gas

Utility Regulation and Rate Design

The natural gas distribution utilities are subject to regulations and oversight by their respective state regulatory agencies. Rates charged to customers vary according to customer class (residential, commercial, or industrial) and rate jurisdiction. These agencies approve rates designed to provide the opportunity to generate revenues to recover all prudently-incurred costs, including a return on rate base sufficient to pay interest on debt and provide a reasonable ROE. Rate base generally consists of the original cost of the utility plant in service, working capital, and certain other assets, less accumulated depreciation on the utility plant in service and net deferred income tax liabilities, and may include certain other additions or deductions.

The natural gas market for Atlanta Gas Light was deregulated in 1997. Accordingly, Marketers, rather than a traditional utility, sell natural gas to end-use customers in Georgia and handle customer billing functions. The Marketers file their rates monthly with the Georgia PSC. As a result of operating in a deregulated environment, Atlanta Gas Light's role includes:

- distributing natural gas for Marketers;
- constructing, operating, and maintaining the gas system infrastructure, including responding to customer service calls and leaks;
- reading meters and maintaining underlying customer premise information for Marketers; and
- planning and contracting for capacity on interstate transportation and storage systems.

Atlanta Gas Light earns revenue by charging rates to its customers based primarily on monthly fixed charges that are set by the Georgia PSC and adjusted periodically. The Marketers add these fixed charges when billing customers. This mechanism, called a straight-fixed-variable rate design, minimizes the seasonality of Atlanta Gas Light's revenues since the monthly fixed charge is not volumetric or directly weather dependent. See "GRAM" and "PRP" herein for additional information.

With the exception of Atlanta Gas Light, the earnings of the natural gas distribution utilities can be affected by customer consumption patterns that are largely a function of weather conditions and price levels for natural gas. Specifically, customer demand substantially increases during the Heating Season when natural gas is used for heating purposes. Southern Company Gas has various mechanisms, such as weather and revenue normalization mechanisms and weather derivative instruments, that limit exposure to weather changes within typical ranges in these utilities' respective service territories.

With the exception of Atlanta Gas Light, the natural gas distribution utilities are authorized by the relevant regulatory agencies in the states in which they serve to use natural gas cost recovery mechanisms that adjust rates to reflect changes in the wholesale cost of natural gas and ensure recovery of all costs prudently incurred in purchasing natural gas for customers. Natural gas cost recovery revenues are adjusted for differences in actual recoverable natural gas costs and amounts billed in current regulated rates. Changes in the billing factor will not have a significant effect on Southern Company Gas' revenues or net income, but will affect cash flows. Since Atlanta Gas Light does not sell natural gas directly to its end-use customers, it does not utilize a traditional natural gas cost recovery mechanism. However, Atlanta Gas Light does maintain natural gas inventory for the Marketers in Georgia and recovers the cost through recovery mechanisms approved by the Georgia PSC specific to Georgia's deregulated market. In addition to natural gas recovery mechanisms, there are other cost recovery mechanisms, such as regulatory riders, which vary by utility but allow recovery of certain costs, such as those related to infrastructure replacement programs as well as environmental remediation and energy efficiency plans. In traditional rate designs, utilities recover a significant portion of the fixed customer service and pipeline infrastructure costs based on assumed natural gas volumes used by customers. The utilities, including Nicor Gas beginning in November 2019, have decoupled regulatory mechanisms that Southern Company Gas believes encourage conservation by separating the recoverable amount of these fixed costs from the amounts of natural gas used by customers. See Note 2 to the financial statements under "Southern Company Gas – Rate Proceedings" for additional information. Also see "Construction Programs – Southern Company Gas – Infrastructure Replacement Programs and Capital Projects" for additional information regarding infrastructure replacement programs at certain of the natural gas distribution utilities.

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The following table provides regulatory information for Southern Company Gas' natural gas distribution utilities:

	Nicor Gas	Atlanta Gas Light	Virginia Natural Gas	Chattanooga Gas
Authorized ROE ^(a)	9.73%	10.25%	9.50%	9.80%
Authorized ROE range ^(a)	N/A	10.05%-10.45%	9.00%-10.00%	N/A
Weather normalization mechanisms ^(b)			✓	✓
Decoupled, including straight-fixed-variable rates ^(c)	✓	✓	✓	
Regulatory infrastructure program rates ^(d)	✓		✓	
Bad debt rider ^(e)	✓		✓	✓
Energy efficiency plan ^(f)	✓		✓	
Annual base rate adjustment mechanism ^(g)		✓		✓
Year of last rate decision	2019	2019	2018	2018

(a) Atlanta Gas Light's authorized ROE and ROE range became effective on January 1, 2020. Atlanta Gas Light's ROE for 2019 was 10.75%.

(b) Regulatory mechanisms that allow recovery of costs in the event of unseasonal weather, but are not direct offsets to the potential impacts on earnings of weather and customer consumption. These mechanisms are designed to help stabilize operating results by increasing base rate amounts charged to customers when weather is warmer than normal and decreasing amounts charged when weather is colder than normal.

(c) Allows for recovery of fixed customer service costs separately from assumed natural gas volumes used by customers. On October 2, 2019, Nicor Gas received approval for a volume balancing adjustment, a revenue decoupling mechanism for residential customers that provides a monthly benchmark level of revenue per rate class for recovery.

(d) Programs that update or expand distribution systems and LNG facilities.

(e) The recovery (refund) of bad debt expense over (under) an established benchmark expense. Nicor Gas, Virginia Natural Gas, and Chattanooga Gas recover the gas portion of bad debt expense through their purchased gas adjustment mechanisms.

(f) Recovery of costs associated with plans to achieve specified energy savings goals.

(g) Regulatory mechanism allowing annual adjustments to base rates up or down based on authorized ROE and/or ROE range.

GRAM

In December 2019, the Georgia PSC approved the continuation of GRAM as part of Atlanta Gas Light's 2019 rate case order. Various infrastructure programs previously authorized by the Georgia PSC, including the Integrated Vintage Plastic Replacement Program (i-VPR) to replace aging plastic pipe and the Integrated System Reinforcement Program (i-SRP) to upgrade Atlanta Gas Light's distribution system and LNG facilities in Georgia, continue under GRAM and the recovery of and return on the infrastructure program investments are included in annual base rate adjustments. The future expected costs to be recovered through rates related to allowed, but not incurred, costs are recognized in an unrecognized ratemaking amount that is not reflected on the balance sheets. This allowed cost is primarily the equity return on the capital investment under the infrastructure programs in place prior to GRAM. See "Unrecognized Ratemaking Amounts" herein for additional information. The Georgia PSC reviews Atlanta Gas Light's performance annually under GRAM. See "Rate Proceedings" herein for additional information.

Pursuant to the GRAM approval, Atlanta Gas Light and the staff of the Georgia PSC agreed to a variation of the Integrated Customer Growth Program to extend pipeline facilities to serve customers in areas without pipeline access and create new economic development opportunities in Georgia. As a result, a new tariff was created, effective October 10, 2017, to provide up to \$15 million annually for Atlanta Gas Light to commit to strategic economic development projects. Projects under this tariff must be approved by the Georgia PSC.

PRP

Atlanta Gas Light previously recovered PRP costs through a PRP surcharge established in 2015 to address recovery of the under recovered PRP balance and the related carrying costs. Effective January 2018, PRP costs are being recovered through GRAM and base rates until the earlier of the full recovery of the under recovered amount or December 31, 2025. The under recovered balance at December 31, 2019 was \$135 million, including \$70 million of unrecognized equity return. See "Rate Proceedings" and "Unrecognized Ratemaking Amounts" herein for additional information.

Rate Proceedings

Nicor Gas

In January 2018, the Illinois Commission approved a \$137 million increase in annual base rate revenues, including \$93 million related to the recovery of investments under the Investing in Illinois program, effective in February 2018, based on a ROE of 9.8%. In May 2018, the Illinois Commission approved Nicor Gas' rehearing request for revised base rates to incorporate the reduction in the federal income tax rate as a result of the Tax Reform Legislation. The resulting decrease of approximately \$44 million in annual base rate revenues became effective May 5, 2018. The benefits of the Tax Reform Legislation from January 25, 2018 through May 4, 2018 were refunded to customers via bill credits and concluded in the second quarter 2019.

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In November 2018, Nicor Gas filed a general base rate case with the Illinois Commission. On October 2, 2019, the Illinois Commission approved a \$168 million annual base rate increase effective October 8, 2019. The base rate increase included \$65 million related to the recovery of program costs under the Investing in Illinois program and was based on a ROE of 9.73% and an equity ratio of 54.2%. Additionally, the Illinois Commission approved a volume balancing adjustment, a revenue decoupling mechanism for residential customers that provides a monthly benchmark level of revenue per rate class for recovery.

Atlanta Gas Light

On June 3, 2019, Atlanta Gas Light filed a general base rate case with the Georgia PSC. On December 19, 2019, the Georgia PSC approved a \$65 million annual base rate increase, effective January 1, 2020, based on a ROE of 10.25% and an equity ratio of 56%. Earnings will be evaluated against a ROE range of 10.05% to 10.45%, with disposition of any earnings above 10.45% to be determined by the Georgia PSC. Additionally, the Georgia PSC approved continuation of the previously authorized inclusion in base rates of the recovery of and return on the infrastructure program investments, including, but not limited to, GRAM adjustments, and a reauthorization and continuation of GRAM until terminated by the Georgia PSC. GRAM filing rate adjustments will be based on the authorized ROE of 10.25%. GRAM adjustments for 2021 may not exceed 5% of 2020 base rates. The 5% limitation does not set a precedent in any future rate proceedings by Atlanta Gas Light.

On January 31, 2020, in accordance with the Georgia PSC's order for the 2019 rate case, Atlanta Gas Light filed a recommended notice of proposed rulemaking for a long-range planning tool. The proposal provides for participating natural gas utilities to file a comprehensive capacity supply and related infrastructure delivery plan for a 10-year period, including capital and related operations and maintenance expense budgets. Participating natural gas utilities would file an updated 10-year plan at least once every third year under the proposal. Related costs of implementing an approved comprehensive plan would be included in the utility's next rate case or GRAM filing. The rulemaking process is expected to be completed during 2020.

Virginia Natural Gas

In December 2018, the Virginia Commission approved Virginia Natural Gas' annual information form filing, which reduced annual base rates by \$14 million effective January 1, 2019 due to lower tax expense as a result of the Tax Reform Legislation, along with customer refunds, via bill credits, for \$14 million related to 2018 tax benefits deferred as a regulatory liability at December 31, 2018. These customer refunds were completed in the first quarter 2019.

On February 3, 2020, Virginia Natural Gas filed a notice of intent with the Virginia Commission as required prior to the filing of a base rate case, which will occur between April 3, 2020 and April 30, 2020. The ultimate outcome of this matter cannot be determined at this time.

See Note 2 to the financial statements under "Southern Company Gas – Rate Proceedings" for additional information.

Affiliate Asset Management Agreements

With the exception of Nicor Gas, the natural gas distribution utilities use asset management agreements with an affiliate, Sequent, for the primary purpose of reducing utility customers' gas cost recovery rates through payments to the utilities by Sequent. For Atlanta Gas Light, these payments are controlled by the Georgia PSC and are utilized for infrastructure improvements and to fund heating assistance programs, rather than as a reduction to gas cost recovery rates. Under these asset management agreements, Sequent supplies natural gas to the utility and markets available pipeline and storage capacity to improve the overall cost of supplying gas to the utility customers. Currently, the natural gas distribution utilities primarily purchase their gas from Sequent. The purchase agreements require Sequent to provide firm gas to the natural gas distribution utilities, but these natural gas distribution utilities maintain the right and ability to make their own long-term supply arrangements if they believe it is in the best interest of their customers.

Each agreement provides for Sequent to make payments to the natural gas distribution utility through either an annual minimum guarantee within a profit sharing structure, a profit sharing structure without an annual minimum guarantee, or a fixed fee.

Unrecognized Ratemaking Amounts

The following table illustrates Southern Company Gas' authorized ratemaking amounts that are not recognized on its balance sheets. These amounts are primarily composed of an allowed equity rate of return on assets associated with certain regulatory infrastructure programs. These amounts will be recognized as revenues in Southern Company Gas' financial statements in the periods they are billable to customers, the majority of which will be recovered by 2025.

	December 31, 2019	December 31, 2018
	<i>(in millions)</i>	
Atlanta Gas Light	\$70	\$ 95
Virginia Natural Gas	10	11
Nicor Gas	2	4
Total	\$82	\$110

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Construction Programs

The Registrants are engaged in continuous construction programs to accommodate existing and estimated future loads on their respective systems. The Southern Company system intends to continue its strategy of developing and constructing new electric generating facilities, expanding and improving the electric transmission and electric and natural gas distribution systems, and undertaking projects to comply with environmental laws and regulations.

For the traditional electric operating companies, major generation construction projects are subject to state PSC approval in order to be included in retail rates. The largest construction project currently underway in the Southern Company system is Plant Vogtle Units 3 and 4. See "Nuclear Construction" herein for additional information. Also see "Regulatory Matters – Alabama Power" herein for information regarding Alabama Power's construction of Plant Barry Unit 8.

While Southern Power generally constructs and acquires generation assets covered by long-term PPAs, any uncontracted capacity could negatively affect future earnings. See "Southern Power" herein, "Acquisitions and Dispositions – Southern Power" herein, and Note 15 to the financial statements under "Southern Power" for additional information about costs relating to Southern Power's acquisitions that involve construction of renewable energy facilities.

Southern Company Gas is engaged in various infrastructure improvement programs designed to update or expand the natural gas distribution systems of the natural gas distribution utilities to improve reliability and meet operational flexibility and growth. The natural gas distribution utilities recover their investment and a return associated with these infrastructure programs through their regulated rates. See "Southern Company Gas" herein for additional information regarding infrastructure improvement programs at the natural gas distribution utilities and certain pipeline construction projects.

See FINANCIAL CONDITION AND LIQUIDITY – "Capital Requirements" herein for additional information regarding the Registrants' capital requirements for their construction programs, including estimated totals for each of the next five years.

Nuclear Construction

In 2009, the Georgia PSC certified construction of Plant Vogtle Units 3 and 4. Georgia Power holds a 45.7% ownership interest in Plant Vogtle Units 3 and 4. In 2012, the NRC issued the related combined construction and operating licenses, which allowed full construction of the two AP1000 nuclear units (with electric generating capacity of approximately 1,100 MWs each) and related facilities to begin. Until March 2017, construction on Plant Vogtle Units 3 and 4 continued under the Vogtle 3 and 4 Agreement, which was a substantially fixed price agreement. In March 2017, the EPC Contractor filed for bankruptcy protection under Chapter 11 of the U.S. Bankruptcy Code.

In connection with the EPC Contractor's bankruptcy filing, Georgia Power, acting for itself and as agent for the other Vogtle Owners, entered into several transitional arrangements to allow construction to continue. In July 2017, Georgia Power, acting for itself and as agent for the other Vogtle Owners, entered into the Vogtle Services Agreement, whereby Westinghouse provides facility design and engineering services, procurement and technical support, and staff augmentation on a time and materials cost basis. The Vogtle Services Agreement provides that it will continue until the start-up and testing of Plant Vogtle Units 3 and 4 are complete and electricity is generated and sold from both units. The Vogtle Services Agreement is terminable by the Vogtle Owners upon 30 days' written notice.

In October 2017, Georgia Power, acting for itself and as agent for the other Vogtle Owners, executed the Bechtel Agreement, a cost reimbursable plus fee arrangement, whereby Bechtel is reimbursed for actual costs plus a base fee and an at-risk fee, which is subject to adjustment based on Bechtel's performance against cost and schedule targets. Each Vogtle Owner is severally (not jointly) liable for its proportionate share, based on its ownership interest, of all amounts owed to Bechtel under the Bechtel Agreement. The Vogtle Owners may terminate the Bechtel Agreement at any time for their convenience, provided that the Vogtle Owners will be required to pay amounts related to work performed prior to the termination (including the applicable portion of the base fee), certain termination-related costs, and, at certain stages of the work, the applicable portion of the at-risk fee. Bechtel may terminate the Bechtel Agreement under certain circumstances, including certain Vogtle Owner suspensions of work, certain breaches of the Bechtel Agreement by the Vogtle Owners, Vogtle Owner insolvency, and certain other events.

See Note 8 to the financial statements under "Long-term Debt – DOE Loan Guarantee Borrowings" for information on the Amended and Restated Loan Guarantee Agreement, including applicable covenants, events of default, mandatory prepayment events, and conditions to borrowing.

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Cost and Schedule

Georgia Power's approximate proportionate share of the remaining estimated capital cost to complete Plant Vogtle Units 3 and 4 by the expected in-service dates of November 2021 and November 2022, respectively, is as follows:

	<i>(in billions)</i>
Base project capital cost forecast ^{(a)(b)}	\$ 8.2
Construction contingency estimate	0.2
Total project capital cost forecast ^{(a)(b)}	8.4
Net investment as of December 31, 2019 ^(b)	(5.9)
Remaining estimate to complete^(a)	\$ 2.5

(a) Excludes financing costs expected to be capitalized through AFUDC of approximately \$300 million, of which \$23 million had been accrued through December 31, 2019.

(b) Net of \$1.7 billion received from Toshiba under the Guarantee Settlement Agreement and approximately \$188 million in related customer refunds.

As of December 31, 2019, approximately \$140 million of the \$366 million construction contingency estimate established in the second quarter 2018 was allocated to the base capital cost forecast for cost risks including, among other factors, construction productivity; craft labor incentives; adding resources for supervision, field support, project management, initial test program, start-up, and operations and engineering support; subcontracts; and procurement. As and when construction contingency is spent, Georgia Power may request the Georgia PSC to evaluate those expenditures for rate recovery.

Georgia Power estimates that its financing costs for construction of Plant Vogtle Units 3 and 4 will total approximately \$3.1 billion, of which \$2.2 billion had been incurred through December 31, 2019.

As part of its ongoing processes, Southern Nuclear continues to evaluate cost and schedule forecasts on a regular basis to incorporate current information available, particularly in the areas of commodity installation, system turnovers, and workforce statistics.

In April 2019, Southern Nuclear established aggressive target values for monthly construction production and system turnover activities as part of a strategy to maintain and, where possible, build margin to the regulatory-approved in-service dates of November 2021 for Unit 3 and November 2022 for Unit 4. The project has faced challenges with the April 2019 aggressive strategy targets, including, but not limited to, electrical and pipefitting labor productivity and closure rates for work packages, which resulted in a backlog of activities and completion percentages below the April 2019 aggressive strategy targets. However, Southern Nuclear and Georgia Power believe that existing productivity levels and pace of activity completion are sufficient to meet the regulatory-approved in-service dates.

In February 2020, Southern Nuclear updated its cost and schedule forecast, which did not change the projected overall capital cost forecast and confirmed the expected in-service dates of November 2021 for Unit 3 and November 2022 for Unit 4. This update included initiatives to improve productivity while refining and extending system turnover plans and certain near-term milestone dates. Other milestone dates did not change. Achievement of the aggressive site work plan relies on meeting increased monthly production and activity target values during 2020. To meet these 2020 targets, existing craft, including subcontractors, construction productivity must improve and be sustained above historical average levels, appropriate levels of craft laborers, particularly electrical and pipefitter craft labor, must be maintained, and additional supervision and other field support resources must be retained. Southern Nuclear and Georgia Power continue to believe that pursuit of an aggressive site work plan is an appropriate strategy to achieve completion of the units by their regulatory-approved in-service dates.

As construction, including subcontract work, continues and testing and system turnover activities increase, challenges with management of contractors and vendors; subcontractor performance; supervision of craft labor and related craft labor productivity, particularly in the installation of electrical and mechanical commodities, ability to attract and retain craft labor, and/or related cost escalation; procurement, fabrication, delivery, assembly, installation, system turnover, and the initial testing and start-up, including any required engineering changes or any remediation related thereto, of plant systems, structures, or components (some of which are based on new technology that only within the last few years began initial operation in the global nuclear industry at this scale), or regional transmission upgrades, any of which may require additional labor and/or materials; or other issues could arise and change the projected schedule and estimated cost.

There have been technical and procedural challenges to the construction and licensing of Plant Vogtle Units 3 and 4 at the federal and state level and additional challenges may arise. Processes are in place that are designed to assure compliance with the requirements specified in the Westinghouse Design Control Document and the combined construction and operating licenses, including inspections by Southern Nuclear and the NRC that occur throughout construction. As a result of such compliance processes, certain license amendment requests have been filed and approved or are pending before the NRC. Various design and other licensing-based compliance matters,

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including the timely submittal by Southern Nuclear of the ITAAC documentation for each unit and the related reviews and approvals by the NRC necessary to support NRC authorization to load fuel, may arise, which may result in additional license amendments or require other resolution. As part of the aggressive site work plan, in January 2020, Southern Nuclear notified the NRC of its intent to load fuel in 2020. If any license amendment requests or other licensing-based compliance issues are not resolved in a timely manner, there may be delays in the project schedule that could result in increased costs.

The ultimate outcome of these matters cannot be determined at this time. However, any extension of the regulatory-approved project schedule is currently estimated to result in additional base capital costs of approximately \$50 million per month, based on Georgia Power's ownership interests, and AFUDC of approximately \$12 million per month. While Georgia Power is not precluded from seeking recovery of any future capital cost forecast increase, management will ultimately determine whether or not to seek recovery. Any further changes to the capital cost forecast that are not expected to be recoverable through regulated rates will be required to be charged to income and such charges could be material.

Joint Owner Contracts

In November 2017, the Vogtle Owners entered into an amendment to their joint ownership agreements for Plant Vogtle Units 3 and 4 to provide for, among other conditions, additional Vogtle Owner approval requirements. Effective in August 2018, the Vogtle Owners further amended the joint ownership agreements to clarify and provide procedures for certain provisions of the joint ownership agreements related to adverse events that require the vote of the holders of at least 90% of the ownership interests in Plant Vogtle Units 3 and 4 to continue construction (as amended, and together with the November 2017 amendment, the Vogtle Joint Ownership Agreements). The Vogtle Joint Ownership Agreements also confirm that the Vogtle Owners' sole recourse against Georgia Power or Southern Nuclear for any action or inaction in connection with their performance as agent for the Vogtle Owners is limited to removal of Georgia Power and/or Southern Nuclear as agent, except in cases of willful misconduct.

As a result of an increase in the total project capital cost forecast and Georgia Power's decision not to seek rate recovery of the increase in the base capital costs in conjunction with the nineteenth VCM report in 2018, the holders of at least 90% of the ownership interests in Plant Vogtle Units 3 and 4 were required to vote to continue construction. In September 2018, the Vogtle Owners unanimously voted to continue construction of Plant Vogtle Units 3 and 4.

Amendments to the Vogtle Joint Ownership Agreements

In connection with the vote to continue construction, Georgia Power entered into (i) a binding term sheet (Vogtle Owner Term Sheet) with the other Vogtle Owners and MEAG Power's wholly-owned subsidiaries MEAG Power SPVJ, LLC (MEAG SPVJ), MEAG Power SPVM, LLC (MEAG SPVM), and MEAG Power SPVP, LLC (MEAG SPVP) to take certain actions which partially mitigate potential financial exposure for the other Vogtle Owners, including additional amendments to the Vogtle Joint Ownership Agreements and the purchase of PTCs from the other Vogtle Owners at pre-established prices, and (ii) a term sheet (MEAG Term Sheet) with MEAG Power and MEAG SPVJ to provide funding with respect to MEAG SPVJ's ownership interest in Plant Vogtle Units 3 and 4 under certain circumstances. On January 14, 2019, Georgia Power, MEAG Power, and MEAG SPVJ entered into an agreement to implement the provisions of the MEAG Term Sheet. On February 18, 2019, Georgia Power, the other Vogtle Owners, and MEAG Power's wholly-owned subsidiaries MEAG SPVJ, MEAG SPVM, and MEAG SPVP entered into certain amendments to the Vogtle Joint Ownership Agreements to implement the provisions of the Vogtle Owner Term Sheet.

The ultimate outcome of these matters cannot be determined at this time.

Regulatory Matters

In 2009, the Georgia PSC voted to certify construction of Plant Vogtle Units 3 and 4 with a certified capital cost of \$4.418 billion. In addition, in 2009 the Georgia PSC approved inclusion of the Plant Vogtle Units 3 and 4 related CWIP accounts in rate base, and the State of Georgia enacted the Georgia Nuclear Energy Financing Act, which allows Georgia Power to recover financing costs for Plant Vogtle Units 3 and 4. Financing costs are recovered on all applicable certified costs through annual adjustments to the NCCR tariff up to the certified capital cost of \$4.418 billion. At December 31, 2019, Georgia Power had recovered approximately \$2.2 billion of financing costs. Financing costs related to capital costs above \$4.418 billion are being recognized through AFUDC and are expected to be recovered through retail rates over the life of Plant Vogtle Units 3 and 4; however, Georgia Power will not record AFUDC related to any capital costs in excess of the total deemed reasonable by the Georgia PSC (currently \$7.3 billion) and not requested for rate recovery. On December 17, 2019, the Georgia PSC approved Georgia Power's request to decrease the NCCR tariff by \$62 million annually, effective January 1, 2020.

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Georgia Power is required to file semi-annual VCM reports with the Georgia PSC by February 28 and August 31 of each year. In 2013, in connection with the eighth VCM report, the Georgia PSC approved a stipulation between Georgia Power and the staff of the Georgia PSC to waive the requirement to amend the Plant Vogtle Units 3 and 4 certificate in accordance with the 2009 certification order until the completion of Plant Vogtle Unit 3, or earlier if deemed appropriate by the Georgia PSC and Georgia Power.

In 2016, the Georgia PSC voted to approve a settlement agreement (Vogtle Cost Settlement Agreement) resolving certain prudency matters in connection with the fifteenth VCM report. In December 2017, the Georgia PSC voted to approve (and issued its related order on January 11, 2018) Georgia Power's seventeenth VCM report and modified the Vogtle Cost Settlement Agreement. The Vogtle Cost Settlement Agreement, as modified by the January 11, 2018 order, resolved the following regulatory matters related to Plant Vogtle Units 3 and 4: (i) none of the \$3.3 billion of costs incurred through December 31, 2015 and reflected in the fourteenth VCM report should be disallowed from rate base on the basis of imprudence; (ii) the Contractor Settlement Agreement was reasonable and prudent and none of the amounts paid pursuant to the Contractor Settlement Agreement should be disallowed from rate base on the basis of imprudence; (iii) (a) capital costs incurred up to \$5.68 billion would be presumed to be reasonable and prudent with the burden of proof on any party challenging such costs, (b) Georgia Power would have the burden to show that any capital costs above \$5.68 billion were prudent, and (c) a revised capital cost forecast of \$7.3 billion (after reflecting the impact of payments received under the Guarantee Settlement Agreement and related customer refunds) was found reasonable; (iv) construction of Plant Vogtle Units 3 and 4 should be completed, with Southern Nuclear serving as project manager and Bechtel as primary contractor; (v) approved and deemed reasonable Georgia Power's revised schedule placing Plant Vogtle Units 3 and 4 in service in November 2021 and November 2022, respectively; (vi) confirmed that the revised cost forecast does not represent a cost cap and that prudence decisions on cost recovery will be made at a later date, consistent with applicable Georgia law; (vii) reduced the ROE used to calculate the NCCR tariff (a) from 10.95% (the ROE rate setting point authorized by the Georgia PSC in the 2013 ARP) to 10.00% effective January 1, 2016, (b) from 10.00% to 8.30%, effective January 1, 2020, and (c) from 8.30% to 5.30%, effective January 1, 2021 (provided that the ROE in no case will be less than Georgia Power's average cost of long-term debt); (viii) reduced the ROE used for AFUDC equity for Plant Vogtle Units 3 and 4 from 10.00% to Georgia Power's average cost of long-term debt, effective January 1, 2018; and (ix) agreed that upon Unit 3 reaching commercial operation, retail base rates would be adjusted to include carrying costs on those capital costs deemed prudent in the Vogtle Cost Settlement Agreement. The January 11, 2018 order also stated that if Plant Vogtle Units 3 and 4 are not commercially operational by June 1, 2021 and June 1, 2022, respectively, the ROE used to calculate the NCCR tariff will be further reduced by 10 basis points each month (but not lower than Georgia Power's average cost of long-term debt) until the respective Unit is commercially operational. The ROE reductions negatively impacted earnings by approximately \$75 million, \$100 million, and \$25 million in 2019, 2018, and 2017, respectively, and are estimated to have negative earnings impacts of approximately \$140 million, \$240 million, and \$190 million in 2020, 2021, and 2022, respectively. In its January 11, 2018 order, the Georgia PSC also stated if other conditions change and assumptions upon which Georgia Power's seventeenth VCM report are based do not materialize, the Georgia PSC reserved the right to reconsider the decision to continue construction.

In February 2018, Georgia Interfaith Power & Light, Inc. (GIPL) and Partnership for Southern Equity, Inc. (PSE) filed a petition appealing the Georgia PSC's January 11, 2018 order with the Fulton County Superior Court. In March 2018, Georgia Watch filed a similar appeal to the Fulton County Superior Court for judicial review of the Georgia PSC's decision and denial of Georgia Watch's motion for reconsideration. In December 2018, the Fulton County Superior Court granted Georgia Power's motion to dismiss the two appeals. On January 9, 2019, GIPL, PSE, and Georgia Watch filed an appeal of this decision with the Georgia Court of Appeals. On October 29, 2019, the Georgia Court of Appeals issued an opinion affirming the Fulton County Superior Court's ruling that the Georgia PSC's January 11, 2018 order was not a final, appealable decision. In addition, the Georgia Court of Appeals remanded the case to the Fulton County Superior Court to clarify its ruling as to whether the petitioners showed that review of the Georgia PSC's final order would not provide them an adequate remedy. Georgia Power believes the petitions have no merit; however, an adverse outcome in the litigation combined with subsequent adverse action by the Georgia PSC could have a material impact on Southern Company's and Georgia Power's results of operations, financial condition, and liquidity.

On February 18, 2020, the Georgia PSC approved Georgia Power's twentieth VCM report and its concurrently-filed twenty-first VCM report, including approval of (i) \$1.2 billion of construction capital costs incurred from July 1, 2018 through June 30, 2019 and (ii) \$21.5 million of expenditures related to Georgia Power's portion of an administrative claim filed in the Westinghouse bankruptcy proceedings (which expenditures had previously been deferred by the Georgia PSC for later approval). Through the twenty-first VCM, the Georgia PSC has approved total construction capital costs incurred through June 30, 2019 of \$6.7 billion (before \$1.7 billion of payments received under the Guarantee Settlement Agreement and approximately \$188 million in related customer refunds). On February 19, 2020, Georgia Power filed its twenty-second VCM report with the Georgia PSC covering the period from July 1, 2019 through December 31, 2019, requesting approval of \$674 million of construction capital costs incurred during that period.

The ultimate outcome of these matters cannot be determined at this time.

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Southern Power

During 2019, Southern Power completed construction of and placed in service the 385-MW Plant Mankato expansion and the Wildhorse Mountain facility, acquired and continued construction of the Skookumchuck facility, and continued construction of the Reading facility.

Project Facility	Resource	Approximate Nameplate Capacity (MW)	Location	Actual/Expected COD	PPA Counterparties	PPA Contract Period
Projects Completed During the Year Ended December 31, 2019						
Mankato expansion ^(a)	Natural Gas	385	Mankato, MN	May 2019	Northern States Power Company	20 years
Wildhorse Mountain ^(b)	Wind	100	Pushmataha County, OK	December 2019	Arkansas Electric Cooperative Corporation	20 years
Projects Under Construction at December 31, 2019						
Reading ^(c)	Wind	200	Osage and Lyon Counties, KS	Second quarter 2020	Royal Caribbean Cruises LTD	12 years
Skookumchuck ^(d)	Wind	136	Lewis and Thurston Counties, WA	Second quarter 2020	Puget Sound Energy	20 years

(a) Southern Power completed the sale of its equity interests in Plant Mankato, including the expansion, to a subsidiary of Xcel on January 17, 2020.

The expansion unit started providing energy under a PPA with Northern States Power on June 1, 2019. See "Acquisitions and Dispositions – Southern Power – Sales of Natural Gas and Biomass Plants" herein and Note 15 to the financial statements under "Southern Power" and "Assets Held for Sale" for additional information.

(b) In May 2018, Southern Power purchased 100% of the membership interests of the Wildhorse Mountain facility. In December 2019, Southern Power entered into a tax equity partnership and, as a result, owns 100% of the Class B membership interests.

(c) In August 2018, Southern Power purchased 100% of the membership interests of the Reading facility pursuant to a joint development arrangement. Southern Power may enter into a tax equity partnership, in which case it would then own 100% of the Class B membership interests. The ultimate outcome of this matter cannot be determined at this time.

(d) In October 2019, Southern Power purchased 100% of the membership interests of the Skookumchuck facility pursuant to a joint development arrangement. In December 2019, Southern Power entered into a tax equity agreement as the Class B member with funding of the tax equity amounts expected to occur upon commercial operation. Shortly after commercial operation, Southern Power may sell a noncontrolling interest in these Class B membership interests to another partner. The ultimate outcome of this matter cannot be determined at this time.

Total aggregate construction costs for the two projects under construction at December 31, 2019, excluding acquisition costs, are expected to be between \$490 million and \$535 million. At December 31, 2019, total costs of construction incurred for these projects were \$417 million and are included in CWIP. The ultimate outcome of these matters cannot be determined at this time.

Southern Company Gas

Infrastructure Replacement Programs and Capital Projects

Southern Company Gas continues to focus on capital discipline and cost control while pursuing projects and initiatives that are expected to have current and future benefits to customers, provide an appropriate return on invested capital, and help ensure the safety and reliability of the utility infrastructure. In addition to capital expenditures recovered through base rates by each of the natural gas distribution utilities, Nicor Gas and Virginia Natural Gas have separate rate riders that provide timely recovery of capital expenditures for specific infrastructure replacement programs. Total capital expenditures incurred during 2019 for gas distribution operations were \$1.4 billion.

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The following table and discussions provide updates on the infrastructure replacement programs and capital projects at the natural gas distribution utilities at December 31, 2019. These programs are risk-based and designed to update and replace cast iron, bare steel, and mid-vintage plastic materials or expand Southern Company Gas' distribution systems to improve reliability and meet operational flexibility and growth. The anticipated expenditures for these programs in 2020 are quantified in the discussion below.

Utility	Program	Recovery	Expenditures in 2019	Expenditures Since Project Inception	Pipe Installed Since Project Inception	Scope of Program	Program Duration	Last Year of Program
			(in millions)		(miles)	(miles)	(years)	
Nicor Gas	Investing in Illinois ^(*)	Rider	\$396	\$1,712	843	1,450	9	2023
Virginia Natural Gas	Steps to Advance Virginia's Energy (SAVE and SAVE II)	Rider	45	244	363	770	13	2024
Total			\$441	\$1,956	1,206	2,220		

(*) Includes replacement of pipes, compressors, and transmission mains along with other improvements such as new meters. Scope of program miles is an estimate and subject to change.

Nicor Gas

In 2013, Illinois enacted legislation that allows Nicor Gas to provide more widespread safety and reliability enhancements to its distribution system. The legislation stipulates that rate increases to customers as a result of any infrastructure investments shall not exceed a cumulative annual average of 4.0% or, in any given year, 5.5% of base rate revenues. In 2014, the Illinois Commission approved the nine-year regulatory infrastructure program, Investing in Illinois, subject to annual review. Nicor Gas expects to place into service \$400 million of qualifying projects under Investing in Illinois in 2020.

In conjunction with the base rate case order issued by the Illinois Commission in January 2018, Nicor Gas is recovering program costs incurred prior to December 31, 2017 through base rates. Additionally, the Illinois Commission's approval of Nicor Gas' rate case on October 2, 2019 included \$65 million in annual revenues related to the recovery of program costs from January 1, 2018 through September 30, 2019 under the Investing in Illinois program. See "Regulatory Matters – Southern Company Gas – Rate Proceedings" herein for additional information.

Virginia Natural Gas

In 2012, the Virginia Commission approved the SAVE program, an accelerated infrastructure replacement program. In 2016 and on September 25, 2019, the Virginia Commission approved amendments and extensions to the SAVE program. The latest extension allows Virginia Natural Gas to continue replacing aging pipeline infrastructure through 2024 and increases its authorized investment under the previously-approved plan from \$35 million to \$40 million in 2019 with additional annual investments of \$50 million in 2020, \$60 million in 2021, \$70 million in each year from 2022 through 2024, and a total potential variance of up to \$5 million allowed for the program, for a maximum total investment over the six-year term (2019 through 2024) of \$365 million. Virginia Natural Gas expects to invest \$50 million under this program in 2020.

The SAVE program is subject to annual review by the Virginia Commission. In accordance with the base rate case order issued by the Virginia Commission in 2017, Virginia Natural Gas is recovering program costs incurred prior to September 1, 2017 through base rates. Program costs incurred subsequent to September 1, 2017 are currently recovered through a separate rider and are subject to future base rate case proceedings.

On December 6, 2019, Virginia Natural Gas filed an application with the Virginia Commission for a 24.1-mile header improvement project to improve resiliency and increase the supply of natural gas delivered to energy suppliers, including Virginia Natural Gas. The cost of the project is expected to total \$346 million. The Virginia Commission is expected to rule on this application in the second quarter 2020. Construction is expected to begin in June 2021 and the project is expected to be placed in service in the fourth quarter 2022. The ultimate outcome of this matter cannot be determined at this time.

Atlanta Gas Light

As discussed under "Regulatory Matters – Southern Company Gas – Utility Regulation and Rate Design" herein, i-SRP and i-VPR will continue under GRAM and the recovery of and return on current and future infrastructure program capital investments will be included in base rates.

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Pipeline Construction Projects

Southern Company Gas is involved in two significant pipeline construction projects within its gas pipeline investments segment. These projects, along with Southern Company Gas' existing pipelines, are intended to provide diverse sources of natural gas supplies to customers, resolve current and long-term supply planning for new capacity, enhance system reliability, and generate economic development in the areas served.

In 2014, Southern Company Gas entered into a joint venture, whereby it holds a 5% ownership interest in the Atlantic Coast Pipeline, an interstate pipeline company formed to develop and operate an approximate 605-mile natural gas pipeline in North Carolina, Virginia, and West Virginia with expected initial transportation capacity of 1.5 Bcf per day. The proposed pipeline project is expected to transport natural gas to customers in Virginia. In 2017, the Atlantic Coast Pipeline received FERC approval.

The Atlantic Coast Pipeline has experienced challenges to its permits since construction began in 2018. During the third and fourth quarters 2018, a FERC stop work order, together with delays in obtaining permits necessary for construction and construction delays due to judicial actions, impacted the cost and schedule for the project. Project cost estimates are approximately \$8.0 billion (\$400 million for Southern Company Gas), excluding financing costs. On October 4, 2019, the U.S. Supreme Court agreed to hear Atlantic Coast Pipeline's appeal of a lower court ruling that overturned a key permit for the project. On January 7, 2020, the U.S. Court of Appeals for the Fourth Circuit vacated another key permit. The operator of the joint venture has indicated that it currently expects to complete construction by the end of 2021 and place the project in service shortly thereafter.

On February 7, 2020, Southern Company Gas entered into an agreement with Dominion Atlantic Coast Pipeline, LLC for the sale of its interest in Atlantic Coast Pipeline. The transaction is expected to be completed in the first half of 2020; however, the ultimate outcome cannot be determined at this time. See Note 15 to the financial statements under "Southern Company Gas – Proposed Sale of Pivotal LNG and Atlantic Coast Pipeline" for additional information.

Also in 2014, Southern Company Gas entered into a partnership in which it holds a 20% ownership interest in the PennEast Pipeline, an interstate pipeline company formed to develop and operate an approximate 118-mile natural gas pipeline between New Jersey and Pennsylvania. The expected initial transportation capacity of 1.0 Bcf per day is under long-term contracts, mainly with public utilities and other market-serving entities, such as electric generation companies, in New Jersey, Pennsylvania, and New York. Southern Company Gas believes this pipeline will alleviate takeaway constraints in the Marcellus region and help mitigate some of the price volatility experienced during recent winters.

Expected project costs related to the PennEast Pipeline for Southern Company Gas total approximately \$300 million, excluding financing costs. In January 2018, the PennEast Pipeline received initial FERC approval. Work continues with state and federal agencies to obtain the required permits to begin construction. On September 10, 2019, an appellate court ruled that the PennEast Pipeline does not have federal eminent domain authority over lands in which a state has property rights interests. On February 18, 2020, PennEast Pipeline filed a petition for a writ of certiorari to seek U.S. Supreme Court review of the appellate court decision. On December 30, 2019, PennEast Pipeline filed a two-year extension request with the FERC to complete the project by January 19, 2022.

Additionally, on January 30, 2020, PennEast Pipeline filed an amendment with the FERC to construct the pipeline project in two phases. The first phase would consist of 68 miles of pipe, constructed entirely within Pennsylvania, which is expected to be completed by November 2021. The second phase would include the remaining route in Pennsylvania and New Jersey and is targeted for completion in 2023. FERC approval of the amended plan is required prior to beginning the first phase.

The ultimate outcome of these matters cannot be determined at this time; however, any work delays, whether caused by judicial or regulatory action, abnormal weather, or other conditions, may result in additional cost or schedule modifications or, ultimately, in project cancellation, any of which could result in an impairment of one or both of Southern Company Gas' investments and could have a material impact on Southern Company's and Southern Company Gas' financial statements. Southern Company Gas evaluated its investments and determined there was no impairment as of December 31, 2019.

See Notes 3 and 7 to the financial statements under "Guarantees" and "Southern Company Gas – Equity Method Investments," respectively, for additional information on these pipeline projects.

Southern Power's Power Sales Agreements

General

Southern Power has PPAs with some of the traditional electric operating companies, other investor-owned utilities, IPPs, municipalities, and other load-serving entities, as well as commercial and industrial customers. The PPAs are expected to provide Southern Power with a stable source of revenue during their respective terms.

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Many of Southern Power's PPAs have provisions that require Southern Power or the counterparty to post collateral or an acceptable substitute guarantee in the event that S&P or Moody's downgrades the credit ratings of the respective company to an unacceptable credit rating or if the counterparty is not rated or fails to maintain a minimum coverage ratio.

On January 29, 2019, Pacific Gas & Electric Company (PG&E) filed petitions to reorganize under Chapter 11 of the U.S. Bankruptcy Code. Southern Power, together with its noncontrolling partners, owns four solar facilities where PG&E is the energy off-taker for approximately 207 MWs of capacity under long-term PPAs. PG&E is also the transmission provider for these four facilities and two of Southern Power's other solar facilities. At December 31, 2019, Southern Power had outstanding accounts receivables due from PG&E of \$2 million related to the PPAs and \$33 million related to the transmission interconnections (of which \$27 million is classified in receivables – other and \$6 million is classified in other deferred charges and assets). Subsequent to December 31, 2019, Southern Power received \$15 million in accordance with a November 2019 bankruptcy court order granting payment of transmission interconnections for amounts due and owing. Southern Power continues to evaluate the recoverability of its investments in these solar facilities under various scenarios, including selling the related energy into the competitive markets, and has concluded that these solar facilities are not impaired. PG&E has continued to perform under the terms of the PPAs. Southern Power does not expect a material impact to its financial statements if, as a result of the bankruptcy proceedings, PG&E does not perform in accordance with the PPAs or the terms of the PPAs are renegotiated; however, the ultimate outcome of this matter cannot be determined at this time.

Southern Power is working to maintain and expand its share of the wholesale markets. During 2019, Southern Power saw an increase in the demand for energy and capacity that can be served from natural gas generating facilities, especially in the Southeast, and expects that this increase in demand will continue in the near term (2020–2022), with timing varying depending on the market. During 2019, Southern Power successfully remarketed approximately 190 to 650 MWs of annual natural gas generation capacity to load-serving entities through several PPAs extending over the next nine years. Southern Power calculates an investment coverage ratio for its generating assets, including those owned with various partners, based on the ratio of investment under contract to total investment using the respective generation facilities' net book value (or expected in-service value for facilities under construction) as the investment amount. With the inclusion of investments associated with the wind facilities currently under construction, as well as other capacity and energy contracts, and excluding Plant Mankato, which was sold on January 17, 2020, Southern Power's average investment coverage ratio at December 31, 2019 was 93% through 2024 and 90% through 2029, with an average remaining contract duration of approximately 14 years. See "Acquisitions and Dispositions – Southern Power" and "Construction Programs – Southern Power" herein for additional information.

Natural Gas

Southern Power's electricity sales from natural gas facilities are primarily through long-term PPAs that consist of two types of agreements. The first type, referred to as a unit or block sale, is a customer purchase from a dedicated generating unit where all or a portion of the generation from that unit is reserved for that customer. Southern Power typically has the ability to serve the unit or block sale customer from an alternate resource. The second type, referred to as requirements service, provides that Southern Power serve the customer's capacity and energy requirements from a combination of the customer's own generating units and from Southern Power resources not dedicated to serve unit or block sales. Southern Power has rights to purchase power provided by the requirements customers' resources when economically viable.

As a general matter, substantially all of the PPAs provide that the purchasers are responsible for either procuring the fuel (tolling agreements) or reimbursing Southern Power for substantially all of the cost of fuel or purchased power relating to the energy delivered under such PPAs. To the extent a particular generating facility does not meet the operational requirements contemplated in the PPAs, Southern Power may be responsible for excess fuel costs. With respect to fuel transportation risk, most of Southern Power's PPAs provide that the counterparties are responsible for the availability of fuel transportation to the particular generating facility.

Capacity charges that form part of the PPA payments are designed to recover fixed and variable operation and maintenance costs based on dollars-per-kilowatt year. In general, to reduce Southern Power's exposure to certain operation and maintenance costs, Southern Power has LTSAs. See Note 1 to the financial statements under "Long-Term Service Agreements" for additional information.

Solar and Wind

Southern Power's electricity sales from solar and wind (renewable) generating facilities are also primarily through long-term PPAs; however, these solar and wind PPAs do not have a capacity charge and customers either purchase the energy output of a dedicated renewable facility through an energy charge or provide Southern Power a certain fixed price for the electricity sold to the grid. As a result, Southern Power's ability to recover fixed and variable operations and maintenance expenses is dependent upon the level of energy generated from these facilities, which can be impacted by weather conditions, equipment performance, transmission constraints, and other factors. Generally, under the renewable generation PPAs, the purchasing party retains the right to keep or resell the renewable energy credits.

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Income Tax Matters

Consolidated Income Taxes

On behalf of the Registrants, Southern Company files a consolidated federal income tax return and various state income tax returns, some of which are combined or unitary. Under a joint consolidated income tax allocation agreement, each Southern Company subsidiary's current and deferred tax expense is computed on a stand-alone basis and no subsidiary is allocated more current expense than would be paid if it filed a separate income tax return. In accordance with IRS regulations, each company is jointly and severally liable for the federal tax liability.

The impact of certain tax events at Southern Company and/or its other subsidiaries can, and does, affect each Registrant's ability to utilize certain tax credits. See "Tax Credits" and ACCOUNTING POLICIES – "Application of Critical Accounting Policies and Estimates" herein and Note 10 to the financial statements for additional information.

Federal Tax Reform Legislation

In 2017, the Tax Reform Legislation was signed into law and became effective on January 1, 2018. The Tax Reform Legislation, among other things, reduced the federal corporate income tax rate to 21%, retained normalization provisions for public utility property and existing renewable energy incentives, and repealed the corporate alternative minimum tax. In addition, under the Tax Reform Legislation, NOLs generated after December 31, 2017 can no longer be carried back to previous tax years but can be carried forward indefinitely, with utilization limited to 80% of taxable income of the subsequent tax year. The projected reduction of Southern Company's consolidated income tax liability resulting from the tax rate reduction also delays the expected utilization of existing tax credit carryforwards. See "Consolidated Income Taxes" herein and Note 10 to the financial statements for information on Southern Company's joint consolidated income tax allocation agreement.

Bonus Depreciation

Under the Tax Reform Legislation, projects with binding contracts prior to September 28, 2017 and placed in service after September 27, 2017 remain eligible for 50% bonus depreciation for 2015 through 2017, 40% bonus depreciation for 2018, and 30% bonus depreciation for 2019 and certain long-lived assets placed in service in 2020. Based on provisional estimates, bonus depreciation is expected to result in positive cash flows for the Registrants as follows:

	2019 Tax Year	2020 Tax Year
	<i>(in millions)</i>	
Southern Company	\$989	\$382
Alabama Power	180	68
Georgia Power	314	56
Mississippi Power	7	2
Southern Power ^(*)	87	95
Southern Company Gas	190	58

(*) Cash flows resulting from bonus depreciation for Southern Power would also be impacted by Southern Power's use of tax equity partnerships.

See Note 10 to the financial statements under "Current and Deferred Income Taxes" for additional information. The ultimate outcome of this matter cannot be determined at this time.

Tax Credits

The Tax Reform Legislation retained solar energy incentives of 30% ITC for projects that commenced construction by December 31, 2019; 26% ITC for projects that commence construction in 2020; 22% ITC for projects that commence construction in 2021; and a permanent 10% ITC for projects that commence construction on or after January 1, 2022. In addition, the Tax Reform Legislation retained wind energy incentives of 100% PTC for projects that commenced construction in 2016; 80% PTC for projects that commenced construction in 2017; 60% PTC for projects that commenced construction in 2018; and 40% PTC for projects that commenced construction in 2019. As a result of a tax extenders bill passed in December 2019, projects that begin construction in 2020 will be entitled to 60% PTC. Projects commencing construction after 2020 will not be entitled to any PTCs. Southern Company has received ITCs and PTCs in connection with investments in solar, wind, and biomass facilities primarily at Southern Power and Georgia Power.

Southern Power's ITCs relate to its investment in new solar facilities acquired or constructed and its PTCs relate to the first 10 years of energy production from its wind facilities, which have had, and may continue to have, a material impact on Southern Power's cash flows and net income. At December 31, 2019, Southern Company and Southern Power had approximately \$1.8 billion and \$1.4 billion, respectively, of unutilized ITCs and PTCs, which are currently expected to be fully utilized by 2024, but could be further delayed. Since 2018, Southern Power has been utilizing tax equity partnerships for wind and solar projects, where the tax partner takes significantly all of the respective federal tax benefits. These tax equity partnerships are consolidated in Southern Company's and Southern Power's

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financial statements using the HLBV methodology to allocate partnership gains and losses. See Note 1 to the financial statements under "General" for additional information on the HLBV methodology and Note 1 to the financial statements under "Income Taxes" and Note 10 to the financial statements under "Deferred Tax Assets and Liabilities – Tax Credit Carryforwards" and "Effective Tax Rate" for additional information regarding utilization and amortization of credits and the tax benefit related to associated basis differences.

General Litigation Matters

The Registrants are involved in various other matters being litigated and regulatory matters that could affect future earnings. The ultimate outcome of such pending or potential litigation or regulatory matters against each Registrant and any subsidiaries cannot be determined at this time; however, for current proceedings not specifically reported herein or in Notes 2 and 3 to the financial statements, management does not anticipate that the ultimate liabilities, if any, arising from such current proceedings would have a material effect on such Registrant's financial statements. See Notes 2 and 3 to the financial statements for a discussion of various other contingencies, regulatory matters, and other matters being litigated which may affect future earnings potential.

The Registrants believe the pending legal challenges discussed below have no merit; however, the ultimate outcome of these matters cannot be determined at this time.

Southern Company

In January 2017, a securities class action complaint was filed against Southern Company, certain of its officers, and certain former Mississippi Power officers in the U.S. District Court for the Northern District of Georgia by Monroe County Employees' Retirement System on behalf of all persons who purchased shares of Southern Company's common stock between April 25, 2012 and October 29, 2013. The complaint alleges that Southern Company, certain of its officers, and certain former Mississippi Power officers made materially false and misleading statements regarding the Kemper County energy facility in violation of certain provisions under the Securities Exchange Act of 1934, as amended. The complaint seeks, among other things, compensatory damages and litigation costs and attorneys' fees. In 2017, the plaintiffs filed an amended complaint that provided additional detail about their claims, increased the purported class period by one day, and added certain other former Mississippi Power officers as defendants. Also in 2017, the defendants filed a motion to dismiss the plaintiffs' amended complaint with prejudice, to which the plaintiffs filed an opposition. In March 2018, the court issued an order granting, in part, the defendants' motion to dismiss. The court dismissed certain claims against certain officers of Southern Company and Mississippi Power and dismissed the allegations related to a number of the statements that plaintiffs challenged as being false or misleading. In April 2018, the defendants filed a motion for reconsideration of the court's order, seeking dismissal of the remaining claims in the lawsuit. In August 2018, the court denied the motion for reconsideration and denied a motion to certify the issue for interlocutory appeal. On August 22, 2019, the court certified the plaintiffs' proposed class. On September 5, 2019, the defendants filed a petition for interlocutory appeal of the class certification order with the U.S. Court of Appeals for the Eleventh Circuit. On December 19, 2019, the U.S. District Court for the Northern District of Georgia entered an order staying all deadlines in the case pending mediation. The stay automatically expires on March 31, 2020.

In February 2017, Jean Vineyard and Judy Mesirov each filed a shareholder derivative lawsuit in the U.S. District Court for the Northern District of Georgia. Each of these lawsuits names as defendants Southern Company, certain of its directors, certain of its officers, and certain former Mississippi Power officers. In 2017, these two shareholder derivative lawsuits were consolidated in the U.S. District Court for the Northern District of Georgia. The complaints allege that the defendants caused Southern Company to make false or misleading statements regarding the Kemper County energy facility cost and schedule. Further, the complaints allege that the defendants were unjustly enriched and caused the waste of corporate assets and also allege that the individual defendants violated their fiduciary duties. Each plaintiff seeks to recover, on behalf of Southern Company, unspecified actual damages and, on each plaintiff's own behalf, attorneys' fees and costs in bringing the lawsuit. Each plaintiff also seeks certain changes to Southern Company's corporate governance and internal processes. In April 2018, the court entered an order staying this lawsuit until 30 days after the resolution of any dispositive motions or any settlement, whichever is earlier, in the securities class action.

In May 2017, Helen E. Piper Survivor's Trust filed a shareholder derivative lawsuit in the Superior Court of Gwinnett County, Georgia that names as defendants Southern Company, certain of its directors, certain of its officers, and certain former Mississippi Power officers. The complaint alleges that the individual defendants, among other things, breached their fiduciary duties in connection with schedule delays and cost overruns associated with the construction of the Kemper County energy facility. The complaint further alleges that the individual defendants authorized or failed to correct false and misleading statements regarding the Kemper County energy facility schedule and cost and failed to implement necessary internal controls to prevent harm to Southern Company. The plaintiff seeks to recover, on behalf of Southern Company, unspecified actual damages and disgorgement of profits and, on its behalf, attorneys' fees and costs in

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bringing the lawsuit. The plaintiff also seeks certain unspecified changes to Southern Company's corporate governance and internal processes. In May 2018, the court entered an order staying this lawsuit until 30 days after the resolution of any dispositive motions or any settlement, whichever is earlier, in the securities class action. On August 5, 2019, the court granted a motion filed by the plaintiff on July 17, 2019 to substitute a new named plaintiff, Martin J. Kobuck, in place of Helen E. Piper Survivor's Trust.

Georgia Power

In 2011, plaintiffs filed a putative class action against Georgia Power in the Superior Court of Fulton County, Georgia alleging that Georgia Power's collection in rates of amounts for municipal franchise fees (which fees are paid to municipalities) exceeded the amounts allowed in orders of the Georgia PSC and alleging certain state tort law claims. In 2016, the Georgia Court of Appeals reversed the trial court's previous dismissal of the case and remanded the case to the trial court. Georgia Power filed a petition for writ of certiorari with the Georgia Supreme Court, which was granted in 2017. In June 2018, the Georgia Supreme Court affirmed the judgment of the Georgia Court of Appeals and remanded the case to the trial court for further proceedings. Following a motion by Georgia Power, on February 13, 2019, the Superior Court of Fulton County ordered the parties to submit petitions to the Georgia PSC for a declaratory ruling to address certain terms the court previously held were ambiguous as used in the Georgia PSC's orders. The order entered by the Superior Court of Fulton County also conditionally certified the proposed class. In March 2019, Georgia Power and the plaintiffs filed petitions with the Georgia PSC seeking confirmation of the proper application of the municipal franchise fee schedule pursuant to the Georgia PSC's orders. On October 23, 2019, the Georgia PSC issued an order that found and concluded that Georgia Power has appropriately implemented the municipal franchise fee schedule. On March 6, 2019, Georgia Power filed a notice of appeal with the Georgia Court of Appeals regarding the Superior Court of Fulton County's February 2019 order. The amount of any possible losses cannot be calculated at this time because, among other factors, it is unknown whether conditional class certification will be upheld and the ultimate composition of any class and whether any losses would be subject to recovery from any municipalities.

Mississippi Power

In May 2018, Southern Company and Mississippi Power received a notice of dispute and arbitration demand filed by Martin Product Sales, LLC (Martin) based on two agreements, both related to Kemper IGCC byproducts for which Mississippi Power provided termination notices in 2017. Martin alleges breach of contract, breach of good faith and fair dealing, fraud and misrepresentation, and civil conspiracy and makes a claim for damages in the amount of approximately \$143 million, as well as additional unspecified damages, attorney's fees, costs, and interest. A portion of the claim for damages was on behalf of Martin Transport, Inc. (Martin Transport), an affiliate of Martin. In the first quarter 2019, Mississippi Power and Southern Company filed motions to dismiss, which were denied by the arbitration panel on May 10, 2019. On September 27, 2019, Martin Transport filed a separate complaint against Mississippi Power in the Circuit Court of Kemper County, Mississippi alleging claims of fraud, negligent misrepresentation, promissory estoppel, and equitable estoppel, each arising out of the same alleged facts and circumstances that underlie Martin's arbitration demand. Martin Transport seeks compensatory damages of \$5 million and punitive damages of \$50 million. In November 2019, Martin Transport's claim was combined with the Martin arbitration case and the separate court case was dismissed. On December 16, 2019, Southern Company and Mississippi Power each filed motions for summary judgment on all claims. On February 17, 2020, the arbitration panel granted Southern Company's motion and dismissed Southern Company from the arbitration. An adverse outcome in this proceeding could have a material impact on Southern Company's and Mississippi Power's financial statements.

In November 2018, Ray C. Turnage and 10 other individual plaintiffs filed a putative class action complaint against Mississippi Power and three members of the Mississippi PSC in the U.S. District Court for the Southern District of Mississippi. Mississippi Power received Mississippi PSC approval in 2013 to charge a mirror CWIP rate premised upon including in its rate base pre-construction and construction costs for the Kemper IGCC prior to placing the Kemper IGCC into service. The Mississippi Supreme Court reversed that approval and ordered Mississippi Power to refund the amounts paid by customers under the previously-approved mirror CWIP rate. The plaintiffs allege that the initial approval process, and the amount approved, were improper. They also allege that Mississippi Power underpaid customers by up to \$23.5 million in the refund process by applying an incorrect interest rate. The plaintiffs seek to recover, on behalf of themselves and their putative class, actual damages, punitive damages, pre-judgment interest, post-judgment interest, attorney's fees, and costs. In response to Mississippi Power and the Mississippi PSC each filing a motion to dismiss, the plaintiffs filed an amended complaint on March 14, 2019. The amended complaint included four additional plaintiffs and additional claims for gross negligence, reckless conduct, and intentional wrongdoing. Mississippi Power and the Mississippi PSC have each filed a motion to dismiss the amended complaint. An adverse outcome in this proceeding could have a material impact on Mississippi Power's financial statements.

See Note 2 to the financial statements under "Kemper County Energy Facility" for additional information.

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Other Matters

Southern Company

A subsidiary of Southern Holdings has several leveraged lease agreements, with original terms ranging up to 45 years, which relate to international and domestic energy generation, distribution, and transportation assets. Southern Company receives federal income tax deductions for depreciation and amortization, as well as interest on long-term debt related to these investments. Southern Company reviews all important lease assumptions at least annually, or more frequently if events or changes in circumstances indicate that a change in assumptions has occurred or may occur. These assumptions include the effective tax rate, the residual value, the credit quality of the lessees, and the timing of expected tax cash flows. See Note 1 to the financial statements under "Leveraged Leases" for additional information.

The ability of the lessees to make required payments to the Southern Holdings subsidiary is dependent on the operational performance of the assets. In 2017, the financial and operational performance of one of the lessees and the associated generation assets raised significant concerns about the short-term ability of the generation assets to produce cash flows sufficient to support ongoing operations and the lessee's contractual obligations and its ability to make the remaining semi-annual lease payments through the end of the lease term in 2047. In addition, following the expiration of the existing power offtake agreement in 2032, the lessee also is exposed to remarketing risk, which encompasses the price and availability of alternative sources of generation. While all lease payments through December 31, 2019 have been paid in full due to recent operational improvements, operational and remarketing risks and the resulting cash liquidity challenges persist, and significant concerns continue regarding the lessee's ability to make the remaining semi-annual lease payments. These challenges may also impact the expected residual value of the generation assets. Southern Company has evaluated the recoverability of the lease receivable and the expected residual value of the generation assets under various scenarios. Based on current forecasts of energy prices in the years following the expiration of the existing PPA, Southern Company concluded that it is no longer probable that all of the associated rental payments will be received over the term of the lease. As a result, during the fourth quarter 2019, Southern Company revised the estimate of cash flows to be received under the leveraged lease, which resulted in an impairment charge of \$17 million (\$13 million after tax). If any future lease payment is not paid in full, the Southern Holdings subsidiary may be unable to make its corresponding payment to the holders of the underlying non-recourse debt related to the generation assets. Failure to make the required payment to the debtholders could represent an event of default that would give the debtholders the right to foreclose on, and take ownership of, the generation assets from the Southern Holdings subsidiary, in effect terminating the lease and resulting in the write-off of the related lease receivable, which totaled approximately \$76 million at December 31, 2019. Southern Company will continue to monitor the operational performance of the underlying assets and evaluate the ability of the lessee to continue to make the required lease payments. The ultimate outcome of this matter cannot be determined at this time.

Mississippi Power

In conjunction with Southern Company's sale of Gulf Power, NextEra Energy held back \$75 million of the purchase price pending Mississippi Power and Gulf Power negotiating a mutually acceptable revised operating agreement for Plant Daniel. In addition, Mississippi Power and Gulf Power committed to seek a restructuring of their 50% undivided ownership interests in Plant Daniel such that each of them would, after the restructuring, own 100% of a generating unit. On January 15, 2019, Gulf Power provided notice to Mississippi Power that Gulf Power will retire its share of the generating capacity of Plant Daniel on January 15, 2024. Mississippi Power has the option to purchase Gulf Power's ownership interest for \$1 on January 15, 2024, provided that Mississippi Power exercises the option no later than 120 days prior to that date. Mississippi Power is assessing the potential operational and economic effects of Gulf Power's notice. The ultimate outcome of these matters remains subject to completion of Mississippi Power's evaluations and applicable regulatory approvals, including by the FERC and the Mississippi PSC, and cannot be determined at this time. See Note 15 to the financial statements under "Southern Company" for information regarding the sale of Gulf Power.

Southern Company Gas

A wholly-owned subsidiary of Southern Company Gas owns and operates a natural gas storage facility consisting of two salt dome caverns in Louisiana. Periodic integrity tests are required in accordance with rules of the Louisiana Department of Natural Resources (DNR). In 2017, in connection with an ongoing integrity project, updated seismic mapping indicated the proximity of one of the caverns to the edge of the salt dome may be less than the required minimum and could result in Southern Company Gas retiring the cavern early.

In the third quarter 2019, management determined that it no longer planned to obtain the core samples during 2020 that are necessary to determine the composition of the sheath surrounding the edge of the salt dome. Core sampling is a requirement of the Louisiana DNR to put the cavern back in service; as a result, the cavern will not return to service by 2021. This change in plan, which affects the future operation of the entire storage facility, resulted in a pre-tax impairment charge of \$91 million (\$69 million after-tax) recorded by Southern Company Gas in 2019. Southern Company Gas continues to monitor the pressure and overall structural integrity of the entire facility pending any future decisions regarding decommissioning.

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Southern Company Gas has two other natural gas storage facilities located in California and Texas, which could be impacted by ongoing changes in the U.S. natural gas storage market. Recent sales of natural gas storage facilities have resulted in losses for the sellers and may imply an impact on future rates and/or asset values. Sustained diminished natural gas storage values could trigger impairment of either or both of these natural gas storage facilities, which have a combined net book value of \$326 million at December 31, 2019.

The ultimate outcome of these matters cannot be determined at this time, but could have a material impact on the financial statements of Southern Company and Southern Company Gas.

ACCOUNTING POLICIES

Application of Critical Accounting Policies and Estimates

The Registrants prepare their financial statements in accordance with GAAP. Significant accounting policies are described in the notes to the financial statements. In the application of these policies, certain estimates are made that may have a material impact on the results of operations and related disclosures of the applicable Registrants (as indicated in the section descriptions herein). Different assumptions and measurements could produce estimates that are significantly different from those recorded in the financial statements. Senior management has reviewed and discussed the following critical accounting policies and estimates with the Audit Committee of Southern Company's Board of Directors. The following critical accounting policies and estimates include only those that are applicable to Southern Company.

Utility Regulation (Southern Company, Alabama Power, Georgia Power, Mississippi Power, and Southern Company Gas)

The traditional electric operating companies and the natural gas distribution utilities are subject to retail regulation by their respective state PSCs or other applicable state regulatory agencies and wholesale regulation by the FERC. These regulatory agencies set the rates the traditional electric operating companies and the natural gas distribution utilities are permitted to charge customers based on allowable costs, including a reasonable ROE. As a result, the traditional electric operating companies and the natural gas distribution utilities apply accounting standards which require the financial statements to reflect the effects of rate regulation. Through the ratemaking process, the regulators may require the inclusion of costs or revenues in periods different than when they would be recognized by a non-regulated company. This treatment may result in the deferral of expenses and the recording of related regulatory assets based on anticipated future recovery through rates or the deferral of gains or creation of liabilities and the recording of related regulatory liabilities. The application of the accounting standards for rate regulated entities also impacts their financial statements as a result of the estimates of allowable costs used in the ratemaking process. These estimates may differ from those actually incurred by the traditional electric operating companies and the natural gas distribution utilities; therefore, the accounting estimates inherent in specific costs such as depreciation, AROs, and pension and other postretirement benefits have less of a direct impact on the results of operations and financial condition of the applicable Registrants than they would on a non-regulated company.

Revenues related to regulated utility operations as a percentage of total operating revenues in 2019 for the applicable Registrants were as follows: 87% for Southern Company, 99% for Alabama Power, 97% for Georgia Power, 100% for Mississippi Power, and 80% for Southern Company Gas.

As reflected in Note 2 to the financial statements, significant regulatory assets and liabilities have been recorded. Management reviews the ultimate recoverability of these regulatory assets and any requirement to refund these regulatory liabilities based on applicable regulatory guidelines and GAAP. However, adverse legislative, judicial, or regulatory actions could materially impact the amounts of such regulatory assets and liabilities and could adversely impact the financial statements of the applicable Registrants.

Estimated Cost, Schedule, and Rate Recovery for the Construction of Plant Vogtle Units 3 and 4 (Southern Company and Georgia Power)

In 2016, the Georgia PSC approved the Vogtle Cost Settlement Agreement, which resolved certain prudence matters in connection with Georgia Power's fifteenth VCM report. In 2017, the Georgia PSC approved Georgia Power's seventeenth VCM report, which included a recommendation to continue construction of Plant Vogtle Units 3 and 4, with Southern Nuclear serving as project manager and Bechtel serving as the primary construction contractor, as well as a modification of the Vogtle Cost Settlement Agreement. The Georgia PSC's related order stated that under the modified Vogtle Cost Settlement Agreement, (i) none of the \$3.3 billion of costs incurred through December 31, 2015 should be disallowed as imprudent; (ii) capital costs incurred up to \$5.68 billion would be presumed to be reasonable and prudent with the burden of proof on any party challenging such costs; (iii) Georgia Power would have the burden of proof to show that any capital costs above \$5.68 billion were prudent; (iv) Georgia Power's total project capital cost forecast of \$7.3 billion (net of \$1.7 billion received under the Guarantee Settlement Agreement and approximately \$188 million in related customer refunds) was found reasonable and did not represent a cost cap; and (v) prudence decisions would be made subsequent to achieving fuel load for Unit 4.

In its order, the Georgia PSC also stated if other conditions change and assumptions upon which Georgia Power's seventeenth VCM report are based do not materialize, the Georgia PSC reserved the right to reconsider the decision to continue construction.

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In the second quarter 2018, Georgia Power revised its base cost forecast and estimated contingency to complete construction and start-up of Plant Vogtle Units 3 and 4 to \$8.0 billion and \$0.4 billion, respectively, for a total project capital cost forecast of \$8.4 billion (net of \$1.7 billion received under the Guarantee Settlement Agreement and approximately \$188 million in related customer refunds). Although Georgia Power believes these incremental costs are reasonable and necessary to complete the project and the Georgia PSC's order in the seventeenth VCM proceeding specifically states that the construction of Plant Vogtle Units 3 and 4 is not subject to a cost cap, Georgia Power did not seek rate recovery for the \$0.7 billion increase in costs included in the base capital cost forecast in the nineteenth VCM report. After considering the significant level of uncertainty that exists regarding the future recoverability of costs included in the construction contingency estimate since the ultimate outcome of these matters is subject to the outcome of future assessments by management, as well as Georgia PSC decisions in these future regulatory proceedings, Georgia Power recorded a total pre-tax charge to income of \$1.1 billion (\$0.8 billion after tax) in the second quarter 2018.

Georgia Power's revised cost estimate reflects an expected in-service date of November 2021 for Unit 3 and November 2022 for Unit 4.

As of December 31, 2019, approximately \$140 million of the \$366 million construction contingency estimate established in the second quarter 2018 was allocated to the base capital cost forecast for cost risks including, among other factors, construction productivity; craft labor incentives; adding resources for supervision, field support, project management, initial test program, start-up, and operations and engineering support; subcontracts; and procurement. As and when construction contingency is spent, Georgia Power may request the Georgia PSC to evaluate those expenditures for rate recovery.

As part of its ongoing processes, Southern Nuclear continues to evaluate cost and schedule forecasts on a regular basis to incorporate current information available, particularly in the areas of commodity installation, system turnovers, and workforce statistics.

In April 2019, Southern Nuclear established aggressive target values for monthly construction production and system turnover activities as part of a strategy to maintain and, where possible, build margin to the regulatory-approved in-service dates of November 2021 for Unit 3 and November 2022 for Unit 4. The project has faced challenges with the April 2019 aggressive strategy targets, including, but not limited to, electrical and pipefitting labor productivity and closure rates for work packages, which resulted in a backlog of activities and completion percentages below the April 2019 aggressive strategy targets. However, Southern Nuclear and Georgia Power believe that existing productivity levels and pace of activity completion are sufficient to meet the regulatory-approved in-service dates.

In February 2020, Southern Nuclear updated its cost and schedule forecast, which did not change the projected overall capital cost forecast and confirmed the expected in-service dates of November 2021 for Unit 3 and November 2022 for Unit 4. This update included initiatives to improve productivity while refining and extending system turnover plans and certain near-term milestone dates. Other milestone dates did not change. Achievement of the aggressive site work plan relies on meeting increased monthly production and activity target values during 2020. To meet these 2020 targets, existing craft, including subcontractors, construction productivity must improve and be sustained above historical average levels, appropriate levels of craft laborers, particularly electrical and pipefitter craft labor, must be maintained, and additional supervision and other field support resources must be retained. Southern Nuclear and Georgia Power continue to believe that pursuit of an aggressive site work plan is an appropriate strategy to achieve completion of the units by their regulatory-approved in-service dates.

As construction, including subcontract work, continues and testing and system turnover activities increase, challenges with management of contractors and vendors; subcontractor performance; supervision of craft labor and related craft labor productivity, particularly in the installation of electrical and mechanical commodities, ability to attract and retain craft labor, and/or related cost escalation; procurement, fabrication, delivery, assembly, installation, system turnover, and the initial testing and start-up, including any required engineering changes or any remediation related thereto, of plant systems, structures, or components (some of which are based on new technology that only within the last few years began initial operation in the global nuclear industry at this scale), or regional transmission upgrades, any of which may require additional labor and/or materials; or other issues could arise and change the projected schedule and estimated cost.

There have been technical and procedural challenges to the construction and licensing of Plant Vogtle Units 3 and 4 at the federal and state level and additional challenges may arise. Processes are in place that are designed to assure compliance with the requirements specified in the Westinghouse Design Control Document and the combined construction and operating licenses, including inspections by Southern Nuclear and the NRC that occur throughout construction. As a result of such compliance processes, certain license amendment requests have been filed and approved or are pending before the NRC. Various design and other licensing-based compliance matters, including the timely submittal by Southern Nuclear of the ITAAC documentation for each unit and the related reviews and approvals by the NRC necessary to support NRC authorization to load fuel, may arise, which may result in additional license amendments or require other resolution. As part of the aggressive site work plan, in January 2020, Southern Nuclear notified the NRC of its intent to load fuel in 2020. If any license amendment requests or other licensing-based compliance issues are not resolved in a timely manner, there may be delays in the project schedule that could result in increased costs.

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The ultimate outcome of these matters cannot be determined at this time. However, any extension of the regulatory-approved project schedule is currently estimated to result in additional base capital costs of approximately \$50 million per month, based on Georgia Power's ownership interests, and AFUDC of approximately \$12 million per month. While Georgia Power is not precluded from seeking recovery of any future capital cost forecast increase, management will ultimately determine whether or not to seek recovery. Any further changes to the capital cost forecast that are not expected to be recoverable through regulated rates will be required to be charged to income and such charges could be material.

Given the significant complexity involved in estimating the future costs to complete construction and start-up of Plant Vogtle Units 3 and 4 and the significant management judgment necessary to assess the related uncertainties surrounding future rate recovery of any projected cost increases, as well as the potential impact on results of operations and cash flows, Southern Company and Georgia Power consider these items to be critical accounting estimates. See Note 2 to the financial statements under "Georgia Power – Nuclear Construction" for additional information.

Accounting for Income Taxes (Southern Company, Mississippi Power, Southern Power, and Southern Company Gas)

The consolidated income tax provision and deferred income tax assets and liabilities, as well as any unrecognized tax benefits and valuation allowances, require significant judgment and estimates. These estimates are supported by historical tax return data, reasonable projections of taxable income, and interpretations of applicable tax laws and regulations across multiple taxing jurisdictions. The effective tax rate reflects the statutory tax rates and calculated apportionments for the various states in which the Southern Company system operates.

On behalf of its subsidiaries, Southern Company files a consolidated federal income tax return and various state income tax returns, some of which are combined or unitary. Under a joint consolidated income tax allocation agreement, each Southern Company subsidiary's current and deferred tax expense is computed on a stand-alone basis and no subsidiary is allocated more current expense than would be paid if it filed a separate income tax return. Certain deductions and credits can be limited or utilized at the consolidated or combined level resulting in NOL and tax credit carryforwards that would not otherwise result on a stand-alone basis. Utilization of NOL and tax credit carryforwards and the assessment of valuation allowances are based on significant judgment and extensive analysis of Southern Company's and its subsidiaries' current financial position and results of operations, including currently available information about future years, to estimate when future taxable income will be realized.

Current and deferred state income tax liabilities and assets are estimated based on laws of multiple states that determine the income to be apportioned to their jurisdictions. States utilize various formulas to calculate the apportionment of taxable income, primarily using sales, assets, or payroll within the jurisdiction compared to the consolidated totals. In addition, each state varies as to whether a stand-alone, combined, or unitary filing methodology is required. The calculation of deferred state taxes considers apportionment factors and filing methodologies that are expected to apply in future years. The apportionments and methodologies which are ultimately finalized in a manner inconsistent with expectations could have a material effect on the financial statements of the applicable Registrants.

Given the significant judgment involved in estimating NOL and tax credit carryforwards and multi-state apportionments for all subsidiaries, the applicable Registrants consider deferred income tax liabilities and assets to be critical accounting estimates.

Asset Retirement Obligations (Southern Company, Alabama Power, Georgia Power, Mississippi Power, and Southern Company Gas)

AROs are computed as the present value of the estimated costs for an asset's future retirement and are recorded in the period in which the liability is incurred. The estimated costs are capitalized as part of the related long-lived asset and depreciated over the asset's useful life. In the absence of quoted market prices, AROs are estimated using present value techniques in which estimates of future cash outlays associated with the asset retirements are discounted using a credit-adjusted risk-free rate. Estimates of the timing and amounts of future cash outlays are based on projections of when and how the assets will be retired and the cost of future removal activities.

The ARO liabilities for the traditional electric operating companies primarily relate to facilities that are subject to the CCR Rule and the related state rules, principally ash ponds. In addition, Alabama Power and Georgia Power have retirement obligations related to the decommissioning of nuclear facilities (Alabama Power's Plant Farley and Georgia Power's ownership interests in Plant Hatch and Plant Vogtle Units 1 and 2). The traditional electric operating companies also have AROs related to various landfill sites, asbestos removal, and underground storage tanks, as well as, for Alabama Power, disposal of polychlorinated biphenyls in certain transformers and sulfur hexafluoride gas in certain substation breakers, for Georgia Power, gypsum cells and restoration of land at the end of long-term land leases for solar facilities, and for Mississippi Power, mine reclamation and water wells.

The traditional electric operating companies and Southern Company Gas also have identified other retirement obligations, such as obligations related to certain electric transmission and distribution facilities, certain asbestos-containing material within long-term assets not subject to ongoing repair and maintenance activities, certain wireless communication towers, the disposal of polychlorinated biphenyls in certain transformers, leasehold improvements, equipment on customer property, and property associated with the Southern Company

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system's rail lines and natural gas pipelines. However, liabilities for the removal of these assets have not been recorded because the settlement timing for certain retirement obligations related to these assets is indeterminable and, therefore, the fair value of the retirement obligations cannot be reasonably estimated. A liability for these retirement obligations will be recognized when sufficient information becomes available to support a reasonable estimation of the ARO.

The cost estimates for AROs related to the disposal of CCR are based on information using various assumptions related to closure and post-closure costs, timing of future cash outlays, inflation and discount rates, and the potential methods for complying with the CCR Rule and the related state rules. The traditional electric operating companies expect to update their ARO cost estimates periodically as additional information related to these assumptions becomes available. See Note 6 to the financial statements for additional information, including increases to AROs related to ash ponds recorded during 2019 by certain Registrants.

Given the significant judgment involved in estimating AROs, the applicable Registrants consider the liabilities for AROs to be critical accounting estimates.

Pension and Other Postretirement Benefits (Southern Company, Alabama Power, Georgia Power, Mississippi Power, and Southern Company Gas)

The applicable Registrants' calculations of pension and other postretirement benefits expense are dependent on a number of assumptions. These assumptions include discount rates, healthcare cost trend rates, expected long-term rate of return (LRR) on plan assets, mortality rates, expected salary and wage increases, and other factors. Components of pension and other postretirement benefits expense include interest and service cost on the pension and other postretirement benefit plans, expected return on plan assets, and amortization of certain unrecognized costs and obligations. Actual results that differ from the assumptions utilized are accumulated and amortized over future periods and, therefore, generally affect recognized expense and the recorded obligation in future periods. While the applicable Registrants believe the assumptions used are appropriate, differences in actual experience or significant changes in assumptions would affect their pension and other postretirement benefit costs and obligations.

Key elements in determining the applicable Registrants' pension and other postretirement benefit expense are the LRR and the discount rate used to measure the benefit plan obligations and the periodic benefit plan expense for future periods. For purposes of determining the applicable Registrants' liabilities related to the pension and other postretirement benefit plans, Southern Company discounts the future related cash flows using a single-point discount rate for each plan developed from the weighted average of market-observed yields for high quality fixed income securities with maturities that correspond to expected benefit payments. The discount rate assumption impacts both the service cost and non-service costs components of net periodic benefit costs as well as the projected benefit obligations.

The LRR on pension and other postretirement benefit plan assets is based on Southern Company's investment strategy, historical experience, and expectations that consider external actuarial advice, and represents the average rate of earnings expected over the long term on the assets invested to provide for anticipated future benefit payments. Southern Company determines the amount of the expected return on plan assets component of non-service costs by applying the LRR of various asset classes to Southern Company's target asset allocation. The LRR only impacts the non-service costs component of net periodic benefit costs for the following year and is set annually at the beginning of the year.

For 2019, the LRR assumption for qualified pension plan assets was reduced from 7.95% to 7.75% for purposes of determining net periodic pension expense as a result of changes in the economic outlook used in estimating the expected returns as of December 31, 2018. As a result of the decrease in the LRR, the non-service costs component of net periodic pension expense increased by \$24 million for the Southern Company system in 2019. See the table below for the impact on each Registrant.

For 2020, net periodic pension expense will be impacted by two factors: a change in the approach used to determine the LRR assumption and cash contributions totaling \$1.1 billion to the qualified pension plan made in December 2019. Historically, Southern Company has set the LRR assumption using asset return modeling based on geometric returns that reflect the compound average returns for dependent annual periods. Beginning in 2020, Southern Company will set the LRR assumption using an arithmetic mean which represents the expected simple average return to be earned by the pension plan assets over any one year. Southern Company believes the use of the arithmetic mean is more compatible with the LRR's function of estimating a single year's investment return. Excluding the additional pension contribution in December 2019, the change in the LRR assumption will reduce the non-service costs component of net periodic pension expense by \$78 million for the Southern Company system in 2020. See the table below for the impact on each Registrant. The contributions in 2019 will further reduce expense by \$88 million for the Southern Company system in 2020.

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	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
	<i>(in millions)</i>				
Increase (decrease) in pension expense:					
2019	\$ 24	\$ 5	\$ 8	\$ 1	\$ 2
2020	(78)	(18)	(25)	(4)	(7)

The following table illustrates the sensitivity to changes in the applicable Registrants' long-term assumptions with respect to the discount rate, salary increases, and the long-term rate of return on plan assets:

25 Basis Point Change in:	Increase/(Decrease) in		
	Total Benefit Expense for 2020	Projected Obligation for Pension Plan at December 31, 2019	Projected Obligation for Other Postretirement Benefit Plans at December 31, 2019
	<i>(in millions)</i>		
Discount rate:			
Southern Company	\$41/\$(39)	\$549/\$(518)	\$57/\$(54)
Alabama Power	\$10/\$(10)	\$131/\$(123)	\$14/\$(13)
Georgia Power	\$12/\$(11)	\$166/\$(156)	\$21/\$(20)
Mississippi Power	\$2/\$(2)	\$25/\$(23)	\$2/\$(2)
Southern Company Gas	\$1/\$(1)	\$38/\$(36)	\$6/\$(6)
Salaries:			
Southern Company	\$23/\$(22)	\$118/\$(113)	\$-/\$-
Alabama Power	\$6/\$(6)	\$33/\$(32)	\$-/\$-
Georgia Power	\$6/\$(6)	\$34/\$(33)	\$-/\$-
Mississippi Power	\$1/\$(1)	\$5/\$(5)	\$-/\$-
Southern Company Gas	\$1/\$(1)	\$3/\$(3)	\$-/\$-
Long-term return on plan assets:			
Southern Company	\$35/\$(35)	N/A	N/A
Alabama Power	\$9/\$(9)	N/A	N/A
Georgia Power	\$11/\$(11)	N/A	N/A
Mississippi Power	\$2/\$(2)	N/A	N/A
Southern Company Gas	\$3/\$(3)	N/A	N/A

See Note 11 to the financial statements for additional information regarding pension and other postretirement benefits.

Asset Impairment (Southern Company, Southern Power, and Southern Company Gas)

Goodwill (Southern Company and Southern Company Gas)

The acquisition method of accounting requires the assets acquired and liabilities assumed to be recorded at the date of acquisition at their respective estimated fair values. The applicable Registrants have recognized goodwill as of the date of their acquisitions, as a residual over the fair values of the identifiable net assets acquired. Goodwill is tested for impairment at the reporting unit level on an annual basis in the fourth quarter of the year as well as on an interim basis as events and changes in circumstances occur, including, but not limited to, a significant change in operating performance, the business climate, legal or regulatory factors, or a planned sale or disposition of a significant portion of the business. A reporting unit is the operating segment, or a business one level below the operating segment (a component), if discrete financial information is prepared and regularly reviewed by management. Components are aggregated if they have similar economic characteristics.

As part of the impairment tests, the applicable Registrant may perform an initial qualitative assessment to determine whether it is more likely than not that the fair value of each reporting unit is less than its carrying amount before applying the quantitative goodwill impairment test. If the applicable Registrant elects to perform the qualitative assessment, it evaluates relevant events and circumstances, including but not limited to, macroeconomic conditions, industry and market conditions, cost factors, financial performance, entity specific events, and events specific to each reporting unit. If the applicable Registrant determines that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, or it elects not to perform a qualitative assessment, it compares the fair value of the reporting unit to its carrying value to determine if the fair value is greater than its carrying value.

Goodwill for Southern Company and Southern Company Gas was \$5.3 billion and \$5.0 billion, respectively, at December 31, 2019. For its 2019 and 2018 annual impairment tests, Southern Company Gas performed the qualitative assessment and determined that it was more likely than not that the fair value of all of its reporting units with goodwill exceeded their carrying amounts, and therefore no quantitative

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analysis was required. For its 2017 annual impairment test, Southern Company Gas performed the quantitative assessment, which resulted in the fair value of all of its reporting units that have goodwill exceeding their carrying value. For its annual impairment tests for PowerSecure, Southern Company performed the quantitative assessment, which resulted in the fair value of goodwill at PowerSecure exceeding its carrying value in all years presented. However, Southern Company recorded goodwill impairment charges totaling \$34 million in 2019 as a result of its decision to sell certain PowerSecure business units. See Note 15 to the financial statements under "Southern Company" for additional information.

The judgments made in determining the estimated fair value assigned to each class of assets acquired and liabilities assumed, as well as asset lives, can significantly impact the applicable Registrant's results of operations. Fair values and useful lives are determined based on, among other factors, the expected future period of benefit of the asset, the various characteristics of the asset, and projected cash flows. As the determination of an asset's fair value and useful life involves management making certain estimates and because these estimates form the basis for the determination of whether or not an impairment charge should be recorded, the applicable Registrants consider these estimates to be critical accounting estimates.

See Note 1 to the financial statements under "Goodwill and Other Intangible Assets and Liabilities" for additional information regarding the applicable Registrants' goodwill.

Long-Lived Assets (Southern Company, Southern Power, and Southern Company Gas)

Impairments of long-lived assets of the traditional electric utilities and natural gas distribution utilities are generally related to specific regulatory disallowances. The applicable Registrants assess their other long-lived assets for impairment whenever events or changes in circumstances indicate that an asset's carrying amount may not be recoverable. If an indicator exists, the asset is tested for recoverability by comparing the asset carrying value to the sum of the undiscounted expected future cash flows directly attributable to the asset's use and eventual disposition. If the estimate of undiscounted future cash flows is less than the carrying value of the asset, the fair value of the asset is determined and a loss is recorded equal to the difference between the carrying value and the fair value of the asset. In addition, when assets are identified as held for sale, an impairment loss is recognized to the extent the carrying value of the assets or asset group exceeds their fair value less cost to sell. A high degree of judgment is required in developing estimates related to these evaluations, which are based on projections of various factors, some of which have been quite volatile in recent years.

Southern Power's investments in long-lived assets are primarily generation assets, whether in service or under construction. Excluding the natural gas distribution utilities, Southern Company Gas' investments in long-lived assets are primarily natural gas transportation and storage facility assets, whether in service or under construction. In addition, exclusive of the traditional electric operating companies and natural gas distribution utilities, Southern Company's investments in long-lived assets also include investments in leveraged leases.

For Southern Power, examples of impairment indicators could include significant changes in construction schedules, current period losses combined with a history of losses or a projection of continuing losses, a significant decrease in market prices, the inability to remarket generating capacity for an extended period, the unplanned termination of a customer contract or the inability of a customer to perform under the terms of the contract, or the inability to deploy wind turbine equipment to a development project. For Southern Company Gas, examples of impairment indicators could include, but are not limited to, significant changes in the U.S. natural gas storage market, construction schedules, current period losses combined with a history of losses or a projection of continuing losses, a significant decrease in market prices, the inability to renew or extend customer contracts or the inability of a customer to perform under the terms of the contract, attrition rates, or the inability to deploy a development project. For Southern Company's investments in leveraged leases, impairment indicators include changes in estimates of future rental payments to be received under the lease as well as the residual value of the leased asset at the end of the lease.

As the determination of the expected future cash flows generated from an asset, an asset's fair value, and useful life involves management making certain estimates and because these estimates form the basis for the determination of whether or not an impairment charge should be recorded, the applicable Registrants consider these estimates to be critical accounting estimates.

See Note 3 to the financial statements under "Other Matters" and Note 15 to the financial statements for information on certain assets recently evaluated for impairment.

Derivatives and Hedging Activities (Southern Company and Southern Company Gas)

Determining whether a contract meets the definition of a derivative instrument, contains an embedded derivative requiring bifurcation, or qualifies for hedge accounting treatment is complex. The treatment of a single contract may vary from period to period depending upon accounting elections, changes in the applicable Registrant's assessment of the likelihood of future hedged transactions, or new interpretations of accounting guidance. As a result, judgment is required in determining the appropriate accounting treatment. In addition, the estimated fair value of derivative instruments may change significantly from period to period depending upon market conditions, and changes in hedge effectiveness may impact the accounting treatment.

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Derivative instruments (including certain derivative instruments embedded in other contracts) are recorded on the balance sheets as either assets or liabilities measured at their fair value. If the transaction qualifies for, and is designated as, a normal purchase or normal sale, it is exempt from fair value accounting treatment and is, instead, subject to traditional accrual accounting. The applicable Registrant utilizes market data or assumptions that market participants would use in pricing the derivative asset or liability, including assumptions about risk and the risks inherent in the inputs of the valuation technique.

Changes in the derivatives' fair value are recognized concurrently in earnings unless specific hedge accounting criteria are met. If the derivatives meet those criteria, derivative gains and losses offset related results of the hedged item in the income statement in the case of a fair value hedge, or gains and losses are deferred in OCI on the balance sheets until the hedged transaction affects earnings in the case of a cash flow hedge. Additionally, a company is required to formally designate a derivative as a hedge as well as document and assess the effectiveness of derivatives associated with transactions that receive hedge accounting treatment.

Southern Company Gas uses derivative instruments primarily to reduce the impact to its results of operations due to the risk of changes in the price of natural gas and, to a lesser extent, Southern Company Gas hedges against warmer-than-normal weather and interest rates. The fair value of natural gas derivative instruments used to manage exposure to changing natural gas prices reflects the estimated amounts that Southern Company Gas would receive or pay to terminate or close the contracts at the reporting date, taking into account the current unrealized gains or losses on open contracts. For derivatives utilized at gas marketing services and wholesale gas services that are not designated as accounting hedges, changes in fair value are reported as gains or losses in results of operations in the period of change. Gas marketing services records derivative gains or losses arising from cash flow hedges in OCI and reclassifies them into earnings in the same period that the underlying hedged item is recognized in earnings.

Derivative assets and liabilities are classified based on the lowest level of input that is significant to the fair value measurement. The assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the valuation of fair value assets and liabilities and their placement within the fair value hierarchy. The determination of the fair value of the derivative instruments incorporates various required factors. These factors include:

- the creditworthiness of the counterparties involved and the impact of credit enhancements (such as cash deposits and letters of credit);
- events specific to a given counterparty; and
- the impact of nonperformance risk on liabilities.

A significant change in the underlying market prices or pricing assumptions used in pricing derivative assets or liabilities may result in a significant financial statement impact.

Given the assumptions used in pricing the derivative asset or liability, Southern Company and Southern Company Gas consider the valuation of derivative assets and liabilities a critical accounting estimate. See FINANCIAL CONDITION AND LIQUIDITY – "Market Price Risk" herein and Note 14 to the financial statements for more information.

Contingent Obligations (All Registrants)

The Registrants are subject to a number of federal and state laws and regulations, as well as other factors and conditions that subject them to environmental, litigation, and other risks. See FUTURE EARNINGS POTENTIAL herein and Notes 2 and 3 to the financial statements for more information regarding certain of these contingencies. The Registrants periodically evaluate their exposure to such risks and record reserves for those matters where a non-tax-related loss is considered probable and reasonably estimable. The adequacy of reserves can be significantly affected by external events or conditions that can be unpredictable; thus, the ultimate outcome of such matters could materially affect the results of operations, cash flows, or financial condition of the Registrants.

Recently Issued Accounting Standards

See Note 1 to the financial statements under "Recently Adopted Accounting Standards" for additional information.

In 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)* (ASU 2016-02). ASU 2016-02 requires lessees to recognize on the balance sheet a lease liability and a right-of-use asset for all leases. ASU 2016-02 also changes the recognition, measurement, and presentation of expense associated with leases and provides clarification regarding the identification of certain components of contracts that would represent a lease. The accounting required by lessors is relatively unchanged and there is no change to the accounting for existing leveraged leases. The Registrants adopted the new standard effective January 1, 2019. See Note 9 to the financial statements for additional information and related disclosures.

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FINANCIAL CONDITION AND LIQUIDITY

Overview

The financial condition of each Registrant remained stable at December 31, 2019. The Registrants' cash requirements primarily consist of funding ongoing operations, including unconsolidated subsidiaries, as well as common stock dividends, capital expenditures, and debt maturities. Southern Power's cash requirements also include distributions to noncontrolling interests. Capital expenditures and other investing activities for the traditional electric operating companies include investments to meet projected long-term demand requirements, including to build new generation facilities, to maintain existing generation facilities, to comply with environmental regulations including adding environmental modifications to certain existing generating units and closures of ash ponds, to expand and improve transmission and distribution facilities, and for restoration following major storms. Southern Power's capital expenditures and other investing activities may include acquisitions or new construction associated with its overall growth strategy and to maintain its existing generation fleet's performance. Southern Company Gas' capital expenditures and other investing activities include investments to meet projected long-term demand requirements, to maintain existing natural gas distribution systems as well as to update and expand these systems, and to comply with environmental regulations.

Operating cash flows provide a substantial portion of the Registrants' cash needs. During 2019, Southern Power utilized tax credits, which provided \$734 million in operating cash flows. For the three-year period from 2020 through 2022, each Registrant's projected stock dividends, capital expenditures, and debt maturities, as well as distributions to noncontrolling interests for Southern Power, are expected to exceed its operating cash flows. Southern Company plans to finance future cash needs in excess of its operating cash flows primarily by accessing borrowings from financial institutions and issuing debt and hybrid securities in the capital markets. Each Subsidiary Registrant plans to finance its future cash needs in excess of its operating cash flows primarily through external securities issuances, borrowings from financial institutions, and equity contributions from Southern Company. In addition, Georgia Power plans to utilize borrowings through the FFB and Southern Power plans to utilize tax equity partnership contributions. The Registrants plan to use commercial paper to manage seasonal variations in operating cash flows and for other working capital needs and continue to monitor their access to short-term and long-term capital markets as well as their bank credit arrangements to meet future capital and liquidity needs. See "Sources of Capital," "Financing Activities," "Capital Requirements," and "Contractual Obligations" herein for additional information.

The Registrants' investments in their qualified pension plans and Alabama Power's and Georgia Power's investments in their nuclear decommissioning trust funds increased in value at December 31, 2019 as compared to December 31, 2018. In December 2019, the Registrants voluntarily contributed the following amounts to the qualified pension plan:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Contributions to qualified pension plan	\$ 1,136	\$ 362	\$ 200	\$ 54	\$ 24	\$ 145

No mandatory contributions to the qualified pension plans are anticipated during 2020. See "Contractual Obligations" herein and Notes 6 and 11 to the financial statements under "Nuclear Decommissioning" and "Pension Plans," respectively, for additional information.

At the end of 2019, the market price of Southern Company's common stock was \$63.70 per share (based on the closing price as reported on the NYSE) and the book value was \$26.11 per share, representing a market-to-book value ratio of 244%, compared to \$43.92, \$23.91, and 184%, respectively, at the end of 2018.

Analysis of Cash Flows

Net cash flows provided from (used for) operating, investing, and financing activities in 2019 and 2018 are presented in the following table:

Net cash provided from (used for):	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
2019						
Operating activities	\$ 5,781	\$ 1,779	\$ 2,907	\$ 339	\$ 1,385	\$ 1,067
Investing activities	(3,392)	(1,963)	(3,885)	(263)	(167)	(1,386)
Financing activities	(1,930)	765	918	(83)	(1,120)	298
2018						
Operating activities	\$ 6,945	\$ 1,881	\$ 2,769	\$ 804	\$ 631	\$ 764
Investing activities	(5,760)	(2,289)	(3,109)	(232)	(227)	998
Financing activities	(1,813)	177	(400)	(527)	(363)	(1,770)

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Fluctuations in cash flows from financing activities vary from year to year based on capital needs and the maturity or redemption of securities.

Southern Company

Net cash provided from operating activities decreased \$1.2 billion in 2019 as compared to 2018 primarily due to the voluntary contribution to the qualified pension plan and the timing of vendor payments.

The net cash used for investing activities in 2019 and 2018 was primarily due to the traditional electric operating companies' construction of electric generation, transmission, and distribution facilities, including installation of equipment to comply with environmental standards, and capital expenditures for Southern Company Gas' infrastructure replacement programs, partially offset by proceeds from the sale transactions described in Note 15 to the financial statements, which totaled \$5.1 billion and \$3.0 billion in 2019 and 2018, respectively.

The net cash used for financing activities in 2019 was primarily due to common stock dividend payments and net repayments of short-term bank debt and commercial paper, partially offset by net issuances of long-term debt and the issuance of common stock. The net cash used for financing activities in 2018 was primarily due to net redemptions and repurchases of long-term debt, common stock dividend payments, and a decrease in commercial paper borrowings, partially offset by net issuances of short-term bank debt, proceeds from Southern Power's sales of non-controlling equity interests in entities indirectly owning substantially all of its solar facilities and eight of its wind facilities, and the issuance of common stock.

Significant Balance Sheet Changes

Southern Company

Significant balance sheet changes in 2019 for Southern Company included:

- decreases in assets and liabilities held for sale of \$5.0 billion and \$3.3 billion, respectively, and an increase of \$2.7 billion in total stockholders' equity primarily related to the sale of Gulf Power;
- an increase of \$2.3 billion in total property, plant, and equipment primarily related to the traditional electric operating companies' construction of electric generation, transmission, and distribution facilities, including installation of equipment to comply with environmental standards, net of \$1.2 billion and \$1.0 billion reclassified to other regulatory assets and regulatory assets associated with AROs, respectively, as a result of generating unit retirements at Alabama Power and Georgia Power;
- an increase in other regulatory assets of \$1.8 billion primarily related to the \$1.2 billion reclassification from property, plant, and equipment discussed above and a \$0.8 billion increase in regulatory assets associated with retiree benefit plans primarily resulting from a decrease in the overall discount rate used to calculate benefit obligations;
- increases in operating lease right-of-use assets, net of amortization and operating lease obligations, each totaling \$1.8 billion, recorded upon the adoption of ASC 842;
- an increase of \$1.4 billion in regulatory assets associated with AROs primarily related to the \$1.0 billion reclassification from property, plant, and equipment discussed above and ARO revisions at Alabama Power and Mississippi Power related to the CCR Rule;
- an increase of \$1.3 billion in accumulated deferred income taxes primarily related to the expected utilization of tax credit carryforwards in the 2019 tax year as a result of increased taxable income from the sale of Gulf Power; and
- a decrease of \$0.9 billion in notes payable related to net repayments of short-term bank debt and commercial paper.

See Notes 2, 5, 6, 8, 9, 10, 11, and 15 to the financial statements for additional information.

Sources of Capital

Southern Company intends to meet its future capital needs through operating cash flows, borrowings from financial institutions, and debt and equity issuances in the capital markets. Equity capital can be provided from any combination of Southern Company's stock plans, private placements, or public offerings. Southern Company does not expect to issue any equity in the capital markets through 2024.

The Subsidiary Registrants plan to obtain the funds to meet their future capital needs from sources similar to those they used in the past, which were primarily from operating cash flows, external securities issuances, borrowings from financial institutions, and equity contributions from Southern Company. In addition, Georgia Power plans to utilize borrowings from the FFB, as discussed further in Note 8 to the financial statements under "Long-term Debt – DOE Loan Guarantee Borrowings," Southern Power plans to utilize tax equity partnership contributions, as discussed further herein, and Southern Company Gas plans to utilize proceeds from the pending sale of its interests in Pivotal LNG and Atlantic Coast Pipeline, as discussed further in Note 15 to the financial statements under "Southern Company Gas – Proposed Sale of Pivotal LNG and Atlantic Coast Pipeline."

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The amount, type, and timing of any financings in 2020, as well as in subsequent years, will be contingent on investment opportunities and the Registrants' capital requirements and will depend upon prevailing market conditions, regulatory approvals (for the Subsidiary Registrants), and other factors. See "Capital Requirements" herein for additional information.

Southern Power utilizes tax equity partnerships as one of its financing sources, where the tax partner takes significantly all of the federal tax benefits. These tax equity partnerships are consolidated in Southern Power's financial statements and are accounted for using HLBV methodology to allocate partnership gains and losses. During 2019, Southern Power obtained tax equity funding for the Wildhorse Mountain wind project and received proceeds of \$97 million. See Notes 1 and 15 to the financial statements under "General" and "Southern Power," respectively, for additional information.

The issuance of securities by the traditional electric operating companies and Nicor Gas is generally subject to the approval of the applicable state PSC or other applicable state regulatory agency. The issuance of all securities by Mississippi Power and short-term securities by Georgia Power is generally subject to regulatory approval by the FERC. Additionally, with respect to the public offering of securities, Southern Company, the traditional electric operating companies, and Southern Power (excluding its subsidiaries), Southern Company Gas Capital, and Southern Company Gas (excluding its other subsidiaries) file registration statements with the SEC under the Securities Act of 1933, as amended (1933 Act). The amounts of securities authorized by the appropriate regulatory authorities, as well as the securities registered under the 1933 Act, are closely monitored and appropriate filings are made to ensure flexibility in the capital markets.

The Registrants generally obtain financing separately without credit support from any affiliate. See Note 8 to the financial statements under "Bank Credit Arrangements" for additional information. The Southern Company system does not maintain a centralized cash or money pool. Therefore, funds of each company are not commingled with funds of any other company in the Southern Company system, except in the case of Southern Company Gas, as described below.

The traditional electric operating companies and SEGCO may utilize a Southern Company subsidiary organized to issue and sell commercial paper at their request and for their benefit. Proceeds from such issuances for the benefit of an individual company are loaned directly to that company. The obligations of each traditional electric operating company and SEGCO under these arrangements are several and there is no cross-affiliate credit support. Alabama Power also maintains its own separate commercial paper program.

Southern Company Gas Capital obtains external financing for Southern Company Gas and its subsidiaries, other than Nicor Gas, which obtains financing separately without credit support from any affiliates. Southern Company Gas maintains commercial paper programs at Southern Company Gas Capital and Nicor Gas. Nicor Gas' commercial paper program supports its working capital needs as Nicor Gas is not permitted to make money pool loans to affiliates. All of the other Southern Company Gas subsidiaries benefit from Southern Company Gas Capital's commercial paper program.

By regulation, Nicor Gas is restricted, to the extent of its retained earnings balance, in the amount it can dividend or loan to affiliates and is not permitted to make money pool loans to affiliates. At December 31, 2019, the amount of subsidiary retained earnings restricted to dividend totaled \$951 million. This restriction did not impact Southern Company Gas' ability to meet its cash obligations, nor does management expect such restriction to materially impact Southern Company Gas' ability to meet its currently anticipated cash obligations.

The Registrants' current liabilities frequently exceed their current assets because of long-term debt maturities and the periodic use of short-term debt as a funding source, as well as significant seasonal fluctuations in cash needs. See Note 8 to the financial statements for additional information. Also see "Financing Activities" herein for information on issuances of long-term debt subsequent to December 31, 2019. At December 31, 2019, the following Registrants' current liabilities exceeded their current assets, primarily as a result of securities due within one year and notes payable, as shown in the table below:

At December 31, 2019	Southern Company^(*)	Georgia Power	Mississippi Power	Southern Power
	<i>(in millions)</i>			
Current liabilities in excess of current assets	\$2,729	\$1,902	\$125	\$945
Securities due within one year	2,989	1,025	281	824
Notes payable	2,055	365	—	549

(*) Includes \$600 million and \$465 million of securities due within one year and notes payable, respectively, at the parent company.

The Registrants believe the need for working capital can be adequately met by utilizing operating cash flows, as well as commercial paper, lines of credit, and short-term bank notes, as market conditions permit. In addition, under certain circumstances, the Subsidiary Registrants may utilize equity contributions and/or loans from Southern Company.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Bank Credit Arrangements

At December 31, 2019, the Registrants' unused committed credit arrangements with banks were as follows:

At December 31, 2019	Southern Company parent	Alabama Power	Georgia Power	Mississippi Power	Southern Power ^(a)	Southern Company Gas ^(b)	SEGCO	Southern Company
<i>(in millions)</i>								
Unused committed credit	\$1,999	\$1,328	\$1,733	\$150	\$591	\$1,745	\$30	\$7,576

(a) At December 31, 2019, Southern Power also had a continuing letter of credit facility for standby letters of credit, of which \$23 million was unused.

Subsequent to December 31, 2019, Southern Power entered into an additional \$60 million continuing letter of credit facility for standby letters of credit.

Southern Power's subsidiaries are not parties to its bank credit arrangement or to the letter of credit facilities.

(b) Includes \$1.245 billion and \$500 million at Southern Company Gas Capital and Nicor Gas, respectively.

Subject to applicable market conditions, the Registrants, Nicor Gas, and SEGCO expect to renew or replace their bank credit arrangements as needed, prior to expiration. In connection therewith, the Registrants, Nicor Gas, and SEGCO may extend the maturity dates and/or increase or decrease the lending commitments thereunder. A portion of the unused credit with banks is allocated to provide liquidity support to the revenue bonds of the traditional electric operating companies and the commercial paper programs of the Registrants, Nicor Gas, and SEGCO. See Note 8 to the financial statements under "Bank Credit Arrangements" for additional information.

Short-term Borrowings

The Registrants, Nicor Gas, and SEGCO make short-term borrowings primarily through commercial paper programs that have the liquidity support of the committed bank credit arrangements described above. Southern Power's subsidiaries are not issuers or obligors under its commercial paper program. Commercial paper and short-term bank term loans are included in notes payable in the balance sheets. Details of the Registrants' short-term borrowings were as follows:

	Short-term Debt at the End of the Period					
	Amount Outstanding			Weighted Average Interest Rate		
	December 31,			December 31,		
	2019	2018	2017	2019	2018	2017
<i>(in millions)</i>						
Southern Company	\$2,055	\$2,915	\$2,439	2.1%	3.1%	1.9%
Alabama Power	—	—	3	—	—	3.7
Georgia Power	365	294	150	2.2	3.1	2.2
Mississippi Power	—	—	4	—	—	3.8
Southern Power	549	100	105	2.2	3.1	2.0
Southern Company Gas:						
Southern Company Gas Capital	\$ 372	\$ 403	\$1,243	2.1%	3.1%	1.7%
Nicor Gas	278	247	275	1.8	3.0	1.8
Southern Company Gas Total	\$ 650	\$ 650	\$1,518	2.0%	3.0%	1.8%

	Short-term Debt During the Period ^(*)								
	Average Amount Outstanding			Weighted Average Interest Rate			Maximum Amount Outstanding		
	2019	2018	2017	2019	2018	2017	2019	2018	2017
<i>(in millions)</i>									
Southern Company	\$1,240	\$3,377	\$2,672	2.6%	2.6%	1.5%	\$2,914	\$5,447	\$3,668
Alabama Power	17	27	25	2.6	2.3	1.3	190	258	223
Georgia Power	371	139	427	2.7	2.5	1.8	935	710	1,460
Mississippi Power	—	68	18	—	2.0	3.0	—	300	36
Southern Power	76	188	232	2.7	2.5	1.4	578	385	419
Southern Company Gas:									
Southern Company Gas Capital	\$ 302	\$ 520	\$ 723	2.6%	2.3%	1.4%	\$ 490	\$1,361	\$1,243
Nicor Gas	91	123	176	2.3	2.2	1.1	278	275	525
Southern Company Gas Total	\$ 393	\$ 643	\$ 899	2.5%	2.3%	1.4%			

(*) Average and maximum amounts are based upon daily balances during the 12-month periods ended December 31, 2019, 2018, and 2017.

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Financing Activities

The following table outlines the Registrants' long-term debt financing activities for the year ended December 31, 2019:

Company	Senior Note Issuances	Senior Note Maturities, Redemptions, and Repurchases	Revenue Bond Issuances and Reofferings of Purchased Bonds	Revenue Bond Maturities, Redemptions, and Repurchases	Other Long-Term Debt Issuances	Other Long-Term Debt Redemptions and Maturities ^(a)
	<i>(in millions)</i>					
Southern Company parent	\$ —	\$ 2,400	\$ —	\$ —	\$ 1,725	\$ —
Alabama Power	600	200	—	—	—	1
Georgia Power	750	500	584	223	1,218	13
Mississippi Power	—	25	43	—	—	—
Southern Power	—	600	—	—	—	—
Southern Company Gas	—	300	—	—	300	50
Other	—	—	—	25	—	17
Elimination ^(b)	—	—	—	—	—	(7)
Southern Company	\$ 1,350	\$ 4,025	\$ 627	\$ 248	\$ 3,243	\$ 74

(a) Includes reductions in finance lease obligations resulting from cash payments under finance leases.

(b) Represents reductions in affiliate finance lease obligations at Georgia Power, which are eliminated in Southern Company's consolidated financial statements.

Except as otherwise described herein, the Registrants used the proceeds of debt issuances for their redemptions and maturities shown in the table above, to repay short-term indebtedness, and for general corporate purposes, including working capital. The Subsidiary Registrants also used the proceeds for their construction programs.

In addition to any financings that may be necessary to meet capital requirements and contractual obligations, the Registrants plan to continue, when economically feasible, a program to retire higher-cost securities and replace these obligations with lower-cost capital if market conditions permit.

Southern Company

During 2019, Southern Company issued approximately 19.5 million shares of common stock through employee equity compensation plans and received proceeds of approximately \$844 million.

In addition, in August 2019, Southern Company issued 34.5 million 2019 Series A Equity Units (Equity Units), initially in the form of corporate units (Corporate Units), at a stated amount of \$50 per Corporate Unit, for a total stated amount of \$1.725 billion. Net proceeds from the issuance were approximately \$1.682 billion. Each Corporate Unit is comprised of (i) a 1/40 undivided beneficial ownership interest in \$1,000 principal amount of Southern Company's Series 2019A Remarketable Junior Subordinated Notes due 2024, (ii) a 1/40 undivided beneficial ownership interest in \$1,000 principal amount of Southern Company's Series 2019B Remarketable Junior Subordinated Notes due 2027, and (iii) a stock purchase contract, which obligates the holder to purchase from Southern Company, no later than August 1, 2022, a certain number of shares of Southern Company's common stock for \$50 in cash. See Note 8 to the financial statements under "Equity Units" for additional information.

In January 2019, Southern Company repaid a \$250 million short-term uncommitted bank credit arrangement and a \$1.5 billion short-term floating rate bank loan.

In 2019, Southern Company, through repurchases and redemptions, retired all \$1.0 billion aggregate principal amount of its 1.85% Senior Notes due July 1, 2019, \$350 million aggregate principal amount of its Series 2014B 2.15% Senior Notes due September 1, 2019, \$750 million aggregate principal amount of its Series 2018A Floating Rate Notes due February 14, 2020, and \$300 million aggregate principal amount of its Series 2017A Floating Rate Senior Notes due September 30, 2020.

Subsequent to December 31, 2019, Southern Company issued \$1.0 billion aggregate principal amount of Series 2020A 4.95% Junior Subordinated Notes due January 30, 2080.

Alabama Power

In February 2019, Alabama Power repaid at maturity \$200 million aggregate principal amount of Series Z 5.125% Senior Notes due February 15, 2019.

In September 2019, Alabama Power issued \$600 million aggregate principal amount of Series 2019A 3.45% Senior Notes due October 1, 2049.

Subsequent to December 31, 2019, Alabama Power received a capital contribution totaling \$610 million from Southern Company.

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Georgia Power

In March and December 2019, Georgia Power made borrowings under the multi-advance credit facilities related to the Amended and Restated Loan Guarantee Agreement in an aggregate principal amount of \$835 million and \$383 million, respectively, with applicable interest rates of 3.213% and 2.537%, respectively, both for an interest period that extends to the final maturity date of February 20, 2044. The proceeds were used to reimburse Georgia Power for Eligible Project Costs relating to the construction of Plant Vogtle Units 3 and 4. See Note 8 to the financial statements under "Long-term Debt – DOE Loan Guarantee Borrowings" for additional information.

In June 2019, Georgia Power entered into two short-term floating rate bank loans in aggregate principal amounts of \$125 million each, both of which bear interest based on one-month LIBOR.

In September 2019, Georgia Power issued \$400 million aggregate principal amount of Series 2019A 2.20% Senior Notes due September 15, 2024 and \$350 million aggregate principal amount of Series 2019B 2.65% Senior Notes due September 15, 2029.

Subsequent to December 31, 2019, Georgia Power issued \$700 million aggregate principal amount of Series 2020A 2.10% Senior Notes due July 30, 2023, \$500 million aggregate principal amount of Series 2020B 3.70% Senior Notes due January 30, 2050, and an additional \$300 million aggregate principal amount of Series 2019B 2.65% Senior Notes due September 15, 2029.

During 2019, Georgia Power reoffered to the public the following pollution control revenue bonds that previously had been purchased and were held by Georgia Power at December 31, 2018:

- \$173 million aggregate principal amount of Development Authority of Bartow County (Georgia) Pollution Control Revenue Bonds (Georgia Power Company Plant Bowen Project), First Series 2009;
- approximately \$105 million aggregate principal amount of Development Authority of Burke County (Georgia) Pollution Control Revenue Bonds (Georgia Power Company Plant Vogtle Project), First Series 2013;
- \$65 million aggregate principal amount of Development Authority of Burke County (Georgia) Pollution Control Revenue Bonds (Georgia Power Company Plant Vogtle Project), Second Series 2008;
- \$55 million aggregate principal amount of Development Authority of Burke County (Georgia) Pollution Control Revenue Bonds (Georgia Power Company Plant Vogtle Project), Fifth Series 1994; and
- approximately \$72 million aggregate principal amount of Development Authority of Bartow County (Georgia) Pollution Control Revenue Bonds (Georgia Power Company Plant Bowen Project), First Series 2013.

During 2019, Georgia Power purchased, held, and subsequently reoffered to the public an additional \$115 million of pollution control revenue bonds.

In January 2019, Georgia Power redeemed approximately \$13 million, \$20 million, and \$75 million aggregate principal amount of Development Authority of Burke County (Georgia) Pollution Control Revenue Bonds (Georgia Power Company Plant Vogtle Project), First Series 1992, Eighth Series 1994, and Second Series 1995, respectively.

In December 2019, Georgia Power repaid at maturity \$500 million aggregate principal amount of its Series 2009B 4.25% Senior Notes.

Subsequent to December 31, 2019, Georgia Power received a capital contribution totaling \$500 million from Southern Company and announced the redemption of all \$500 million aggregate principal amount of its Series 2017C 2.00% Senior Notes due September 8, 2020.

Mississippi Power

In March 2019, Mississippi Power reoffered to the public approximately \$43 million of Mississippi Business Finance Corporation Pollution Control Revenue Refunding Bonds, Series 2002, which previously had been purchased and held by Mississippi Power.

In December 2019, Mississippi Power redeemed \$25 million aggregate principal amount of its Series 2018A Floating Rate Senior Notes due March 27, 2020.

Southern Power

In May 2019, Southern Power repaid at maturity a \$100 million short-term floating rate bank loan.

In December 2019, Southern Power repaid at maturity \$600 million aggregate principal amount of its Series 2016D 1.95% Senior Notes.

Also in December 2019, Southern Power entered into a short-term floating rate bank loan in the aggregate principal amount of \$100 million, bearing interest based on one-month LIBOR. Subsequent to December 31, 2019, Southern Power repaid the bank loan.

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Southern Company Gas

In July 2019, Nicor Gas repaid at maturity \$50 million aggregate principal amount of its 4.7% first mortgage bonds.

In August 2019, Southern Company Gas Capital repaid at maturity \$300 million aggregate principal amount of its 5.25% Senior Notes.

In August and October 2019, Nicor Gas issued \$200 million and \$100 million, respectively, aggregate principal amount of first mortgage bonds in a private placement.

Credit Rating Risk

At December 31, 2019, the Registrants did not have any credit arrangements that would require material changes in payment schedules or terminations as a result of a credit rating downgrade.

There are certain contracts that could require collateral, but not accelerated payment, in the event of a credit rating change of certain Registrants to BBB and/or Baa2 or below. These contracts are primarily for physical electricity and natural gas purchases and sales, fuel purchases, fuel transportation and storage, energy price risk management, transmission, interest rate management, and, for Georgia Power, construction of new generation at Plant Vogtle Units 3 and 4.

The maximum potential collateral requirements under these contracts at December 31, 2019 were as follows:

Credit Ratings	Southern Company ^(*)	Alabama Power	Georgia Power	Mississippi Power	Southern Power ^(*)	Southern Company Gas
				(in millions)		
At BBB and/or Baa2	\$ 36	\$ 1	\$ —	\$ —	\$ 35	\$ —
At BBB- and/or Baa3	472	1	86	—	385	—
At BB+ and/or Ba1 or below	2,040	322	1,020	267	1,174	18

(*) Excludes amounts related to Plant Mankato, which was sold on January 17, 2020. Southern Power has PPAs that could require collateral, but not accelerated payment, in the event of a downgrade of Southern Power's credit. The PPAs require credit assurances without stating a specific credit rating. The amount of collateral required would depend upon actual losses resulting from a credit downgrade. Southern Power had \$104 million of cash collateral posted related to PPA requirements at December 31, 2019.

The potential collateral requirement amounts in the previous table for the traditional electric operating companies and Southern Power include certain agreements that could require collateral in the event that either Alabama Power or Georgia Power has a credit rating change to below investment grade. Generally, collateral may be provided by a Southern Company guaranty, letter of credit, or cash. Additionally, a credit rating downgrade could impact the ability of the Registrants to access capital markets and would be likely to impact the cost at which they do so.

Mississippi Power and its largest retail customer, Chevron, have agreements under which Mississippi Power continues to provide retail service to the Chevron refinery in Pascagoula, Mississippi through 2038. The agreements grant Chevron a security interest in the co-generation assets located at the refinery that is exercisable upon the occurrence of (i) certain bankruptcy events or (ii) other events of default coupled with specific reductions in steam output at the facility and a downgrade of Mississippi Power's credit rating to below investment grade by two of the three rating agencies.

On August 1, 2019, Moody's upgraded Mississippi Power's senior unsecured long-term debt rating to Baa2 from Baa3 and maintained the positive rating outlook.

On September 12, 2019, S&P upgraded the senior unsecured long-term debt rating of Alabama Power to A from A-, the long-term issuer rating of Nicor Gas to A from A-, and the senior secured debt rating of Nicor Gas to A+ from A. The ratings outlooks remained negative.

Market Price Risk

The Registrants are exposed to market risks, including commodity price risk, interest rate risk, weather risk, and occasionally foreign currency exchange rate risk. To manage the volatility attributable to these exposures, the applicable company nets the exposures, where possible, to take advantage of natural offsets and enters into various derivative transactions for the remaining exposures pursuant to the applicable company's policies in areas such as counterparty exposure and risk management practices. Southern Company Gas' wholesale gas operations uses various contracts in its commercial activities that generally meet the definition of derivatives. For the traditional electric operating companies, Southern Power, and Southern Company Gas' other businesses, each company's policy is that derivatives are to be used primarily for hedging purposes and mandates strict adherence to all applicable risk management policies. Derivative positions are monitored using techniques including, but not limited to, market valuation, value at risk, stress testing, and sensitivity analysis.

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Due to cost-based rate regulation and other various cost recovery mechanisms, the traditional electric operating companies and the natural gas distribution utilities that sell natural gas directly to end-use customers continue to have limited exposure to market volatility in interest rates, foreign currency exchange rates, commodity fuel prices, and prices of electricity. The traditional electric operating companies and certain of the natural gas distribution utilities manage fuel-hedging programs implemented per the guidelines of their respective state PSCs or other applicable state regulatory agencies to hedge the impact of market fluctuations in natural gas prices for customers. Mississippi Power also manages wholesale fuel-hedging programs under agreements with its wholesale customers. Because energy from Southern Power's facilities is primarily sold under long-term PPAs with tolling agreements and provisions shifting substantially all of the responsibility for fuel cost to the counterparties, Southern Power's exposure to market volatility in commodity fuel prices and prices of electricity is generally limited. However, Southern Power has been and may continue to be exposed to market volatility in energy-related commodity prices as a result of uncontracted generating capacity. To mitigate residual risks relative to movements in electricity prices, the traditional electric operating companies and Southern Power may enter into physical fixed-price contracts for the purchase and sale of electricity through the wholesale electricity market and, to a lesser extent, financial hedge contracts for natural gas purchases; however, a significant portion of contracts are priced at market.

Certain of Southern Company Gas' non-regulated operations routinely utilize various types of derivative instruments to economically hedge certain commodity price and weather risks inherent in the natural gas industry. These instruments include a variety of exchange-traded and OTC energy contracts, such as forward contracts, futures contracts, options contracts, and swap agreements. Southern Company Gas' gas marketing services and wholesale gas services businesses also actively manage storage positions through a variety of hedging transactions for the purpose of managing exposures arising from changing natural gas prices. These hedging instruments are used to substantially protect economic margins (as spreads between wholesale and retail natural gas prices widen between periods) and thereby minimize exposure to declining operating margins. Some of these economic hedge activities may not qualify, or may not be designated, for hedge accounting treatment.

The Registrants had no material change in market risk exposure for the year ended December 31, 2019 when compared to the year ended December 31, 2018. See Note 1 to the financial statements under "Financial Instruments" and Note 14 to the financial statements for additional information.

The Registrants may enter into interest rate derivatives designated as hedges, which are intended to mitigate interest rate volatility related to forecasted debt financings and existing fixed and floating rate obligations. Outstanding interest rate derivatives at December 31, 2019 are as follows:

At December 31, 2019	Southern Company^(*)	Georgia Power	Southern Company Gas
		<i>(in millions)</i>	
Hedges of forecasted debt	\$ 700	\$500	\$200
Hedges of existing debt	1,800	—	—
Total	\$2,500	\$500	\$200

(*) Includes \$1.8 billion of hedges of existing debt at the Southern Company parent.

The following table provides information related to variable interest rate exposure on long-term debt (including amounts due within one year) at December 31, 2019 for the applicable Registrants:

At December 31, 2019	Southern Company^(*)	Alabama Power	Georgia Power	Mississippi Power	Southern Power
		<i>(in millions, except percentages)</i>			
Long-term variable interest rate exposure	\$4,063	\$1,079	\$ 550	\$ 308	\$ 525
Weighted average interest rate on long-term variable interest rate exposure	2.38%	2.35%	1.74%	2.51%	2.46%
Impact on annualized interest expense of 100 basis point change in interest rates	\$ 41	\$ 11	\$ 6	\$ 3	\$ 5

(*) Includes \$1.5 billion of long-term variable interest rate exposure at the Southern Company parent entity.

Southern Power Company had foreign currency denominated debt of €1.1 billion at December 31, 2019. Southern Power Company has mitigated its exposure to foreign currency exchange rate risk through the use of foreign currency swaps converting all interest and principal payments to fixed-rate U.S. dollars.

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The changes in fair value of energy-related derivative contracts for Southern Company and Southern Company Gas for the years ended December 31, 2019 and 2018 are provided in the table below. The fair value of energy-related derivative contracts was not material for the other Registrants.

	Southern Company ^(a)	Southern Company Gas ^(a)
	<i>(in millions)</i>	
Contracts outstanding at December 31, 2017, assets (liabilities), net	\$(163)	\$(106)
Contracts realized or settled	93	66
Current period changes ^(b)	(131)	(127)
Contracts outstanding at December 31, 2018, assets (liabilities), net	\$(201)	\$(167)
Contracts realized or settled	69	26
Current period changes ^(b)	105	213
Disposition	6	—
Contracts outstanding at December 31, 2019, assets (liabilities), net	\$ (21)	\$ 72

(a) Excludes cash collateral held on deposit in broker margin accounts of \$99 million, \$277 million, and \$193 million at December 31, 2019, 2018, and 2017, respectively, and premium and intrinsic value associated with weather derivatives of \$4 million, \$8 million, and \$11 million at December 31, 2019, 2018, and 2017, respectively.

(b) The changes in fair value of energy-related derivative contracts are substantially attributable to both the volume and the price of natural gas. Current period changes also include the changes in fair value of new contracts entered into during the period, if any.

The net hedge volumes of energy-related derivative contracts for natural gas purchased (sold) at December 31, 2019 and 2018 for Southern Company and Southern Company Gas were as follows:

	Southern Company	Southern Company Gas
	<i>mmBtu Volume (in millions)</i>	
At December 31, 2019:		
Commodity – Natural gas swaps	327	—
Commodity – Natural gas options	262	218
Total hedge volume	589	218
At December 31, 2018:		
Commodity – Natural gas swaps	287	—
Commodity – Natural gas options	144	120
Total hedge volume	431	120

Southern Company Gas' derivative contracts are comprised of both long and short natural gas positions. A long position is a contract to purchase natural gas, and a short position is a contract to sell natural gas. The volumes presented above for Southern Company Gas represent the net of long natural gas positions of 4.10 billion mmBtu and short natural gas positions of 3.88 billion mmBtu at December 31, 2019 and the net of long natural gas positions of 4.16 billion mmBtu and short natural gas positions of 4.04 billion mmBtu at December 31, 2018.

For the Southern Company system, the weighted average swap contract cost above market prices was approximately \$0.28 and \$0.12 per mmBtu at December 31, 2019 and 2018, respectively. The change in option fair value is primarily attributable to the volatility of the market and the underlying change in the natural gas price. Substantially all of the traditional electric operating companies' natural gas hedge gains and losses are recovered through their respective fuel cost recovery clauses.

At December 31, 2019 and 2018, substantially all of the traditional electric operating companies' and certain of the natural gas distribution utilities' energy-related derivative contracts were designated as regulatory hedges and were related to the applicable company's fuel-hedging program. Gains and losses associated with regulatory hedges are initially recorded as regulatory liabilities and assets, respectively, and then are included in fuel expense/cost of natural gas as they are recovered through their respective cost recovery clause. Gains and losses on energy-related derivatives designated as cash flow hedges, which are used to hedge anticipated purchases and sales, are initially deferred in AOCI before being recognized in income in the same period as the hedged transaction. Gains and losses on energy-related derivative contracts that are not designated or fail to qualify as hedges are recognized in the statements of income as incurred. See Note 14 to the financial statements for additional information.

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Some energy-related derivative contracts require physical delivery as opposed to financial settlement, and this type of derivative is both common and prevalent within the electric and natural gas industries. When an energy-related derivative contract is settled physically, any cumulative unrealized gain or loss is reversed and the contract price is recognized in the respective line item representing the actual price of the underlying goods being delivered.

The Registrants use over-the-counter contracts that are not exchange traded but are fair valued using prices which are market observable, and thus fall into Level 2 of the fair value hierarchy. In addition, Southern Company Gas uses exchange-traded market-observable contracts, which are categorized as Level 1, and contracts that include a combination of observable and unobservable components, which are categorized as Level 3. See Note 13 to the financial statements for further discussion of fair value measurements. The maturities of the energy-related derivative contracts for Southern Company and Southern Company Gas at December 31, 2019 were as follows:

	Fair Value Measurements of Contracts at December 31, 2019			
	Total Fair Value	Maturity		
		Year 1	Years 2&3	Years 4&5
	<i>(in millions)</i>			
Southern Company				
Level 1 ^(a)	\$ (53)	\$ (19)	\$ (37)	\$ 3
Level 2 ^(b)	18	42	(25)	1
Level 3	14	10	1	3
Southern Company total ^(c)	\$ (21)	\$ 33	\$ (61)	\$ 7
Southern Company Gas				
Level 1 ^(a)	\$ (53)	\$ (19)	\$ (37)	\$ 3
Level 2 ^(b)	111	98	11	2
Level 3	14	10	1	3
Southern Company Gas total ^(c)	\$ 72	\$ 89	\$ (25)	\$ 8

(a) Valued using NYMEX futures prices.

(b) Level 2 amounts for Southern Company Gas are valued using basis transactions that represent the cost to transport natural gas from a NYMEX delivery point to the contract delivery point. These transactions are based on quotes obtained either through electronic trading platforms or directly from brokers.

(c) Excludes cash collateral of \$99 million as well as premium and associated intrinsic value associated with weather derivatives of \$4 million at December 31, 2019.

The Registrants are exposed to risk in the event of nonperformance by counterparties to energy-related and interest rate derivative contracts, as applicable. The Registrants only enter into agreements and material transactions with counterparties that have investment grade credit ratings by Moody's and S&P, or with counterparties who have posted collateral to cover potential credit exposure. Therefore, the Registrants do not anticipate market risk exposure from nonperformance by the counterparties. For additional information, see Note 1 to the financial statements under "Financial Instruments" and Note 14 to the financial statements.

Southern Company performs periodic reviews of its leveraged lease transactions, both domestic and international, and the creditworthiness of the lessees, including a review of the value of the underlying leased assets and the credit ratings of the lessees. Southern Company's domestic lease transactions generally do not have any credit enhancement mechanisms; however, the lessees in its international lease transactions have pledged various deposits as additional security to secure the obligations. The lessees in Southern Company's international lease transactions are also required to provide additional collateral in the event of a credit downgrade below a certain level. See Notes 1 and 3 to the financial statements under "Leveraged Leases" and "Other Matters – Southern Company," respectively, for additional information.

Credit Risk

Except as discussed herein, the Southern Company system is not exposed to any concentrations of credit risk. Concentration of credit risk occurs at Atlanta Gas Light for amounts billed for services and other costs to its customers, which consist of 16 Marketers in Georgia. For 2019, the four largest Marketers based on customer count, which includes SouthStar, accounted for 14% of Southern Company Gas' total operating revenues. Southern Company Gas has a concentration of credit risk as measured by its 30-day receivable exposure plus forward exposure. At December 31, 2019, the top 20 counterparties of Southern Company Gas' wholesale gas services segment represented approximately 59%, or \$218 million, of its total counterparty exposure and had a weighted average S&P equivalent credit rating of A-, all of which is consistent with the prior year.

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Capital Requirements

Total estimated capital expenditures for the Registrants through 2024 based on their current construction programs are as follows:

	2020	2021	2022	2023	2024
	<i>(in billions)</i>				
Southern Company ^{(a)(b)(c)(d)}	\$8.7	\$7.3	\$6.8	\$6.8	\$6.2
Alabama Power ^(b)	2.1	1.8	1.8	1.8	1.6
Georgia Power ^(c)	4.1	3.4	3.0	2.8	2.7
Mississippi Power	0.3	0.2	0.2	0.3	0.2
Southern Power ^(d)	0.3	0.2	0.1	0.1	0.1
Southern Company Gas	1.8	1.6	1.6	1.7	1.6

(a) Includes the Subsidiary Registrants, as well the other subsidiaries.

(b) Includes amounts contingent upon approval by the Alabama PSC related to Alabama Power's September 6, 2019 CCN filing totaling \$0.5 billion for 2020, \$0.2 billion for 2021, \$0.3 billion for 2022, and \$0.1 billion for 2023. See FUTURE EARNINGS POTENTIAL – "Regulatory Matters – Alabama Power – Petition for Certificate of Convenience and Necessity" herein for additional information.

(c) These amounts include expenditures of approximately \$1.6 billion, \$0.9 billion, and \$0.3 billion for the construction of Plant Vogtle Units 3 and 4 in 2020, 2021, and 2022, respectively.

(d) These amounts do not include approximately \$0.5 billion per year for 2020 through 2024 for Southern Power's planned expenditures for plant acquisitions and placeholder growth, which may vary materially due to market opportunities and Southern Power's ability to execute its growth strategy.

These amounts include estimated capital expenditures to comply with environmental laws and regulations, but do not include any potential compliance costs associated with pending regulation of CO₂ emissions from fossil fuel-fired electric generating units. See FUTURE EARNINGS POTENTIAL – "Environmental Matters" herein for additional information. These amounts also include capital expenditures related to contractual purchase commitments for nuclear fuel (for Southern Company, Alabama Power, and Georgia Power) and capital expenditures covered under LTSAs.

The traditional electric operating companies also anticipate costs associated with closure and monitoring of ash ponds and landfills in accordance with the CCR Rule and the related state rules, which are reflected in the applicable Registrants' ARO liabilities. Alabama Power's cost estimates are based on closure-in-place for all of its ash ponds. The cost estimates for Georgia Power and Mississippi Power are based on a combination of closure-in-place for some ash ponds and closure by removal for others. These anticipated costs are likely to change, and could change materially, as assumptions and details pertaining to closure are refined and compliance activities continue. See FUTURE EARNINGS POTENTIAL – "Environmental Matters – Environmental Laws and Regulations – Coal Combustion Residuals" herein and Note 6 to the financial statements for additional information. The current estimates of these costs through 2024 are as follows:

	2020	2021	2022	2023	2024
	<i>(in millions)</i>				
Southern Company	\$498	\$551	\$742	\$916	\$967
Alabama Power	200	217	284	363	386
Georgia Power	265	289	391	475	530
Mississippi Power	23	29	24	23	20

The construction programs are subject to periodic review and revision, and actual construction costs may vary from these estimates because of numerous factors. These factors include: changes in business conditions; changes in load projections; changes in environmental laws and regulations; the outcome of any legal challenges to environmental rules; changes in electric generating plants, including unit retirements and replacements and adding or changing fuel sources at existing electric generating units, to meet regulatory requirements; changes in FERC rules and regulations; state regulatory agency approvals; changes in the expected environmental compliance program; changes in legislation; the cost and efficiency of construction labor, equipment, and materials; project scope and design changes; abnormal weather; delays in construction due to judicial or regulatory action; storm impacts; and the cost of capital. In addition, there can be no assurance that costs related to capital expenditures will be fully recovered. Additionally, Southern Power's planned expenditures for plant acquisitions may vary due to market opportunities and Southern Power's ability to execute its growth strategy. See Note 15 to the financial statements under "Southern Power" for additional information regarding Southern Power's plant acquisitions and construction projects.

The construction program of Georgia Power also includes Plant Vogtle Units 3 and 4, which includes components based on new technology that only within the last few years began initial operation in the global nuclear industry at this scale and which may be subject to additional revised cost estimates during construction. See Note 2 to the financial statements under "Georgia Power – Nuclear Construction" for information regarding Plant Vogtle Units 3 and 4 and additional factors that may impact construction expenditures.

See FUTURE EARNINGS POTENTIAL – "Construction Programs" herein for additional information. Also see "Contractual Obligations" herein for information regarding other future funding requirements of the Registrants.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Contractual Obligations

The following table presents Southern Company's contractual obligations at December 31, 2019. Additional information about these funding requirements is provided herein.

Southern Company	2020	2021- 2022	2023- 2024	After 2024	Total
	<i>(in millions)</i>				
Long-term debt –					
Principal	\$ 2,971	\$ 5,189	\$ 2,890	\$33,489	\$ 44,539
Interest	1,677	3,109	2,809	25,986	33,581
Financial derivative obligations	450	204	65	—	719
Operating leases	294	543	386	1,609	2,832
Finance leases	31	47	33	246	357
Pipeline charges, storage capacity, and gas supply	725	1,085	784	1,677	4,271
Purchase commitments –					
Capital	7,758	12,981	11,989		32,728
Fuel	2,787	3,491	1,527	4,546	12,351
Purchased power	150	270	237	1,725	2,382
Other	406	618	530	2,174	3,728
ARO settlements	498	1,293	1,883		3,674
Other ^(*)	163	310	38	65	576
Southern Company system total	\$17,910	\$29,140	\$23,171	\$71,517	\$141,738

(*) Includes funding requirements related to pension and other postretirement benefit plans, nuclear decommissioning trusts of Georgia Power, and preferred stock dividends of Alabama Power.

Additional information about these funding requirements is provided below:

- *Long-term debt* – Represents scheduled maturities of long-term debt, as well as the related interest. All amounts are reflected based on final maturity dates except for amounts related to Georgia Power's FFB borrowings. The final maturity date for Georgia Power's FFB borrowings is February 20, 2044; however, principal amortization is reflected beginning in February 2020. The interest amounts also include the effects of interest rate derivatives employed to manage interest rate risk and effects of foreign currency swaps employed to manage foreign currency exchange rate risk, as applicable. Debt principal includes a \$5 million loss related to Southern Power's foreign currency hedge of €1.1 billion. The Registrants plan to continue, when economically feasible, to retire higher-cost securities and replace these obligations with lower-cost capital if market conditions permit. Variable rate interest obligations are estimated based on rates at December 31, 2019, as reflected in the statements of capitalization for each Registrant. Long-term debt excludes finance lease amounts, which are shown separately. See Note 8 to the financial statements for additional information.
- *Financial derivative obligations* – See Note 14 to the financial statements for additional information.
- *Operating and finance leases* – See Note 9 to the financial statements for additional information. Operating lease commitments may include certain land leases for facilities that may be subject to annual price escalation based on indices. Estimated lease payments exclude amounts contingent upon approval by the Alabama PSC related to Alabama Power's September 6, 2019 CCN filing totaling \$1 million for 2021, \$2 million for 2022, \$3 million for 2023, \$4 million for 2024, and \$85 million for after 2024. See Note 2 to the financial statements under "Alabama Power – Petition for Certificate of Convenience and Necessity" for additional information.
- *Purchase commitments – Capital* – Estimated capital expenditures are provided for a five-year period, including capital expenditures associated with environmental regulations. These amounts exclude contractual purchase commitments for nuclear fuel, capital expenditures covered under LTSAs, and estimated capital expenditures for AROs, which are reflected in the "fuel," "other," and "ARO settlements" categories, respectively, where applicable. Estimated capital expenditures exclude amounts contingent upon approval by the Alabama PSC related to Alabama Power's September 6, 2019 CCN filing totaling \$0.5 billion for 2020, \$0.2 billion for 2021, \$0.3 billion for 2022, and \$0.1 billion for 2023. See Note 2 to the financial statements under "Alabama Power – Petition for Certificate of Convenience and Necessity" for additional information. Estimated capital expenditures exclude approximately \$0.5 billion per year for 2020 through 2024 for Southern Power's planned expenditures for plant acquisitions and placeholder growth. At December 31, 2019, significant purchase commitments were outstanding in connection with the Registrants' construction programs. See FUTURE EARNINGS POTENTIAL – "Environmental Matters" and "Construction Programs" herein and "Capital Requirements" herein for additional information.

Management's Discussion and Analysis of Financial Condition and Results of Operations

- *Purchase commitments – Fuel* – Primarily includes commitments to purchase coal (at the traditional electric operating companies), natural gas (at the traditional electric operating companies and Southern Power), and nuclear fuel (at Alabama Power and Georgia Power), as well as the related transportation and storage. In most cases, these contracts contain provisions for price escalation, minimum purchase levels, and other financial commitments. Natural gas purchase commitments are based on various indices at the time of delivery. Amounts reflected for natural gas purchase commitments have been estimated based on the NYMEX future prices at December 31, 2019.
- *Purchase commitments – Purchased power* – Represents estimated minimum obligations for various PPAs for the purchase of capacity and energy, as well as, at Georgia Power, capacity payments related to Plant Vogtle Units 1 and 2. Amounts exclude PPAs accounted for as leases, which are reflected in the "operating leases" and "finance leases" categories, where applicable. Estimated capacity payments exclude amounts contingent upon approval by the Alabama PSC related to Alabama Power's September 6, 2019 CCN filing totaling \$4 million for 2020, \$7 million for 2021, \$7 million for 2022, \$8 million for 2023, \$8 million for 2024, and \$107 million for after 2024. See Note 2 to the financial statements under "Alabama Power – Petition for Certificate of Convenience and Necessity" for additional information. Mississippi Power's long-term PPAs are associated with solar facilities and only include an energy component. Southern Power's purchased power commitments will be resold under a third-party agreement at cost. See Note 3 to the financial statements under "Guarantees" for additional information.
- *Purchase commitments – Other* – Includes LTSAs, contracts for the procurement of limestone (at Alabama Power and Georgia Power), contractual environmental remediation liabilities (at Southern Company Gas), operation and maintenance agreements (at Southern Power), and transmission agreements (at Southern Power). LTSAs include price escalation based on inflation indices. Southern Power's transmission commitments are based on the Southern Company system's current tariff rate for point-to-point transmission.
- *Pension and other postretirement benefit plans* – The Southern Company system provides postretirement benefits to the majority of its employees and funds trusts to the extent required by PSCs, other applicable state regulatory agencies, or the FERC. The Registrants forecast contributions to their pension and other postretirement benefit plans over a three-year period. The Registrants anticipate no mandatory contributions to the qualified pension plan during the next three years. Amounts presented represent estimated benefit payments for the nonqualified pension plans, estimated non-trust benefit payments for the other postretirement benefit plans, and estimated contributions to the other postretirement benefit plan trusts, all of which will be made from corporate assets of the applicable subsidiaries. See Note 11 to the financial statements for additional information related to the pension and other postretirement benefit plans, including estimated benefit payments. Certain benefit payments will be made through the related benefit plans. Other benefit payments will be made from corporate assets of the applicable subsidiaries.
- *ARO settlements* – Represents estimated costs for a five-year period associated with closing and monitoring ash ponds at the traditional electric operating companies in accordance with the CCR Rule and the related state rules, which are reflected in the applicable Registrants' ARO liabilities. Material expenditures in future years for ARO settlements also will be required for ash ponds, nuclear decommissioning (at Alabama Power and Georgia Power), and other liabilities reflected in the applicable Registrants' AROs. See Note 6 to the financial statements for additional information.
- *Preferred stock dividends* – Represents preferred stock of Alabama Power. Preferred stock does not mature; therefore, amounts are provided for the next five years only.
- *Nuclear decommissioning trusts* – As a result of NRC requirements, Alabama Power and Georgia Power have external trust funds for nuclear decommissioning costs. Based on its most recent site study completed in 2018, Alabama Power currently has no additional funding requirements. Alabama Power's next site study is expected to be conducted by 2023. Georgia Power's projections of nuclear decommissioning trust fund contributions for Plant Hatch and Plant Vogtle Units 1 and 2 are based on the 2019 ARP. See Note 6 to the financial statements under "Nuclear Decommissioning" for additional information.
- *Pipeline charges, storage capacity, and gas supply* – Includes charges at Southern Company Gas recoverable through a natural gas cost recovery mechanism, or alternatively billed to Marketers selling retail natural gas, and demand charges associated with Sequent. The gas supply balance includes amounts for Nicor Gas and SouthStar gas commodity purchase commitments of 45 million mmBtu at floating gas prices calculated using forward natural gas prices at December 31, 2019 and valued at \$84 million. Southern Company Gas provides guarantees to certain gas suppliers for certain of its subsidiaries, including SouthStar, in support of payment obligations.

Consolidated Statements of Income

For the Years Ended December 31, 2019, 2018, and 2017

	2019	2018	2017
		<i>(in millions)</i>	
Operating Revenues:			
Retail electric revenues	\$14,084	\$15,222	\$15,330
Wholesale electric revenues	2,152	2,516	2,426
Other electric revenues	636	664	681
Natural gas revenues	3,792	3,854	3,791
Other revenues	755	1,239	803
Total operating revenues	21,419	23,495	23,031
Operating Expenses:			
Fuel	3,622	4,637	4,400
Purchased power	816	971	863
Cost of natural gas	1,319	1,539	1,601
Cost of other sales	435	806	513
Other operations and maintenance	5,600	5,889	5,739
Depreciation and amortization	3,038	3,131	3,010
Taxes other than income taxes	1,230	1,315	1,250
Estimated loss on plants under construction	24	1,097	3,362
Impairment charges	168	210	—
(Gain) loss on dispositions, net	(2,569)	(291)	(40)
Total operating expenses	13,683	19,304	20,698
Operating Income	7,736	4,191	2,333
Other Income and (Expense):			
Allowance for equity funds used during construction	128	138	160
Earnings from equity method investments	162	148	106
Interest expense, net of amounts capitalized	(1,736)	(1,842)	(1,694)
Other income (expense), net	252	114	163
Total other income and (expense)	(1,194)	(1,442)	(1,265)
Earnings Before Income Taxes	6,542	2,749	1,068
Income taxes	1,798	449	142
Consolidated Net Income	4,744	2,300	926
Dividends on preferred and preference stock of subsidiaries	15	16	38
Net income (loss) attributable to noncontrolling interests	(10)	58	46
Consolidated Net Income Attributable to Southern Company	\$ 4,739	\$ 2,226	\$ 842
Common Stock Data:			
Earnings per share —			
Basic	\$ 4.53	\$ 2.18	\$ 0.84
Diluted	4.50	2.17	0.84
Average number of shares of common stock outstanding — (in millions)			
Basic	1,046	1,020	1,000
Diluted	1,054	1,025	1,008

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

Consolidated Statements of Comprehensive Income

For the Years Ended December 31, 2019, 2018, and 2017

	2019	2018	2017
		<i>(in millions)</i>	
Consolidated Net Income	\$4,744	\$2,300	\$926
Other comprehensive income (loss):			
Qualifying hedges:			
Changes in fair value, net of tax of \$(39), \$(16), and \$34, respectively	(115)	(47)	57
Reclassification adjustment for amounts included in net income, net of tax of \$19, \$24, and \$(37), respectively	57	72	(60)
Pension and other postretirement benefit plans:			
Benefit plan net gain (loss), net of tax of \$(31), \$(2), and \$6, respectively	(64)	(5)	17
Reclassification adjustment for amounts included in net income, net of tax of \$1, \$5, and \$(6), respectively	4	6	(23)
Total other comprehensive income (loss)	(118)	26	(9)
Dividends on preferred and preference stock of subsidiaries	15	16	38
Comprehensive income (loss) attributable to noncontrolling interests	(10)	58	46
Consolidated Comprehensive Income Attributable to Southern Company	\$4,621	\$2,252	\$833

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

Consolidated Statements of Cash Flows

For the Years Ended December 31, 2019, 2018, and 2017

	2019	2018	2017
		<i>(in millions)</i>	
Operating Activities:			
Consolidated net income	\$ 4,744	\$ 2,300	\$ 926
Adjustments to reconcile consolidated net income to net cash provided from operating activities —			
Depreciation and amortization, total	3,331	3,549	3,457
Deferred income taxes	611	89	166
Utilization of federal investment tax credits	757	5	—
Allowance for equity funds used during construction	(128)	(138)	(160)
Pension, postretirement, and other employee benefits	(204)	(103)	(84)
Pension and postretirement funding	(1,136)	(4)	(2)
Settlement of asset retirement obligations	(328)	(244)	(177)
Storm damage reserve accruals	168	74	38
Stock based compensation expense	107	125	109
Estimated loss on plants under construction	15	1,093	3,179
Impairment charges	168	210	—
(Gain) loss on dispositions, net	(2,588)	(301)	(42)
Other, net	102	14	(63)
Changes in certain current assets and liabilities —			
-Receivables	630	(426)	(202)
-Fossil fuel for generation	(120)	123	36
-Natural gas for sale	44	49	36
-Other current assets	70	(127)	(143)
-Accounts payable	(693)	291	(280)
-Accrued taxes	117	267	(142)
-Accrued compensation	(9)	33	(8)
-Retail fuel cost over recovery	62	36	(212)
-Other current liabilities	61	30	(38)
Net cash provided from operating activities	5,781	6,945	6,394
Investing Activities:			
Business acquisitions, net of cash acquired	(50)	(65)	(1,054)
Property additions	(7,555)	(8,001)	(7,423)
Proceeds pursuant to the Toshiba Guarantee, net of joint owner portion	—	—	1,682
Nuclear decommissioning trust fund purchases	(888)	(1,117)	(811)
Nuclear decommissioning trust fund sales	882	1,111	805
Proceeds from dispositions and asset sales	5,122	2,956	97
Cost of removal, net of salvage	(393)	(388)	(313)
Change in construction payables, net	(169)	50	259
Investments in unconsolidated subsidiaries	(148)	(114)	(152)
Payments pursuant to LTSAs	(234)	(186)	(227)
Other investing activities	41	(6)	(53)
Net cash used for investing activities	(3,392)	(5,760)	(7,190)

Consolidated Statements of Cash Flows (continued)

For the Years Ended December 31, 2019, 2018, and 2017

	2019	2018	2017
		<i>(in millions)</i>	
Financing Activities:			
Increase (decrease) in notes payable, net	640	(774)	(401)
Proceeds —			
Long-term debt	5,220	2,478	5,858
Common stock	844	1,090	793
Preferred stock	—	—	250
Short-term borrowings	350	3,150	1,259
Redemptions and repurchases —			
Long-term debt	(4,347)	(5,533)	(2,930)
Preferred and preference stock	—	(33)	(658)
Short-term borrowings	(1,850)	(1,900)	(659)
Distributions to noncontrolling interests	(256)	(153)	(119)
Capital contributions from noncontrolling interests	196	2,551	80
Payment of common stock dividends	(2,570)	(2,425)	(2,300)
Other financing activities	(157)	(264)	(222)
Net cash provided from (used for) financing activities	(1,930)	(1,813)	951
Net Change in Cash, Cash Equivalents, and Restricted Cash	459	(628)	155
Cash, Cash Equivalents, and Restricted Cash at Beginning of Year	1,519	2,147	1,992
Cash, Cash Equivalents, and Restricted Cash at End of Year	\$ 1,978	\$ 1,519	\$ 2,147
Supplemental Cash Flow Information:			
Cash paid (received) during the period for —			
Interest (net of \$74, \$72, and \$89 capitalized, respectively)	\$ 1,651	\$ 1,794	\$ 1,676
Income taxes (net of refunds)	276	172	(410)
Noncash transactions — Accrued property additions at year-end	932	1,103	985

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

Consolidated Balance Sheets

At December 31, 2019 and 2018

Assets	2019	2018
	(in millions)	
Current Assets:		
Cash and cash equivalents	\$ 1,975	\$ 1,396
Receivables —		
Customer accounts receivable	1,614	1,726
Energy marketing receivable	428	801
Unbilled revenues	599	654
Under recovered fuel clause revenues	—	115
Other accounts and notes receivable	817	813
Accumulated provision for uncollectible accounts	(49)	(50)
Materials and supplies	1,388	1,465
Fossil fuel for generation	521	405
Natural gas for sale	479	524
Prepaid expenses	314	432
Assets from risk management activities, net of collateral	183	222
Regulatory assets – asset retirement obligations	287	—
Other regulatory assets	885	525
Assets held for sale	188	393
Other current assets	188	162
Total current assets	9,817	9,583
Property, Plant, and Equipment:		
In service	105,114	103,706
Less: Accumulated depreciation	30,765	31,038
Plant in service, net of depreciation	74,349	72,668
Nuclear fuel, at amortized cost	851	875
Construction work in progress	7,880	7,254
Total property, plant, and equipment	83,080	80,797
Other Property and Investments:		
Goodwill	5,280	5,315
Equity investments in unconsolidated subsidiaries	1,303	1,580
Other intangible assets, net of amortization of \$280 and \$235 at December 31, 2019 and December 31, 2018, respectively	536	613
Nuclear decommissioning trusts, at fair value	2,036	1,721
Leveraged leases	788	798
Miscellaneous property and investments	391	269
Total other property and investments	10,334	10,296
Deferred Charges and Other Assets:		
Operating lease right-of-use assets, net of amortization	1,800	—
Deferred charges related to income taxes	798	794
Unamortized loss on reacquired debt	300	323
Regulatory assets – asset retirement obligations, deferred	4,094	2,933
Other regulatory assets, deferred	6,805	5,375
Assets held for sale, deferred	601	5,350
Other deferred charges and assets	1,071	1,463
Total deferred charges and other assets	15,469	16,238
Total Assets	\$118,700	\$116,914

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

Consolidated Balance Sheets (continued)

At December 31, 2019 and 2018

Liabilities and Stockholders' Equity	2019	2018
	<i>(in millions)</i>	
Current Liabilities:		
Securities due within one year	\$ 2,989	\$ 3,198
Notes payable	2,055	2,915
Energy marketing trade payables	442	856
Accounts payable	2,115	2,580
Customer deposits	496	522
Accrued taxes —		
Accrued income taxes	—	21
Other accrued taxes	659	635
Accrued interest	474	472
Accrued compensation	992	1,030
Asset retirement obligations	504	404
Other regulatory liabilities	756	376
Liabilities held for sale	5	425
Operating lease obligations	229	—
Other current liabilities	830	852
Total current liabilities	12,546	14,286
Long-Term Debt (See accompanying statements)	41,798	40,736
Deferred Credits and Other Liabilities:		
Accumulated deferred income taxes	7,888	6,558
Deferred credits related to income taxes	6,078	6,460
Accumulated deferred ITCs	2,291	2,372
Employee benefit obligations	1,814	2,147
Operating lease obligations, deferred	1,615	—
Asset retirement obligations, deferred	9,282	8,990
Accrued environmental remediation	234	268
Other cost of removal obligations	2,239	2,297
Other regulatory liabilities, deferred	256	169
Liabilities held for sale, deferred	—	2,836
Other deferred credits and liabilities	609	465
Total deferred credits and other liabilities	32,306	32,562
Total Liabilities	86,650	87,584
Redeemable Preferred Stock of Subsidiaries (See accompanying statements)	291	291
Total Stockholders' Equity (See accompanying statements)	31,759	29,039
Total Liabilities and Stockholders' Equity	\$118,700	\$116,914
Commitments and Contingent Matters (See notes)		

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

Consolidated Statements of Capitalization

At December 31, 2019 and 2018

	Weighted Average Interest Rate at December 31, 2019	2019	2018	2019	2018
		<i>(in millions)</i>		<i>(percent of total)</i>	
Long-Term Debt:					
Long-term debt payable to affiliated trusts —					
Variable rate due 2042	5.20%	\$ 206	\$ 206		
Long-term senior notes and debt —					
Maturity					
2019	—	—	2,948		
2020	2.43%	2,100	2,271		
2021	2.70%	2,672	2,638		
2022	2.53%	1,870	1,983		
2023	3.05%	2,290	2,290		
2024	2.20%	400	—		
2025 through 2049	4.27%	20,120	19,895		
Variable rate due 2020	2.50%	800	1,875		
Variable rate due 2021	2.42%	125	125		
Total long-term senior notes and debt		30,377	34,025		
Other long-term debt —					
Pollution control revenue bonds —					
Maturity					
2019	—	—	25		
2022	2.35%	53	90		
2023	—	—	33		
2025 through 2053	2.40%	1,466	1,112		
Variable rate due 2020	1.80%	7	148		
Variable rate due 2021	1.75%	65	65		
Variable rate due 2022	—	—	4		
Variable rate due 2024	1.72%	21	21		
Variable rate due 2025 to 2052	1.69%	1,351	1,396		
Plant Daniel revenue bonds due 2021	7.13%	270	270		
FFB loans —					
Maturity					
2020	3.20%	64	44		
2021	3.20%	64	44		
2022	3.20%	64	44		
2023	3.20%	64	44		
2024	3.20%	64	44		
2025 to 2044	3.20%	3,523	2,405		
First mortgage bonds —					
Maturity					
2019	—	—	50		
2023	5.80%	50	50		
2026 to 2059	3.94%	1,525	1,225		
Junior subordinated notes due 2024	2.70%	863	—		
Junior subordinated notes due 2027 to 2077	5.00%	4,433	3,570		
Total other long-term debt		13,947	10,684		
Unamortized fair value adjustment of long-term debt		430	474		
Finance lease obligations		226	197		
Unamortized debt premium (discount), net		(152)	(158)		
Unamortized debt issuance expense		(247)	(208)		
Total long-term debt		44,787	45,220		
Less:					
Amount due within one year		2,989	3,198		
Amount held for sale		—	1,286		
Long-term debt excluding amounts due within one year and held for sale		41,798	40,736	56.6%	58.1%

Consolidated Statements of Capitalization (continued)

At December 31, 2019 and 2018

	2019	2018	2019	2018
	<i>(in millions)</i>		<i>(percent of total)</i>	
Redeemable Preferred Stock of Subsidiaries:				
<u>Cumulative preferred stock</u>				
\$100 par or stated value — 4.20% to 4.92%				
Authorized — 10 million shares				
Outstanding — 475,115 shares	48	48		
\$1 par value — 5.00%				
Authorized — 28 million shares				
Outstanding — 10 million shares	243	243		
Total redeemable preferred stock of subsidiaries	291	291	0.4	0.4
(annual dividend requirement — \$15 million)				
Common Stockholders' Equity:				
Common stock, par value \$5 per share —	5,257	5,164		
Authorized — 1.5 billion shares				
Issued — 2019: 1.1 billion shares				
— 2018: 1.0 billion shares				
Treasury — 2019: 1.0 million shares				
— 2018: 1.0 million shares				
Paid-in capital	11,734	11,094		
Treasury, at cost	(42)	(38)		
Retained earnings	10,877	8,706		
Accumulated other comprehensive loss	(321)	(203)		
Total common stockholders' equity	27,505	24,723	37.2	35.3
Noncontrolling interests	4,254	4,316	5.8	6.2
Total stockholders' equity	31,759	29,039		
Total Capitalization	\$73,848	\$70,066	100.0%	100.0%

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

Consolidated Statements of Stockholders' Equity

For the Years Ended December 31, 2019, 2018, and 2017

Southern Company Common Stockholders' Equity										
	Number of Common Shares		Common Stock			Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Preferred and Preference Stock of Subsidiaries	Noncontrolling Interests ^(a)	Total
	Issued	Treasury	Par Value	Paid-In Capital	Treasury					
<i>(in millions)</i>										
Balance at										
December 31, 2016	991	(1)	\$4,952	\$ 9,661	\$(31)	\$10,356	\$(180)	\$ 609	\$1,245	\$26,612
Consolidated net income attributable to Southern Company	—	—	—	—	—	842	—	—	—	842
Other comprehensive income (loss)	—	—	—	—	—	—	(9)	—	—	(9)
Stock issued	18	—	86	707	—	—	—	—	—	793
Stock-based compensation	—	—	—	105	—	—	—	—	—	105
Cash dividends of \$2.3000 per share	—	—	—	—	—	(2,300)	—	—	—	(2,300)
Preferred and preference stock redemptions	—	—	—	—	—	—	—	(609)	—	(609)
Contributions from noncontrolling interests	—	—	—	—	—	—	—	—	79	79
Distributions to noncontrolling interests	—	—	—	—	—	—	—	—	(122)	(122)
Net income attributable to noncontrolling interests	—	—	—	—	—	—	—	—	44	44
Reclassification from redeemable noncontrolling interests	—	—	—	—	—	—	—	—	114	114
Other	—	—	—	(4)	(5)	(13)	—	—	1	(21)
Balance at										
December 31, 2017	1,009	(1)	5,038	10,469	(36)	8,885	(189)	—	1,361	25,528
Consolidated net income attributable to Southern Company	—	—	—	—	—	2,226	—	—	—	2,226
Other comprehensive income	—	—	—	—	—	—	26	—	—	26
Stock issued	26	—	126	964	—	—	—	—	—	1,090
Stock-based compensation	—	—	—	84	—	—	—	—	—	84
Cash dividends of \$2.3800 per share	—	—	—	—	—	(2,425)	—	—	—	(2,425)
Contributions from noncontrolling interests	—	—	—	—	—	—	—	—	1,372	1,372
Distributions to noncontrolling interests	—	—	—	—	—	—	—	—	(164)	(164)
Net income attributable to noncontrolling interests	—	—	—	—	—	—	—	—	58	58
Sale of noncontrolling interests	—	—	—	(417)	—	—	—	—	1,690	1,273
Other	—	—	—	(6)	(2)	20	(40)	—	(1)	(29)

Consolidated Statements of Stockholders' Equity (continued)

For the Years Ended December 31, 2019, 2018, and 2017

	Southern Company Common Stockholders' Equity									
	Number of Common Shares		Common Stock			Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Preferred and Preference Stock of Subsidiaries	Noncontrolling Interests ^(a)	Total
	Issued	Treasury	Par Value	Paid-In Capital	Treasury					
	<i>(in millions)</i>									
Balance at										
December 31, 2018	1,035	(1)	5,164	11,094	(38)	8,706	(203)	—	4,316	29,039
Consolidated net income attributable to Southern Company	—	—	—	—	—	4,739	—	—	—	4,739
Other comprehensive income (loss)	—	—	—	—	—	—	(118)	—	—	(118)
Issuance of equity units ^(b)	—	—	—	(198)	—	—	—	—	—	(198)
Stock issued	19	—	93	751	—	—	—	—	—	844
Stock-based compensation	—	—	—	66	—	—	—	—	—	66
Cash dividends of \$2.4600 per share	—	—	—	—	—	(2,570)	—	—	—	(2,570)
Contributions from noncontrolling interests	—	—	—	—	—	—	—	—	276	276
Distributions to noncontrolling interests	—	—	—	—	—	—	—	—	(327)	(327)
Net income (loss) attributable to noncontrolling interests	—	—	—	—	—	—	—	—	(10)	(10)
Other	—	—	—	21	(4)	2	—	—	(1)	18
Balance at										
December 31, 2019	1,054	(1)	\$5,257	\$11,734	\$(42)	\$10,877	\$(321)	\$ —	\$4,254	\$31,759

(a) Excludes redeemable noncontrolling interests. See Note 7 to the financial statements under "Southern Power – Redeemable Noncontrolling Interests" for additional information.

(b) See Note 8 under "Equity Units" for additional information.

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

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Notes to Financial Statements

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

General

Southern Company is the parent company of three traditional electric operating companies, as well as Southern Power, Southern Company Gas, SCS, Southern Linc, Southern Holdings, Southern Nuclear, PowerSecure, and other direct and indirect subsidiaries. The traditional electric operating companies – Alabama Power, Georgia Power, and Mississippi Power – are vertically integrated utilities providing electric service in three Southeastern states. On January 1, 2019, Southern Company completed the sale of Gulf Power (another traditional electric operating company through December 31, 2018) to NextEra Energy. Southern Power develops, constructs, acquires, owns, and manages power generation assets, including renewable energy projects, and sells electricity at market-based rates in the wholesale market. Southern Company Gas distributes natural gas through natural gas distribution utilities, including Nicor Gas (Illinois), Atlanta Gas Light (Georgia), Virginia Natural Gas, and Chattanooga Gas (Tennessee). In 2018, Southern Company Gas sold its other natural gas utilities – Elizabethtown Gas (New Jersey), Florida City Gas, and Elkton Gas (Maryland). Southern Company Gas is also involved in several other complementary businesses including gas pipeline investments, wholesale gas services, and gas marketing services. SCS, the system service company, provides, at cost, specialized services to Southern Company and its subsidiary companies. Southern Linc provides digital wireless communications for use by Southern Company and its subsidiary companies and also markets these services to the public and provides fiber optics services within the Southeast. Southern Holdings is an intermediate holding company subsidiary, primarily for Southern Company's leveraged lease and other investments. Southern Nuclear operates and provides services to the Southern Company system's nuclear power plants, including Alabama Power's Plant Farley and Georgia Power's Plant Hatch and Plant Vogtle Units 1 and 2, and is currently managing construction of and developing Plant Vogtle Units 3 and 4, which are co-owned by Georgia Power. PowerSecure provides energy solutions to electric utilities and their customers in the areas of distributed generation, energy storage and renewables, and energy efficiency. See Note 15 for information regarding disposition activities at Southern Power and Southern Company Gas, as well as additional information regarding Southern Company's sale of Gulf Power.

The Registrants' financial statements reflect investments in subsidiaries on a consolidated basis. Intercompany transactions have been eliminated in consolidation. The equity method is used for investments in entities in which a Registrant has significant influence but does not have control and for VIEs where a Registrant has an equity investment but is not the primary beneficiary. Southern Power has partial ownership in certain legal entities for which the contractual provisions represent profit-sharing arrangements because the allocations of cash distributions and tax benefits are not based on fixed ownership percentages. For these arrangements, the noncontrolling interest is accounted for under a balance sheet approach utilizing the HLBV method. The HLBV method calculates each partner's share of income based on the change in net equity the partner can legally claim in a HLBV at the end of the period compared to the beginning of the period. See "Variable Interest Entities" herein and Note 7 for additional information.

The traditional electric operating companies, Southern Power, certain subsidiaries of Southern Company Gas, and certain other subsidiaries are subject to regulation by the FERC, and the traditional electric operating companies and natural gas distribution utilities are also subject to regulation by their respective state PSCs or other applicable state regulatory agencies. As such, the respective financial statements of the Registrants reflect the effects of rate regulation in accordance with GAAP and comply with the accounting policies and practices prescribed by relevant state PSCs or other applicable state regulatory agencies.

The preparation of financial statements in conformity with GAAP requires the use of estimates, and the actual results may differ from those estimates. Certain prior years' data presented in the financial statements have been reclassified to conform to the current year presentation. These reclassifications had no impact on the Registrants' results of operations, financial position, or cash flows. In addition, during 2018, Southern Company Gas recast its reportable segments. See Note 16 under "Southern Company Gas" for additional information.

At December 31, 2019 and 2018, Southern Company and Southern Power each had assets and liabilities held for sale on their balance sheets. At December 31, 2019, Southern Company Gas had assets and liabilities held for sale on its balance sheet. Unless otherwise noted, the disclosures herein related to specific asset and liability balances at December 31, 2019 and 2018 exclude assets and liabilities held for sale. See Note 15 under "Assets Held for Sale" for additional information including major classes of assets and liabilities classified as held for sale by Southern Company, Southern Power, and Southern Company Gas.

Notes to Financial Statements

Recently Adopted Accounting Standards

See Note 4 for information on the Registrants' adoption of ASC 606, *Revenue from Contracts with Customers* (ASC 606) effective January 1, 2018.

In 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)* (ASU 2016-02). ASU 2016-02 requires lessees to recognize on the balance sheet a lease liability and a right-of-use asset for all leases. ASU 2016-02 also changes the recognition, measurement, and presentation of expense associated with leases and provides clarification regarding the identification of certain components of contracts that would represent a lease. The accounting required by lessors is relatively unchanged and there is no change to the accounting for existing leveraged leases. The Registrants adopted the new standard effective January 1, 2019. See Note 9 for additional information and related disclosures.

Affiliate Transactions

The traditional electric operating companies, Southern Power, and Southern Company Gas have agreements with SCS under which certain of the following services are rendered to them at direct or allocated cost: general executive and advisory, general and design engineering, operations, purchasing, accounting, finance, treasury, legal, tax, information technology, marketing, auditing, insurance and pension administration, human resources, systems and procedures, digital wireless communications, cellular tower space, and other services with respect to business and operations, construction management, and Southern Company power pool transactions. These costs are primarily included in other operations and maintenance expenses or capitalized to property, plant, and equipment. Costs for these services from SCS in 2019, 2018, and 2017 were as follows:

	Alabama Power	Georgia Power	Mississippi Power	Southern Power ^(*)	Southern Company Gas
			(in millions)		
2019	\$527	\$704	\$118	\$ 90	\$183
2018	508	653	104	98	194
2017	479	625	140	218	63

(*) Prior to December 2017, Southern Power had no employees but was billed for employee-related costs from SCS.

Alabama Power and Georgia Power also have agreements with Southern Nuclear under which Southern Nuclear renders the following nuclear-related services at cost: general executive and advisory services; general operations, management, and technical services; administrative services including procurement, accounting, employee relations, systems, and procedures services; strategic planning and budgeting services; other services with respect to business and operations; and, for Georgia Power, construction management. These costs are primarily included in other operations and maintenance expenses or capitalized to property, plant, and equipment. Costs for these services in 2019, 2018, and 2017 amounted to \$256 million, \$247 million, and \$248 million, respectively, for Alabama Power and \$760 million, \$780 million, and \$675 million, respectively, for Georgia Power. See Note 2 under "Georgia Power – Nuclear Construction" for additional information regarding Southern Nuclear's construction management of Plant Vogtle Units 3 and 4 for Georgia Power.

Cost allocation methodologies used by SCS and Southern Nuclear prior to the repeal of the Public Utility Holding Company Act of 1935, as amended, were approved by the SEC. Subsequently, additional cost allocation methodologies have been reported to the FERC and management believes they are reasonable. The FERC permits services to be rendered at cost by system service companies.

Alabama Power's and Georgia Power's power purchases from affiliates through the Southern Company power pool are included in purchased power, affiliates on their respective statements of income. Mississippi Power's and Southern Power's power purchases from affiliates through the Southern Company power pool are included in purchased power on their respective statements of income and were as follows:

	Mississippi Power	Southern Power
	(in millions)	
2019	\$ 3	\$14
2018	15	41
2017	16	27

Notes to Financial Statements

Georgia Power has entered into several PPAs with Southern Power for capacity and energy. Georgia Power's total expenses associated with these PPAs were \$177 million, \$216 million, and \$235 million in 2019, 2018, and 2017, respectively. Southern Power's total revenues from all PPAs with Georgia Power, included in wholesale revenue affiliates on Southern Power's consolidated statements of income, were \$174 million, \$215 million, and \$233 million for 2019, 2018, and 2017, respectively. Included within these revenues were affiliate PPAs accounted for as operating leases, which totaled \$116 million, \$65 million, and \$81 million for 2019, 2018, and 2017, respectively. See Note 9 for additional information.

SCS (as agent for Alabama Power, Georgia Power, and Southern Power) and Southern Company Gas have long-term interstate natural gas transportation agreements with SNG. The interstate transportation service provided to Alabama Power, Georgia Power, Southern Power, and Southern Company Gas by SNG pursuant to these agreements is governed by the terms and conditions of SNG's natural gas tariff and is subject to FERC regulation. See Note 7 under "Southern Company Gas – Equity Method Investments – SNG" for additional information. Transportation costs under these agreements in 2019, 2018, and 2017 were as follows:

	Alabama Power	Georgia Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>			
2019	\$17	\$ 99	\$28	\$31
2018	8	101	25	32
2017	9	102	25	32

In November 2018, SNG purchased the natural gas lateral pipeline serving Plant McDonough Units 4 through 6 from Georgia Power at net book value, as approved by the Georgia PSC. In January 2020, SNG paid Georgia Power \$142 million, which included \$71 million contributed to SNG by Southern Company Gas for its proportionate share. During the interim period, Georgia Power received a discounted shipping rate to reflect the deferred consideration and SNG constructed an extension to the pipeline.

SCS, as agent for the traditional electric operating companies and Southern Power, has agreements with certain subsidiaries of Southern Company Gas to purchase natural gas. Natural gas purchases made under these agreements were immaterial for Alabama Power and Mississippi Power and as follows for Georgia Power and Southern Power in 2019, 2018, and 2017:

	Georgia Power	Southern Power
	<i>(in millions)</i>	
2019	\$ 4	\$ 64
2018	21	119
2017	22	119

Alabama Power and Mississippi Power jointly own Plant Greene County. The companies have an agreement under which Alabama Power operates Plant Greene County and Mississippi Power reimburses Alabama Power for its proportionate share of non-fuel operations and maintenance expenses, which totaled \$9 million, \$8 million, and \$9 million in 2019, 2018, and 2017, respectively. See Note 5 under "Joint Ownership Agreements" for additional information.

Alabama Power has an agreement with Gulf Power under which Alabama Power made transmission system upgrades to ensure firm delivery of energy under a non-affiliate PPA from a combined cycle plant located in Autauga County, Alabama. Under a related tariff, Alabama Power received \$11 million in each of 2018 and 2017. See Note 15 under "Southern Company" for information regarding the sale of Gulf Power.

Alabama Power has agreements with PowerSecure for services related to utility infrastructure construction, distributed energy, and energy efficiency projects. Costs for these services amounted to approximately \$7 million, \$24 million, and \$11 million in 2019, 2018, and 2017, respectively.

See Note 7 under "SEGCO" for information regarding Alabama Power's and Georgia Power's equity method investment in SEGCO and related affiliate purchased power costs, as well as Alabama Power's gas pipeline ownership agreement with SEGCO.

Georgia Power has a joint ownership agreement with Gulf Power under which Gulf Power owns a 25% portion of Plant Scherer Unit 3. Under this agreement, Georgia Power operates Plant Scherer Unit 3 and Gulf Power reimburses Georgia Power for its 25% proportionate share of the related non-fuel expenses, which were \$8 million and \$11 million in 2018 and 2017, respectively. See Note 5 under "Joint Ownership Agreements" and Note 15 under "Southern Company" for additional information.

Notes to Financial Statements

Mississippi Power has an agreement with Gulf Power under which Gulf Power owns a portion of Plant Daniel. Mississippi Power operates Plant Daniel and Gulf Power reimburses Mississippi Power for its proportionate share of all associated non-fuel operations and maintenance expenses, which totaled \$31 million in each of 2018 and 2017. See Note 5 under "Joint Ownership Agreements" and Note 15 under "Southern Company" for additional information.

Southern Power has several agreements with SCS for transmission services. Transmission services purchased by Southern Power from SCS totaled \$15 million, \$12 million, and \$13 million for 2019, 2018, and 2017, respectively, and were charged to other operations and maintenance expenses in Southern Power's consolidated statements of income. All charges were billed to Southern Power based on the Southern Company Open Access Transmission Tariff as filed with the FERC.

The traditional electric operating companies and Southern Power may jointly enter into various types of wholesale energy, natural gas, and certain other contracts, either directly or through SCS as agent. Each participating company may be jointly and severally liable for the obligations incurred under these agreements. See Note 14 under "Contingent Features" for additional information. Southern Power and the traditional electric operating companies generally settle amounts related to the above transactions on a monthly basis in the month following the performance of such services or the purchase or sale of electricity. See "Revenues – Southern Power" herein for additional information.

The traditional electric operating companies, Southern Power, and Southern Company Gas provide incidental services to and receive such services from other Southern Company subsidiaries which are generally minor in duration and amount. Except as described herein, the traditional electric operating companies, Southern Power, and Southern Company Gas neither provided nor received any material services to or from affiliates in any year presented.

Regulatory Assets and Liabilities

The traditional electric operating companies and natural gas distribution utilities are subject to accounting requirements for the effects of rate regulation. Regulatory assets represent probable future revenues associated with certain costs that are expected to be recovered from customers through the ratemaking process. Regulatory liabilities represent probable future reductions in revenues associated with amounts that are expected to be credited to customers through the ratemaking process.

In the event that a portion of a traditional electric operating company's or a natural gas distribution utility's operations is no longer subject to applicable accounting rules for rate regulation, such company would be required to write off to income or reclassify to AOCI related regulatory assets and liabilities that are not specifically recoverable through regulated rates. In addition, the traditional electric operating company or natural gas distribution utility would be required to determine if any impairment to other assets, including plant, exists and write down the assets, if impaired, to their fair values. All regulatory assets and liabilities are to be reflected in rates. See Note 2 for additional information including details of regulatory assets and liabilities reflected in the balance sheets for Southern Company, the traditional electric operating companies, and Southern Company Gas.

Revenues

The Registrants generate revenues from a variety of sources which are accounted for under various revenue accounting guidance, including ASC 606, lease, derivative, and regulatory accounting. Other than the timing of recognition of guaranteed and fixed billing arrangements at Southern Company Gas, the adoption of ASC 606 in 2018 had no impact on the timing or amount of revenue recognized under previous guidance. See Note 4 for information regarding the Registrants' adoption of ASC 606 and related disclosures.

Traditional Electric Operating Companies

The majority of the revenues of the traditional electric operating companies are generated from contracts with retail electric customers. Retail revenues recognized under ASC 606 are consistent with prior revenue recognition policies. These revenues, generated from the integrated service to deliver electricity when and if called upon by the customer, are recognized as a single performance obligation satisfied over time, at a tariff rate, and as electricity is delivered to the customer during the month. Unbilled revenues related to retail sales are accrued at the end of each fiscal period. Retail rates may include provisions to adjust billings for fluctuations in fuel costs, fuel hedging, the energy component of purchased power costs, and certain other costs. Revenues are adjusted for differences between these actual costs and amounts billed in current regulated rates. Under or over recovered regulatory clause revenues are recorded in the balance sheets and are recovered from or returned to customers, respectively, through adjustments to the billing factors. See Note 2 for additional information regarding regulatory matters of the traditional electric operating companies.

Notes to Financial Statements

Wholesale capacity revenues from PPAs are recognized either on a levelized basis over the appropriate contract period or the amount billable under the contract terms. Energy and other revenues are generally recognized as services are provided. The accounting for these revenues under ASC 606 is consistent with prior revenue recognition policies. The contracts for capacity and energy in a wholesale PPA have multiple performance obligations where the contract's total transaction price is allocated to each performance obligation based on the standalone selling price. The standalone selling price is primarily determined by the price charged to customers for the specific goods or services transferred with the performance obligations. Generally, the traditional electric operating companies recognize revenue as the performance obligations are satisfied over time as electricity is delivered to the customer or as generation capacity is available to the customer.

For both retail and wholesale revenues, the traditional electric operating companies generally have a right to consideration in an amount that corresponds directly with the value to the customer of the entity's performance completed to date and may recognize revenue in the amount to which the entity has a right to invoice and has elected to recognize revenue for its sales of electricity and capacity using the invoice practical expedient. In addition, payment for goods and services rendered is typically due in the subsequent month following satisfaction of the Registrants' performance obligation.

Southern Power

Southern Power sells capacity and energy at rates specified under contractual terms in long-term PPAs. These PPAs are accounted for as operating leases, non-derivatives, or normal sale derivatives. Capacity revenues from PPAs classified as operating leases are recognized on a straight-line basis over the term of the agreement. Energy revenues are recognized in the period the energy is delivered.

Southern Power's non-lease contracts commonly include capacity and energy which are considered separate performance obligations. In these contracts, the total transaction price is allocated to each performance obligation based on the standalone selling price. The standalone selling price is primarily determined by the price charged to customers for the specific goods or services transferred with the performance obligations. Generally, Southern Power recognizes revenue as the performance obligations are satisfied over time, as electricity is delivered to the customer or as generation capacity is made available to the customer.

Southern Power generally has a right to consideration in an amount that corresponds directly with the value to the customer of the entity's performance completed to date and may recognize revenue in the amount to which the entity has a right to invoice. In addition, payment for goods and services rendered is typically due in the subsequent month following satisfaction of Southern Power's performance obligation.

When multiple contracts exist with the same counterparty, the revenues from each contract are accounted for as separate arrangements.

Southern Power may also enter into contracts to sell short-term capacity in the wholesale electricity markets. These sales are generally classified as mark-to-market derivatives and net unrealized gains and losses on such contracts are recorded in wholesale revenues. See Note 14 and "Financial Instruments" herein for additional information.

Southern Company Gas

Gas Distribution Operations

Southern Company Gas records revenues when goods or services are provided to customers. Those revenues are based on rates approved by the state regulatory agencies of the natural gas distribution utilities. The natural gas market for Atlanta Gas Light was deregulated in 1997. Accordingly, Marketers, rather than a traditional utility, sell natural gas to end-use customers in Georgia and handle customer billing functions. As required by the Georgia PSC, Atlanta Gas Light bills Marketers in equal monthly installments for each residential, commercial, and industrial end-use customer's distribution costs as well as for capacity costs utilizing a seasonal rate design for the calculation of each residential end-use customer's annual straight-fixed-variable charge, which reflects the historic volumetric usage pattern for the entire residential class.

The majority of the revenues of Southern Company Gas are generated from contracts with natural gas distribution customers. Revenues from this integrated service to deliver gas when and if called upon by the customer is recognized as a single performance obligation satisfied over time and is recognized at a tariff rate as gas is delivered to the customer during the month.

The standalone selling price is primarily determined by the price charged to customers for the specific goods or services transferred with the performance obligations. Generally, Southern Company Gas recognizes revenue as the performance obligations are satisfied over time as natural gas is delivered to the customer. The performance obligations related to wholesale gas services are satisfied, and revenue is recognized, at a point in time when natural gas is delivered to the customer.

Notes to Financial Statements

Southern Company Gas generally has a right to consideration in an amount that corresponds directly with the value to the customer of the entity's performance completed to date and may recognize revenue in the amount to which the entity has a right to invoice and has elected to recognize revenue for its sales of natural gas using the invoice practical expedient. In addition, payment for goods and services rendered is typically due in the subsequent month following satisfaction of Southern Company Gas' performance obligation.

With the exception of Atlanta Gas Light, the natural gas distribution utilities have rate structures that include volumetric rate designs that allow the opportunity to recover certain costs based on gas usage. Revenues from sales and transportation services are recognized in the same period in which the related volumes are delivered to customers. Revenues from residential and certain commercial and industrial customers are recognized on the basis of scheduled meter readings. Additionally, unbilled revenues are recognized for estimated deliveries of gas not yet billed to these customers, from the last bill date to the end of the accounting period. For other commercial and industrial customers and for all wholesale customers, revenues are based on actual deliveries through the end of the period.

The tariffs for several of the natural gas distribution utilities include provisions which allow for the recognition of certain revenues prior to the time such revenues are billed to customers. These provisions are referred to as alternative revenue programs and provide for the recognition of certain revenues prior to billing, as long as the amounts recognized will be collected from customers within 24 months of recognition. These programs are as follows:

- *Weather normalization adjustments* – reduce customer bills when winter weather is colder than normal and increase customer bills when weather is warmer than normal and are included in the tariffs for Virginia Natural Gas, Chattanooga Gas, and, prior to its sale, Elizabethtown Gas;
- *Revenue normalization mechanisms* – mitigate the impact of conservation and declining customer usage and are contained in the tariffs for Virginia Natural Gas, Chattanooga Gas, Nicor Gas (effective November 1, 2019), and, prior to its sale, Elkton Gas; and
- *Revenue true-up adjustment* – included within the provisions of the GRAM program in which Atlanta Gas Light participates as a short-term alternative to formal rate case filings, the revenue true-up feature provides for a monthly positive (or negative) adjustment to record revenue in the amount of any variance to budgeted revenues, which are submitted and approved annually as a requirement of GRAM. Such adjustments are reflected in customer billings in a subsequent program year.

Wholesale Gas Services

Southern Company Gas nets revenues from energy and risk management activities with the associated costs. Profits from sales between segments are eliminated and are recognized as goods or services sold to end-use customers. Southern Company Gas records transactions that qualify as derivatives at fair value with changes in fair value recognized in earnings in the period of change and characterized as unrealized gains or losses. Gains and losses on derivatives held for energy trading purposes are presented on a net basis in revenue.

Gas Marketing Services

Southern Company Gas recognizes revenues from natural gas sales and transportation services in the same period in which the related volumes are delivered to customers and recognizes sales revenues from residential and certain commercial and industrial customers on the basis of scheduled meter readings. Southern Company Gas also recognizes unbilled revenues for estimated deliveries of gas not yet billed to these customers from the most recent meter reading date to the end of the accounting period. For other commercial and industrial customers and for all wholesale customers, revenues are based on actual deliveries during the period.

Southern Company Gas recognizes revenues on 12-month utility-bill management contracts as the lesser of cumulative earned or cumulative billed amounts. Prior to the sale of Pivotal Home Solutions in 2018, revenues for warranty and repair contracts were recognized on a straight-line basis over the contract term while revenues for maintenance services were recognized at the time such services were performed. See Note 15 under "Southern Company Gas – Sale of Pivotal Home Solutions" for additional information.

Concentration of Revenue

Southern Company, Alabama Power, Georgia Power, Mississippi Power (with the exception of its cost-based MRA electric tariffs described below), and Southern Company Gas each have a diversified base of customers and no single customer or industry comprises 10% or more of each company's revenues.

Mississippi Power serves long-term contracts with rural electric cooperative associations and municipalities located in southeastern Mississippi under cost-based MRA electric tariffs, which are subject to regulation by the FERC. The contracts with these wholesale customers represented 15.7% of Mississippi Power's total operating revenues in 2019 and are generally subject to 10-year rolling cancellation notices. Historically, these wholesale customers have acted as a group and any changes in contractual relationships for one customer are likely to be followed by the other wholesale customers.

Notes to Financial Statements

Significant portions of Southern Power's revenues have been derived from certain customers pursuant to PPAs. The following table shows the percentage of total revenues for Southern Power's top three customers for each of the years presented:

	2019	2018	2017
Georgia Power	9.0%	9.8%	11.3%
Duke Energy Corporation	N/A	6.8%	6.7%
Southern California Edison	6.8%	6.2%	N/A
Morgan Stanley Capital Group	4.9%	N/A	4.5%

On January 29, 2019, Pacific Gas & Electric Company (PG&E) filed petitions to reorganize under Chapter 11 of the U.S. Bankruptcy Code. Southern Power, together with its noncontrolling partners, owns four solar facilities where PG&E is the energy off-taker for approximately 207 MWs of capacity under long-term PPAs. PG&E is also the transmission provider for these four facilities and two of Southern Power's other solar facilities. At December 31, 2019, Southern Power had outstanding accounts receivables due from PG&E of \$2 million related to the PPAs and \$33 million related to the transmission interconnections (of which \$27 million is classified in receivables – other and \$6 million is classified in other deferred charges and assets). Subsequent to December 31, 2019, Southern Power received \$15 million in accordance with a November 2019 bankruptcy court order granting payment of transmission interconnections for amounts due and owing. Southern Power continues to evaluate the recoverability of its investments in these solar facilities under various scenarios, including selling the related energy into the competitive markets, and has concluded that these solar facilities are not impaired. PG&E has continued to perform under the terms of the PPAs. Southern Power does not expect a material impact to its financial statements if, as a result of the bankruptcy proceedings, PG&E does not perform in accordance with the PPAs or the terms of the PPAs are renegotiated; however, the ultimate outcome of this matter cannot be determined at this time.

Fuel Costs

Fuel costs for the traditional electric operating companies and Southern Power are expensed as the fuel is used. Fuel expense generally includes fuel transportation costs and the cost of purchased emissions allowances as they are used. For Alabama Power and Georgia Power, fuel expense also includes the amortization of the cost of nuclear fuel. For the traditional electric operating companies, fuel costs also include gains and/or losses from fuel-hedging programs as approved by their respective state PSCs.

Cost of Natural Gas

Excluding Atlanta Gas Light, which does not sell natural gas to end-use customers, Southern Company Gas charges its utility customers for natural gas consumed using natural gas cost recovery mechanisms set by the applicable state regulatory agencies. Under these mechanisms, all prudently-incurred natural gas costs are passed through to customers without markup, subject to regulatory review. Southern Company Gas defers or accrues the difference between the actual cost of natural gas and the amount of commodity revenue earned in a given period such that no operating income is recognized related to these costs. The deferred or accrued amount is either billed or refunded to customers prospectively through adjustments to the commodity rate. Deferred and accrued natural gas costs are included in the balance sheets as regulatory assets and regulatory liabilities, respectively.

Southern Company Gas' gas marketing services' customers are charged for actual or estimated natural gas consumed. Within cost of natural gas, Southern Company Gas also includes costs of lost and unaccounted for gas, adjustments to reduce the value of inventories to market value, and gains and losses associated with certain derivatives.

Income Taxes

The Registrants use the liability method of accounting for deferred income taxes and provide deferred income taxes for all significant income tax temporary differences. In accordance with regulatory requirements, deferred federal ITCs for the traditional electric operating companies are deferred and amortized over the average life of the related property, with such amortization normally applied as a credit to reduce depreciation and amortization in the statements of income. Southern Power's and the natural gas distribution utilities' deferred federal ITCs, as well as certain state ITCs for Nicor Gas, are deferred and amortized to income tax expense over the life of the respective asset.

Notes to Financial Statements

Under current tax law, certain projects at Southern Power related to the construction of renewable facilities are eligible for federal ITCs. Southern Power estimates eligible costs which, as they relate to acquisitions, may not be finalized until the allocation of the purchase price to assets has been finalized. Southern Power applies the deferred method to ITCs. Under the deferred method, the ITCs are recorded as a deferred credit and amortized to income tax expense over the life of the respective asset. Furthermore, the tax basis of the asset is reduced by 50% of the ITCs received, resulting in a net deferred tax asset. Southern Power has elected to recognize the tax benefit of this basis difference as a reduction to income tax expense in the year in which the plant reaches commercial operation. State ITCs are recognized as an income tax benefit in the period in which the credits are generated. In addition, certain projects are eligible for federal and state PTCs, which are recognized as an income tax benefit based on KWH production.

Federal ITCs and PTCs, as well as state ITCs and other state tax credits available to reduce income taxes payable, were not fully utilized in 2019 and will be carried forward and utilized in future years. In addition, Southern Company is expected to have various state net operating loss (NOL) carryforwards for certain of its subsidiaries, which would result in income tax benefits in the future, if utilized. See Note 10 under "Current and Deferred Income Taxes – Tax Credit Carryforwards" and " – Net Operating Loss Carryforwards" for additional information.

The Registrants recognize tax positions that are "more likely than not" of being sustained upon examination by the appropriate taxing authorities. See Note 10 under "Unrecognized Tax Benefits" for additional information.

Other Taxes

Taxes imposed on and collected from customers on behalf of governmental agencies are presented net on the Registrants' statements of income and are excluded from the transaction price in determining the revenue related to contracts with a customer accounted for under ASC 606.

Southern Company Gas is taxed on its gas revenues by various governmental authorities, but is allowed to recover these taxes from its customers. Revenue taxes imposed on the natural gas distribution utilities are recorded at the amount charged to customers, which may include a small administrative fee, as operating revenues, and the related taxes imposed on Southern Company Gas are recorded as operating expenses on the statements of income. Revenue taxes included in operating expenses were \$114 million, \$111 million, and \$98 million in 2019, 2018, and 2017, respectively.

Allowance for Funds Used During Construction and Interest Capitalized

The traditional electric operating companies and the natural gas distribution utilities, with the exception of Elizabethtown Gas and Elkton Gas prior to their sales, record AFUDC, which represents the estimated debt and equity costs of capital funds that are necessary to finance the construction of new regulated facilities. While cash is not realized currently, AFUDC increases the revenue requirement and is recovered over the service life of the asset through a higher rate base and higher depreciation. The equity component of AFUDC is not taxable.

Interest related to financing the construction of new facilities at Southern Power and new facilities not included in the traditional electric operating companies' and Southern Company Gas' regulated rates is capitalized in accordance with standard interest capitalization requirements.

Total AFUDC and interest capitalized for the Registrants in 2019, 2018, and 2017 was as follows:

	Southern Company	Alabama Power	Georgia Power ^(*)	Mississippi Power	Southern Power	Southern Company Gas
				(in millions)		
2019	\$202	\$71	\$103	\$ —	\$15	\$13
2018	210	84	94	—	17	14
2017	249	54	63	72	11	19

(*) See Note 2 under "Georgia Power – Nuclear Construction" for information on the inclusion of a portion of construction costs related to Plant Vogtle Units 3 and 4 in Georgia Power's rate base.

Notes to Financial Statements

The average AFUDC composite rates for 2019, 2018, and 2017 for the traditional electric operating companies and the natural gas distribution utilities were as follows:

	2019	2018	2017
Alabama Power	8.4%	8.3%	8.3%
Georgia Power ^(*)	6.9%	7.3%	5.6%
Mississippi Power	7.3%	3.3%	6.7%
Southern Company Gas:			
Atlanta Gas Light	7.8%	7.9%	8.1%
Chattanooga Gas	7.1%	7.4%	7.4%
Nicor Gas	2.3%	2.1%	1.2%

(*) Excludes AFUDC related to the construction of Plant Vogtle Units 3 and 4. See Note 2 under "Georgia Power – Nuclear Construction" for additional information.

Impairment of Long-Lived Assets

The Registrants evaluate long-lived assets and finite-lived intangible assets for impairment when events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. The determination of whether an impairment has occurred is based on either a specific regulatory disallowance, a sales transaction price that is less than the asset group's carrying value, or an estimate of undiscounted future cash flows attributable to the asset group, as compared with the carrying value of the assets. If an impairment has occurred, the amount of the impairment recognized is determined by either the amount of regulatory disallowance or by estimating the fair value of the assets and recording a loss if the carrying value is greater than the fair value. For assets identified as held for sale, the carrying value is compared to the estimated fair value less the cost to sell in order to determine if an impairment loss is required. Until the assets are disposed of, their estimated fair value is re-evaluated when circumstances or events change. See Note 3 under "Other Matters – Southern Company" and " – Southern Company Gas" and Note 15 under "Southern Company Gas – Proposed Sale of Pivotal LNG and Atlantic Coast Pipeline" for information regarding impairment charges recorded in 2019 and Note 15 under "Southern Power" for information regarding impairment charges recorded at Southern Power in 2018. Also see "Revenues" herein for additional information.

Goodwill and Other Intangible Assets and Liabilities

Southern Power's intangible assets consist primarily of certain PPAs acquired, which are amortized over the term of the respective PPA. Southern Company Gas' goodwill and other intangible assets and liabilities primarily relate to its 2016 acquisition by Southern Company. In addition to these items, Southern Company's goodwill and other intangible assets also relate to its 2016 acquisition of PowerSecure.

Goodwill is not amortized, but is subject to an annual impairment test during the fourth quarter of each year, or more frequently if impairment indicators arise, as discussed below. Southern Company and Southern Company Gas each evaluated its goodwill in the fourth quarter 2019 and determined no additional impairment was required.

A goodwill impairment charge of \$32 million was recorded in the second quarter 2019 in contemplation of the July 22, 2019 sale of PowerSecure's utility infrastructure services business. In the third quarter 2019, impairment charges of \$2 million and \$3 million were recorded to goodwill and other intangible assets, net, respectively, in contemplation of the December 31, 2019 sale of PowerSecure's lighting business. See Note 15 under "Southern Company" for additional information.

At December 31, 2019 and 2018, goodwill was as follows:

	At December 31, 2019	At December 31, 2018
	<i>(in millions)</i>	
Southern Company	\$5,280	\$5,315
Southern Company Gas:		
Gas distribution operations	\$4,034	\$4,034
Gas marketing services	981	981
Southern Company Gas total	\$5,015	\$5,015

Notes to Financial Statements

At December 31, 2019 and 2018, other intangible assets were as follows:

	At December 31, 2019			At December 31, 2018		
	Gross Carrying Amount	Accumulated Amortization	Other Intangible Assets, Net	Gross Carrying Amount	Accumulated Amortization	Other Intangible Assets, Net
	<i>(in millions)</i>			<i>(in millions)</i>		
Southern Company						
Other intangible assets subject to amortization:						
Customer relationships ^(a)	\$212	\$(116)	\$ 96	\$223	\$ (94)	\$129
Trade names ^(a)	64	(25)	39	70	(21)	49
Storage and transportation contracts	64	(62)	2	64	(54)	10
PPA fair value adjustments ^(b)	390	(69)	321	405	(61)	344
Other	11	(8)	3	11	(5)	6
Total other intangible assets subject to amortization	\$741	\$(280)	\$461	\$773	\$(235)	\$538
Other intangible assets not subject to amortization:						
Federal Communications Commission licenses	75	—	75	75	—	75
Total other intangible assets	\$816	\$(280)	\$536	\$848	\$(235)	\$613
Southern Power						
Other intangible assets subject to amortization:						
PPA fair value adjustments ^(b)	\$390	\$ (69)	\$321	\$405	\$ (61)	\$344
Southern Company Gas						
Other intangible assets subject to amortization:						
Gas marketing services						
Customer relationships	\$156	\$(104)	\$ 52	\$156	\$ (84)	\$ 72
Trade names	26	(10)	16	26	(7)	19
Wholesale gas services						
Storage and transportation contracts	64	(62)	2	64	(54)	10
Total other intangible assets subject to amortization	\$246	\$(176)	\$ 70	\$246	\$(145)	\$101

(a) The decrease in the gross carrying amount during 2019 primarily reflects the sales of two PowerSecure business units. See Note 15 for additional information.

(b) The decrease in the gross carrying amount during 2019 reflects the sale of Plant Nacogdoches, partially offset by additional PPA fair value adjustments related to the acquisition of DSGP. See Note 15 under "Southern Power" for additional information.

Amortization associated with other intangible assets in 2019, 2018, and 2017 was as follows:

	2019	2018	2017
	<i>(in millions)</i>		
Southern Company ^(a)	\$61	\$89	\$124
Southern Power ^(b)	19	25	25
Southern Company Gas:			
Gas marketing services	\$23	\$32	\$ 54
Wholesale gas services ^(b)	8	20	32
Southern Company Gas total	\$31	\$52	\$ 86

(a) Includes \$27 million, \$45 million, and \$57 million in 2019, 2018, and 2017, respectively, recorded as a reduction to operating revenues.

(b) Recorded as a reduction to operating revenues.

Notes to Financial Statements

At December 31, 2019, the estimated amortization associated with other intangible assets for the next five years is as follows:

	2020	2021	2022	2023	2024
			(in millions)		
Southern Company ^(*)	\$48	\$42	\$38	\$37	\$35
Southern Power ^(*)	20	20	20	20	20
Southern Company Gas	19	13	10	9	7

(*) Excludes amounts related to held for sale assets. See Note 15 under "Southern Power – Sales of Natural Gas and Biomass Plants" for additional information.

Intangible liabilities of \$91 million recorded under acquisition accounting for transportation contracts at Southern Company Gas were fully amortized as of December 31, 2019.

Acquisition Accounting

At the time of an acquisition, management will assess whether acquired assets and activities meet the definition of a business. For acquisitions that meet the definition of a business, operating results from the date of acquisition are included in the acquiring entity's financial statements. The purchase price, including any contingent consideration, is allocated based on the fair value of the identifiable assets acquired and liabilities assumed (including any intangible assets). Assets acquired that do not meet the definition of a business are accounted for as an asset acquisition. The purchase price of each asset acquisition is allocated based on the relative fair value of assets acquired.

Determining the fair value of assets acquired and liabilities assumed requires management judgment and management may engage independent valuation experts to assist in this process. Fair values are determined by using market participant assumptions and typically include the timing and amounts of future cash flows, incurred construction costs, the nature of acquired contracts, discount rates, power market prices, and expected asset lives. Any due diligence or transition costs incurred for potential or successful acquisitions are expensed as incurred.

Historically, contingent consideration primarily relates to fixed amounts due to the seller once an acquired construction project is placed in service. For contingent consideration with variable payments, management fair values the arrangement with any changes recorded in the statements of income. See Note 13 for additional fair value information.

Development Costs

For Southern Power, development costs are capitalized once a project is probable of completion, primarily based on a review of its economics and operational feasibility, as well as the status of power off-take agreements and regulatory approvals, if applicable. Southern Power's capitalized development costs are included in CWIP on the balance sheets. All of Southern Power's development costs incurred prior to the determination that a project is probable of completion are expensed as incurred and included in other operations and maintenance expense in the statements of income. If it is determined that a project is no longer probable of completion, any of Southern Power's capitalized development costs are expensed and included in other operations and maintenance expense in the statements of income.

Long-Term Service Agreements

The traditional electric operating companies and Southern Power have entered into LTSAs for the purpose of securing maintenance support for certain of their generating facilities. The LTSAs cover all planned inspections on the covered equipment, which generally includes the cost of all labor and materials. The LTSAs also obligate the counterparties to cover the costs of unplanned maintenance on the covered equipment subject to limits and scope specified in each contract.

Payments made under the LTSAs for the performance of any planned inspections or unplanned capital maintenance are recorded in the statements of cash flows as investing activities. Receipts of major parts into materials and supplies inventory prior to planned inspections are treated as noncash transactions in the statements of cash flows. Any payments made prior to the work being performed are recorded as prepayments in other current assets and noncurrent assets on the balance sheets. At the time work is performed, an appropriate amount is accrued for future payments or transferred from the prepayment and recorded as property, plant, and equipment or expensed.

Notes to Financial Statements

Transmission Receivables/Prepayments

As a result of Southern Power's acquisition and construction of generating facilities, Southern Power has transmission receivables and/or prepayments representing the portion of interconnection network and transmission upgrades that will be reimbursed to Southern Power. Upon completion of the related project, transmission costs are generally reimbursed by the interconnection provider within a five-year period and the receivable/prepayments are reduced as payments or services are received.

Cash and Cash Equivalents

For purposes of the financial statements, temporary cash investments are considered cash equivalents. Temporary cash investments are securities with original maturities of 90 days or less.

Restricted Cash

At December 31, 2019 and 2018, Southern Company Gas had restricted cash held as collateral for worker's compensation, life insurance, and long-term disability insurance. At December 31, 2018, Georgia Power had restricted cash related to the redemption of certain pollution control revenue bonds in January 2019. See Note 8 under "Long-term Debt" for additional information.

The following tables provide a reconciliation of cash, cash equivalents, and restricted cash reported within the balance sheets that total to the amounts shown in the statements of cash flows for the Registrants that had restricted cash at December 31, 2019 and/or 2018:

	Southern Company	Southern Company Gas
	<i>(in millions)</i>	
At December 31, 2019		
Cash and cash equivalents	\$1,975	\$46
Restricted cash:		
Other accounts and notes receivable	3	3
Total cash, cash equivalents, and restricted cash	\$1,978	\$49

	Southern Company	Georgia Power	Southern Company Gas
	<i>(in millions)</i>		
At December 31, 2018			
Cash and cash equivalents	\$1,396	\$ 4	\$64
Cash and cash equivalents classified as assets held for sale	9	—	—
Restricted cash:			
Restricted cash	—	108	—
Other accounts and notes receivable	114	—	6
Total cash, cash equivalents, and restricted cash	\$1,519	\$112	\$70

Storm Damage Reserves

Each traditional electric operating company maintains a reserve to cover or is allowed to defer and recover the cost of damages from major storms to its transmission and distribution lines and, for Mississippi Power, the cost of uninsured damages to its generation facilities and other property. Alabama Power and Mississippi Power also have authority based on orders from their state PSCs to accrue certain additional amounts as circumstances warrant. Alabama Power recorded an additional accrual of \$84 million in 2019 and no such additional accruals in 2018 or 2017. There were no such additional accruals for Mississippi Power in any year presented. In accordance with their respective state PSC orders, the traditional electric operating companies accrued the following amounts related to storm damage reserves in 2019, 2018, and 2017:

	Southern Company ^{(a)(b)}	Alabama Power ^(b)	Georgia Power	Mississippi Power
	<i>(in millions)</i>			
2019	\$170	\$139	\$30	\$1
2018	74	16	30	1
2017	41	4	30	3

(a) Includes accruals at Gulf Power of \$26.9 million in 2018 and \$3.5 million in 2017. See Note 15 under "Southern Company" for information regarding the sale of Gulf Power.

(b) Includes \$39 million applied in 2019 to Alabama Power's NDR from its remaining excess deferred income tax regulatory liability balance in accordance with an Alabama PSC order.

Notes to Financial Statements

See Note 2 under "Alabama Power – Rate NDR," "Georgia Power – Storm Damage Recovery," and "Mississippi Power – System Restoration Rider" for additional information regarding each company's storm damage reserve.

Leveraged Leases

A subsidiary of Southern Holdings has several leveraged lease agreements, with original terms ranging up to 45 years, which relate to international and domestic energy generation, distribution, and transportation assets. Southern Company receives federal income tax deductions for depreciation and amortization, as well as interest on long-term debt related to these investments. Southern Company reviews all important lease assumptions at least annually, or more frequently if events or changes in circumstances indicate that a change in assumptions has occurred or may occur. These assumptions include the effective tax rate, the residual value, the credit quality of the lessees, and the timing of expected tax cash flows. See Note 3 under "Other Matters – Southern Company" for information regarding an impairment charge associated with one of the leveraged leases.

On December 30, 2019, Southern Company completed the sale of one of its leveraged lease investments for approximately \$20 million.

Southern Company's net investment in domestic and international leveraged leases consists of the following at December 31:

	2019	2018
	<i>(in millions)</i>	
Net rentals receivable	\$1,410	\$1,563
Unearned income	(622)	(765)
Investment in leveraged leases	788	798
Deferred taxes from leveraged leases	(238)	(255)
Net investment in leveraged leases	\$ 550	\$ 543

A summary of the components of income from the leveraged leases follows:

	2019	2018	2017
	<i>(in millions)</i>		
Pretax leveraged lease income	\$11	\$25	\$25
Net impact of Tax Reform Legislation	—	—	48
Income tax expense	—	(6)	(9)
Net leveraged lease income	\$11	\$19	\$64

Materials and Supplies

Materials and supplies for the traditional electric operating companies generally includes the average cost of transmission, distribution, and generating plant materials. Materials and supplies for Southern Company Gas generally includes propane gas inventory, fleet fuel, and other materials and supplies. Materials and supplies for Southern Power generally includes the average cost of generating plant materials.

Materials are recorded to inventory when purchased and then expensed or capitalized to property, plant, and equipment, as appropriate, at weighted average cost when installed. In addition, certain major parts are recorded as inventory when acquired and then capitalized at cost when installed to property, plant, and equipment.

Fuel Inventory

Fuel inventory for the traditional electric operating companies includes the average cost of coal, natural gas, oil, transportation, and emissions allowances. Fuel inventory for Southern Power, which is included in other current assets, includes the average cost of oil, natural gas, biomass, and emissions allowances. Fuel is recorded to inventory when purchased and then expensed, at weighted average cost, as used. Emissions allowances granted by the EPA are included in inventory at zero cost. The traditional electric operating companies recover fuel expense through fuel cost recovery rates approved by each state PSC or, for wholesale rates, the FERC.

Natural Gas for Sale

With the exception of Nicor Gas, the natural gas distribution utilities record natural gas inventories on a WACOG basis. In Georgia's deregulated, competitive environment, Marketers sell natural gas to firm end-use customers at market-based prices. On a monthly basis, Atlanta Gas Light assigns to Marketers the majority of the pipeline storage services that it has under contract, along with a corresponding amount of inventory. Atlanta Gas Light retains and manages a portion of its pipeline storage assets and related natural gas inventories for system balancing and to serve system demand.

Notes to Financial Statements

Nicor Gas' natural gas inventory is carried at cost on a LIFO basis. Inventory decrements occurring during the year that are restored prior to year end are charged to cost of natural gas at the estimated annual replacement cost. Inventory decrements that are not restored prior to year end are charged to cost of natural gas at the actual LIFO cost of the inventory layers liquidated. The cost of natural gas, including inventory costs, is recovered from customers under a purchased gas recovery mechanism adjusted for differences between actual costs and amounts billed; therefore, LIFO liquidations have no impact on Southern Company's or Southern Company Gas' net income. At December 31, 2019, the Nicor Gas LIFO inventory balance was \$161 million. Based on the average cost of gas purchased in December 2019, the estimated replacement cost of Nicor Gas' inventory at December 31, 2019 was \$214 million.

Southern Company Gas' gas marketing services, wholesale gas services, and all other segments record inventory at LOCOM, with cost determined on a WACOG basis. For these segments, Southern Company Gas evaluates the weighted average cost of its natural gas inventories against market prices to determine whether any declines in market prices below the WACOG are other than temporary. For any declines considered to be other than temporary, Southern Company Gas recorded LOCOM adjustments to cost of natural gas to reduce the value of its natural gas inventories to market value. LOCOM adjustments for wholesale gas services were \$21 million and \$10 million during 2019 and 2018, respectively, and immaterial for 2017.

Energy Marketing Receivables and Payables

Southern Company Gas' wholesale gas services provides services to retail gas marketers, wholesale gas marketers, utility companies, and industrial customers. These counterparties utilize netting agreements that enable wholesale gas services to net receivables and payables by counterparty upon settlement. Southern Company Gas' wholesale gas services also nets across product lines and against cash collateral, provided the netting and cash collateral agreements include such provisions. While the amounts due from, or owed to, wholesale gas services' counterparties are settled net, they are recorded on a gross basis in the balance sheets as energy marketing receivables and energy marketing payables.

Southern Company Gas' wholesale gas services has trade and credit contracts that contain minimum credit rating requirements. These credit rating requirements typically give counterparties the right to suspend or terminate credit if Southern Company Gas' credit ratings are downgraded to non-investment grade status. Under such circumstances, Southern Company Gas' wholesale gas services would need to post collateral to continue transacting business with some of its counterparties. As of December 31, 2019 and 2018, the required collateral in the event of a credit rating downgrade was \$11 million and \$30 million, respectively.

Credit policies were established to determine and monitor the creditworthiness of counterparties, including requirements to post collateral or other credit security, as well as the quality of pledged collateral. Collateral or credit security is most often in the form of cash or letters of credit from an investment-grade financial institution, but may also include cash or U.S. government securities held by a trustee. When Southern Company Gas' wholesale gas services is engaged in more than one outstanding derivative transaction with the same counterparty and it also has a legally enforceable netting agreement with that counterparty, the "net" mark-to-market exposure represents the netting of the positive and negative exposures with that counterparty combined with a reasonable measure of Southern Company Gas' credit risk. Southern Company Gas' wholesale gas services also uses other netting agreements with certain counterparties with whom it conducts significant transactions.

See "Concentration of Credit Risk" herein for additional information.

Provision for Uncollectible Accounts

The customers of the traditional electric operating companies and the natural gas distribution utilities are billed monthly. For the majority of receivables, a provision for uncollectible accounts is established based on historical collection experience and other factors. For the remaining receivables, if the company is aware of a specific customer's inability to pay, a provision for uncollectible accounts is recorded to reduce the receivable balance to the amount reasonably expected to be collected. If circumstances change, the estimate of the recoverability of accounts receivable could change as well. Circumstances that could affect this estimate include, but are not limited to, customer credit issues, customer deposits, and general economic conditions. Customers' accounts are written off once they are deemed to be uncollectible. For all periods presented, uncollectible accounts averaged less than 1% of revenues for each Registrant.

Credit risk exposure at Nicor Gas is mitigated by a bad debt rider approved by the Illinois Commission. The bad debt rider provides for the recovery from (or refund to) customers of the difference between Nicor Gas' actual bad debt experience on an annual basis and the benchmark bad debt expense used to establish its base rates for the respective year.

Notes to Financial Statements

Concentration of Credit Risk

Southern Company Gas' wholesale gas services business has a concentration of credit risk for services it provides to its counterparties. This credit risk is generally concentrated in 20 of its counterparties and is measured by 30-day receivable exposure plus forward exposure. Counterparty credit risk is evaluated using a S&P equivalent credit rating, which is determined by a process of converting the lower of the S&P or Moody's rating to an internal rating ranging from 9 to 1, with 9 being equivalent to AAA/Aaa by S&P and Moody's, respectively, and 1 being equivalent to D/Default by S&P and Moody's, respectively. A counterparty that does not have an external rating is assigned an internal rating based on the strength of its financial ratios. As of December 31, 2019, the top 20 counterparties represented 59%, or \$218 million, of the total counterparty exposure and had a weighted average S&P equivalent rating of A-

Concentration of credit risk occurs at Atlanta Gas Light for amounts billed for services and other costs to its customers, which consist of 16 Marketers in Georgia (including SouthStar). The credit risk exposure to Marketers varies seasonally, with the lowest exposure in the non-peak summer months and the highest exposure in the peak winter months. Marketers are responsible for the retail sale of natural gas to end-use customers in Georgia. The functions of the retail sale of gas include the purchase and sale of natural gas, customer service, billings, and collections. The provisions of Atlanta Gas Light's tariff allow Atlanta Gas Light to obtain credit security support in an amount equal to a minimum of two times a Marketer's highest month's estimated bill from Atlanta Gas Light.

Financial Instruments

The traditional electric operating companies and Southern Power use derivative financial instruments to limit exposure to fluctuations in interest rates, the prices of certain fuel purchases, electricity purchases and sales, and occasionally foreign currency exchange rates. Southern Company Gas uses derivative financial instruments to limit exposure to fluctuations in natural gas prices, weather, interest rates, and commodity prices. All derivative financial instruments are recognized as either assets or liabilities on the balance sheets (included in "Other" or shown separately as "Risk Management Activities") and are measured at fair value. See Note 13 for additional information regarding fair value. Substantially all of the traditional electric operating companies' and Southern Power's bulk energy purchases and sales contracts that meet the definition of a derivative are excluded from fair value accounting requirements because they qualify for the "normal" scope exception, and are accounted for under the accrual method. Derivative contracts that qualify as cash flow hedges of anticipated transactions or are recoverable through the traditional electric operating companies' and the natural gas distribution utilities' fuel-hedging programs result in the deferral of related gains and losses in AOCI or regulatory assets and liabilities, respectively, until the hedged transactions occur. For 2017, ineffectiveness arising from cash flow hedges was recognized in net income. Upon the adoption of ASU No. 2017-12, *Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities* (ASU 2017-12) in 2018, ineffectiveness is no longer separately measured and recorded in earnings. Other derivative contracts that qualify as fair value hedges are marked to market through current period income and are recorded on a net basis in the statements of income. Cash flows from derivatives are classified on the statements of cash flows in the same category as the hedged item. See Note 14 for additional information regarding derivatives.

The Registrants offset fair value amounts recognized for multiple derivative instruments executed with the same counterparty under netting arrangements. The Registrants had no outstanding collateral repayment obligations or rights to reclaim collateral arising from derivative instruments recognized at December 31, 2019.

The Registrants are exposed to potential losses related to financial instruments in the event of counterparties' nonperformance. The Registrants have established risk management policies and controls to determine and monitor the creditworthiness of counterparties in order to mitigate their exposure to counterparty credit risk.

Southern Company Gas

Southern Company Gas enters into weather derivative contracts as economic hedges of natural gas revenues in the event of warmer-than-normal weather in the Heating Season. Exchange-traded options are carried at fair value, with changes reflected in natural gas revenues. Non-exchange-traded options are accounted for using the intrinsic value method. Changes in the intrinsic value for non-exchange-traded contracts are also reflected in natural gas revenues in the statements of income.

Wholesale gas services purchases natural gas for storage when the current market price paid to buy and transport natural gas plus the cost to store and finance the natural gas is less than the market price that can be received in the future, resulting in positive net natural gas revenues. NYMEX futures and OTC contracts are used to sell natural gas at that future price to substantially protect the natural gas revenues that will ultimately be realized when the stored natural gas is sold. Southern Company Gas enters into transactions to secure transportation capacity between delivery points in order to serve its customers and various markets. NYMEX futures and OTC

Notes to Financial Statements

contracts are used to capture the price differential or spread between the locations served by the capacity in order to substantially protect the natural gas revenues that will ultimately be realized when the physical flow of natural gas between delivery points occurs. These contracts generally meet the definition of derivatives and are carried at fair value on the balance sheets, with changes in fair value recorded in natural gas revenues on the statements of income in the period of change. These contracts are not designated as hedges for accounting purposes.

The purchase, transportation, storage, and sale of natural gas are accounted for on a weighted average cost or accrual basis, as appropriate, rather than on the fair value basis utilized for the derivatives used to mitigate the natural gas price risk associated with the storage and transportation portfolio. Monthly demand charges are incurred for the contracted storage and transportation capacity and payments associated with asset management agreements, and these demand charges and payments are recognized on the statements of income in the period they are incurred. This difference in accounting methods can result in volatility in reported earnings, even though the economic margin is substantially unchanged from the dates the transactions were consummated.

Comprehensive Income

The objective of comprehensive income is to report a measure of all changes in common stock equity of an enterprise that result from transactions and other economic events of the period other than transactions with owners. Comprehensive income consists of net income attributable to the Registrant, changes in the fair value of qualifying cash flow hedges, and reclassifications for amounts included in net income. Comprehensive income also consists of certain changes in pension and other postretirement benefit plans for Southern Company, Southern Power, and Southern Company Gas.

AOCI (loss) balances, net of tax effects, for Southern Company, Southern Power, and Southern Company Gas were as follows:

	Qualifying Hedges	Pension and Other Postretirement Benefit Plans	Accumulated Other Comprehensive Income (Loss)
	<i>(in millions)</i>		
Southern Company			
Balance at December 31, 2018	\$(121)	\$ (82)	\$(203)
Current period change	(58)	(60)	(118)
Balance at December 31, 2019	\$(179)	\$(142)	\$(321)
Southern Power			
Balance at December 31, 2018	\$ 36	\$ (20)	\$ 16
Current period change	(25)	(17)	(42)
Balance at December 31, 2019	\$ 11	\$ (37)	\$ (26)
Southern Company Gas			
Balance at December 31, 2018	\$ (3)	\$ 29	\$ 26
Current period change	(3)	(16)	(19)
Balance at December 31, 2019	\$ (6)	\$ 13	\$ 7

Variable Interest Entities

The Registrants may hold ownership interests in a number of business ventures with varying ownership structures. Partnership interests and other variable interests are evaluated to determine if each entity is a VIE. The primary beneficiary of a VIE is required to consolidate the VIE when it has both the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and the obligation to absorb losses or the right to receive benefits from the VIE that could potentially be significant to the VIE. See Note 7 for additional information regarding VIEs.

Alabama Power has established a wholly-owned trust to issue preferred securities. See Note 8 under "Long-term Debt" for additional information. However, Alabama Power is not considered the primary beneficiary of the trust. Therefore, the investment in the trust is reflected as other investments, and the related loan from the trust is reflected as long-term debt in Alabama Power's balance sheets.

Notes to Financial Statements

2. REGULATORY MATTERS

Southern Company

Regulatory Assets and Liabilities

Regulatory assets and (liabilities) reflected in the consolidated balance sheets of Southern Company at December 31, 2019 and 2018 relate to:

	2019	2018	Note
		<i>(in millions)</i>	
Retiree benefit plans	\$ 4,423	\$ 3,658	(a,o)
Asset retirement obligations-asset	4,381	2,933	(b,o)
Remaining net book value of retired assets	1,275	211	(c)
Deferred income tax charges	803	799	(b,n)
Property damage reserves-asset	410	416	(d)
Environmental remediation-asset	349	366	(e,o)
Loss on reacquired debt	323	346	(f)
Under recovered regulatory clause revenues	254	407	(g)
Vacation pay	186	182	(h,o)
Long-term debt fair value adjustment	107	121	(i)
Other regulatory assets	492	581	(j)
Deferred income tax credits	(6,301)	(6,455)	(b,n)
Other cost of removal obligations	(2,084)	(2,297)	(b)
Customer refunds	(285)	(293)	(k)
Over recovered regulatory clause revenues	(205)	(47)	(g)
Property damage reserves-liability	(204)	(76)	(l)
Other regulatory liabilities	(86)	(132)	(m)
Total regulatory assets (liabilities), net	\$ 3,838	\$ 720	

Note: Unless otherwise noted, the recovery and amortization periods for these regulatory assets and (liabilities) are approved by the respective PSC or regulatory agency and are as follows:

- (a) Recovered and amortized over the average remaining service period, which may range up to 15 years. See Note 11 for additional information.
- (b) AROs and other cost of removal obligations are recorded, deferred income tax assets are recovered, and deferred income tax liabilities are amortized over the related property lives, which may range up to 80 years. Asset retirement and removal liabilities will be settled and trued up following completion of the related activities. Included in the deferred income tax assets is \$23 million for the retiree Medicare drug subsidy, which is being recovered and amortized through 2027.
- (c) Amortized over periods not exceeding 18 years.
- (d) Effective January 1, 2020, Georgia Power is recovering approximately \$213 million annually for storm damage. See "Georgia Power – Rate Plans – 2019 ARP" and " – Storm Damage Recovery" herein for additional information.
- (e) Recovered through environmental cost recovery mechanisms when the remediation work is performed. See Note 3 for additional information.
- (f) Recovered over either the remaining life of the original issue or, if refinanced, over the remaining life of the new issue. At December 31, 2019, the remaining amortization periods do not exceed 34 years.
- (g) Recorded and recovered or amortized over periods generally not exceeding six years.
- (h) Recorded as earned by employees and recovered as paid, generally within one year.
- (i) Recovered over the remaining life of the original debt issuances at acquisition, which range up to 19 years as of December 31, 2019.
- (j) Comprised of numerous immaterial components including nuclear outage costs, fuel-hedging losses, cancelled construction projects, property tax, and other miscellaneous assets. These costs are amortized over remaining periods generally not exceeding eight years as of December 31, 2019.
- (k) At December 31, 2019 and 2018, primarily includes approximately \$53 million and \$109 million, respectively, at Alabama Power and \$110 million and \$100 million, respectively, at Georgia Power as a result of each company exceeding its allowed retail return range, as well as approximately \$105 million and \$55 million, respectively, pursuant to the Georgia Power Tax Reform Settlement Agreement. See "Alabama Power – Rate RSE" and "Georgia Power – Rate Plans" herein for additional information.
- (l) Amortized as related expenses are incurred. See "Alabama Power – Rate NDR" and "Mississippi Power – System Restoration Rider" herein for additional information.
- (m) Comprised of numerous components including building leases, fuel-hedging gains, and other liabilities that are recovered over remaining periods not exceeding 20 years.
- (n) As a result of the Tax Reform Legislation, these accounts include certain deferred income tax assets and liabilities not subject to normalization, including \$778 million of liabilities being amortized over periods not exceeding six years as of December 31, 2019. See "Georgia Power," "Mississippi Power," and "Southern Company Gas" herein and Note 10 for additional information.
- (o) Not earning a return as offset in rate base by a corresponding asset or liability.

Notes to Financial Statements

Gulf Power

On January 1, 2019, Southern Company completed its sale of Gulf Power to NextEra Energy. See Note 15 under "Southern Company" for additional information.

In accordance with a Florida PSC-approved settlement agreement, Gulf Power's rates effective for the first billing cycle in July 2017 increased by approximately \$54 million annually (2017 Gulf Power Rate Case Settlement Agreement), including a \$62 million increase in base revenues, less an \$8 million purchased power capacity cost recovery clause credit. The 2017 Gulf Power Rate Case Settlement Agreement also resulted in a \$32.5 million write-down of Gulf Power's ownership of Plant Scherer Unit 3, which was recorded in the first quarter 2017.

As a continuation of the 2017 Gulf Power Rate Case Settlement Agreement, in March 2018, the Florida PSC approved a stipulation and settlement agreement addressing Gulf Power's retail revenue requirement effects of the Tax Reform Legislation (Gulf Power Tax Reform Settlement Agreement). Beginning on April 1, 2018, the Gulf Power Tax Reform Settlement Agreement resulted in annual reductions of approximately \$18 million to Gulf Power's base rates and approximately \$16 million to Gulf Power's environmental cost recovery rates and a one-time refund of approximately \$69 million for the retail portion of unprotected (not subject to normalization) deferred tax liabilities, which was credited to customers through Gulf Power's fuel cost recovery rates over the remainder of 2018.

Alabama Power

Regulatory Assets and Liabilities

Regulatory assets and (liabilities) reflected in the balance sheets of Alabama Power at December 31, 2019 and 2018 relate to:

	2019	2018	Note
		<i>(in millions)</i>	
Retiree benefit plans	\$ 1,131	\$ 947	(a,o)
Asset retirement obligations	1,043	147	(b)
Deferred income tax charges	245	241	(b,c,d)
(Over) under recovered regulatory clause revenues	(72)	176	(e)
Regulatory clauses	142	142	(f)
Vacation pay	72	71	(g,o)
Loss on reacquired debt	52	56	(h)
Nuclear outage	78	49	(i)
Remaining net book value of retired assets	649	43	(j)
Other regulatory assets	67	57	(k,l)
Deferred income tax credits	(1,960)	(2,027)	(b,d)
Other cost of removal obligations	(412)	(497)	(b)
Customer refunds	(56)	(142)	(m)
Natural disaster reserve	(150)	(20)	(n)
Other regulatory liabilities	(19)	(12)	(l)
Total regulatory assets (liabilities), net	\$ 810	\$ (769)	

Note: Unless otherwise noted, the recovery and amortization periods for these regulatory assets and (liabilities) have been accepted or approved by the Alabama PSC and are as follows:

- (a) Recovered and amortized over the average remaining service period which may range up to 14 years. See Note 11 for additional information.
- (b) Asset retirement and removal assets and liabilities are recorded, deferred income tax assets are recovered, and deferred income tax credits are amortized over the related property lives, which may range up to 53 years. Asset retirement and other cost of removal assets and liabilities will be settled and trued up following completion of the related activities.
- (c) Included in the deferred income tax charges are \$9 million for 2019 and \$10 million for 2018 for the retiree Medicare drug subsidy, which is being recovered and amortized through 2027.
- (d) As a result of the Tax Reform Legislation, these accounts include certain deferred income tax assets and liabilities not subject to normalization. The recovery and amortization of these amounts will occur ratably over the related property lives, which may range up to 53 years. See Note 10 for additional information.
- (e) Recorded monthly and expected to be recovered or returned within three years. See "Rate CNP PPA," "Rate CNP Compliance," and "Rate ECR" herein for additional information.
- (f) In accordance with an accounting order issued in 2017 by the Alabama PSC, these regulatory assets will be amortized concurrently with the effective date of Alabama Power's next depreciation study, which is expected to occur no later than 2022.
- (g) Recorded as earned by employees and recovered as paid, generally within one year. This includes both vacation and banked holiday pay.
- (h) Recovered over either the remaining life of the original issue or, if refinanced, over the remaining life of the new issue. At December 31, 2019, the remaining amortization periods do not exceed 30 years.
- (i) Nuclear outage costs are deferred to a regulatory asset when incurred and amortized over a subsequent 18-month period.
- (j) Recorded and amortized over remaining periods not exceeding 18 years.

Notes to Financial Statements

- (k) Comprised of components including generation site selection/evaluation costs, which are capitalized upon initiation of related construction projects, if applicable, and PPA capacity costs, which are to be recovered over the next 12 months.
- (l) Fuel-hedging assets and liabilities are recorded over the life of the underlying hedged purchase contracts, which generally do not exceed three and a half years. Upon final settlement, actual costs incurred are recovered through the energy cost recovery clause.
- (m) Includes \$53 million for 2019 and \$109 million for 2018 due to the retail return exceeding the allowed range. The December 31, 2018 balance also includes a \$33 million excess deferred tax liability used to increase the Rate NDR balance in 2019. See "Rate RSE," "Rate NDR," and "Tax Reform Accounting Order" herein for additional information.
- (n) Amortized as expenses are incurred. See "Rate NDR" herein for additional information.
- (o) Not earning a return as offset in rate base by a corresponding asset or liability.

Petition for Certificate of Convenience and Necessity

On September 6, 2019, Alabama Power filed a petition for a CCN with the Alabama PSC for authorization to procure additional generating capacity through the turnkey construction of a new combined cycle facility and long-term contracts for the purchase of power from others, both as more fully described below, as well as the acquisition of an existing combined cycle facility in Autauga County, Alabama (Autauga Combined Cycle Acquisition). In addition, Alabama Power will pursue approximately 200 MWs of certain demand side management and distributed energy resource programs. This filing was predicated on the results of Alabama Power's 2019 IRP provided to the Alabama PSC, which identified an approximately 2,400-MW resource need for Alabama Power, driven by the need for additional winter reserve capacity. See Note 15 under "Alabama Power" for additional information regarding the Autauga Combined Cycle Acquisition.

The procurement of these resources is subject to the satisfaction or waiver of certain conditions, including, among other customary conditions, approval by the Alabama PSC. The completion of the Autauga Combined Cycle Acquisition is also subject to approval by the FERC. Alabama Power expects to obtain all regulatory approvals by the end of the third quarter 2020.

On May 8, 2019, Alabama Power entered into an Agreement for Engineering, Procurement, and Construction with Mitsubishi Hitachi Power Systems Americas, Inc. and Black & Veatch Construction, Inc. to construct an approximately 720-MW combined cycle facility at Plant Barry (Plant Barry Unit 8), which is expected to be placed in service by the end of 2023.

The capital investment associated with the construction of Plant Barry Unit 8 and the Autauga Combined Cycle Acquisition is currently estimated to total approximately \$1.1 billion.

Alabama Power entered into additional long-term PPAs totaling approximately 640 MWs of generating capacity consisting of approximately 240 MWs of combined cycle generation expected to begin later in 2020 and approximately 400 MWs of solar generation coupled with battery energy storage systems (solar/battery systems) expected to begin in 2022 through 2024. The terms of the agreements for the solar/battery systems permit Alabama Power to use the energy and retire the associated renewable energy credits (REC) in service of customers or to sell RECs, separately or bundled with energy.

Upon certification, Alabama Power expects to recover costs associated with Plant Barry Unit 8 pursuant to its Rate CNP New Plant. Additionally, Alabama Power expects to recover costs associated with the Autauga Combined Cycle Acquisition through the inclusion in Rate RSE of revenues from the existing power sales agreement and, on expiration of that agreement, pursuant to Rate CNP New Plant. The recovery of costs associated with laws, regulations, and other such mandates directed at the utility industry are expected to be recovered through Rate CNP Compliance. Alabama Power expects to recover the capacity-related costs associated with the PPAs through its Rate CNP PPA. In addition, fuel and energy-related costs are expected to be recovered through Rate ECR. Any remaining costs associated with the Autauga Combined Cycle Acquisition and Plant Barry Unit 8 will be incorporated through the annual filing of Rate RSE.

The ultimate outcome of these matters cannot be determined at this time.

Construction Work in Progress Accounting Order

On October 1, 2019, the Alabama PSC acknowledged that Alabama Power would begin certain limited preparatory activities associated with Plant Barry Unit 8 construction to meet the target in-service date by authorizing Alabama Power to record the related costs as CWIP prior to the issuance of an order on the CCN petition. Should a CCN not be granted and Alabama Power does not proceed with the related construction of Plant Barry Unit 8, Alabama Power may transfer those costs and any costs that directly result from the non-issuance of the CCN to a regulatory asset which would be amortized over a five-year period. If the balance of incurred costs reaches 5% of the estimated in-service cost of the total project prior to issuance of an order on the CCN petition, Alabama Power will confer with the Alabama PSC regarding the appropriateness of additional authorization. The Sierra Club subsequently filed a petition for reconsideration of the accounting order. The Alabama PSC voted to deny the petition for reconsideration on January 7, 2020.

Rate RSE

The Alabama PSC has adopted Rate RSE that provides for periodic annual adjustments based upon Alabama Power's projected weighted common equity return (WCER) compared to an allowable range. Rate RSE adjustments are based on forward-looking information for the applicable upcoming calendar year. Rate RSE adjustments for any two-year period, when averaged together, cannot exceed 4.0% and

Notes to Financial Statements

any annual adjustment is limited to 5.0%. When the projected WCER is under the allowed range, there is an adjusting point of 5.98% and eligibility for a performance-based adder of seven basis points, or 0.07%, to the WCER adjusting point if Alabama Power (i) has an "A" credit rating equivalent with at least one of the recognized rating agencies or (ii) is in the top one-third of a designated customer value benchmark survey. If Alabama Power's actual retail return is above the allowed WCER range, the excess will be refunded to customers unless otherwise directed by the Alabama PSC; however, there is no provision for additional customer billings should the actual retail return fall below the WCER range. Prior to January 2019, retail rates remained unchanged when the WCER range was between 5.75% and 6.21%.

Effective in January 2017, Rate RSE increased 4.48%, or \$245 million annually. At December 31, 2017, Alabama Power's actual retail return was within the allowed WCER range. Retail rates under Rate RSE were unchanged for 2018.

In conjunction with Rate RSE, Alabama Power has an established retail tariff that provides for an adjustment to customer billings to recognize the impact of a change in the statutory income tax rate. In accordance with this tariff, Alabama Power returned \$267 million to retail customers through bill credits during 2018 as a result of the change in the federal income tax rate under the Tax Reform Legislation.

In May 2018, the Alabama PSC approved modifications to Rate RSE and other commitments designed to position Alabama Power to address the growing pressure on its credit quality resulting from the Tax Reform Legislation, without increasing retail rates under Rate RSE in the near term. Alabama Power plans to reduce growth in total debt by increasing equity, with corresponding reductions in debt issuances, thereby de-leveraging its capital structure. Alabama Power's goal is to achieve an equity ratio of approximately 55% by the end of 2025. At December 31, 2019 and 2018, Alabama Power's equity ratio was approximately 50% and 47%, respectively.

The approved modifications to Rate RSE began for billings in January 2019. The modifications include reducing the top of the allowed WCER range from 6.21% to 6.15% and modifications to the refund mechanism applicable to prior year actual results. The modifications to the refund mechanism allow Alabama Power to retain a portion of the revenue that causes the actual WCER for a given year to exceed the allowed range.

Generally, during a year without a Rate RSE upward adjustment, if Alabama Power's actual WCER is between 6.15% and 7.65%, customers will receive 25% of the amount between 6.15% and 6.65%, 40% of the amount between 6.65% and 7.15%, and 75% of the amount between 7.15% and 7.65%. Customers will receive all amounts in excess of an actual WCER of 7.65%. During a year with a Rate RSE upward adjustment, if Alabama Power's actual WCER exceeds 6.15%, customers receive 50% of the amount between 6.15% and 6.90% and all amounts in excess of an actual WCER of 6.90%.

In conjunction with these modifications to Rate RSE, in May 2018, Alabama Power consented to a moratorium on any upward adjustments under Rate RSE for 2019 and 2020 and to return \$50 million to customers through bill credits in 2019.

At December 31, 2018, Alabama Power's retail return exceeded the allowed WCER range, which resulted in Alabama Power establishing a regulatory liability of \$109 million for Rate RSE refunds. In accordance with an Alabama PSC order issued on February 5, 2019, Alabama Power applied \$78 million to reduce the Rate ECR under recovered balance and the remaining \$31 million was refunded to customers through bill credits starting in July 2019.

On November 27, 2019, Alabama Power made its required annual Rate RSE submission to the Alabama PSC of projected data for calendar year 2020. Projected earnings were within the specified range; therefore, retail rates under Rate RSE remain unchanged for 2020.

During 2019, Alabama Power provided to the Alabama PSC and the Alabama Office of the Attorney General information related to the operation and utilization of Rate RSE, in accordance with the rules governing the operation of Rate RSE. The ultimate outcome of this matter cannot be determined at this time.

At December 31, 2019, Alabama Power's WCER exceeded 6.15%, resulting in Alabama Power establishing a current regulatory liability of \$53 million for Rate RSE refunds, which will be refunded to customers through bill credits in April 2020.

Rate CNP New Plant

Rate CNP New Plant allows for recovery of Alabama Power's retail costs associated with newly developed or acquired certificated generating facilities placed into retail service. No adjustments to Rate CNP New Plant occurred during the period 2017 through 2019. See "Petition for Certificate of Convenience and Necessity" herein for additional information.

Rate CNP PPA

Rate CNP PPA allows for the recovery of Alabama Power's retail costs associated with certificated PPAs. No adjustments to Rate CNP PPA occurred during the period 2017 through 2019 and no adjustment is expected for 2020. At December 31, 2019 and 2018, Alabama Power had an under recovered Rate CNP PPA balance of \$40 million and \$25 million, respectively, which is included in other regulatory assets, deferred on Southern Company's balance sheets and deferred under recovered regulatory clause revenues on Alabama Power's balance sheets.

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Rate CNP Compliance

Rate CNP Compliance allows for the recovery of Alabama Power's retail costs associated with laws, regulations, and other such mandates directed at the utility industry involving the environment, security, reliability, safety, sustainability, or similar considerations impacting Alabama Power's facilities or operations. Rate CNP Compliance is based on forward-looking information and provides for the recovery of these costs pursuant to factors that are calculated and submitted to the Alabama PSC by December 1 with rates effective for the following calendar year. Compliance costs to be recovered include operations and maintenance expenses, depreciation, and a return on certain invested capital. Revenues for Rate CNP Compliance, as recorded on the financial statements, are adjusted for differences in actual recoverable costs and amounts billed in current regulated rates. Accordingly, changes in the billing factor will have no significant effect on Southern Company's or Alabama Power's revenues or net income, but will affect annual cash flow. Changes in Rate CNP Compliance-related operations and maintenance expenses and depreciation generally will have no effect on net income.

In November 2018, Alabama Power submitted calculations associated with its cost of complying with governmental mandates, as provided under Rate CNP Compliance. The filing reflected a projected under recovered retail revenue requirement for governmental mandates of approximately \$205 million, which was recovered in the billing months of January 2019 through December 2019.

On November 27, 2019, Alabama Power submitted calculations associated with its cost of complying with governmental mandates, as provided under Rate CNP Compliance. The filing reflected a projected over recovered retail revenue requirement for governmental mandates, which resulted in a rate decrease of approximately \$68 million that became effective for the billing month of January 2020.

At December 31, 2019, Alabama Power had an over recovered Rate CNP Compliance balance of \$62 million, of which \$55 million is included in other regulatory liabilities, current and \$7 million is included in other regulatory liabilities, deferred on the balance sheet, compared to an under recovered balance of \$42 million at December 31, 2018 included in customer accounts receivable on the balance sheet.

Rate ECR

Rate ECR recovers Alabama Power's retail energy costs based on an estimate of future energy costs and the current over or under recovered balance. Revenues recognized under Rate ECR and recorded on the financial statements are adjusted for the difference in actual recoverable fuel costs and amounts billed in current regulated rates. The difference in the recoverable fuel costs and amounts billed gives rise to the over or under recovered amounts recorded as regulatory assets or liabilities. Alabama Power, along with the Alabama PSC, continually monitors the over or under recovered cost balance to determine whether an adjustment to billing rates is required. Changes in the Rate ECR factor have no significant effect on Southern Company's or Alabama Power's net income but will impact operating cash flows. The Alabama PSC may approve billing rates under Rate ECR of up to 5.910 cents per KWH.

In May 2018, the Alabama PSC approved an increase to Rate ECR from 2.015 cents per KWH to 2.353 cents per KWH effective July 2018 through December 2018. In December 2018, the Alabama PSC issued a consent order to leave this rate in effect through December 31, 2019.

As discussed herein under "Rate RSE," in accordance with an Alabama PSC order issued on February 5, 2019, Alabama Power utilized \$78 million of the 2018 Rate RSE refund liability to reduce the Rate ECR under recovered balance.

On December 3, 2019, the Alabama PSC approved a decrease to Rate ECR from 2.353 to 2.160 cents per KWH, equal to 1.82%, or approximately \$102 million annually, effective January 1, 2020. The rate will adjust to 5.910 cents per KWH in January 2021 absent a further order from the Alabama PSC.

At December 31, 2019, Alabama Power's over recovered fuel costs totaled \$49 million, of which \$32 million is included in other regulatory liabilities, current and \$17 million is included in other regulatory liabilities, deferred on Southern Company's and Alabama Power's balance sheets. At December 31, 2018, Alabama Power's under recovered fuel costs totaled \$109 million, of which \$18 million is included in customer accounts receivable and \$91 million is included in deferred under recovered regulatory clause revenues on Southern Company's and Alabama Power's balance sheets. These classifications are based on estimates, which include such factors as weather, generation availability, energy demand, and the price of energy. A change in any of these factors could have a material impact on the timing of any recovery or return of fuel costs.

Tax Reform Accounting Order

In May 2018, the Alabama PSC approved an accounting order that authorized Alabama Power to defer the benefits of federal excess deferred income taxes associated with the Tax Reform Legislation for the year ended December 31, 2018 as a regulatory liability and to use up to \$30 million of such deferrals to offset under recovered amounts under Rate ECR. The final excess deferred tax liability for the year ended December 31, 2018 totaled approximately \$69 million, of which \$30 million was used to offset the Rate ECR under recovered

Notes to Financial Statements

balance. On December 3, 2019, the Alabama PSC issued an order authorizing Alabama Power to apply the remaining deferred balance of approximately \$39 million to increase the balance in the NDR. See "Rate NDR" herein and Note 10 under "Current and Deferred Income Taxes" for additional information.

Software Accounting Order

On February 5, 2019, the Alabama PSC approved an accounting order that authorizes Alabama Power to establish a regulatory asset for operations and maintenance costs associated with software implementation projects. The regulatory asset will be amortized ratably over the life of the related software.

Rate NDR

Based on an order from the Alabama PSC, Alabama Power maintains a reserve for operations and maintenance expenses to cover the cost of damages from major storms to its transmission and distribution facilities. The order approves a separate monthly Rate NDR charge to customers consisting of two components. The first component is intended to establish and maintain a reserve balance for future storms and is an on-going part of customer billing. When the reserve balance falls below \$50 million, a reserve establishment charge will be activated (and the on-going reserve maintenance charge concurrently suspended) until the reserve balance reaches \$75 million.

The second component of the Rate NDR charge is intended to allow recovery of any existing deferred storm-related operations and maintenance costs and any future reserve deficits over a 24-month period. The Alabama PSC order gives Alabama Power authority to record a deficit balance in the NDR when costs of storm damage exceed any established reserve balance. Absent further Alabama PSC approval, the maximum total Rate NDR charge consisting of both components is \$10 per month per non-residential customer account and \$5 per month per residential customer account. Alabama Power has the authority, based on an order from the Alabama PSC, to accrue certain additional amounts as circumstances warrant. The order allows for reliability-related expenditures to be charged against the additional accruals when the NDR balance exceeds \$75 million. Alabama Power may designate a portion of the NDR to reliability-related expenditures as a part of an annual budget process for the following year or during the current year for identified unbudgeted reliability-related expenditures that are incurred. Accruals that have not been designated can be used to offset storm charges. Additional accruals to the NDR enhance Alabama Power's ability to mitigate the financial effects of future natural disasters, promote system reliability, and offset costs retail customers would otherwise bear. There were no such accruals in 2017 and 2018.

As discussed herein under "Tax Reform Accounting Order," in accordance with an Alabama PSC order issued on December 3, 2019, Alabama Power applied the remaining excess deferred income tax regulatory liability balance of approximately \$39 million to increase the balance in the NDR. Alabama Power also accrued an additional \$84 million to the NDR in December 2019 resulting in an accumulated balance of \$150 million at December 31, 2019. Of this amount, Alabama Power designated \$37 million to be applied to budgeted reliability-related expenditures for 2020, which is included in other regulatory liabilities, current. The remaining NDR balance of \$113 million is included in other regulatory liabilities, deferred on the balance sheet.

In December 2017, the reserve maintenance charge was suspended and the reserve establishment charge was activated and collected approximately \$16 million annually through 2019. Effective with the March 2020 billings, the reserve establishment charge will be suspended and the reserve maintenance charge will be activated as a result of the NDR balance exceeding \$75 million. Alabama Power expects to collect approximately \$5 million in 2020 and \$3 million annually thereafter unless the NDR balance falls below \$50 million.

As revenue from the Rate NDR charge is recognized, an equal amount of operations and maintenance expenses related to the NDR will also be recognized. As a result, the Rate NDR charge will not have an effect on net income but will impact operating cash flows.

Environmental Accounting Order

Based on an order from the Alabama PSC (Environmental Accounting Order), Alabama Power is allowed to establish a regulatory asset to record the unrecovered investment costs, including the unrecovered plant asset balance and the unrecovered costs associated with site removal and closure associated with future unit retirements caused by environmental regulations. The regulatory asset is being amortized and recovered over the affected unit's remaining useful life, as established prior to the decision regarding early retirement through Rate CNP Compliance.

On April 15, 2019, Alabama Power retired Plant Gorgas Units 8, 9, and 10 and reclassified approximately \$654 million of the unrecovered asset balances to regulatory assets, which are being recovered over the units' remaining useful lives, the latest being through 2037, as established prior to the decision to retire. At December 31, 2019, the related regulatory assets totaled \$649 million, of which \$63 million is included in other regulatory assets, current and \$586 million is included in other regulatory assets, deferred on the balance sheet. Additionally, approximately \$700 million of net capitalized asset retirement costs were reclassified to a regulatory asset in accordance with accounting guidance provided by the Alabama PSC. The asset retirement costs are being recovered through 2055.

Notes to Financial Statements

Georgia Power

Regulatory Assets and Liabilities

Regulatory assets and (liabilities) reflected in the balance sheets of Georgia Power at December 31, 2019 and 2018 relate to:

	2019	2018	Note
		<i>(in millions)</i>	
Retiree benefit plans	\$ 1,516	\$ 1,295	(a, m)
Asset retirement obligations	3,119	2,644	(b, m)
Deferred income tax charges	523	522	(b, c, m)
Storm damage reserves	410	416	(d)
Remaining net book value of retired assets	596	127	(e)
Loss on reacquired debt	262	277	(f, m)
Vacation pay	93	91	(g, m)
Other cost of removal obligations	156	68	(b)
Environmental remediation	52	55	(h)
Fuel-hedging (realized and unrealized) losses	53	15	(i, m)
Other regulatory assets	50	120	(j)
Deferred income tax credits	(3,078)	(3,080)	(b, c)
Customer refunds	(229)	(165)	(k)
Other regulatory liabilities	(16)	(7)	(l, m)
Total regulatory assets (liabilities), net	\$ 3,507	\$ 2,378	

Note: Unless otherwise noted, the recovery and amortization periods for these regulatory assets and (liabilities) are approved by the Georgia PSC and are as follows:

- (a) Recovered and amortized over the average remaining service period which may range up to 13 years. See Note 11 for additional information.
- (b) Effective January 1, 2020, Georgia Power is recovering CCR AROs through its Environmental Compliance Cost Recovery (ECCR) tariff and approximately \$5 million annually for other AROs through its traditional base tariffs. See "Rate Plans – 2019 ARP" and "Integrated Resource Plan" herein for additional information on recovery of compliance costs for CCR AROs. Other cost of removal obligations, non-CCR AROs, and deferred income tax assets are recovered and deferred income tax liabilities are amortized over the related property lives, which may range up to 60 years. Included in the deferred income tax assets is \$13 million for the retiree Medicare drug subsidy, which is being recovered and amortized through 2022. See Note 6 for additional information on AROs.
- (c) As a result of the Tax Reform Legislation, these balances include \$145 million of deferred income tax assets related to CWIP for Plant Vogtle Units 3 and 4 and approximately \$660 million of deferred income tax liabilities, neither of which are subject to normalization. The recovery of deferred income tax assets related to CWIP for Plant Vogtle Units 3 and 4 is expected to be determined in a future regulatory proceeding. Effective January 1, 2020, the deferred income tax liabilities are being amortized through 2022. See "Rate Plans" herein and Note 10 for additional information.
- (d) Effective January 1, 2020, Georgia Power is recovering \$213 million annually for storm damage. See "Rate Plans – 2019 ARP" and "Storm Damage Recovery" herein and Note 1 under "Storm Damage Reserves" for additional information.
- (e) The net book values of Plant Hammond Units 1 through 4 (\$488 million at December 31, 2019) and Plant Branch Units 1 through 4 (\$69 million and \$87 million at December 31, 2019 and 2018, respectively) are being amortized over the units' remaining useful lives, which vary between 2020 and 2035. The net book values of Plant McIntosh Unit 1 (\$30 million at December 31, 2019) and Plant Mitchell Unit 3 (\$8 million and \$9 million at December 31, 2019 and 2018, respectively) are being amortized through 2022. The balance at December 31, 2018 also includes \$31 million related to obsolete inventories of certain retired units, which was fully amortized under the 2019 ARP. See "Rate Plans – 2019 ARP" and "Integrated Resource Plan" herein for additional information.
- (f) Recovered over either the remaining life of the original issue or, if refinanced, over the remaining life of the new issue. At December 31, 2019, the amortization periods do not exceed 33 years.
- (g) Recorded as earned by employees and recovered as paid, generally within one year.
- (h) Effective January 1, 2020, Georgia Power is recovering \$12 million annually for environmental remediation. See Note 3 under "Environmental Remediation" for additional information.
- (i) Recovered through Georgia Power's fuel cost recovery mechanism upon final settlement, within four years.
- (j) Comprised of several components including deferred nuclear outage costs and cancelled construction projects. Nuclear outage costs are recorded as incurred and recovered over the outage cycles of each nuclear unit, which do not exceed 24 months. Approximately \$22 million of costs associated with construction of environmental controls that will not be completed as a result of unit retirements are being amortized through 2022.
- (k) At December 31, 2019 and 2018, includes approximately \$110 million and \$100 million, respectively, as a result of the retail ROE exceeding the allowed retail ROE range and approximately \$105 million and \$55 million, respectively, related to the Georgia Power Tax Reform Settlement Agreement. See "Rate Plans" herein for additional information.
- (l) Comprised of Demand-Side Management (DSM) tariffs over recovery, building lease, and fuel-hedging gains. DSM tariffs over recovery of \$10 million at December 31, 2019 is being amortized through 2022. The building lease is being amortized through 2030. Fuel-hedging gains are refunded through Georgia Power's fuel cost recovery mechanism upon final settlement, within four years.
- (m) Generally not earning a return as they are excluded from rate base or are offset in rate base by a corresponding asset or liability.

Notes to Financial Statements

Rate Plans

2019 ARP

On December 17, 2019, the Georgia PSC voted to approve the 2019 ARP, under which Georgia Power increased its rates on January 1, 2020 and will increase rates annually for 2021 and 2022 as detailed below based on compliance filings to be made at least 90 days prior to the effective date. Georgia Power will recover estimated increases through its existing tariffs as follows:

Tariff	2020	2021	2022
		(in millions)	
Traditional base	\$ —	\$120	\$192
ECCR ^(a)	318	55	184
DSM	12	1	1
Municipal Franchise Fee	12	4	9
Total ^(b)	\$342	\$181	\$386

(a) Effective January 1, 2020, CCR AROs will be recovered through the ECCR tariff. See "Integrated Resource Plan" herein for additional information on recovery of compliance costs for CCR AROs.

(b) Totals may not add due to rounding.

Further, under the 2019 ARP, Georgia Power's retail ROE is set at 10.50%, and earnings will be evaluated against a retail ROE range of 9.50% to 12.00%. The Georgia PSC also approved an increase in the retail equity ratio to 56% from 55%. Any retail earnings above 12.00% will be shared, with 40% being applied to reduce regulatory assets, 40% directly refunded to customers, and the remaining 20% retained by Georgia Power. There will be no recovery of any earnings shortfall below 9.50% on an actual basis. However, if at any time during the term of the 2019 ARP, Georgia Power projects that its retail earnings will be below 9.50% for any calendar year, it could petition the Georgia PSC for implementation of the Interim Cost Recovery (ICR) tariff to adjust Georgia Power's retail rates to achieve a 9.50% ROE. The Georgia PSC would have 90 days to rule on Georgia Power's request. The ICR tariff would expire at the earlier of January 1, 2023 or the end of the calendar year in which the ICR tariff becomes effective. In lieu of requesting implementation of an ICR tariff, or if the Georgia PSC chooses not to implement the ICR tariff, Georgia Power may file a full rate case.

Additionally, under the 2019 ARP and pursuant to the sharing mechanism approved in the 2013 ARP whereby two-thirds of any earnings above the top of the allowed ROE range are shared with Georgia Power's customers, (i) Georgia Power used 50% (approximately \$50 million) of the customer share of earnings above the band in 2018 to reduce regulatory assets and 50% (approximately \$50 million) will be refunded to customers in 2020 and (ii) Georgia Power will forgo its share of 2019 earnings in excess of the earnings band so that 50% (approximately \$60 million) of all earnings over the 2019 band will be refunded to customers and 50% (approximately \$60 million) were used to reduce regulatory assets.

Except as provided above, Georgia Power will not file for a general base rate increase while the 2019 ARP is in effect. Georgia Power is required to file a general base rate case by July 1, 2022, in response to which the Georgia PSC would be expected to determine whether the 2019 ARP should be continued, modified, or discontinued.

2013 ARP

Pursuant to the terms and conditions of a settlement agreement related to Southern Company's acquisition of Southern Company Gas approved by the Georgia PSC in 2016, the 2013 ARP continued in effect until December 31, 2019. Furthermore, through December 31, 2019, Georgia Power retained its merger savings, net of transition costs, as defined in the settlement agreement; through December 31, 2022, such net merger savings will be shared on a 60/40 basis with customers; thereafter, all merger savings will be retained by customers.

There were no changes to Georgia Power's traditional base tariffs, ECCR tariff, DSM tariffs, or Municipal Franchise Fee tariffs in 2017, 2018, or 2019.

Under the 2013 ARP, Georgia Power's retail ROE was set at 10.95% and earnings were evaluated against a retail ROE range of 10.00% to 12.00%. Two-thirds of any earnings above 12.00% were to be directly refunded to customers, with the remaining one-third retained by Georgia Power. On February 5, 2019, the Georgia PSC approved a settlement between Georgia Power and the staff of the Georgia PSC under which Georgia Power's retail ROE for 2017 was stipulated to exceed 12.00% and Georgia Power reduced certain regulatory assets by approximately \$4 million in lieu of providing refunds to retail customers. In 2019 and 2018, Georgia Power's retail ROE exceeded 12.00% and, under the modified sharing mechanism pursuant to the 2019 ARP, Georgia Power has reduced regulatory assets by a total of approximately \$110 million and expects to refund a total of approximately \$110 million to customers, subject to review and approval by the Georgia PSC. See "2019 ARP" and "Integrated Resource Plan" herein for additional information.

Notes to Financial Statements

Tax Reform Settlement Agreement

In April 2018, the Georgia PSC approved the Georgia Power Tax Reform Settlement Agreement. To reflect the federal income tax rate reduction impact of the Tax Reform Legislation, Georgia Power issued bill credits of approximately \$95 million and \$130 million in 2019 and 2018, respectively, and is issuing bill credits of approximately \$105 million in February 2020, for a total of \$330 million. In addition, Georgia Power deferred as a regulatory liability (i) the revenue equivalent of the tax expense reduction resulting from legislation lowering the Georgia state income tax rate from 6.00% to 5.75% in 2019 and (ii) the entire benefit of federal and state excess accumulated deferred income taxes. At December 31, 2019, the related regulatory liability balance totaled \$659 million, which is being amortized over a three-year period ending December 31, 2022 in accordance with the 2019 ARP.

To address some of the negative cash flow and credit quality impacts of the Tax Reform Legislation, the Georgia PSC also approved an increase in Georgia Power's retail equity ratio to the lower of (i) Georgia Power's actual common equity weight in its capital structure or (ii) 55%, until the Georgia PSC approved the 2019 ARP. Benefits from reduced federal income tax rates in excess of the amounts refunded to customers were retained by Georgia Power to cover the carrying costs of the incremental equity in 2018 and 2019.

See "2019 ARP" herein for additional information.

Integrated Resource Plan

On July 16, 2019, the Georgia PSC voted to approve Georgia Power's modified triennial IRP (Georgia Power 2019 IRP). In the Georgia Power 2019 IRP, the Georgia PSC approved the decertification and retirement of Plant Hammond Units 1 through 4 (840 MWs) and Plant McIntosh Unit 1 (142.5 MWs) effective July 29, 2019. In accordance with the 2019 ARP, the remaining net book values at December 31, 2019 of \$488 million for the Plant Hammond units are being recovered over a period equal to the respective unit's remaining useful life, which varies between 2024 and 2035, and \$30 million for Plant McIntosh Unit 1 is being recovered over a three-year period ending December 31, 2022. In addition, approximately \$20 million of related unusable materials and supplies inventory balances and approximately \$295 million of net capitalized asset retirement costs were reclassified to a regulatory asset. In accordance with the modifications to the earnings sharing mechanism approved in the 2019 ARP, Georgia Power fully amortized the regulatory assets associated with these unusable materials and supplies inventory balances as well as a regulatory asset of approximately \$50 million related to costs for a future generation site in Stewart County, Georgia. See "Rate Plans – 2019 ARP" herein for additional information.

Also in the Georgia Power 2019 IRP, the Georgia PSC approved Georgia Power's proposed environmental compliance strategy associated with ash pond and certain landfill closures and post-closure care in compliance with the CCR Rule and the related state rule. In the 2019 ARP, the Georgia PSC approved recovery of the estimated under recovered balance of these compliance costs at December 31, 2019 over a three-year period ending December 31, 2022 and recovery of estimated compliance costs for 2020, 2021, and 2022 over three-year periods ending December 31, 2022, 2023, and 2024, respectively, with recovery of construction contingency beginning in the year following actual expenditure. The under recovered balance at December 31, 2019 was \$175 million and the estimated compliance costs expected to be incurred in 2020, 2021, and 2022 are \$265 million, \$290 million, and \$390 million, respectively. The ECCR tariff is expected to be revised for actual expenditures and updated estimates through future annual compliance filings. See Note 6 for additional information regarding Georgia Power's AROs.

On February 4, 2020, the Georgia PSC voted to deny a motion for reconsideration filed by the Sierra Club regarding the Georgia PSC's decision in the 2019 ARP allowing Georgia Power to recover compliance costs for CCR AROs.

Additionally, the Georgia PSC rejected a request to certify approximately 25 MWs of capacity at Plant Scherer Unit 3 for the retail jurisdiction beginning January 1, 2020 following the expiration of a wholesale PPA. Georgia Power may offer such capacity in the wholesale market or to the retail jurisdiction in a future IRP.

The Georgia PSC also approved Georgia Power to (i) issue requests for proposals (RFP) for capacity beginning in 2022 or 2023 and in 2026, 2027, or 2028; (ii) procure up to an additional 2,210 MWs of renewable resources through competitive RFPs; and (iii) invest in a portfolio of up to 80 MWs of battery energy storage technologies.

Notes to Financial Statements

Fuel Cost Recovery

Georgia Power has established fuel cost recovery rates approved by the Georgia PSC. In 2016, the Georgia PSC approved Georgia Power's request to lower annual billings under an interim fuel rider by approximately \$313 million which was in effect from June 1, 2016 through December 31, 2017. Georgia Power is scheduled to file its next fuel case no later than March 16, 2020, with new rates, if any, to be effective June 1, 2020. Georgia Power continues to be allowed to adjust its fuel cost recovery rates under an interim fuel rider prior to the next fuel case if the under or over recovered fuel balance exceeds \$200 million. Georgia Power's over recovered fuel balance totaled \$73 million at December 31, 2019 and is included in other deferred credits and liabilities on Southern Company's and Georgia Power's balance sheets. At December 31, 2018, Georgia Power's under recovered fuel balance totaled \$115 million and is included in under recovered fuel clause revenues on Southern Company's and Georgia Power's balance sheets.

Georgia Power's fuel cost recovery mechanism includes costs associated with a natural gas hedging program, as revised and approved by the Georgia PSC, allowing the use of an array of derivative instruments within a 48-month time horizon.

Fuel cost recovery revenues as recorded on the financial statements are adjusted for differences in actual recoverable fuel costs and amounts billed in current regulated rates. Accordingly, changes in the billing factor will not have a significant effect on Southern Company's or Georgia Power's revenues or net income but will affect operating cash flows.

Storm Damage Recovery

Georgia Power defers and recovers certain costs related to damages from major storms as mandated by the Georgia PSC. Beginning January 1, 2020, Georgia Power is recovering \$213 million annually under the 2019 ARP. At December 31, 2019 and 2018, the balance in the regulatory asset related to storm damage was \$410 million and \$416 million, respectively, with \$213 million and \$30 million, respectively, included in other regulatory assets, current on Southern Company's balance sheets and regulatory assets – storm damage reserves on Georgia Power's balance sheets and \$197 million and \$386 million, respectively, included in other regulatory assets, deferred on Southern Company's and Georgia Power's balance sheets. The rate of storm damage cost recovery is expected to be adjusted in future regulatory proceedings as necessary. As a result of this regulatory treatment, costs related to storms are not expected to have a material impact on Southern Company's or Georgia Power's financial statements.

Nuclear Construction

In 2009, the Georgia PSC certified construction of Plant Vogtle Units 3 and 4. Georgia Power holds a 45.7% ownership interest in Plant Vogtle Units 3 and 4. In 2012, the NRC issued the related combined construction and operating licenses, which allowed full construction of the two AP1000 nuclear units (with electric generating capacity of approximately 1,100 MWs each) and related facilities to begin. Until March 2017, construction on Plant Vogtle Units 3 and 4 continued under the Vogtle 3 and 4 Agreement, which was a substantially fixed price agreement. In March 2017, the EPC Contractor filed for bankruptcy protection under Chapter 11 of the U.S. Bankruptcy Code.

In connection with the EPC Contractor's bankruptcy filing, Georgia Power, acting for itself and as agent for the other Vogtle Owners, entered into several transitional arrangements to allow construction to continue. In July 2017, Georgia Power, acting for itself and as agent for the other Vogtle Owners, entered into the Vogtle Services Agreement, whereby Westinghouse provides facility design and engineering services, procurement and technical support, and staff augmentation on a time and materials cost basis. The Vogtle Services Agreement provides that it will continue until the start-up and testing of Plant Vogtle Units 3 and 4 are complete and electricity is generated and sold from both units. The Vogtle Services Agreement is terminable by the Vogtle Owners upon 30 days' written notice.

In October 2017, Georgia Power, acting for itself and as agent for the other Vogtle Owners, executed the Bechtel Agreement, a cost reimbursable plus fee arrangement, whereby Bechtel is reimbursed for actual costs plus a base fee and an at-risk fee, which is subject to adjustment based on Bechtel's performance against cost and schedule targets. Each Vogtle Owner is severally (not jointly) liable for its proportionate share, based on its ownership interest, of all amounts owed to Bechtel under the Bechtel Agreement. The Vogtle Owners may terminate the Bechtel Agreement at any time for their convenience, provided that the Vogtle Owners will be required to pay amounts related to work performed prior to the termination (including the applicable portion of the base fee), certain termination-related costs, and, at certain stages of the work, the applicable portion of the at-risk fee. Bechtel may terminate the Bechtel Agreement under certain circumstances, including certain Vogtle Owner suspensions of work, certain breaches of the Bechtel Agreement by the Vogtle Owners, Vogtle Owner insolvency, and certain other events.

See Note 8 under "Long-term Debt – DOE Loan Guarantee Borrowings" for information on the Amended and Restated Loan Guarantee Agreement, including applicable covenants, events of default, mandatory prepayment events, and conditions to borrowing.

Notes to Financial Statements

Cost and Schedule

Georgia Power's approximate proportionate share of the remaining estimated capital cost to complete Plant Vogtle Units 3 and 4 by the expected in-service dates of November 2021 and November 2022, respectively, is as follows:

	<i>(in billions)</i>
Base project capital cost forecast ^{(a)(b)}	\$ 8.2
Construction contingency estimate	0.2
Total project capital cost forecast ^{(a)(b)}	8.4
Net investment as of December 31, 2019 ^(b)	(5.9)
Remaining estimate to complete^(a)	\$ 2.5

(a) Excludes financing costs expected to be capitalized through AFUDC of approximately \$300 million, of which \$23 million had been accrued through December 31, 2019.

(b) Net of \$1.7 billion received from Toshiba under the Guarantee Settlement Agreement and approximately \$188 million in related customer refunds.

As of December 31, 2019, approximately \$140 million of the \$366 million construction contingency estimate established in the second quarter 2018 was allocated to the base capital cost forecast for cost risks including, among other factors, construction productivity; craft labor incentives; adding resources for supervision, field support, project management, initial test program, start-up, and operations and engineering support; subcontracts; and procurement. As and when construction contingency is spent, Georgia Power may request the Georgia PSC to evaluate those expenditures for rate recovery.

Georgia Power estimates that its financing costs for construction of Plant Vogtle Units 3 and 4 will total approximately \$3.1 billion, of which \$2.2 billion had been incurred through December 31, 2019.

As part of its ongoing processes, Southern Nuclear continues to evaluate cost and schedule forecasts on a regular basis to incorporate current information available, particularly in the areas of commodity installation, system turnovers, and workforce statistics.

In April 2019, Southern Nuclear established aggressive target values for monthly construction production and system turnover activities as part of a strategy to maintain and, where possible, build margin to the regulatory-approved in-service dates of November 2021 for Unit 3 and November 2022 for Unit 4. The project has faced challenges with the April 2019 aggressive strategy targets, including, but not limited to, electrical and pipefitting labor productivity and closure rates for work packages, which resulted in a backlog of activities and completion percentages below the April 2019 aggressive strategy targets. However, Southern Nuclear and Georgia Power believe that existing productivity levels and pace of activity completion are sufficient to meet the regulatory-approved in-service dates.

In February 2020, Southern Nuclear updated its cost and schedule forecast, which did not change the projected overall capital cost forecast and confirmed the expected in-service dates of November 2021 for Unit 3 and November 2022 for Unit 4. This update included initiatives to improve productivity while refining and extending system turnover plans and certain near-term milestone dates. Other milestone dates did not change. Achievement of the aggressive site work plan relies on meeting increased monthly production and activity target values during 2020. To meet these 2020 targets, existing craft, including subcontractors, construction productivity must improve and be sustained above historical average levels, appropriate levels of craft laborers, particularly electrical and pipefitter craft labor, must be maintained, and additional supervision and other field support resources must be retained. Southern Nuclear and Georgia Power continue to believe that pursuit of an aggressive site work plan is an appropriate strategy to achieve completion of the units by their regulatory-approved in-service dates.

As construction, including subcontract work, continues and testing and system turnover activities increase, challenges with management of contractors and vendors; subcontractor performance; supervision of craft labor and related craft labor productivity, particularly in the installation of electrical and mechanical commodities, ability to attract and retain craft labor, and/or related cost escalation; procurement, fabrication, delivery, assembly, installation, system turnover, and the initial testing and start-up, including any required engineering changes or any remediation related thereto, of plant systems, structures, or components (some of which are based on new technology that only within the last few years began initial operation in the global nuclear industry at this scale), or regional transmission upgrades, any of which may require additional labor and/or materials; or other issues could arise and change the projected schedule and estimated cost.

Notes to Financial Statements

There have been technical and procedural challenges to the construction and licensing of Plant Vogtle Units 3 and 4 at the federal and state level and additional challenges may arise. Processes are in place that are designed to assure compliance with the requirements specified in the Westinghouse Design Control Document and the combined construction and operating licenses, including inspections by Southern Nuclear and the NRC that occur throughout construction. As a result of such compliance processes, certain license amendment requests have been filed and approved or are pending before the NRC. Various design and other licensing-based compliance matters, including the timely submittal by Southern Nuclear of the ITAAC documentation for each unit and the related reviews and approvals by the NRC necessary to support NRC authorization to load fuel, may arise, which may result in additional license amendments or require other resolution. As part of the aggressive site work plan, in January 2020, Southern Nuclear notified the NRC of its intent to load fuel in 2020. If any license amendment requests or other licensing-based compliance issues are not resolved in a timely manner, there may be delays in the project schedule that could result in increased costs.

The ultimate outcome of these matters cannot be determined at this time. However, any extension of the regulatory-approved project schedule is currently estimated to result in additional base capital costs of approximately \$50 million per month, based on Georgia Power's ownership interests, and AFUDC of approximately \$12 million per month. While Georgia Power is not precluded from seeking recovery of any future capital cost forecast increase, management will ultimately determine whether or not to seek recovery. Any further changes to the capital cost forecast that are not expected to be recoverable through regulated rates will be required to be charged to income and such charges could be material.

Joint Owner Contracts

In November 2017, the Vogtle Owners entered into an amendment to their joint ownership agreements for Plant Vogtle Units 3 and 4 to provide for, among other conditions, additional Vogtle Owner approval requirements. Effective in August 2018, the Vogtle Owners further amended the joint ownership agreements to clarify and provide procedures for certain provisions of the joint ownership agreements related to adverse events that require the vote of the holders of at least 90% of the ownership interests in Plant Vogtle Units 3 and 4 to continue construction (as amended, and together with the November 2017 amendment, the Vogtle Joint Ownership Agreements). The Vogtle Joint Ownership Agreements also confirm that the Vogtle Owners' sole recourse against Georgia Power or Southern Nuclear for any action or inaction in connection with their performance as agent for the Vogtle Owners is limited to removal of Georgia Power and/or Southern Nuclear as agent, except in cases of willful misconduct.

As a result of an increase in the total project capital cost forecast and Georgia Power's decision not to seek rate recovery of the increase in the base capital costs in conjunction with the nineteenth VCM report in 2018, the holders of at least 90% of the ownership interests in Plant Vogtle Units 3 and 4 were required to vote to continue construction. In September 2018, the Vogtle Owners unanimously voted to continue construction of Plant Vogtle Units 3 and 4.

Amendments to the Vogtle Joint Ownership Agreements

In connection with the vote to continue construction, Georgia Power entered into (i) a binding term sheet (Vogtle Owner Term Sheet) with the other Vogtle Owners and MEAG Power's wholly-owned subsidiaries MEAG Power SPVJ, LLC (MEAG SPVJ), MEAG Power SPVM, LLC (MEAG SPVM), and MEAG Power SPVP, LLC (MEAG SPVP) to take certain actions which partially mitigate potential financial exposure for the other Vogtle Owners, including additional amendments to the Vogtle Joint Ownership Agreements and the purchase of PTCs from the other Vogtle Owners at pre-established prices, and (ii) a term sheet (MEAG Term Sheet) with MEAG Power and MEAG SPVJ to provide funding with respect to MEAG SPVJ's ownership interest in Plant Vogtle Units 3 and 4 under certain circumstances. On January 14, 2019, Georgia Power, MEAG Power, and MEAG SPVJ entered into an agreement to implement the provisions of the MEAG Term Sheet. On February 18, 2019, Georgia Power, the other Vogtle Owners, and MEAG Power's wholly-owned subsidiaries MEAG SPVJ, MEAG SPVM, and MEAG SPVP entered into certain amendments to the Vogtle Joint Ownership Agreements to implement the provisions of the Vogtle Owner Term Sheet.

The ultimate outcome of these matters cannot be determined at this time.

Regulatory Matters

In 2009, the Georgia PSC voted to certify construction of Plant Vogtle Units 3 and 4 with a certified capital cost of \$4.418 billion. In addition, in 2009 the Georgia PSC approved inclusion of the Plant Vogtle Units 3 and 4 related CWIP accounts in rate base, and the State of Georgia enacted the Georgia Nuclear Energy Financing Act, which allows Georgia Power to recover financing costs for Plant Vogtle Units 3 and 4. Financing costs are recovered on all applicable certified costs through annual adjustments to the NCCR tariff up to the certified capital cost of \$4.418 billion. At December 31, 2019, Georgia Power had recovered approximately \$2.2 billion of financing costs. Financing costs related to capital costs above \$4.418 billion are being recognized through AFUDC and are expected to be recovered through retail rates over the life of Plant Vogtle Units 3 and 4; however, Georgia Power will not record AFUDC related to any capital costs in excess of the total deemed reasonable by the Georgia PSC (currently \$7.3 billion) and not requested for rate recovery. On December 17, 2019, the Georgia PSC approved Georgia Power's request to decrease the NCCR tariff by \$62 million annually, effective January 1, 2020.

Notes to Financial Statements

Georgia Power is required to file semi-annual VCM reports with the Georgia PSC by February 28 and August 31 of each year. In 2013, in connection with the eighth VCM report, the Georgia PSC approved a stipulation between Georgia Power and the staff of the Georgia PSC to waive the requirement to amend the Plant Vogtle Units 3 and 4 certificate in accordance with the 2009 certification order until the completion of Plant Vogtle Unit 3, or earlier if deemed appropriate by the Georgia PSC and Georgia Power.

In 2016, the Georgia PSC voted to approve a settlement agreement (Vogtle Cost Settlement Agreement) resolving certain prudency matters in connection with the fifteenth VCM report. In December 2017, the Georgia PSC voted to approve (and issued its related order on January 11, 2018) Georgia Power's seventeenth VCM report and modified the Vogtle Cost Settlement Agreement. The Vogtle Cost Settlement Agreement, as modified by the January 11, 2018 order, resolved the following regulatory matters related to Plant Vogtle Units 3 and 4: (i) none of the \$3.3 billion of costs incurred through December 31, 2015 and reflected in the fourteenth VCM report should be disallowed from rate base on the basis of imprudence; (ii) the Contractor Settlement Agreement was reasonable and prudent and none of the amounts paid pursuant to the Contractor Settlement Agreement should be disallowed from rate base on the basis of imprudence; (iii) (a) capital costs incurred up to \$5.68 billion would be presumed to be reasonable and prudent with the burden of proof on any party challenging such costs, (b) Georgia Power would have the burden to show that any capital costs above \$5.68 billion were prudent, and (c) a revised capital cost forecast of \$7.3 billion (after reflecting the impact of payments received under the Guarantee Settlement Agreement and related customer refunds) was found reasonable; (iv) construction of Plant Vogtle Units 3 and 4 should be completed, with Southern Nuclear serving as project manager and Bechtel as primary contractor; (v) approved and deemed reasonable Georgia Power's revised schedule placing Plant Vogtle Units 3 and 4 in service in November 2021 and November 2022, respectively; (vi) confirmed that the revised cost forecast does not represent a cost cap and that prudence decisions on cost recovery will be made at a later date, consistent with applicable Georgia law; (vii) reduced the ROE used to calculate the NCCR tariff (a) from 10.95% (the ROE rate setting point authorized by the Georgia PSC in the 2013 ARP) to 10.00% effective January 1, 2016, (b) from 10.00% to 8.30%, effective January 1, 2020, and (c) from 8.30% to 5.30%, effective January 1, 2021 (provided that the ROE in no case will be less than Georgia Power's average cost of long-term debt); (viii) reduced the ROE used for AFUDC equity for Plant Vogtle Units 3 and 4 from 10.00% to Georgia Power's average cost of long-term debt, effective January 1, 2018; and (ix) agreed that upon Unit 3 reaching commercial operation, retail base rates would be adjusted to include carrying costs on those capital costs deemed prudent in the Vogtle Cost Settlement Agreement. The January 11, 2018 order also stated that if Plant Vogtle Units 3 and 4 are not commercially operational by June 1, 2021 and June 1, 2022, respectively, the ROE used to calculate the NCCR tariff will be further reduced by 10 basis points each month (but not lower than Georgia Power's average cost of long-term debt) until the respective Unit is commercially operational. The ROE reductions negatively impacted earnings by approximately \$75 million, \$100 million, and \$25 million in 2019, 2018, and 2017, respectively, and are estimated to have negative earnings impacts of approximately \$140 million, \$240 million, and \$190 million in 2020, 2021, and 2022, respectively. In its January 11, 2018 order, the Georgia PSC also stated if other conditions change and assumptions upon which Georgia Power's seventeenth VCM report are based do not materialize, the Georgia PSC reserved the right to reconsider the decision to continue construction.

In February 2018, Georgia Interfaith Power & Light, Inc. (GIPL) and Partnership for Southern Equity, Inc. (PSE) filed a petition appealing the Georgia PSC's January 11, 2018 order with the Fulton County Superior Court. In March 2018, Georgia Watch filed a similar appeal to the Fulton County Superior Court for judicial review of the Georgia PSC's decision and denial of Georgia Watch's motion for reconsideration. In December 2018, the Fulton County Superior Court granted Georgia Power's motion to dismiss the two appeals. On January 9, 2019, GIPL, PSE, and Georgia Watch filed an appeal of this decision with the Georgia Court of Appeals. On October 29, 2019, the Georgia Court of Appeals issued an opinion affirming the Fulton County Superior Court's ruling that the Georgia PSC's January 11, 2018 order was not a final, appealable decision. In addition, the Georgia Court of Appeals remanded the case to the Fulton County Superior Court to clarify its ruling as to whether the petitioners showed that review of the Georgia PSC's final order would not provide them an adequate remedy. Georgia Power believes the petitions have no merit; however, an adverse outcome in the litigation combined with subsequent adverse action by the Georgia PSC could have a material impact on Southern Company's and Georgia Power's results of operations, financial condition, and liquidity.

On February 18, 2020, the Georgia PSC approved Georgia Power's twentieth VCM report and its concurrently-filed twenty-first VCM report, including approval of (i) \$1.2 billion of construction capital costs incurred from July 1, 2018 through June 30, 2019 and (ii) \$21.5 million of expenditures related to Georgia Power's portion of an administrative claim filed in the Westinghouse bankruptcy proceedings (which expenditures had previously been deferred by the Georgia PSC for later approval). Through the twenty-first VCM, the Georgia PSC has approved total construction capital costs incurred through June 30, 2019 of \$6.7 billion (before \$1.7 billion of payments received under the Guarantee Settlement Agreement and approximately \$188 million in related customer refunds). On February 19, 2020, Georgia Power filed its twenty-second VCM report with the Georgia PSC covering the period from July 1, 2019 through December 31, 2019, requesting approval of \$674 million of construction capital costs incurred during that period.

The ultimate outcome of these matters cannot be determined at this time.

Notes to Financial Statements

Mississippi Power

Regulatory Assets and Liabilities

Regulatory assets and (liabilities) reflected in the balance sheets of Mississippi Power at December 31, 2019 and 2018 relate to:

	2019	2018	Note
		<i>(in millions)</i>	
Retiree benefit plans – regulatory assets	\$ 213	\$ 171	(a)
Asset retirement obligations	210	143	(b)
Kemper County energy facility assets, net	61	69	(c)
Remaining net book value of retired assets	30	41	(d)
Property tax	47	44	(e)
Deferred charges related to income taxes	33	34	(b)
Plant Daniel Units 3 and 4	34	36	(f)
ECO Plan carryforward	—	26	(g)
Other regulatory assets	48	28	(h)
Deferred credits related to income taxes	(358)	(377)	(i)
Other cost of removal obligations	(189)	(185)	(b)
Property damage	(55)	(56)	(j)
Other regulatory liabilities	(10)	(9)	(k)
Total regulatory assets (liabilities), net	\$ 64	\$ (35)	

Note: Unless otherwise noted, the recovery and amortization periods for these regulatory assets and (liabilities) are approved by the Mississippi PSC and are as follows:

- (a) Recovered and amortized over the average remaining service period which may range up to 14 years. See Note 11 for additional information.
- (b) Asset retirement and other cost of removal obligations will be settled and trued up upon completion of removal activities over a period to be determined by the Mississippi PSC. Asset retirement and other cost of removal obligations and deferred charges related to income taxes are generally recovered over the related property lives, which may range up to 48 years.
- (c) Includes \$78 million of regulatory assets and \$18 million of regulatory liabilities that are expected to be fully amortized by 2025 and 2023, respectively. For additional information, see "Kemper County Energy Facility – Rate Recovery" herein.
- (d) Retail portion includes approximately \$16 million being recovered over a five-year period through 2021 and 2022 for Plant Watson and Plant Greene County, respectively. Wholesale portion includes approximately \$14 million being recovered over a 12-year period through 2031 for Plant Watson and Plant Greene County.
- (e) Recovered through the ad valorem tax adjustment clause over a 12-month period beginning in April of the following year. See "Ad Valorem Tax Adjustment" herein for additional information.
- (f) Represents the difference between the revenue requirement under purchase accounting and operating lease accounting, which will be amortized over a 10-year period beginning October 2021.
- (g) Generally recovered through the ECO Plan clause in the year following the deferral. See "Environmental Compliance Overview Plan" herein.
- (h) Includes \$9 million related to vacation pay and \$5 million related to other miscellaneous assets, all of which are recorded and recovered over periods not exceeding one year; \$6 million related to loss on reacquired debt, which is recorded and amortized over either the remaining life of the original issue, or if refinanced, over the remaining life of the new issue (at December 31, 2019, the amortization periods did not exceed 22 years); and \$27 million related to fuel-hedging assets, which are recorded over the life of the underlying hedged purchase contracts, which generally do not exceed three years, and are recovered through Mississippi Power's energy cost management clause upon settlement.
- (i) Includes excess deferred income taxes primarily associated with Tax Reform Legislation of \$358 million, of which \$252 million is related to protected deferred income taxes being recovered over the related property lives, which may range up to 48 years, and \$106 million related to unprotected deferred income taxes (not subject to normalization). The unprotected retail portion includes \$28 million associated with the Kemper County energy facility being amortized over an eight-year period through 2025. The unprotected wholesale portion includes \$18 million of excess deferred income taxes being amortized over three-year periods through 2022. An additional \$8 million associated with the System Restoration Rider is being amortized over an eight-year period through 2025. The amortization period for the remaining unprotected deferred income taxes is expected to be determined in the Mississippi Power 2019 Base Rate Case. See "Kemper County Energy Facility" and "Municipal and Rural Associations Tariff" herein and Note 10 for additional information.
- (j) See "System Restoration Rider" herein.
- (k) Refunded or amortized generally over periods not exceeding one year.

Notes to Financial Statements

2019 Base Rate Case

On November 26, 2019, Mississippi Power filed a base rate case (Mississippi Power 2019 Base Rate Case) with the Mississippi PSC. The filing includes a requested annual decrease in Mississippi Power's retail rates of \$5.8 million, or 0.6%, which is driven primarily by changes in the amortization rates of certain regulatory assets and liabilities and cost reductions, partially offset by an increase in Mississippi Power's requested return on investment and depreciation associated with the filing of an updated depreciation study. The revenue requirements included in the filing are based on a projected test year period of January 1, 2020 through December 31, 2020, a 53% average equity ratio, and a 7.728% return on investment. The filing reflects the elimination of separate rates for costs associated with the Kemper County energy facility and energy efficiency initiatives; those costs are proposed to be included in the PEP, ECO Plan, and ad valorem tax adjustment factor, as applicable. On December 10, 2019, the Mississippi PSC suspended the base rate case filing through no later than March 25, 2020. If no further action is taken by the Mississippi PSC, the proposed rates may be effective beginning on March 26, 2020. The ultimate outcome of this matter cannot be determined at this time.

Operations Review

In August 2018, the Mississippi PSC began an operations review of Mississippi Power, for which the final report is expected prior to the conclusion of the Mississippi Power 2019 Base Rate Case. The review includes, but is not limited to, a comparative analysis of its costs, its cost recovery framework, and ways in which it may streamline management operations for the reasonable benefit of ratepayers. The ultimate outcome of this matter cannot be determined at this time.

Reserve Margin Plan

On December 31, 2019, Mississippi Power updated its proposed Reserve Margin Plan (RMP), originally filed in August 2018, as required by the Mississippi PSC. In 2018, Mississippi Power had proposed alternatives to reduce its reserve margin and lower or avoid operating costs, with the most economic alternatives being the two-year and seven-year acceleration of the retirement of Plant Watson Units 4 and 5, respectively, to the first quarter 2022 and the four-year acceleration of the retirement of Plant Greene County Units 1 and 2 to the third quarter 2021 and the third quarter 2022, respectively. The December 2019 update noted that Plant Daniel Units 1 and 2 currently have long-term economics similar to Plant Watson Unit 5. The Plant Greene County unit retirements would require the completion by Alabama Power of proposed transmission and system reliability improvements, as well as agreement by Alabama Power. The RMP filing also states that, in the event the Mississippi PSC ultimately approves an alternative that includes an accelerated retirement, Mississippi Power would require authorization to defer in a regulatory asset for future recovery the remaining net book value of the units at the time of retirement. A decision by the Mississippi PSC that does not include recovery of the remaining book value of any generating units retired could have a material impact on Southern Company's and Mississippi Power's financial statements. The ultimate outcome of this matter cannot be determined at this time. See Note 3 under "Other Matters – Mississippi Power" for additional information on Plant Daniel Units 1 and 2.

Performance Evaluation Plan

Mississippi Power's retail base rates generally are set under the PEP, a rate plan approved by the Mississippi PSC. Typically, two PEP filings are made for each calendar year: the PEP projected filing, which is typically filed prior to the beginning of the year based on a projected revenue requirement, and the PEP lookback filing, which is filed after the end of the year and allows for review of the actual revenue requirement compared to the projected filing.

In February 2018, Mississippi Power revised its annual projected PEP filing for 2018 to reflect the impacts of the Tax Reform Legislation. The revised filing requested an increase of \$26 million in annual revenues, based on a performance adjusted ROE of 9.33% and an increased equity ratio of 55%. In July 2018, Mississippi Power and the MPUS entered into a settlement agreement, which was approved by the Mississippi PSC in August 2018, with respect to the 2018 PEP filing and all unresolved PEP filings for prior years (PEP Settlement Agreement). Rates under the PEP Settlement Agreement became effective with the first billing cycle of September 2018. The PEP Settlement Agreement provided for an increase of approximately \$21.6 million in annual base retail revenues, which excluded certain compensation costs contested by the MPUS, as well as approximately \$2 million subsequently approved for recovery through the 2018 Energy Efficiency Cost Rider. Under the PEP Settlement Agreement, Mississippi Power deferred a portion of the contested compensation costs for 2018 and 2019 as a regulatory asset, which totaled \$4 million as of December 31, 2019 and is included in other regulatory assets, deferred on the balance sheet. The Mississippi PSC is expected to rule on the appropriate treatment for such costs in connection with the Mississippi Power 2019 Base Rate Case. The ultimate outcome of this matter cannot be determined at this time.

Notes to Financial Statements

Pursuant to the PEP Settlement Agreement, Mississippi Power's performance-adjusted allowed ROE is 9.31% and its allowed equity ratio is capped at 51%, pending further review by the Mississippi PSC. In lieu of the requested equity ratio increase, Mississippi Power retained \$44 million of excess accumulated deferred income taxes resulting from the Tax Reform Legislation until the conclusion of the Mississippi Power 2019 Base Rate Case. Further, Mississippi Power agreed to seek equity contributions sufficient to restore its equity ratio to 50% by December 31, 2018. Since Mississippi Power's actual average equity ratio for 2018 was more than 1% lower than the 50% target, Mississippi Power deferred the corresponding difference in its revenue requirement of approximately \$4 million as a regulatory liability for resolution in the Mississippi Power 2019 Base Rate Case. Pursuant to the PEP Settlement Agreement, PEP proceedings are suspended until after the conclusion of the Mississippi Power 2019 Base Rate Case and Mississippi Power was not required to make any PEP filings for regulatory years 2018, 2019, and 2020. The PEP Settlement Agreement also resolved all open PEP filings with no change to customer rates.

Energy Efficiency

In May 2018, the Mississippi PSC issued an order approving Mississippi Power's revised annual projected Energy Efficiency Cost Rider 2018 compliance filing, which increased annual retail revenues by approximately \$3 million effective with the first billing cycle for June 2018.

On February 5, 2019, the Mississippi PSC issued an order approving Mississippi Power's Energy Efficiency Cost Rider 2019 compliance filing, which included a slight decrease in annual retail revenues, effective with the first billing cycle in March 2019.

As part of the Mississippi Power 2019 Base Rate Case, Mississippi Power has proposed that the Energy Efficiency Cost Rider be eliminated and those costs be included in the PEP. The ultimate outcome of this matter cannot be determined at this time.

Environmental Compliance Overview Plan

In accordance with a 2011 accounting order from the Mississippi PSC, Mississippi Power has the authority to defer in a regulatory asset for future recovery all plant retirement- or partial retirement-related costs resulting from environmental regulations. The Mississippi PSC approved \$41 million and \$17 million of costs that were reclassified to regulatory assets associated with the fuel conversion of Plant Watson and Plant Greene County, respectively, for amortization over five-year periods ending in July 2021 and July 2022, respectively.

In August 2018, the Mississippi PSC approved an annual increase in revenues related to the ECO Plan of approximately \$17 million, effective with the first billing cycle for September 2018. This increase represented the maximum 2% annual increase in revenues and primarily related to the carryforward from the prior year.

The increase was the result of Mississippi PSC approval of an agreement between Mississippi Power and the MPUS to settle the 2018 ECO Plan filing (ECO Settlement Agreement) and was sufficient to recover costs through 2019, including remaining amounts deferred from prior years along with the related carrying costs. In accordance with the ECO Settlement Agreement, ECO Plan proceedings are suspended until after the conclusion of the Mississippi Power 2019 Base Rate Case and Mississippi Power was not required to make any ECO Plan filings for 2018, 2019, and 2020, with any necessary adjustments reflected in the Mississippi Power 2019 Base Rate Case. The ECO Settlement Agreement contains the same terms as the PEP Settlement Agreement described herein with respect to allowed ROE and equity ratio. At December 31, 2019, Mississippi Power has recorded \$2 million in other regulatory liabilities, deferred on the balance sheet related to the actual December 31, 2018 average equity ratio differential from target applicable to the ECO Plan.

On October 24, 2019, the Mississippi PSC approved Mississippi Power's July 9, 2019 request for a CPCN to complete certain environmental compliance projects, primarily associated with the Plant Daniel coal units co-owned 50% with Gulf Power. The total estimated cost is approximately \$125 million, with Mississippi Power's share of approximately \$66 million being proposed for recovery through its ECO Plan. Approximately \$17 million of Mississippi Power's share is associated with ash pond closure and is reflected in Mississippi Power's ARO liabilities. See Note 6 for additional information on AROs and Note 3 under "Other Matters – Mississippi Power" for additional information on Gulf Power's ownership in Plant Daniel.

Fuel Cost Recovery

Mississippi Power annually establishes and is required to file for an adjustment to the retail fuel cost recovery factor that is approved by the Mississippi PSC. The Mississippi PSC approved an increase of \$39 million effective February 2018 and decreases of \$35 million and \$24 million, effective in February 2019 and 2020, respectively. At December 31, 2019 and 2018, over recovered retail fuel costs included in other current liabilities on Southern Company's balance sheets and over recovered regulatory clause liabilities on Mississippi Power's balance sheets were approximately \$23 million and \$8 million, respectively.

Notes to Financial Statements

Mississippi Power has wholesale MRA and Market Based (MB) fuel cost recovery factors. Effective with the first billing cycle for January 2019, the wholesale MRA fuel rate increased \$16 million annually and the wholesale MB fuel rate decreased by an immaterial amount. Effective January 1, 2020, the wholesale MRA fuel rate increased \$1 million annually and the wholesale MB fuel rate decreased by an immaterial amount. At December 31, 2019 and 2018, over recovered wholesale MRA fuel costs included in other current liabilities on Southern Company's balance sheets and over recovered regulatory clause liabilities on Mississippi Power's balance sheets were approximately \$6 million. At December 31, 2019 and 2018, over/under recovered wholesale MB fuel costs included in the balance sheets were immaterial.

Mississippi Power's operating revenues are adjusted for differences in actual recoverable fuel cost and amounts billed in accordance with the currently approved cost recovery rate. Accordingly, changes in the billing factor should have no significant effect on Mississippi Power's revenues or net income but will affect operating cash flows.

Ad Valorem Tax Adjustment

Mississippi Power establishes annually an ad valorem tax adjustment factor that is approved by the Mississippi PSC to collect the ad valorem taxes paid by Mississippi Power. In 2019, 2018, and 2017, the Mississippi PSC approved Mississippi Power's annual ad valorem tax adjustment factor filing, which included rate increases of \$2 million, \$7 million, and \$8 million in 2019, 2018, and 2017, respectively.

System Restoration Rider

Mississippi Power carries insurance for the cost of certain types of damage to generation plants and general property. However, Mississippi Power is self-insured for the cost of storm, fire, and other uninsured casualty damage to its property, including transmission and distribution facilities. As permitted by the Mississippi PSC and the FERC, Mississippi Power accrues for the cost of such damage through an annual expense accrual credited to regulatory liability accounts for the retail and wholesale jurisdictions. The cost of repairing actual damage resulting from such events that individually exceed \$50,000 is charged to the reserve. Every three years the Mississippi PSC, the MPUS, and Mississippi Power agree on SRR revenue level(s) for the ensuing period, based on historical data, expected exposure, type and amount of insurance coverage, excluding insurance cost, and any other relevant information. The accrual amount and the reserve balance are determined based on the SRR revenue level(s). If a significant change in circumstances occurs, then the SRR revenue level can be adjusted more frequently if Mississippi Power and the MPUS or the Mississippi PSC deem the change appropriate. The property damage reserve accrual will be the difference between the approved SRR revenues and the SRR revenue requirement, excluding any accrual to the reserve. In addition, SRR allows Mississippi Power to set up a regulatory asset, pending review, if the allowable actual retail property damage costs exceed the amount in the retail property damage reserve. Mississippi Power made retail accruals of \$1 million, \$1 million, and \$3 million for 2019, 2018, and 2017, respectively. Mississippi Power also accrued \$0.3 million annually in 2019, 2018, and 2017 for the wholesale jurisdiction. As of December 31, 2019, the property damage reserve balances were \$54 million and \$1 million for retail and wholesale, respectively.

The SRR rate was zero for all years presented and Mississippi Power accrued \$1 million, \$2 million, and \$4 million to the property damage reserve in 2019, 2018, and 2017, respectively.

Kemper County Energy Facility

Overview

The Kemper County energy facility was designed to utilize IGCC technology with an expected output capacity of 582 MWs and to be fueled by locally mined lignite (an abundant, lower heating value coal) from a mine owned by Mississippi Power and situated adjacent to the Kemper County energy facility.

Schedule and Cost Estimate

In 2012, the Mississippi PSC issued an order confirming the CPCN originally approved by the Mississippi PSC in 2010 authorizing the acquisition, construction, and operation of the Kemper County energy facility. The order approved a construction cost cap of up to \$2.88 billion, with recovery of prudently-incurred costs subject to approval by the Mississippi PSC. The Kemper County energy facility was originally projected to be placed in service in May 2014. Mississippi Power placed the combined cycle and the associated common facilities portion of the Kemper County energy facility in service in August 2014. The combined cycle and associated common facilities portions of the Kemper County energy facility were dedicated as Plant Ratcliffe in April 2018.

Notes to Financial Statements

In June 2017, the Mississippi PSC stated its intent to issue an order, which occurred in July 2017, directing Mississippi Power to pursue a settlement under which the Kemper County energy facility would be operated as a natural gas plant, rather than an IGCC plant, and address all issues associated with the Kemper County energy facility. The order established a new docket for the purpose of pursuing a global settlement of the related costs (Kemper Settlement Docket). In June 2017, Mississippi Power notified the Mississippi PSC that it would begin a process to suspend operations and start-up activities on the gasifier portion of the Kemper County energy facility, given the uncertainty as to its future.

At the time of project suspension in June 2017, the total cost estimate for the Kemper County energy facility was approximately \$7.38 billion, including approximately \$5.95 billion of costs subject to the construction cost cap, net of \$137 million in additional grants from the DOE received in April 2016. In the aggregate, Mississippi Power had recorded charges to income of \$3.07 billion (\$1.89 billion after tax) as a result of changes in the cost estimate above the cost cap for the Kemper IGCC through May 2017.

Given the Mississippi PSC's stated intent regarding no further rate increase for the Kemper County energy facility and the subsequent suspension, cost recovery of the gasifier portions became no longer probable; therefore, Mississippi Power recorded an additional charge to income in June 2017 of \$2.8 billion (\$2.0 billion after tax), which included estimated costs associated with the gasification portions of the plant and lignite mine. During the third and fourth quarters of 2017, Mississippi Power recorded charges to income of \$242 million (\$206 million after tax), including \$164 million for ongoing project costs, estimated mine and gasifier-related costs, and certain termination costs during the suspension period prior to conclusion of the Kemper Settlement Docket, as well as the charge associated with the Kemper Settlement Agreement discussed below.

In 2019, Mississippi Power recorded pre-tax and after-tax charges to income of \$24 million, primarily associated with the expected close out of a related DOE contract, as well as other abandonment and related closure costs and ongoing period costs, net of salvage proceeds, for the mine and gasifier-related assets. The after-tax amount for 2019 includes an adjustment related to the tax abandonment of the Kemper IGCC following the filing of the 2018 tax return. In 2018, Mississippi Power recorded pre-tax charges to income of \$37 million (\$68 million benefit after tax), primarily associated with abandonment and related closure costs and ongoing period costs, net of salvage proceeds, for the mine and gasifier-related assets, as well as the impact of a change in the valuation allowance for the related state income tax NOL carryforward.

Mississippi Power expects to substantially complete mine reclamation activities in 2020 and dismantlement of the abandoned gasifier-related assets and site restoration activities are expected to be completed in 2024. The additional pre-tax period costs associated with dismantlement and site restoration activities, including related costs for compliance and safety, ARO accretion, and property taxes, are estimated to total \$17 million in 2020, \$15 million to \$16 million annually in 2021 through 2023, and \$5 million in 2024.

See Note 10 for additional information.

Rate Recovery

In February 2018, the Mississippi PSC voted to approve a settlement agreement related to cost recovery for the Kemper County energy facility among Mississippi Power, the MPUS, and certain intervenors (Kemper Settlement Agreement), which resolved all cost recovery issues, modified the CPCN to limit the Kemper County energy facility to natural gas combined cycle operation, and provided for an annual revenue requirement of approximately \$99.3 million for costs related to the Kemper County energy facility, which included the impact of the Tax Reform Legislation. The revenue requirement was based on (i) a fixed ROE for 2018 of 8.6% excluding any performance adjustment, (ii) a ROE for 2019 calculated in accordance with PEP, excluding the performance adjustment, (iii) for future years, a performance-based ROE calculated pursuant to PEP, and (iv) amortization periods for the related regulatory assets and liabilities of eight years and six years, respectively. The revenue requirement also reflects a disallowance related to a portion of Mississippi Power's investment in the Kemper County energy facility requested for inclusion in rate base, which was recorded in the fourth quarter 2017 as an additional charge to income of approximately \$78 million (\$85 million net of accumulated depreciation of \$7 million) pre-tax (\$48 million after tax).

Under the Kemper Settlement Agreement, retail customer rates were reduced by approximately \$26.8 million annually, effective with the first billing cycle of April 2018, and include no recovery for costs associated with the gasifier portion of the Kemper County energy facility in 2018 or at any future date.

On November 26, 2019, Mississippi Power filed the Mississippi Power 2019 Base Rate Case, which reflects the elimination of separate rates for costs associated with the Kemper County energy facility; these costs are proposed to be included in rates for PEP, ECO Plan, and ad valorem tax adjustment factor, as applicable. The ultimate outcome of this matter cannot be determined at this time.

Notes to Financial Statements

Lignite Mine and CO₂ Pipeline Facilities

Mississippi Power owns the lignite mine and equipment and mineral reserves located around the Kemper County energy facility site. The mine started commercial operation in June 2013. In connection with the Kemper County energy facility construction, Mississippi Power also constructed a pipeline for the transport of captured CO₂.

In 2010, Mississippi Power executed a management fee contract with Liberty Fuels Company, LLC (Liberty Fuels), a wholly-owned subsidiary of The North American Coal Corporation, which developed, constructed, and is responsible for the mining operations through the end of the mine reclamation. As the mining permit holder, Liberty Fuels has a legal obligation to perform mine reclamation and Mississippi Power has a contractual obligation to fund all reclamation activities. As a result of the abandonment of the Kemper IGCC, final mine reclamation began in 2018 and is expected to be substantially completed in 2020, with monitoring expected to continue through 2027. See Note 6 for additional information.

On December 31, 2019, Mississippi Power transferred ownership of the CO₂ pipeline to an unrelated gas pipeline company, with no resulting impact on income. In conjunction with the transfer of the CO₂ pipeline, the parties agreed to enter into a 15-year firm transportation agreement, which is expected to be signed by March 2020, providing for the conversion by the pipeline company of the CO₂ pipeline to a natural gas pipeline to be used for the delivery of natural gas to Plant Ratcliffe. The agreement will be treated as a finance lease for accounting purposes upon commencement, which is expected to occur by August 2020. See Note 9 for additional information.

Government Grants

In 2010, the DOE, through a cooperative agreement with SCS, agreed to fund \$270 million of the Kemper County energy facility through the grants awarded to the project by the DOE under the Clean Coal Power Initiative Round 2. In 2016, additional DOE grants in the amount of \$137 million were awarded to the Kemper County energy facility. Through December 31, 2018, Mississippi Power received total DOE grants of \$387 million, of which \$382 million reduced the construction costs of the Kemper County energy facility and \$5 million reimbursed Mississippi Power for expenses associated with DOE reporting. In December 2018, Mississippi Power filed with the DOE its request for property closeout certification under the contract related to the \$387 million of grants received. Mississippi Power expects to close out the DOE contract related to the Kemper County energy facility in 2020. In connection with the DOE closeout discussions, on April 29, 2019, the Civil Division of the Department of Justice informed Southern Company and Mississippi Power of an investigation related to the Kemper County energy facility. The ultimate outcome of this matter cannot be determined at this time; however, it could have a material impact on Southern Company's and Mississippi Power's financial statements.

Municipal and Rural Associations Tariff

Mississippi Power provides wholesale electric service to Cooperative Energy, East Mississippi Electric Power Association, and the City of Collins, all located in southeastern Mississippi, under a long-term, cost-based, FERC-regulated MRA tariff.

In 2017, Mississippi Power and Cooperative Energy executed, and the FERC accepted, a Shared Service Agreement (SSA), as part of the MRA tariff, under which Mississippi Power and Cooperative Energy will share in providing electricity to the Cooperative Energy delivery points under the tariff, effective January 1, 2018. The SSA may be cancelled by Cooperative Energy with 10 years notice after December 31, 2020. As of December 31, 2019, Cooperative Energy has the option to decrease its use of Mississippi Power's generation services under the MRA tariff up to 2.5% annually, with required notice, up to a maximum total reduction of 11%, or approximately \$9 million in cumulative annual base revenues.

On May 7, 2019, the FERC accepted Mississippi Power's requested \$3.7 million annual decrease in MRA base rates effective January 1, 2019, as agreed upon in a settlement agreement reached with its wholesale customers resolving all matters related to the Kemper County energy facility, similar to the retail rate settlement agreement approved by the Mississippi PSC in February 2018, and reflecting the impacts of the Tax Reform Legislation.

Notes to Financial Statements

Southern Company Gas

Regulatory Assets and Liabilities

Regulatory assets and (liabilities) reflected in the balance sheets of Southern Company Gas at December 31, 2019 and 2018 relate to:

	2019	2018	Note
		<i>(in millions)</i>	
Environmental remediation	\$ 296	\$ 311	(a,b)
Retiree benefit plans	167	161	(a,c)
Long-term debt fair value adjustment	107	121	(d)
Under recovered regulatory clause revenues	72	90	(e)
Other regulatory assets	68	59	(f)
Other cost of removal obligations	(1,606)	(1,585)	(g)
Deferred income tax credits	(874)	(940)	(g,i)
Over recovered regulatory clause revenues	(82)	(43)	(e)
Other regulatory liabilities	(22)	(46)	(h)
Total regulatory assets (liabilities), net	\$(1,874)	\$(1,872)	

Note: Unless otherwise noted, the recovery and amortization periods for these regulatory assets and (liabilities) have been approved or accepted by the relevant state PSC or other regulatory body and are as follows:

- (a) Not earning a return as offset in rate base by a corresponding asset or liability.
- (b) Recovered through environmental cost recovery mechanisms when the remediation work is performed. See Note 3 for additional information.
- (c) Recovered and amortized over the average remaining service period which range up to 15 years. See Note 11 for additional information.
- (d) Recovered over the remaining life of the original debt issuances at acquisition, which range up to 19 years as of December 31, 2019.
- (e) Recorded and recovered or amortized over periods generally not exceeding six years. In addition to natural gas cost recovery mechanisms, the natural gas distribution utilities have various other cost recovery mechanisms for the recovery of costs, including those related to infrastructure replacement programs.
- (f) Includes financial instrument-hedging assets totaling \$11 million and \$8 million at December 31, 2019 and 2018, respectively, which are recorded over the life of the underlying hedged purchase contracts generally not exceeding two years, vacation pay assets totaling \$11 million at both December 31, 2019 and 2018, which are recorded as earned by employees and recovered as paid, generally within one year, and several other miscellaneous components, which are recovered or amortized over periods generally not exceeding eight years.
- (g) Other cost of removal obligations are recorded and deferred income tax liabilities are amortized over the related property lives, which may range up to 80 years. Cost of removal liabilities will be settled and trued up following completion of the related activities.
- (h) Comprised of numerous components, including amounts to be refunded to customers as a result of the Tax Reform Legislation and energy efficiency programs, which are recovered or amortized over remaining periods generally not exceeding 20 years. Upon final settlement, actual energy efficiency program costs incurred are recovered, and actual income earned is refunded through the energy cost recovery clause. See "Rate Proceedings" herein for additional information regarding customer refunds resulting from the Tax Reform Legislation.
- (i) As of December 31, 2019, includes \$12 million of excess deferred income tax liabilities not subject to normalization as a result of the Tax Reform Legislation which are being amortized through 2024. See "Rate Proceedings" herein and Note 10 for additional details.

Infrastructure Replacement Programs and Capital Projects

In addition to capital expenditures recovered through base rates by each of the natural gas distribution utilities, Nicor Gas and Virginia Natural Gas have separate rate riders that provide timely recovery of capital expenditures for specific infrastructure replacement programs. Descriptions of the infrastructure replacement programs and capital projects at the natural gas distribution utilities follow.

Nicor Gas

In 2013, Illinois enacted legislation that allows Nicor Gas to provide more widespread safety and reliability enhancements to its distribution system. The legislation stipulates that rate increases to customers as a result of any infrastructure investments shall not exceed a cumulative annual average of 4.0% or, in any given year, 5.5% of base rate revenues. In 2014, the Illinois Commission approved the nine-year regulatory infrastructure program, Investing in Illinois, subject to annual review. In conjunction with the base rate case order issued by the Illinois Commission in January 2018, Nicor Gas is recovering program costs incurred prior to December 31, 2017 through base rates. Additionally, the Illinois Commission's approval of Nicor Gas' rate case on October 2, 2019 included \$65 million in annual revenues related to the recovery of program costs from January 1, 2018 through September 30, 2019 under the Investing in Illinois program. See "Rate Proceedings" herein for additional information.

Notes to Financial Statements

Virginia Natural Gas

In 2012, the Virginia Commission approved the Steps to Advance Virginia's Energy (SAVE) program, an accelerated infrastructure replacement program. In 2016 and on September 25, 2019, the Virginia Commission approved amendments and extensions to the SAVE program. The latest extension allows Virginia Natural Gas to continue replacing aging pipeline infrastructure through 2024 and increases its authorized investment under the previously-approved plan from \$35 million to \$40 million in 2019 with additional annual investments of \$50 million in 2020, \$60 million in 2021, \$70 million in each year from 2022 through 2024, and a total potential variance of up to \$5 million allowed for the program, for a maximum total investment over the six-year term (2019 through 2024) of \$365 million.

The SAVE program is subject to annual review by the Virginia Commission. In accordance with the base rate case order issued by the Virginia Commission in 2017, Virginia Natural Gas is recovering program costs incurred prior to September 1, 2017 through base rates. Program costs incurred subsequent to September 1, 2017 are currently recovered through a separate rider and are subject to future base rate case proceedings.

On December 6, 2019, Virginia Natural Gas filed an application with the Virginia Commission for a 24.1-mile header improvement project to improve resiliency and increase the supply of natural gas delivered to energy suppliers, including Virginia Natural Gas. The cost of the project is expected to total \$346 million. The Virginia Commission is expected to rule on this application in the second quarter 2020. Construction is expected to begin in June 2021 and the project is expected to be placed in service in the fourth quarter 2022. The ultimate outcome of this matter cannot be determined at this time.

Atlanta Gas Light

GRAM

In December 2019, the Georgia PSC approved the continuation of GRAM as part of Atlanta Gas Light's 2019 rate case order. Various infrastructure programs previously authorized by the Georgia PSC, including the Integrated Vintage Plastic Replacement Program to replace aging plastic pipe and the Integrated System Reinforcement Program to upgrade Atlanta Gas Light's distribution system and LNG facilities in Georgia, continue under GRAM and the recovery of and return on the infrastructure program investments are included in annual base rate adjustments. The future expected costs to be recovered through rates related to allowed, but not incurred, costs are recognized in an unrecognized ratemaking amount that is not reflected on the balance sheets. This allowed cost is primarily the equity return on the capital investment under the infrastructure programs in place prior to GRAM. See "Unrecognized Ratemaking Amounts" herein for additional information. The Georgia PSC reviews Atlanta Gas Light's performance annually under GRAM. See "Rate Proceedings" herein for additional information.

Pursuant to the GRAM approval, Atlanta Gas Light and the staff of the Georgia PSC agreed to a variation of the Integrated Customer Growth Program to extend pipeline facilities to serve customers in areas without pipeline access and create new economic development opportunities in Georgia. As a result, a new tariff was created, effective October 10, 2017, to provide up to \$15 million annually for Atlanta Gas Light to commit to strategic economic development projects. Projects under this tariff must be approved by the Georgia PSC.

PRP

Atlanta Gas Light previously recovered PRP costs through a PRP surcharge established in 2015 to address recovery of the under recovered PRP balance and the related carrying costs. The under recovered balance at December 31, 2019 was \$135 million, including \$70 million of unrecognized equity return. Effective January 2018, PRP costs are being recovered through GRAM and base rates until the earlier of the full recovery of the under recovered amount or December 31, 2025.

One of the capital projects under the PRP experienced construction issues and Atlanta Gas Light was required to complete mitigation work prior to placing it in service. These mitigation costs were included in base rates in 2018. In 2017, Atlanta Gas Light recovered \$20 million from the settlement of contractor litigation claims and recovered an additional \$7 million from the final settlement of contractor litigation claims during the first quarter 2018. Mitigation costs recovered through the legal process are retained by Atlanta Gas Light.

Natural Gas Cost Recovery

With the exception of Atlanta Gas Light, the natural gas distribution utilities are authorized by the relevant regulatory agencies in the states in which they serve to use natural gas cost recovery mechanisms that adjust rates to reflect changes in the wholesale cost of natural gas and ensure recovery of all costs prudently incurred in purchasing natural gas for customers. Natural gas cost recovery revenues are adjusted for differences in actual recoverable natural gas costs and amounts billed in current regulated rates. Changes in the billing factor will not have a significant effect on Southern Company's or Southern Company Gas' revenues or net income, but will affect cash flows. At December 31, 2019 and 2018, the over recovered balances were \$74 million and \$15 million, respectively, which were included in other regulatory liabilities on Southern Company's and Southern Company Gas' balance sheets.

Notes to Financial Statements

Rate Proceedings

Nicor Gas

In January 2018, the Illinois Commission approved a \$137 million increase in annual base rate revenues, including \$93 million related to the recovery of investments under the Investing in Illinois program, effective in February 2018, based on a ROE of 9.8%. In May 2018, the Illinois Commission approved Nicor Gas' rehearing request for revised base rates to incorporate the reduction in the federal income tax rate as a result of the Tax Reform Legislation. The resulting decrease of approximately \$44 million in annual base rate revenues became effective May 5, 2018. The benefits of the Tax Reform Legislation from January 25, 2018 through May 4, 2018 were refunded to customers via bill credits and concluded in the second quarter 2019.

In November 2018, Nicor Gas filed a general base rate case with the Illinois Commission. On October 2, 2019, the Illinois Commission approved a \$168 million annual base rate increase effective October 8, 2019. The base rate increase included \$65 million related to the recovery of program costs under the Investing in Illinois program and was based on a ROE of 9.73% and an equity ratio of 54.2%. Additionally, the Illinois Commission approved a volume balancing adjustment, a revenue decoupling mechanism for residential customers that provides a monthly benchmark level of revenue per rate class for recovery.

Atlanta Gas Light

In February 2018, Atlanta Gas Light revised its annual base rate filing to reflect the impacts of the Tax Reform Legislation and requested a \$16 million rate reduction. In May 2018, the Georgia PSC approved a stipulation for Atlanta Gas Light's annual base rates to remain at the 2017 level for 2018 and 2019, with customer credits of \$8 million in each of July 2018 and October 2018 to reflect the impacts of the Tax Reform Legislation. The Georgia PSC maintained Atlanta Gas Light's previously authorized earnings band based on a ROE between 10.55% and 10.95% and increased the allowed equity ratio by 4% to an equity ratio of 55% to address the negative cash flow and credit metric impacts of the Tax Reform Legislation.

On June 3, 2019, Atlanta Gas Light filed a general base rate case with the Georgia PSC. On December 19, 2019, the Georgia PSC approved a \$65 million annual base rate increase, effective January 1, 2020, based on a ROE of 10.25% and an equity ratio of 56%. Earnings will be evaluated against a ROE range of 10.05% to 10.45%, with disposition of any earnings above 10.45% to be determined by the Georgia PSC. Additionally, the Georgia PSC approved continuation of the previously authorized inclusion in base rates of the recovery of and return on the infrastructure program investments, including, but not limited to, GRAM adjustments, and a reauthorization and continuation of GRAM until terminated by the Georgia PSC. GRAM filing rate adjustments will be based on the authorized ROE of 10.25%. GRAM adjustments for 2021 may not exceed 5% of 2020 base rates. The 5% limitation does not set a precedent in any future rate proceedings by Atlanta Gas Light.

On January 31, 2020, in accordance with the Georgia PSC's order for the 2019 rate case, Atlanta Gas Light filed a recommended notice of proposed rulemaking for a long-range planning tool. The proposal provides for participating natural gas utilities to file a comprehensive capacity supply and related infrastructure delivery plan for a 10-year period, including capital and related operations and maintenance expense budgets. Participating natural gas utilities would file an updated 10-year plan at least once every third year under the proposal. Related costs of implementing an approved comprehensive plan would be included in the utility's next rate case or GRAM filing. The rulemaking process is expected to be completed during 2020.

Virginia Natural Gas

In 2017, the Virginia Commission approved a settlement for a \$34 million increase in annual base rate revenues, effective September 1, 2017, including \$13 million related to the recovery of investments under the SAVE program. See "Infrastructure Replacement Programs and Capital Projects" herein for additional information. An authorized ROE range of 9.0% to 10.0% with a midpoint of 9.5% will be used to determine the revenue requirement in any filing, other than for a change in base rates.

In December 2018, the Virginia Commission approved Virginia Natural Gas' annual information form filing, which reduced annual base rates by \$14 million effective January 1, 2019 due to lower tax expense as a result of the Tax Reform Legislation, along with customer refunds, via bill credits, for \$14 million related to 2018 tax benefits deferred as a regulatory liability at December 31, 2018. These customer refunds were completed in the first quarter 2019.

On February 3, 2020, Virginia Natural Gas filed a notice of intent with the Virginia Commission as required prior to the filing of a base rate case, which will occur between April 3, 2020 and April 30, 2020. The ultimate outcome of this matter cannot be determined at this time.

Notes to Financial Statements

Unrecognized Ratemaking Amounts

The following table illustrates Southern Company Gas' authorized ratemaking amounts that are not recognized on its balance sheets. These amounts are primarily composed of an allowed equity rate of return on assets associated with certain regulatory infrastructure programs. These amounts will be recognized as revenues in Southern Company Gas' financial statements in the periods they are billable to customers, the majority of which will be recovered by 2025.

	December 31, 2019	December 31, 2018
	<i>(in millions)</i>	
Atlanta Gas Light	\$70	\$ 95
Virginia Natural Gas	10	11
Nicor Gas	2	4
Total	\$82	\$110

3. CONTINGENCIES, COMMITMENTS, AND GUARANTEES

General Litigation Matters

The Registrants are involved in various other matters being litigated and regulatory matters. The ultimate outcome of such pending or potential litigation or regulatory matters against each Registrant and any subsidiaries cannot be determined at this time; however, for current proceedings not specifically reported herein, management does not anticipate that the ultimate liabilities, if any, arising from such current proceedings would have a material effect on such Registrant's financial statements.

The Registrants believe the pending legal challenges discussed below have no merit; however, the ultimate outcome of these matters cannot be determined at this time.

Southern Company

In January 2017, a securities class action complaint was filed against Southern Company, certain of its officers, and certain former Mississippi Power officers in the U.S. District Court for the Northern District of Georgia by Monroe County Employees' Retirement System on behalf of all persons who purchased shares of Southern Company's common stock between April 25, 2012 and October 29, 2013. The complaint alleges that Southern Company, certain of its officers, and certain former Mississippi Power officers made materially false and misleading statements regarding the Kemper County energy facility in violation of certain provisions under the Securities Exchange Act of 1934, as amended. The complaint seeks, among other things, compensatory damages and litigation costs and attorneys' fees. In 2017, the plaintiffs filed an amended complaint that provided additional detail about their claims, increased the purported class period by one day, and added certain other former Mississippi Power officers as defendants. Also in 2017, the defendants filed a motion to dismiss the plaintiffs' amended complaint with prejudice, to which the plaintiffs filed an opposition. In March 2018, the court issued an order granting, in part, the defendants' motion to dismiss. The court dismissed certain claims against certain officers of Southern Company and Mississippi Power and dismissed the allegations related to a number of the statements that plaintiffs challenged as being false or misleading. In April 2018, the defendants filed a motion for reconsideration of the court's order, seeking dismissal of the remaining claims in the lawsuit. In August 2018, the court denied the motion for reconsideration and denied a motion to certify the issue for interlocutory appeal. On August 22, 2019, the court certified the plaintiffs' proposed class. On September 5, 2019, the defendants filed a petition for interlocutory appeal of the class certification order with the U.S. Court of Appeals for the Eleventh Circuit. On December 19, 2019, the U.S. District Court for the Northern District of Georgia entered an order staying all deadlines in the case pending mediation. The stay automatically expires on March 31, 2020.

In February 2017, Jean Vineyard and Judy Mesirov each filed a shareholder derivative lawsuit in the U.S. District Court for the Northern District of Georgia. Each of these lawsuits names as defendants Southern Company, certain of its directors, certain of its officers, and certain former Mississippi Power officers. In 2017, these two shareholder derivative lawsuits were consolidated in the U.S. District Court for the Northern District of Georgia. The complaints allege that the defendants caused Southern Company to make false or misleading statements regarding the Kemper County energy facility cost and schedule. Further, the complaints allege that the defendants were unjustly enriched and caused the waste of corporate assets and also allege that the individual defendants violated their fiduciary duties. Each plaintiff seeks to recover, on behalf of Southern Company, unspecified actual damages and, on each plaintiff's own behalf, attorneys' fees and costs in bringing the lawsuit. Each plaintiff also seeks certain changes to Southern Company's corporate governance and internal processes. In April 2018, the court entered an order staying this lawsuit until 30 days after the resolution of any dispositive motions or any settlement, whichever is earlier, in the securities class action.

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In May 2017, Helen E. Piper Survivor's Trust filed a shareholder derivative lawsuit in the Superior Court of Gwinnett County, Georgia that names as defendants Southern Company, certain of its directors, certain of its officers, and certain former Mississippi Power officers. The complaint alleges that the individual defendants, among other things, breached their fiduciary duties in connection with schedule delays and cost overruns associated with the construction of the Kemper County energy facility. The complaint further alleges that the individual defendants authorized or failed to correct false and misleading statements regarding the Kemper County energy facility schedule and cost and failed to implement necessary internal controls to prevent harm to Southern Company. The plaintiff seeks to recover, on behalf of Southern Company, unspecified actual damages and disgorgement of profits and, on its behalf, attorneys' fees and costs in bringing the lawsuit. The plaintiff also seeks certain unspecified changes to Southern Company's corporate governance and internal processes. In May 2018, the court entered an order staying this lawsuit until 30 days after the resolution of any dispositive motions or any settlement, whichever is earlier, in the securities class action. On August 5, 2019, the court granted a motion filed by the plaintiff on July 17, 2019 to substitute a new named plaintiff, Martin J. Kobuck, in place of Helen E. Piper Survivor's Trust.

Georgia Power

In 2011, plaintiffs filed a putative class action against Georgia Power in the Superior Court of Fulton County, Georgia alleging that Georgia Power's collection in rates of amounts for municipal franchise fees (which fees are paid to municipalities) exceeded the amounts allowed in orders of the Georgia PSC and alleging certain state tort law claims. In 2016, the Georgia Court of Appeals reversed the trial court's previous dismissal of the case and remanded the case to the trial court. Georgia Power filed a petition for writ of certiorari with the Georgia Supreme Court, which was granted in 2017. In June 2018, the Georgia Supreme Court affirmed the judgment of the Georgia Court of Appeals and remanded the case to the trial court for further proceedings. Following a motion by Georgia Power, on February 13, 2019, the Superior Court of Fulton County ordered the parties to submit petitions to the Georgia PSC for a declaratory ruling to address certain terms the court previously held were ambiguous as used in the Georgia PSC's orders. The order entered by the Superior Court of Fulton County also conditionally certified the proposed class. In March 2019, Georgia Power and the plaintiffs filed petitions with the Georgia PSC seeking confirmation of the proper application of the municipal franchise fee schedule pursuant to the Georgia PSC's orders. On October 23, 2019, the Georgia PSC issued an order that found and concluded that Georgia Power has appropriately implemented the municipal franchise fee schedule. On March 6, 2019, Georgia Power filed a notice of appeal with the Georgia Court of Appeals regarding the Superior Court of Fulton County's February 2019 order. The amount of any possible losses cannot be calculated at this time because, among other factors, it is unknown whether conditional class certification will be upheld and the ultimate composition of any class and whether any losses would be subject to recovery from any municipalities.

Mississippi Power

In May 2018, Southern Company and Mississippi Power received a notice of dispute and arbitration demand filed by Martin Product Sales, LLC (Martin) based on two agreements, both related to Kemper IGCC byproducts for which Mississippi Power provided termination notices in 2017. Martin alleges breach of contract, breach of good faith and fair dealing, fraud and misrepresentation, and civil conspiracy and makes a claim for damages in the amount of approximately \$143 million, as well as additional unspecified damages, attorney's fees, costs, and interest. A portion of the claim for damages was on behalf of Martin Transport, Inc. (Martin Transport), an affiliate of Martin. In the first quarter 2019, Mississippi Power and Southern Company filed motions to dismiss, which were denied by the arbitration panel on May 10, 2019. On September 27, 2019, Martin Transport filed a separate complaint against Mississippi Power in the Circuit Court of Kemper County, Mississippi alleging claims of fraud, negligent misrepresentation, promissory estoppel, and equitable estoppel, each arising out of the same alleged facts and circumstances that underlie Martin's arbitration demand. Martin Transport seeks compensatory damages of \$5 million and punitive damages of \$50 million. In November 2019, Martin Transport's claim was combined with the Martin arbitration case and the separate court case was dismissed. On December 16, 2019, Southern Company and Mississippi Power each filed motions for summary judgment on all claims. On February 17, 2020, the arbitration panel granted Southern Company's motion and dismissed Southern Company from the arbitration. An adverse outcome in this proceeding could have a material impact on Southern Company's and Mississippi Power's financial statements.

In November 2018, Ray C. Turnage and 10 other individual plaintiffs filed a putative class action complaint against Mississippi Power and three members of the Mississippi PSC in the U.S. District Court for the Southern District of Mississippi. Mississippi Power received Mississippi PSC approval in 2013 to charge a mirror CWIP rate premised upon including in its rate base pre-construction and construction costs for the Kemper IGCC prior to placing the Kemper IGCC into service. The Mississippi Supreme Court reversed that approval and ordered Mississippi Power to refund the amounts paid by customers under the previously-approved mirror CWIP rate. The plaintiffs allege that the initial approval process, and the amount approved, were improper. They also allege that Mississippi Power underpaid customers by up to \$23.5 million in the refund process by applying an incorrect interest rate. The plaintiffs seek to recover, on behalf of themselves and their putative class, actual damages, punitive damages, pre-judgment interest, post-judgment interest, attorney's fees, and costs. In response to Mississippi Power and the Mississippi PSC each filing a motion to dismiss, the plaintiffs filed an amended complaint on March 14, 2019.

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The amended complaint included four additional plaintiffs and additional claims for gross negligence, reckless conduct, and intentional wrongdoing. Mississippi Power and the Mississippi PSC have each filed a motion to dismiss the amended complaint. An adverse outcome in this proceeding could have a material impact on Mississippi Power's financial statements.

See Note 2 under "Kemper County Energy Facility" for additional information.

Southern Power

Southern Power indirectly owns a 51% membership interest in RE Roserock LLC (Roserock), the owner of the Roserock facility in Pecos County, Texas. Prior to the facility being placed in service in 2016, certain solar panels were damaged during installation by the construction contractor, McCarthy Building Companies, Inc. (McCarthy), and certain solar panels were damaged by a hail event that also occurred during construction. In connection therewith, Southern Power withheld payment of approximately \$26 million to the construction contractor, which placed a lien on the Roserock facility for the same amount. In 2017, Roserock filed a lawsuit in the state district court in Pecos County, Texas against XL Insurance America, Inc. and North American Elite Insurance Company seeking recovery from an insurance policy for damages resulting from the hail event and McCarthy's installation practices. In June 2018, the court granted Roserock's motion for partial summary judgment, finding that the insurers were in breach of contract and in violation of the Texas Insurance Code for failing to pay any monies owed for the hail claim. Separate lawsuits were filed between Roserock and McCarthy, as well as other parties, and that litigation was consolidated in the U.S. District Court for the Western District of Texas. On April 18, 2019, Roserock and the parties to the state and federal lawsuits executed a settlement agreement and mutual release that resolved both lawsuits. Following execution of the agreement, the lawsuits were dismissed, Southern Power paid McCarthy the amounts previously withheld, and McCarthy released its lien. As part of the settlement, Roserock received funds that covered all related legal costs, damages, and the replacement costs of certain solar panels. Funds received by Southern Power in excess of the initial replacement costs were recognized as a gain and included in other income (expense), net, with a portion allocated to noncontrolling interests. As a result, Southern Power recognized a \$12 million after-tax gain in the second quarter 2019.

Environmental Remediation

The Southern Company system must comply with environmental laws and regulations governing the handling and disposal of waste and releases of hazardous substances. Under these various laws and regulations, the Southern Company system could incur substantial costs to clean up affected sites. The traditional electric operating companies and the natural gas distribution utilities conduct studies to determine the extent of any required cleanup and have recognized the estimated costs to clean up known impacted sites in the financial statements. A liability for environmental remediation costs is recognized only when a loss is determined to be probable and reasonably estimable. The traditional electric operating companies and the natural gas distribution utilities in Illinois and Georgia have each received authority from their respective state PSCs or other applicable state regulatory agencies to recover approved environmental compliance costs through regulatory mechanisms. These regulatory mechanisms are adjusted annually or as necessary within limits approved by the state PSCs or other applicable state regulatory agencies. At December 31, 2019 and 2018, the environmental remediation liabilities of Alabama Power and Mississippi Power were immaterial.

Georgia Power has been designated or identified as a potentially responsible party at sites governed by the Georgia Hazardous Site Response Act and/or by the federal Comprehensive Environmental Response, Compensation, and Liability Act, and assessment and potential cleanup of such sites is expected. For all years presented, Georgia Power recovered approximately \$2 million annually through the ECCR tariff. Effective January 1, 2020, Georgia Power is recovering approximately \$12 million annually through the ECCR tariff under the 2019 ARP. Georgia Power recognizes a liability for environmental remediation costs only when it determines a loss is probable and reasonably estimable and reduces the reserve as expenditures are incurred. Any difference between the liabilities accrued and costs recovered through rates is deferred as a regulatory asset or liability. The annual recovery amount is expected to be adjusted in future regulatory proceedings.

On December 23, 2019, Mississippi Power entered into an agreement with the Mississippi Commission on Environmental Quality related to groundwater conditions arising from the closed ash pond at Plant Watson. Mississippi Power paid a civil penalty of \$200,000 and will complete an assessment and remediation consistent with the requirements of the agreement and the CCR Rule. It is anticipated that corrective action will be needed; however, an estimate of remedial costs will not be available until further site assessment is completed. Mississippi Power expects to recover the retail portion of remedial costs through the ECO Plan and the wholesale portion through MRA rates.

Southern Company Gas is subject to environmental remediation liabilities associated with 40 former MGP sites in four different states. Southern Company Gas' accrued environmental remediation liability at December 31, 2019 and 2018 was based on the estimated cost of environmental investigation and remediation associated with known current and former MGP operating sites. These environmental remediation expenditures are generally recoverable from customers through rate mechanisms approved by the applicable state regulatory agencies of the natural gas distribution utilities.

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At December 31, 2019 and 2018, the environmental remediation liability and the balance of under recovered environmental remediation costs were reflected in the balance sheets as follows:

	Southern Company	Georgia Power	Southern Company Gas
		<i>(in millions)</i>	
December 31, 2019:			
Environmental remediation liability:			
Other current liabilities	\$ 51	\$15	\$ 36
Accrued environmental remediation	234	—	233
Under recovered environmental remediation costs:			
Other regulatory assets, current	\$ 49	\$12	\$ 37
Other regulatory assets, deferred	300	40	260
December 31, 2018:			
Environmental remediation liability:			
Other current liabilities	\$ 49	\$23	\$ 26
Accrued environmental remediation	268	—	268
Under recovered environmental remediation costs:			
Other regulatory assets, current	\$ 21	\$ 2	\$ 19
Other regulatory assets, deferred	345	53	292

The ultimate outcome of these matters cannot be determined at this time; however, as a result of the regulatory treatment for environmental remediation expenses described above, the final disposition of these matters is not expected to have a material impact on the financial statements of the applicable Registrants.

Nuclear Fuel Disposal Costs

Acting through the DOE and pursuant to the Nuclear Waste Policy Act of 1982, the U.S. government entered into contracts with Alabama Power and Georgia Power that require the DOE to dispose of spent nuclear fuel and high level radioactive waste generated at Plants Farley, Hatch, and Vogtle Units 1 and 2 beginning no later than January 31, 1998. The DOE has yet to commence the performance of its contractual and statutory obligation to dispose of spent nuclear fuel. Consequently, Alabama Power and Georgia Power pursued and continue to pursue legal remedies against the U.S. government for its partial breach of contract.

In 2014, Alabama Power and Georgia Power filed lawsuits against the U.S. government for the costs of continuing to store spent nuclear fuel at Plants Farley, Hatch, and Vogtle Units 1 and 2 for the period from January 1, 2011 through December 31, 2013. The damage period was subsequently extended to December 31, 2014. On June 12, 2019, the Court of Federal Claims granted Alabama Power's and Georgia Power's motion for summary judgment on damages not disputed by the U.S. government, awarding those undisputed damages to Alabama Power and Georgia Power. However, those undisputed damages are not collectible and no amounts will be recognized in the financial statements until the court enters final judgment on the remaining damages.

In 2017, Alabama Power and Georgia Power filed additional lawsuits against the U.S. government in the Court of Federal Claims for the costs of continuing to store spent nuclear fuel at Plants Farley, Hatch, and Vogtle Units 1 and 2 for the period from January 1, 2015 through December 31, 2017. Damages will continue to accumulate until the issue is resolved, the U.S. government disposes of Alabama Power's and Georgia Power's spent nuclear fuel pursuant to its contractual obligations, or alternative storage is otherwise provided. No amounts have been recognized in the financial statements as of December 31, 2019 for any potential recoveries from the pending lawsuits.

The final outcome of these matters cannot be determined at this time. However, Alabama Power and Georgia Power expect to credit any recoveries for the benefit of customers in accordance with direction from their respective PSC; therefore, no material impact on Southern Company's, Alabama Power's, or Georgia Power's net income is expected.

On-site dry spent fuel storage facilities are operational at all three plants and can be expanded to accommodate spent fuel through the expected life of each plant.

Nuclear Insurance

Under the Price-Anderson Amendments Act (Act), Alabama Power and Georgia Power maintain agreements of indemnity with the NRC that, together with private insurance, cover third-party liability arising from any nuclear incident occurring at the companies' nuclear power plants. The Act provides funds up to \$13.9 billion for public liability claims that could arise from a single nuclear incident. Each nuclear plant is insured against this liability to a maximum of \$450 million by American Nuclear Insurers (ANI), with the remaining coverage

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provided by a mandatory program of deferred premiums that could be assessed, after a nuclear incident, against all owners of commercial nuclear reactors. A company could be assessed up to \$138 million per incident for each licensed reactor it operates but not more than an aggregate of \$20 million per incident to be paid in a calendar year for each reactor. Such maximum assessment, excluding any applicable state premium taxes, for Alabama Power and Georgia Power, based on its ownership and buyback interests in all licensed reactors, is \$275 million and \$267 million, respectively, per incident, but not more than an aggregate of \$41 million and \$40 million, respectively, to be paid for each incident in any one year. Both the maximum assessment per reactor and the maximum yearly assessment are adjusted for inflation at least every five years. The next scheduled adjustment is due no later than November 1, 2023. See Note 5 under "Joint Ownership Agreements" for additional information on joint ownership agreements.

Alabama Power and Georgia Power are members of Nuclear Electric Insurance Limited (NEIL), a mutual insurer established to provide property damage insurance in an amount up to \$1.5 billion for members' operating nuclear generating facilities. Additionally, both companies have NEIL policies that currently provide decontamination, excess property insurance, and premature decommissioning coverage up to \$1.25 billion for nuclear losses and policies providing coverage up to \$750 million for non-nuclear losses in excess of the \$1.5 billion primary coverage.

NEIL also covers the additional costs that would be incurred in obtaining replacement power during a prolonged accidental outage at a member's nuclear plant. Members can purchase this coverage, subject to a deductible waiting period of up to 26 weeks, with a maximum per occurrence per unit limit of \$490 million. After the deductible period, weekly indemnity payments would be received until either the unit is operational or until the limit is exhausted. Alabama Power and Georgia Power each purchase limits based on the projected full cost of replacement power, subject to ownership limitations, and have each elected a 12-week deductible waiting period for each nuclear plant.

A builders' risk property insurance policy has been purchased from NEIL for the construction of Plant Vogtle Units 3 and 4. This policy provides the Vogtle Owners up to \$2.75 billion for accidental property damage occurring during construction.

Under each of the NEIL policies, members are subject to assessments each year if losses exceed the accumulated funds available to the insurer. The maximum annual assessments for Alabama Power and Georgia Power as of December 31, 2019 under the NEIL policies would be \$58 million and \$85 million, respectively.

Claims resulting from terrorist acts are covered under both the ANI and NEIL policies (subject to normal policy limits). The aggregate that NEIL will pay for all claims resulting from terrorist acts in any 12-month period is \$3.2 billion plus such additional amounts NEIL can recover through reinsurance, indemnity, or other sources.

For all on-site property damage insurance policies for commercial nuclear power plants, the NRC requires that the proceeds of such policies shall be dedicated first for the sole purpose of placing the reactor in a safe and stable condition after an accident. Any remaining proceeds are to be applied next toward the costs of decontamination and debris removal operations ordered by the NRC, and any further remaining proceeds are to be paid either to the applicable company or to its debt trustees as may be appropriate under the policies and applicable trust indentures. In the event of a loss, the amount of insurance available might not be adequate to cover property damage and other expenses incurred. Uninsured losses and other expenses, to the extent not recovered from customers, would be borne by Alabama Power or Georgia Power, as applicable, and could have a material effect on Southern Company's, Alabama Power's, and Georgia Power's financial condition and results of operations.

All retrospective assessments, whether generated for liability, property, or replacement power, may be subject to applicable state premium taxes.

Other Matters

Southern Company

As discussed in Note 1 under "Leveraged Leases," a subsidiary of Southern Holdings has several leveraged lease agreements. The ability of the lessees to make required payments to the Southern Holdings subsidiary is dependent on the operational performance of the assets. In 2017, the financial and operational performance of one of the lessees and the associated generation assets raised significant concerns about the short-term ability of the generation assets to produce cash flows sufficient to support ongoing operations and the lessee's contractual obligations and its ability to make the remaining semi-annual lease payments through the end of the lease term in 2047. In addition, following the expiration of the existing power offtake agreement in 2032, the lessee also is exposed to remarketing risk, which encompasses the price and availability of alternative sources of generation. While all lease payments through December 31, 2019 have been paid in full due to recent operational improvements, operational and remarketing risks and the resulting cash liquidity challenges persist, and significant concerns continue regarding the lessee's ability to make the remaining semi-annual lease payments. These challenges may also impact the expected residual value of the generation assets. Southern Company has evaluated the recoverability of the lease receivable and the expected residual value of the generation assets under various scenarios. Based on current forecasts of energy prices in

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the years following the expiration of the existing PPA, Southern Company concluded that it is no longer probable that all of the associated rental payments will be received over the term of the lease. As a result, during the fourth quarter 2019, Southern Company revised the estimate of cash flows to be received under the leveraged lease, which resulted in an impairment charge of \$17 million (\$13 million after tax). If any future lease payment is not paid in full, the Southern Holdings subsidiary may be unable to make its corresponding payment to the holders of the underlying non-recourse debt related to the generation assets. Failure to make the required payment to the debtholders could represent an event of default that would give the debtholders the right to foreclose on, and take ownership of, the generation assets from the Southern Holdings subsidiary, in effect terminating the lease and resulting in the write-off of the related lease receivable, which totaled approximately \$76 million at December 31, 2019. Southern Company will continue to monitor the operational performance of the underlying assets and evaluate the ability of the lessee to continue to make the required lease payments. The ultimate outcome of this matter cannot be determined at this time.

Alabama Power

On October 16, 2019, Alabama Power agreed to a consent order regarding a fish kill investigation. The consent order required Alabama Power to pay approximately \$50,000 to the Alabama Department of Environmental Management in civil penalties and approximately \$172,000 to the Alabama Department of Conservation and Natural Resources in fish restocking costs. Alabama Power paid the penalties and restocking costs during the fourth quarter 2019.

Mississippi Power

In 2013, Mississippi Power submitted a lost revenue claim under the Deepwater Horizon Economic and Property Damages Settlement Agreement associated with the oil spill that occurred in the Gulf of Mexico in 2010. In May 2018, Mississippi Power's claim was settled. The settlement proceeds of \$18 million, net of expenses and income tax, were included in Mississippi Power's earnings for 2018. Mississippi Power received half of the settlement proceeds in 2018 and half in 2019.

In conjunction with Southern Company's sale of Gulf Power, NextEra Energy held back \$75 million of the purchase price pending Mississippi Power and Gulf Power negotiating a mutually acceptable revised operating agreement for Plant Daniel. In addition, Mississippi Power and Gulf Power committed to seek a restructuring of their 50% undivided ownership interests in Plant Daniel such that each of them would, after the restructuring, own 100% of a generating unit. On January 15, 2019, Gulf Power provided notice to Mississippi Power that Gulf Power will retire its share of the generating capacity of Plant Daniel on January 15, 2024. Mississippi Power has the option to purchase Gulf Power's ownership interest for \$1 on January 15, 2024, provided that Mississippi Power exercises the option no later than 120 days prior to that date. Mississippi Power is assessing the potential operational and economic effects of Gulf Power's notice. The ultimate outcome of these matters remains subject to completion of Mississippi Power's evaluations and applicable regulatory approvals, including by the FERC and the Mississippi PSC, and cannot be determined at this time. See Note 15 under "Southern Company" for information regarding the sale of Gulf Power.

Southern Company Gas

Gas Pipeline Projects

At December 31, 2019, Southern Company Gas was involved in two gas pipeline construction projects, the Atlantic Coast Pipeline project and the PennEast Pipeline project.

The Atlantic Coast Pipeline has experienced challenges to its permits since construction began in 2018. During the third and fourth quarters 2018, a FERC stop work order, together with delays in obtaining permits necessary for construction and construction delays due to judicial actions, impacted the cost and schedule for the project. Project cost estimates are approximately \$8.0 billion (\$400 million for Southern Company Gas), excluding financing costs. On October 4, 2019, the U.S. Supreme Court agreed to hear Atlantic Coast Pipeline's appeal of a lower court ruling that overturned a key permit for the project. On January 7, 2020, the U.S. Court of Appeals for the Fourth Circuit vacated another key permit. The operator of the joint venture has indicated that it currently expects to complete construction by the end of 2021 and place the project in service shortly thereafter.

On February 7, 2020, Southern Company Gas entered into an agreement with Dominion Atlantic Coast Pipeline, LLC for the sale of its interest in Atlantic Coast Pipeline. The transaction is expected to be completed in the first half of 2020; however, the ultimate outcome cannot be determined at this time. See Note 15 under "Southern Company Gas – Proposed Sale of Pivotal LNG and Atlantic Coast Pipeline" for additional information.

Expected project costs related to the PennEast Pipeline for Southern Company Gas total approximately \$300 million, excluding financing costs. In January 2018, the PennEast Pipeline received initial FERC approval. Work continues with state and federal agencies to obtain the required permits to begin construction on the PennEast Pipeline. On September 10, 2019, an appellate court ruled that the PennEast

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Pipeline does not have federal eminent domain authority over lands in which a state has property rights interests. On February 18, 2020, PennEast Pipeline filed a petition for a writ of certiorari to seek U.S. Supreme Court review of the appellate court decision. On December 30, 2019, PennEast Pipeline filed a two-year extension request with the FERC to complete the project by January 19, 2022.

Additionally, on January 30, 2020, PennEast Pipeline filed an amendment with the FERC to construct the pipeline project in two phases. The first phase would consist of 68 miles of pipe, constructed entirely within Pennsylvania, which is expected to be completed by November 2021. The second phase would include the remaining route in Pennsylvania and New Jersey and is targeted for completion in 2023. FERC approval of the amended plan is required prior to beginning the first phase.

The ultimate outcome of these matters cannot be determined at this time; however, any work delays, whether caused by judicial or regulatory action, abnormal weather, or other conditions, may result in additional cost or schedule modifications or, ultimately, in project cancellation, any of which could result in an impairment of one or both of Southern Company Gas' investments and could have a material impact on Southern Company's and Southern Company Gas' financial statements. Southern Company Gas evaluated its investments and determined there was no impairment as of December 31, 2019.

See Note 3 under "Guarantees" and Note 7 under "Southern Company Gas" for additional information.

Natural Gas Storage Facilities

A wholly-owned subsidiary of Southern Company Gas owns and operates a natural gas storage facility consisting of two salt dome caverns in Louisiana. Periodic integrity tests are required in accordance with rules of the Louisiana Department of Natural Resources (DNR). In 2017, in connection with an ongoing integrity project, updated seismic mapping indicated the proximity of one of the caverns to the edge of the salt dome may be less than the required minimum and could result in Southern Company Gas retiring the cavern early.

In the third quarter 2019, management determined that it no longer planned to obtain the core samples during 2020 that are necessary to determine the composition of the sheath surrounding the edge of the salt dome. Core sampling is a requirement of the Louisiana DNR to put the cavern back in service; as a result, the cavern will not return to service by 2021. This change in plan, which affects the future operation of the entire storage facility, resulted in a pre-tax impairment charge of \$91 million (\$69 million after-tax) recorded by Southern Company Gas in 2019. Southern Company Gas continues to monitor the pressure and overall structural integrity of the entire facility pending any future decisions regarding decommissioning.

Southern Company Gas has two other natural gas storage facilities located in California and Texas, which could be impacted by ongoing changes in the U.S. natural gas storage market. Recent sales of natural gas storage facilities have resulted in losses for the sellers and may imply an impact on future rates and/or asset values. Sustained diminished natural gas storage values could trigger impairment of either or both of these natural gas storage facilities, which have a combined net book value of \$326 million at December 31, 2019.

The ultimate outcome of these matters cannot be determined at this time, but could have a material impact on the financial statements of Southern Company and Southern Company Gas.

Commitments

To supply a portion of the fuel requirements of the Southern Company system's electric generating plants, the Southern Company system has entered into various long-term commitments not recognized on the balance sheets for the procurement and delivery of fossil fuel and, for Alabama Power and Georgia Power, nuclear fuel. The majority of the Registrants' fuel expense for the periods presented was purchased under long-term commitments. Each Registrant expects that a substantial amount of its future fuel needs will continue to be purchased under long-term commitments.

Georgia Power has commitments, in the form of capacity purchases, regarding a portion of a 5% interest in the original cost of Plant Vogtle Units 1 and 2 owned by MEAG Power that are in effect until the later of the retirement of the plant or the latest stated maturity date of MEAG Power's bonds issued to finance such ownership interest. The payments for capacity are required whether or not any capacity is available. Portions of the capacity payments made to MEAG Power for its Plant Vogtle Units 1 and 2 investment relate to costs in excess of Georgia Power's allowed investment for ratemaking purposes. The present value of these portions at the time of the disallowance was written off. Generally, the cost of such capacity is included in purchased power in Southern Company's statements of income and in purchased power, non-affiliates in Georgia Power's statements of income. Georgia Power's capacity payments related to this commitment totaled \$6 million, \$8 million, and \$9 million in 2019, 2018, and 2017, respectively. At December 31, 2019, Georgia Power's estimated long-term obligations related to this commitment totaled \$56 million, consisting of \$5 million for 2020, \$5 million for 2021, \$4 million for 2022, \$3 million for 2023, \$4 million for 2024, and \$35 million for 2025 and thereafter.

See Note 9 for information regarding PPAs accounted for as leases.

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Southern Company Gas has commitments for pipeline charges, storage capacity, and gas supply, including charges recoverable through natural gas cost recovery mechanisms or, alternatively, billed to marketers selling retail natural gas, as well as demand charges associated with Southern Company Gas' wholesale gas services. Gas supply commitments include amounts for gas commodity purchases associated with Southern Company Gas' gas marketing services of 45 million mmBtu at floating gas prices calculated using forward natural gas prices at December 31, 2019 and valued at \$84 million. Southern Company Gas provides guarantees to certain gas suppliers for certain of its subsidiaries in support of payment obligations. Southern Company Gas' expected future contractual obligations for pipeline charges, storage capacity, and gas supply that are not recognized on the balance sheets at December 31, 2019 were as follows:

	Pipeline Charges, Storage Capacity, and Gas Supply
	<i>(in millions)</i>
2020	\$ 725
2021	559
2022	526
2023	454
2024	330
2025 and thereafter	1,677
Total	<u>\$4,271</u>

Guarantees

SCS may enter into various types of wholesale energy and natural gas contracts acting as an agent for the traditional electric operating companies and Southern Power. Under these agreements, each of the traditional electric operating companies and Southern Power may be jointly and severally liable. Accordingly, Southern Company has entered into keep-well agreements with each of the traditional electric operating companies to ensure they will not subsidize or be responsible for any costs, losses, liabilities, or damages resulting from the inclusion of Southern Power as a contracting party under these agreements.

Alabama Power has guaranteed a \$100 million principal amount long-term bank loan entered into by SEGCO in November 2018. Georgia Power has agreed to reimburse Alabama Power for the portion of such obligation corresponding to Georgia Power's proportionate ownership of SEGCO's stock if Alabama Power is called upon to make such payment under its guarantee. At December 31, 2019, the capitalization of SEGCO consisted of \$87 million of equity and \$100 million of long-term debt, on which the annual interest requirement is derived from a variable rate index. In addition, SEGCO had short-term debt outstanding of \$26 million. See Note 7 under "SEGCO" for additional information.

In 2017, Atlantic Coast Pipeline executed a \$3.4 billion revolving credit facility with a stated maturity date of October 2021. Southern Company Gas entered into a guarantee agreement to support its share of the revolving credit facility. Southern Company Gas' maximum exposure to loss under the terms of the guarantee is limited to 5% of the outstanding borrowings under the credit facility, and totaled \$88 million as of December 31, 2019. See "Other Matters – Southern Company Gas – Gas Pipeline Projects" herein and Note 7 under "Southern Company Gas" for additional information regarding the Atlantic Coast Pipeline.

As discussed in Note 9, Alabama Power and Georgia Power have entered into certain residual value guarantees related to railcar leases.

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4. REVENUE FROM CONTRACTS WITH CUSTOMERS

The Registrants generate revenues from a variety of sources, some of which are not accounted for as revenue from contracts with customers, such as leases, derivatives, and certain cost recovery mechanisms. ASC 606 became effective on January 1, 2018 and the Registrants adopted it using the modified retrospective method applied to open contracts and only to the version of contracts in effect as of January 1, 2018. In accordance with the modified retrospective method, the Registrants' previously issued financial statements have not been restated to comply with ASC 606 and the Registrants did not have a cumulative-effect adjustment to retained earnings. See Note 1 under "Revenues" for additional information on the revenue policies of the Registrants. See Notes 9 and 14 for additional information on revenue accounted for under lease and derivative accounting guidance, respectively.

The following tables disaggregate revenue from contracts with customers for 2019 and 2018:

2019	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
<i>(in millions)</i>						
Operating revenues						
Retail electric revenues						
Residential	\$ 6,164	\$2,509	\$3,377	\$ 278	\$ —	\$ —
Commercial	5,065	1,677	3,097	291	—	—
Industrial	3,126	1,460	1,360	306	—	—
Other	90	25	54	11	—	—
Total retail electric revenues	14,445	5,671	7,888	886	—	—
Natural gas distribution revenues						
Residential	1,413	—	—	—	—	1,413
Commercial	389	—	—	—	—	389
Transportation	907	—	—	—	—	907
Industrial	35	—	—	—	—	35
Other	245	—	—	—	—	245
Total natural gas distribution revenues	2,989	—	—	—	—	2,989
Wholesale electric revenues						
PPA energy revenues	833	145	60	11	648	—
PPA capacity revenues	453	102	54	3	322	—
Non-PPA revenues	232	81	9	352	238	—
Total wholesale electric revenues	1,518	328	123	366	1,208	—
Other natural gas revenues						
Gas pipeline investments	32	—	—	—	—	32
Wholesale gas services	2,095	—	—	—	—	2,095
Gas marketing services	440	—	—	—	—	440
Other natural gas revenues	42	—	—	—	—	42
Total natural gas revenues	2,609	—	—	—	—	2,609
Other revenues	1,035	153	407	19	12	—
Total revenue from contracts with customers	22,596	6,152	8,418	1,271	1,220	5,598
Other revenue sources ^(a)	4,266	(27)	(10)	(7)	718	3,637
Other adjustments ^(b)	(5,443)	—	—	—	—	(5,443)
Total operating revenues	\$21,419	\$6,125	\$8,408	\$1,264	\$1,938	\$ 3,792

(a) Other revenue sources primarily relate to revenues from customers accounted for as derivatives and leases, as well as alternative revenues program at Southern Company Gas and other cost recovery mechanisms at the traditional electric operating companies.

(b) Other adjustments relate to the cost of Southern Company Gas' energy and risk management activities. Wholesale gas services revenues are presented net of the related costs of those activities on the statement of income. See Note 16 under "Southern Company Gas" for additional information on the components of wholesale gas services' operating revenues.

Notes to Financial Statements

2018	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Operating revenues						
Retail electric revenues						
Residential	\$ 6,586	\$ 2,285	\$ 3,295	\$ 277	\$ —	\$ —
Commercial	5,255	1,541	3,025	290	—	—
Industrial	3,152	1,364	1,321	326	—	—
Other	94	25	56	9	—	—
Total retail electric revenues	15,087	5,215	7,697	902	—	—
Natural gas distribution revenues						
Residential	1,525	—	—	—	—	1,525
Commercial	436	—	—	—	—	436
Transportation	944	—	—	—	—	944
Industrial	40	—	—	—	—	40
Other	230	—	—	—	—	230
Total natural gas distribution revenues	3,175	—	—	—	—	3,175
Wholesale electric revenues						
PPA energy revenues	950	158	81	15	727	—
PPA capacity revenues	498	101	53	6	394	—
Non-PPA revenues	263	119	24	329	230	—
Total wholesale electric revenues	1,711	378	158	350	1,351	—
Other natural gas revenues						
Gas pipeline investments	32	—	—	—	—	32
Wholesale gas services	3,083	—	—	—	—	3,083
Gas marketing services	571	—	—	—	—	571
Other natural gas revenues	53	—	—	—	—	53
Total other natural gas revenues	3,739	—	—	—	—	3,739
Other revenues	1,529	210	236	22	13	—
Total revenue from contracts with customers	25,241	5,803	8,091	1,274	1,364	6,914
Other revenue sources ^(a)	5,108	229	329	(9)	841	3,849
Other adjustments ^(b)	(6,854)	—	—	—	—	(6,854)
Total operating revenues	\$23,495	\$6,032	\$8,420	\$1,265	\$2,205	\$ 3,909

(a) Other revenue sources primarily relate to revenues from customers accounted for as derivatives and leases, as well as alternative revenues program at Southern Company Gas and other cost recovery mechanisms at the traditional electric operating companies.

(b) Other adjustments relate to the cost of Southern Company Gas' energy and risk management activities. Wholesale gas services revenues are presented net of the related costs of those activities on the statement of income. See Note 16 under "Southern Company Gas" for additional information on the components of wholesale gas services' operating revenues.

Notes to Financial Statements

Contract Balances

The following table reflects the closing balances of receivables, contract assets, and contract liabilities related to revenues from contracts with customers at December 31, 2019 and 2018:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Accounts Receivables						
As of December 31, 2019	\$2,413	\$586	\$688	\$ 79	\$ 97	\$749
As of December 31, 2018	2,630	520	721	100	118	952
Contract Assets						
As of December 31, 2019	\$ 117	\$ —	\$ 69	\$ —	\$ —	\$ —
As of December 31, 2018	102	—	58	—	—	—
Contract Liabilities						
As of December 31, 2019	\$ 52	\$ 10	\$ 13	\$ —	\$ 1	\$ 1
As of December 31, 2018	32	12	7	—	11	2

As of December 31, 2019 and 2018, Georgia Power had contract assets primarily related to fixed retail customer bill programs, where the payment is contingent upon Georgia Power's continued performance and the customer's continued participation in the program over the one-year contract term, and unregulated service agreements, where payment is contingent on project completion. Alabama Power had contract liabilities for outstanding performance obligations primarily related to extended service agreements. Contract liabilities for Georgia Power and Southern Power relate to cash collections recognized in advance of revenue for certain unregulated service agreements and certain levelized PPAs, respectively. Southern Company's unregulated distributed generation business had contract assets of \$40 million and \$39 million at December 31, 2019 and 2018, respectively, and contract liabilities of \$28 million and \$11 million at December 31, 2019 and 2018, respectively, for outstanding performance obligations.

The following table reflects revenue from contracts with customers recognized in 2019 included in the contract liability at December 31, 2018:

	Southern Company	Alabama Power	Georgia Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>				
Revenue Recognized					
2019	\$30	\$11	\$6	\$11	\$2

Remaining Performance Obligations

The traditional electric operating companies and Southern Power have long-term contracts with customers in which revenues are recognized as performance obligations are satisfied over the contract term. These contracts primarily relate to PPAs whereby the traditional electric operating companies and Southern Power provide electricity and generation capacity to a customer. The revenue recognized for the delivery of electricity is variable; however, certain PPAs include a fixed payment for fixed generation capacity over the term of the contract. Southern Company's unregulated distributed generation business also has partially satisfied performance obligations related to certain fixed price contracts. Revenues from contracts with customers related to these performance obligations remaining at December 31, 2019 are expected to be recognized as follows:

	2020	2021	2022	2023	2024	2025 and Thereafter
	<i>(in millions)</i>					
Southern Company	\$490	\$430	\$336	\$324	\$323	\$2,108
Alabama Power	21	25	22	22	22	118
Georgia Power	60	49	32	32	23	61
Southern Power	287	280	281	271	279	1,948

Revenue expected to be recognized for performance obligations remaining at December 31, 2019 was immaterial for Mississippi Power.

Notes to Financial Statements

5. PROPERTY, PLANT, AND EQUIPMENT

Property, plant, and equipment is stated at original cost or fair value at acquisition, as appropriate, less any regulatory disallowances and impairments. Original cost may include: materials; labor; minor items of property; appropriate administrative and general costs; payroll-related costs such as taxes, pensions, and other benefits; and the interest capitalized and/or cost of equity funds used during construction.

The Registrants' property, plant, and equipment in service consisted of the following at December 31, 2019 and 2018:

At December 31, 2019:	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Electric utilities:						
Generation	\$ 50,329	\$15,329	\$18,341	\$2,786	\$13,241	\$ —
Transmission	12,157	4,719	6,590	808	—	—
Distribution	19,846	7,798	11,024	1,024	—	—
General/other	4,650	2,177	2,182	239	29	—
Electric utilities' plant in service	86,982	30,023	38,137	4,857	13,270	—
Southern Company Gas:						
Natural gas distribution utilities						
transportation and distribution	13,518	—	—	—	—	13,518
Storage facilities	1,634	—	—	—	—	1,634
Other	1,192	—	—	—	—	1,192
Southern Company Gas plant in service	16,344	—	—	—	—	16,344
Other plant in service	1,788	—	—	—	—	—
Total plant in service	\$105,114	\$30,023	\$38,137	\$4,857	\$13,270	\$16,344

At December 31, 2018:	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Electric utilities:						
Generation	\$ 52,324	\$16,533	\$19,145	\$2,849	\$13,246	\$ —
Transmission	11,344	4,380	6,156	769	—	—
Distribution	18,746	7,389	10,389	968	—	—
General/other	4,446	2,100	1,985	314	25	—
Electric utilities' plant in service	86,860	30,402	37,675	4,900	13,271	—
Southern Company Gas:						
Natural gas distribution utilities						
transportation and distribution	12,409	—	—	—	—	12,409
Storage facilities	1,640	—	—	—	—	1,640
Other	1,128	—	—	—	—	1,128
Southern Company Gas plant in service	15,177	—	—	—	—	15,177
Other plant in service	1,669	—	—	—	—	—
Total plant in service	\$103,706	\$30,402	\$37,675	\$4,900	\$13,271	\$15,177

The cost of replacements of property, exclusive of minor items of property, is capitalized. The cost of maintenance, repairs, and replacement of minor items of property is charged to other operations and maintenance expenses as incurred or performed with the exception of nuclear refueling costs and certain maintenance costs including those described below.

In accordance with orders from their respective state PSCs, Alabama Power and Georgia Power defer nuclear outage operations and maintenance expenses to a regulatory asset when the charges are incurred. Alabama Power amortizes the costs over a subsequent 18-month period with Plant Farley's fall outage cost amortization beginning in January of the following year and spring outage cost amortization beginning in July of the same year. Georgia Power amortizes its costs over each unit's operating cycle, or 18 months for Plant Vogtle Units 1 and 2 and 24 months for Plant Hatch Units 1 and 2.

A portion of Mississippi Power's railway track maintenance costs is charged to fuel stock and recovered through Mississippi Power's fuel clause.

Notes to Financial Statements

The portion of Southern Company Gas' non-working gas used to maintain the structural integrity of natural gas storage facilities that is considered to be non-recoverable is depreciated, while the recoverable or retained portion is not depreciated.

Finance Leases

Assets acquired under a finance lease (previously referred to as a capital lease) are included in property, plant, and equipment and are further detailed in the table below for the applicable Registrants at December 31, 2018:

At December 31, 2018:	Southern Company	Georgia Power
	<i>(in millions)</i>	
Office buildings	\$216	\$ 61
PPAs ^(*)	—	144
Computer-related equipment	43	—
Gas pipeline	7	—
Less: Accumulated amortization	(75)	(84)
Balance, net of amortization	\$191	\$121

(*) Represents Georgia Power's affiliate PPAs with Southern Power. See Note 1 under "Affiliate Transactions" for additional information.

See Note 9 for additional information, including finance lease right-of-use (ROU) assets, net included in property, plant, and equipment at December 31, 2019.

Depreciation and Amortization

The traditional electric operating companies' and Southern Company Gas' depreciation of the original cost of utility plant in service is provided primarily by using composite straight-line rates. The approximate rates for 2019, 2018, and 2017 are as follows:

	2019	2018	2017
Alabama Power	3.1%	3.0%	2.9%
Georgia Power	2.6%	2.6%	2.7%
Mississippi Power	3.7%	4.2%	3.4%
Southern Company Gas	2.9%	2.9%	2.9%

Depreciation studies are conducted periodically to update the composite rates. These studies are filed with the respective state PSC and/or other applicable state and federal regulatory agencies for the traditional electric operating companies and natural gas distribution utilities. Effective January 1, 2020, Georgia Power's and Atlanta Gas Light's depreciation rates were revised by the Georgia PSC in connection with their respective base rate cases. On November 26, 2019, an updated depreciation study was filed with the Mississippi PSC in conjunction with the Mississippi Power 2019 Base Rate Case requesting a \$16 million increase in total annual depreciation. See Note 2 for additional information.

When property, plant, and equipment subject to composite depreciation is retired or otherwise disposed of in the normal course of business, its original cost, together with the cost of removal, less salvage, is charged to accumulated depreciation. For other property dispositions, the applicable cost and accumulated depreciation are removed from the balance sheet accounts, and a gain or loss is recognized. Minor items of property included in the original cost of the asset are retired when the related property unit is retired.

At December 31, 2019 and 2018, accumulated depreciation for utility plant in service totaled \$30.0 billion and \$30.3 billion, respectively, for Southern Company and \$4.5 billion and \$4.3 billion, respectively, for Southern Company Gas.

Depreciation of the original cost of other plant in service is provided primarily on a straight-line basis over estimated useful lives, which for Southern Company range up to 65 years and for Southern Company Gas range from five to 15 years for transportation equipment, 40 to 60 years for storage facilities, and up to 65 years for other assets. At December 31, 2019 and 2018, accumulated depreciation for other plant in service totaled \$732 million and \$766 million, respectively, for Southern Company and \$155 million and \$129 million, respectively, for Southern Company Gas.

Notes to Financial Statements

Southern Power

Southern Power applies component depreciation, where depreciation is computed principally by the straight-line method over the estimated useful life of the asset. Certain of Southern Power's generation assets related to natural gas-fired facilities are depreciated on a units-of-production basis, using hours or starts, to better match outage and maintenance costs to the usage of, and revenues from, these assets. The primary assets in Southern Power's property, plant, and equipment are generating facilities, which generally have estimated useful lives as follows:

Southern Power Generating Facility	Useful life
Natural gas	Up to 45 years
Biomass ^(*)	Up to 40 years
Solar	Up to 35 years
Wind	Up to 30 years

(*) See Note 15 under "Southern Power – Sales of Natural Gas and Biomass Plants" for information on Southern Power's sale of its biomass facility on June 13, 2019.

Southern Power reviews its estimated useful lives and salvage values on an ongoing basis. The results of these reviews could result in changes which could have a material impact on Southern Power's net income in the near term.

When Southern Power's depreciable property, plant, and equipment is retired, or otherwise disposed of in the normal course of business, the applicable cost and accumulated depreciation is removed and a gain or loss is recognized in the statements of income.

Joint Ownership Agreements

At December 31, 2019, the Registrants' percentage ownership and investment (exclusive of nuclear fuel) in jointly-owned facilities in commercial operation were as follows:

Facility (Type)	Percent Ownership	Plant in Service	Accumulated Depreciation	CWIP
		<i>(in millions)</i>		
Alabama Power				
Greene County (natural gas) Units 1 and 2	60.0% ^(a)	\$ 182	\$ 71	\$ 1
Plant Miller (coal) Units 1 and 2	91.8% ^(b)	2,058	630	65
Georgia Power				
Plant Hatch (nuclear)	50.1% ^(c)	\$ 1,316	\$ 603	\$ 40
Plant Vogtle (nuclear) Units 1 and 2	45.7% ^(c)	3,565	2,177	96
Plant Scherer (coal) Units 1 and 2	8.4% ^(c)	266	94	14
Plant Scherer (coal) Unit 3	75.0% ^(c)	1,267	492	47
Plant Wansley (coal)	53.5% ^(c)	1,059	367	10
Rocky Mountain (pumped storage)	25.4% ^(d)	182	139	—
Mississippi Power				
Greene County (natural gas) Units 1 and 2	40.0% ^(a)	\$ 118	\$ 46	\$ 1
Plant Daniel (coal) Units 1 and 2	50.0% ^(e)	750	214	11
Southern Company Gas				
Dalton Pipeline (natural gas pipeline)	50.0% ^(f)	\$ 271	\$ 10	\$ —

(a) Jointly owned by Alabama Power and Mississippi Power and operated and maintained by Alabama Power.

(b) Jointly owned with PowerSouth and operated and maintained by Alabama Power.

(c) Georgia Power owns undivided interests in Plants Hatch, Vogtle Units 1 and 2, Scherer, and Wansley in varying amounts jointly with one or more of the following entities: OPC, MEAG Power, Dalton, Florida Power & Light Company, JEA, and Gulf Power. Georgia Power has been contracted to operate and maintain the plants as agent for the co-owners and is jointly and severally liable for third party claims related to these plants.

(d) Jointly owned with OPC, which is the operator of the plant.

(e) Jointly owned by Gulf Power and Mississippi Power. In accordance with the operating agreement, Mississippi Power acts as Gulf Power's agent with respect to the operation and maintenance of these units. See Note 3 under "Other Matters – Mississippi Power" for information regarding a commitment between Mississippi Power and Gulf Power to seek a restructuring of their 50% undivided ownership interests in Plant Daniel.

(f) Jointly owned with The Williams Companies, Inc., The Dalton Pipeline is a 115-mile natural gas pipeline that serves as an extension of the Transco natural gas pipeline system into northwest Georgia. Southern Company Gas leases its 50% undivided ownership for approximately \$26 million annually for an initial term through 2042. The lessee is responsible for maintaining the pipeline during the lease term and for providing service to transportation customers under its FERC-regulated tariff.

Notes to Financial Statements

Georgia Power also owns 45.7% of Plant Vogtle Units 3 and 4, which are currently under construction and had a CWIP balance of \$5.8 billion at December 31, 2019. See Note 2 under "Georgia Power – Nuclear Construction" for additional information.

The Registrants' proportionate share of their jointly-owned facility operating expenses is included in the corresponding operating expenses in the statements of income and each Registrant is responsible for providing its own financing.

Assets Subject to Lien

In October 2018, the Mississippi PSC approved executed agreements between Mississippi Power and its largest retail customer, Chevron Products Company (Chevron), for Mississippi Power to continue providing retail service to the Chevron refinery in Pascagoula, Mississippi through 2038. The agreements grant Chevron a security interest in the co-generation assets, with a lease receivable balance of \$118 million at December 31, 2019, located at the refinery that is exercisable upon the occurrence of (i) certain bankruptcy events or (ii) other events of default coupled with specific reductions in steam output at the facility and a downgrade of Mississippi Power's credit rating to below investment grade by two of the three rating agencies.

On January 17, 2020, Southern Power completed the sale of its equity interests in Plant Mankato to a subsidiary of Xcel. As of December 31, 2019, under the terms of the PPA and the expansion PPA for Plant Mankato, approximately \$547 million of assets, primarily related to property, plant, and equipment, were subject to lien. See Note 15 under "Southern Power – Sales of Natural Gas and Biomass Plants" for additional information.

See Note 8 under "Secured Debt" for information regarding debt secured by certain assets of Georgia Power, Mississippi Power, and Southern Company Gas.

6. ASSET RETIREMENT OBLIGATIONS

AROs are computed as the present value of the estimated costs for an asset's future retirement and are recorded in the period in which the liability is incurred. The estimated costs are capitalized as part of the related long-lived asset and depreciated over the asset's useful life. In the absence of quoted market prices, AROs are estimated using present value techniques in which estimates of future cash outlays associated with the asset retirements are discounted using a credit-adjusted risk-free rate. Estimates of the timing and amounts of future cash outlays are based on projections of when and how the assets will be retired and the cost of future removal activities. Each traditional electric operating company and natural gas distribution utility has received accounting guidance from its state PSC or applicable state regulatory agency allowing the continued accrual or recovery of other retirement costs for long-lived assets that it does not have a legal obligation to retire. Accordingly, the accumulated removal costs for these obligations are reflected in the balance sheets as regulatory liabilities and amounts to be recovered are reflected in the balance sheets as regulatory assets.

The ARO liabilities for the traditional electric operating companies primarily relate to facilities that are subject to the CCR Rule and the related state rules, principally ash ponds. In addition, Alabama Power and Georgia Power have retirement obligations related to the decommissioning of nuclear facilities (Alabama Power's Plant Farley and Georgia Power's ownership interests in Plant Hatch and Plant Vogtle Units 1 and 2). See "Nuclear Decommissioning" herein for additional information. The traditional electric operating companies also have AROs related to various landfill sites, asbestos removal, and underground storage tanks, as well as, for Alabama Power, disposal of polychlorinated biphenyls in certain transformers and sulfur hexafluoride gas in certain substation breakers, for Georgia Power, gypsum cells and restoration of land at the end of long-term land leases for solar facilities, and, for Mississippi Power, mine reclamation and water wells. The ARO liability for Southern Power primarily relates to Southern Power's solar and wind facilities, which are located on long-term land leases requiring the restoration of land at the end of the lease.

The traditional electric operating companies and Southern Company Gas also have identified other retirement obligations, such as obligations related to certain electric transmission and distribution facilities, certain asbestos-containing material within long-term assets not subject to ongoing repair and maintenance activities, certain wireless communication towers, the disposal of polychlorinated biphenyls in certain transformers, leasehold improvements, equipment on customer property, and property associated with the Southern Company system's rail lines and natural gas pipelines. However, liabilities for the removal of these assets have not been recorded because the settlement timing for certain retirement obligations related to these assets is indeterminable and, therefore, the fair value of the retirement obligations cannot be reasonably estimated. A liability for these retirement obligations will be recognized when sufficient information becomes available to support a reasonable estimation of the ARO.

Southern Company and the traditional electric operating companies will continue to recognize in their respective statements of income allowed removal costs in accordance with regulatory treatment. Any differences between costs recognized in accordance with accounting standards related to asset retirement and environmental obligations and those reflected in rates are recognized as either a regulatory asset or liability in the balance sheets as ordered by the various state PSCs.

Notes to Financial Statements

Details of the AROs included in the balance sheets are as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power ^(*)
			<i>(in millions)</i>		
Balance at December 31, 2017	\$ 4,824	\$ 1,709	\$ 2,638	\$ 174	\$ 78
Liabilities incurred	29	—	27	—	2
Liabilities settled	(244)	(55)	(116)	(35)	—
Accretion	217	106	94	5	4
Cash flow revisions	4,737	1,450	3,186	16	—
Reclassification to held for sale	(169)	—	—	—	—
Balance at December 31, 2018	\$ 9,394	\$ 3,210	\$ 5,829	\$ 160	\$ 84
Liabilities incurred	37	—	35	1	1
Liabilities settled	(328)	(127)	(151)	(35)	—
Accretion	402	145	243	7	4
Cash flow revisions	281	312	(172)	57	—
Balance at December 31, 2019	\$ 9,786	\$ 3,540	\$ 5,784	\$ 190	\$ 89

(*) Included in other deferred credits and liabilities on Southern Power's consolidated balance sheets.

In June 2018, Alabama Power recorded an increase of approximately \$1.2 billion to its AROs related to the CCR Rule. Mississippi Power also recorded an increase of approximately \$11 million to its AROs related to an ash pond at Plant Greene County, which is jointly-owned with Alabama Power. The revised cost estimates were based on information from feasibility studies performed on ash ponds in use at plants operated by Alabama Power, including Plant Greene County. During the second quarter 2018, Alabama Power's management completed its analysis of these studies which indicated that additional closure costs, primarily related to increases in estimated ash volume, water management requirements, and design revisions, will be required to close these ash ponds under the planned closure-in-place methodology.

Also in June 2018, Alabama Power completed an updated decommissioning cost site study for Plant Farley. The estimated cost of decommissioning based on the study resulted in an increase in Alabama Power's ARO liability of approximately \$300 million. In December 2018, Georgia Power completed updated decommissioning cost site studies for Plant Hatch and Plant Vogtle Units 1 and 2. The estimated cost of decommissioning based on the studies resulted in an increase in Georgia Power's ARO liability of approximately \$130 million. See "Nuclear Decommissioning" below for additional information.

In December 2018, Georgia Power recorded an increase of approximately \$3.1 billion to its AROs related to the CCR Rule and the related state rule. During the second half of 2018, Georgia Power completed a strategic assessment related to its plans to close the ash ponds at all of its generating plants in compliance with the CCR Rule and the related state rule. This assessment included engineering and constructability studies related to design assumptions for ash pond closures and advanced engineering methods. The results indicated that additional closure costs will be required to close these ash ponds, primarily due to changes in closure strategies, the estimated amount of ash to be excavated, and additional water management requirements necessary to support closure strategies. These factors also impact the estimated timing of future cash outlays.

The 2018 reclassification of a portion of the ARO liability to liabilities held for sale by Southern Company represents the AROs related to Gulf Power. See Note 15 under "Southern Company" and "Assets Held for Sale" for additional information.

During 2019, Alabama Power recorded increases totaling approximately \$312 million to its AROs primarily related to the CCR Rule and the related state rule based on management's completion of closure designs during the second and third quarters 2019 under the planned closure-in-place methodology for all but one of its ash pond facilities. During 2019, Mississippi Power recorded an increase of approximately \$57 million to its AROs related to the CCR Rule, primarily associated with the ash pond facility at Plant Greene County, which is jointly owned with Alabama Power. The additional estimated costs to close these ash ponds under the planned closure-in-place methodology primarily relate to cost inputs from contractor bids, internal drainage and dewatering system designs, and increases in the estimated ash volumes. Alabama Power anticipates increasing the ARO for its remaining ash pond facility within the next nine months upon completion of a feasibility study and the related cost estimate, and the increase could be material.

During the second half of 2019, Georgia Power completed an assessment of its plans to close the ash ponds at all of its generating plants in compliance with the CCR Rule and the related state rule. Cost estimates were revised to reflect further refined costs for closure plans and updates to the timing of future cash outlays. As a result, in December 2019, Georgia Power recorded a decrease of approximately \$174 million to its AROs related to the CCR Rule and the related state rule.

Notes to Financial Statements

The cost estimates for AROs related to the CCR Rule and related state rules are based on information at December 31, 2019 using various assumptions related to closure and post-closure costs, timing of future cash outlays, inflation and discount rates, and the potential methods for complying with the CCR Rule and related state requirements for closure. The traditional electric operating companies expect to continue to update their cost estimates and ARO liabilities periodically as additional information related to these assumptions becomes available. Additionally, the closure designs and plans in the States of Alabama and Georgia are subject to approval by environmental regulatory agencies. Absent continued recovery of ARO costs through regulated rates, Southern Company's and the traditional electric operating companies' results of operations, cash flows, and financial condition could be materially impacted. The ultimate outcome of this matter cannot be determined at this time.

Nuclear Decommissioning

The NRC requires licensees of commercial nuclear power reactors to establish a plan for providing reasonable assurance of funds for future decommissioning. Alabama Power and Georgia Power have external trust funds (Funds) to comply with the NRC's regulations. Use of the Funds is restricted to nuclear decommissioning activities. The Funds are managed and invested in accordance with applicable requirements of various regulatory bodies, including the NRC, the FERC, and state PSCs, as well as the IRS. While Alabama Power and Georgia Power are allowed to prescribe an overall investment policy to the Funds' managers, neither Southern Company nor its subsidiaries or affiliates are allowed to engage in the day-to-day management of the Funds or to mandate individual investment decisions. Day-to-day management of the investments in the Funds is delegated to unrelated third-party managers with oversight by the management of Alabama Power and Georgia Power. The Funds' managers are authorized, within certain investment guidelines, to actively buy and sell securities at their own discretion in order to maximize the return on the Funds' investments. The Funds are invested in a tax-efficient manner in a diversified mix of equity and fixed income securities and are reported as trading securities.

Alabama Power and Georgia Power record the investment securities held in the Funds at fair value, as disclosed in Note 13, as management believes that fair value best represents the nature of the Funds. Gains and losses, whether realized or unrealized, are recorded in the regulatory liability for AROs in the balance sheets and are not included in net income or OCI. Fair value adjustments and realized gains and losses are determined on a specific identification basis.

The Funds at Georgia Power participate in a securities lending program through the managers of the Funds. Under this program, Georgia Power's Funds' investment securities are loaned to institutional investors for a fee. Securities loaned are fully collateralized by cash, letters of credit, and/or securities issued or guaranteed by the U.S. government or its agencies or instrumentalities. At December 31, 2019 and 2018, approximately \$28 million and \$27 million, respectively, of the fair market value of Georgia Power's Funds' securities were on loan and pledged to creditors under the Funds' managers' securities lending program. The fair value of the collateral received was approximately \$29 million and \$28 million at December 31, 2019 and 2018, respectively, and can only be sold by the borrower upon the return of the loaned securities. The collateral received is treated as a non-cash item in the statements of cash flows.

Investment securities in the Funds for December 31, 2019 and 2018 were as follows:

	Southern Company	Alabama Power	Georgia Power
	<i>(in millions)</i>		
At December 31, 2019:			
Equity securities	\$1,159	\$ 743	\$ 416
Debt securities	798	218	580
Other securities	77	60	17
Total investment securities in the Funds	\$2,034	\$1,021	\$1,013
At December 31, 2018:			
Equity securities	\$ 919	\$ 594	\$ 325
Debt securities	726	201	525
Other securities	74	51	23
Total investment securities in the Funds	\$1,719	\$ 846	\$ 873

These amounts exclude receivables related to investment income and pending investment sales and payables related to pending investment purchases. For Southern Company and Georgia Power, these amounts include Georgia Power's investment securities pledged to creditors and collateral received and excludes payables related to Georgia Power's securities lending program.

Notes to Financial Statements

The fair value increases (decreases) of the Funds, including unrealized gains (losses) and reinvested interest and dividends and excluding the Funds' expenses, for 2019, 2018, and 2017 are shown in the table below.

	Southern Company	Alabama Power	Georgia Power
	<i>(in millions)</i>		
Fair value increases (decreases)			
2019	\$ 344	\$194	\$150
2018	(67)	(38)	(29)
2017	233	125	108
Unrealized gains (losses)			
At December 31, 2019	\$ 259	\$149	\$110
At December 31, 2018	(183)	(96)	(87)
At December 31, 2017	181	98	83

The investment securities held in the Funds continue to be managed with a long-term focus. Accordingly, all purchases and sales within the Funds are presented separately in the statements of cash flows as investing cash flows, consistent with the nature of the securities and purpose for which the securities were acquired.

For Alabama Power, approximately \$16 million and \$17 million at December 31, 2019 and 2018, respectively, previously recorded in internal reserves is being transferred into the Funds through 2040 as approved by the Alabama PSC. The NRC's minimum external funding requirements are based on a generic estimate of the cost to decommission only the radioactive portions of a nuclear unit based on the size and type of reactor. Alabama Power and Georgia Power have filed plans with the NRC designed to ensure that, over time, the deposits and earnings of the Funds will provide the minimum funding amounts prescribed by the NRC.

At December 31, 2019 and 2018, the accumulated provisions for the external decommissioning trust funds were as follows:

	2019	2018
	<i>(in millions)</i>	
Alabama Power		
Plant Farley	\$1,021	\$846
Georgia Power		
Plant Hatch	\$ 634	\$547
Plant Vogtle Units 1 and 2	379	326
Total	\$1,013	\$873

Site study cost is the estimate to decommission a specific facility as of the site study year. The decommissioning cost estimates are based on prompt dismantlement and removal of the plant from service. The actual decommissioning costs may vary from these estimates because of changes in the assumed date of decommissioning, changes in NRC requirements, or changes in the assumptions used in making these estimates. The estimated costs of decommissioning at December 31, 2019 based on the most current studies, which were each performed in 2018, were as follows:

	Plant Farley	Plant Hatch ^(*)	Plant Vogtle Units 1 and 2 ^(*)
Decommissioning periods:			
Beginning year	2037	2034	2047
Completion year	2076	2075	2079
	<i>(in millions)</i>		
Site study costs:			
Radiated structures	\$1,234	\$ 734	\$ 601
Spent fuel management	387	172	162
Non-radiated structures	99	56	79
Total site study costs	\$1,720	\$ 962	\$ 842

(*) Based on Georgia Power's ownership interests.

Notes to Financial Statements

For ratemaking purposes, Alabama Power's decommissioning costs are based on the site study and Georgia Power's decommissioning costs are based on the NRC generic estimate to decommission the radioactive portion of the facilities and the site study estimate for spent fuel management as of 2018. Significant assumptions used to determine these costs for ratemaking were an estimated inflation rate of 4.5% and 2.75% for Alabama Power and Georgia Power, respectively, and an estimated trust earnings rate of 7.0% and 4.75% for Alabama Power and Georgia Power, respectively.

Amounts previously contributed to the Funds for Plant Farley are currently projected to be adequate to meet the decommissioning obligations. Alabama Power will continue to provide site-specific estimates of the decommissioning costs and related projections of funds in the external trust to the Alabama PSC and, if necessary, would seek the Alabama PSC's approval to address any changes in a manner consistent with NRC and other applicable requirements.

Under the 2013 ARP, Georgia Power's annual decommissioning cost for ratemaking was a total of \$5 million for Plant Hatch and Plant Vogtle Units 1 and 2. Effective January 1, 2020, in connection with the 2019 ARP, this total annual amount was reduced to \$4 million. See Note 2 under "Georgia Power – Rate Plans – 2019 ARP" for additional information.

7. CONSOLIDATED ENTITIES AND EQUITY METHOD INVESTMENTS

The Registrants may hold ownership interests in a number of business ventures with varying ownership structures. Partnership interests and other variable interests are evaluated to determine if each entity is a VIE. If a venture is a VIE for which a Registrant is the primary beneficiary, the assets, liabilities, and results of operations of the entity are consolidated. The Registrants reassess the conclusion as to whether an entity is a VIE upon certain occurrences, which are deemed reconsideration events.

For entities that are not determined to be VIEs, the Registrants evaluate whether they have control or significant influence over the investee to determine the appropriate consolidation and presentation. Generally, entities under the control of a Registrant are consolidated, and entities over which a Registrant can exert significant influence, but which a Registrant does not control, are accounted for under the equity method of accounting. However, the Registrants may also invest in partnerships and limited liability companies that maintain separate ownership accounts. All such investments are required to be accounted for under the equity method unless the interest is so minor that there is virtually no influence over operating and financial policies, as are all investments in joint ventures.

Investments accounted for under the equity method are recorded within equity investments in unconsolidated subsidiaries in the balance sheets and, for Southern Company and Southern Company Gas, the equity income is recorded within earnings from equity method investments in the statements of income. See "SEGCO" and "Southern Company Gas" herein for additional information.

SEGCO

Alabama Power and Georgia Power own equally all of the outstanding capital stock of SEGCO, which owns electric generating units with a total rated capacity of 1,020 MWs, as well as associated transmission facilities. Alabama Power and Georgia Power account for SEGCO using the equity method; Southern Company consolidates SEGCO. The capacity of these units is sold equally to Alabama Power and Georgia Power. Alabama Power and Georgia Power make payments sufficient to provide for the operating expenses, taxes, interest expense, and a ROE. The share of purchased power included in purchased power, affiliates in the statements of income totaled \$93 million in 2019, \$102 million in 2018, and \$76 million in 2017 for Alabama Power and \$95 million in 2019, \$105 million in 2018, and \$78 million in 2017 for Georgia Power.

SEGCO paid \$14 million of dividends in 2019, \$18 million in 2018, and \$24 million in 2017, of which one-half of each was paid to each of Alabama Power and Georgia Power. In addition, Alabama Power and Georgia Power each recognize 50% of SEGCO's net income.

Alabama Power, which owns and operates a generating unit adjacent to the SEGCO generating units, has a joint ownership agreement with SEGCO for the ownership of an associated gas pipeline. Alabama Power owns 14% of the pipeline with the remaining 86% owned by SEGCO.

See Note 3 under "Guarantees" for additional information regarding guarantees of Alabama Power and Georgia Power related to SEGCO.

Southern Power

Variable Interest Entities

Southern Power has certain subsidiaries that are determined to be VIEs. Southern Power is considered the primary beneficiary of these VIEs because it controls the most significant activities of the VIEs, including operating and maintaining the respective assets, and has the obligation to absorb expected losses of these VIEs to the extent of its equity interests.

Notes to Financial Statements

SP Solar and SP Wind

In May 2018, Southern Power sold a noncontrolling 33% limited partnership interest in SP Solar to Global Atlantic Financial Group Limited (Global Atlantic). See Note 15 under "Southern Power" for additional information. A wholly-owned subsidiary of Southern Power is the general partner and holds a 1% ownership interest in SP Solar and another wholly-owned subsidiary of Southern Power owns the remaining 66% ownership in SP Solar. SP Solar qualifies as a VIE since the arrangement is structured as a limited partnership and the 33% limited partner does not have substantive kick-out rights against the general partner.

At December 31, 2019 and 2018, SP Solar had total assets of \$6.4 billion and \$6.3 billion, respectively, total liabilities of \$381 million and \$113 million, respectively, and noncontrolling interests of \$1.1 billion and \$1.2 billion, respectively. Cash distributions from SP Solar are allocated 67% to Southern Power and 33% to Global Atlantic in accordance with their partnership interest percentage. Under the terms of the limited partnership agreement, distributions without limited partner consent are limited to available cash and SP Solar is obligated to distribute all such available cash to its partners each quarter. Available cash includes all cash generated in the quarter subject to the maintenance of appropriate operating reserves.

In December 2018, Southern Power sold a noncontrolling tax-equity interest in SP Wind to three financial investors. SP Wind owns eight operating wind farms. See Note 15 under "Southern Power" for additional information. Southern Power owns 100% of the Class B membership interests and the three financial investors own 100% of the Class A membership interests. SP Wind qualifies as a VIE since the structure of the arrangement is similar to a limited partnership and the Class A members do not have substantive kick-out rights against Southern Power.

At December 31, 2019 and 2018, SP Wind had total assets of \$2.5 billion and \$2.5 billion, respectively, total liabilities of \$128 million and \$51 million, respectively, and noncontrolling interests of \$45 million and \$47 million, respectively. Under the terms of the limited liability agreement, distributions without Class A member consent are limited to available cash and SP Wind is obligated to distribute all such available cash to its members each quarter. Available cash includes all cash generated in the quarter subject to the maintenance of appropriate operating reserves. Cash distributions from SP Wind are generally allocated 60% to Southern Power and 40% to the three financial investors in accordance with the limited liability agreement.

Southern Power consolidates both SP Solar and SP Wind, as the primary beneficiary, since it controls the most significant activities of each entity, including operating and maintaining their assets. Certain transfers and sales of the assets in the VIEs are subject to partner consent and the liabilities are non-recourse to the general credit of Southern Power. Liabilities consist of customary working capital items and do not include any long-term debt.

Other Variable Interest Entities

Southern Power has other consolidated VIEs that relate to certain subsidiaries that have either sold noncontrolling interests to tax-equity investors or acquired less than a 100% interest from facility developers. These entities are considered VIEs because the arrangements are structured similar to a limited partnership and the noncontrolling members do not have substantive kick-out rights.

At December 31, 2019 and 2018, the other VIEs had total assets of \$1.1 billion and \$858 million, respectively, total liabilities of \$104 million and \$80 million, respectively, and noncontrolling interests of \$409 million and \$241 million, respectively. Under the terms of the partnership agreements, distributions of all available cash are required each month or quarter and additional distributions require partner consent.

In August 2019, Southern Power completed the acquisition of a majority interest in DSGP and gained control of its most significant activities. As a result, Southern Power became the primary beneficiary of this VIE and began accounting for it as a consolidated entity. Upon consolidation of DSGP, Southern Power recorded an additional \$107 million in assets, \$51 million in liabilities, and \$56 million in noncontrolling interest. There was no cash transferred as a result of this consolidation. From the date of Southern Power's first investment in June 2019 until gaining control in August 2019, Southern Power applied the equity method of accounting. See Note 15 under "Southern Power" for additional information.

Equity Method Investments

At December 31, 2019, Southern Power had equity method investments in several wind and battery storage projects totaling \$28 million.

Redeemable Noncontrolling Interests

In 2017, Southern Power reclassified approximately \$114 million from redeemable noncontrolling interests to non-redeemable noncontrolling interests due to the expiration of an option allowing SunPower Corporation to require Southern Power to purchase its redeemable noncontrolling interest at fair market value. In addition, in 2017, Turner Renewable Energy, LLC redeemed at fair value its 10% interest of redeemable noncontrolling interest in certain of Southern Power's solar facilities. At December 31, 2019, 2018, and 2017, there were no outstanding redeemable noncontrolling interests.

Notes to Financial Statements

The following table presents the changes in Southern Power's redeemable noncontrolling interests for the year ended December 31, 2017:

	2017
	<i>(in millions)</i>
Beginning balance	\$ 164
Net income attributable to redeemable noncontrolling interests	2
Distributions to redeemable noncontrolling interests	(2)
Capital contributions from redeemable noncontrolling interests	2
Redemption of redeemable noncontrolling interests	(59)
Reclassification to non-redeemable noncontrolling interests	(114)
Change in fair value of redeemable noncontrolling interests	7
Ending balance	\$ —

The following table presents the attribution of net income to Southern Power and the noncontrolling interests for the year ended December 31, 2017:

	2017
	<i>(in millions)</i>
Net income	\$1,117
Less: Net income attributable to noncontrolling interests	44
Less: Net income attributable to redeemable noncontrolling interests	2
Net income attributable to Southern Power	\$1,071

Southern Company Gas

Equity Method Investments

The carrying amounts of Southern Company Gas' equity method investments at December 31, 2019 and 2018 and related income from those investments for the years ended December 31, 2019, 2018, and 2017 were as follows:

Investment Balance	2019	2018
	<i>(in millions)</i>	
SNG ^(a)	\$1,137	\$1,261
Atlantic Coast Pipeline ^(b)	—	83
PennEast Pipeline	82	71
Pivotal JAX LNG ^(b)	—	53
Other ^(c)	32	70
Total	\$1,251	\$1,538

(a) Decrease primarily relates to the continued amortization of deferred tax assets established upon acquisition, as well as distributions in excess of earnings.

(b) As a result of the proposed sale of Southern Company Gas' interests in Pivotal LNG and Atlantic Coast Pipeline, these amounts are classified as held for sale at December 31, 2019. See Note 3 under "Other Matters – Southern Company Gas" and Note 15 under "Southern Company Gas – Proposed Sale of Pivotal LNG and Atlantic Coast Pipeline" and "Assets Held for Sale," respectively, for additional information.

(c) Decrease primarily relates to the sale of Triton. See Note 15 under "Southern Company Gas" for additional information.

Earnings from Equity Method Investments	2019	2018	2017
	<i>(in millions)</i>		
SNG	\$141	\$131	\$ 88
Atlantic Coast Pipeline ^(a)	13	7	6
PennEast Pipeline ^(a)	6	5	6
Other ^(b)	(3)	5	6
Total	\$157	\$148	\$106

(a) Amounts primarily result from AFUDC equity recorded by the project entity.

(b) Decrease primarily relates to the sale of Triton. See Note 15 under "Southern Company Gas" for additional information.

Notes to Financial Statements

SNG

In 2016, Southern Company Gas, through a wholly-owned, indirect subsidiary, acquired a 50% equity interest in SNG, which is accounted for as an equity method investment. Selected financial information of SNG at December 31, 2019 and 2018 and for the years ended December 31, 2019, 2018, and 2017 is as follows:

Balance Sheet Information	2019	2018
	<i>(in millions)</i>	
Current assets	\$ 85	\$ 104
Property, plant, and equipment	2,570	2,606
Deferred charges and other assets	158	121
Total Assets	\$2,813	\$2,831
Current liabilities	\$ 227	\$ 103
Long-term debt	1,214	1,103
Other deferred charges and other liabilities	86	212
Total Liabilities	\$1,527	\$1,418
Total Stockholders' Equity	\$1,286	\$1,413
Total Liabilities and Stockholders' Equity	\$2,813	\$2,831

Income Statement Information	2019	2018	2017
	<i>(in millions)</i>		
Revenues	\$630	\$604	\$544
Operating income	335	310	242
Net income	280	261	175

Atlantic Coast and PennEast Pipelines

In 2014, Southern Company Gas entered into a joint venture, whereby it holds a 5% ownership interest in the Atlantic Coast Pipeline, an interstate pipeline company formed to develop and operate an approximate 605-mile natural gas pipeline in North Carolina, Virginia, and West Virginia with expected initial transportation capacity of 1.5 Bcf per day. On February 7, 2020, Southern Company Gas entered into an agreement with Dominion Atlantic Coast Pipeline, LLC for the sale of its interest in Atlantic Coast Pipeline. The transaction is expected to be completed in the first half of 2020; however, the ultimate outcome cannot be determined at this time. See Note 15 under "Southern Company Gas – Proposed Sale of Pivotal LNG and Atlantic Coast Pipeline" for additional information.

Also in 2014, Southern Company Gas entered into a partnership in which it holds a 20% ownership interest in the PennEast Pipeline, an interstate pipeline company formed to develop and operate an approximate 118-mile natural gas pipeline between New Jersey and Pennsylvania. The expected initial transportation capacity of 1.0 Bcf per day is under long-term contracts, mainly with public utilities and other market-serving entities, such as electric generation companies, in New Jersey, Pennsylvania, and New York.

See Note 3 under "Other Matters – Southern Company Gas – Gas Pipeline Projects" and "Guarantees" for additional information on these pipeline projects.

Other

On May 29, 2019, Southern Company Gas sold its investment in Triton, a cargo container leasing company that was aggregated into Southern Company Gas' all other segment. See Note 15 under "Southern Company Gas" for additional information.

Southern Company Gas owns a 50% equity method investment in a LNG liquefaction and storage facility in Jacksonville, Florida, which was placed in service in October 2018. This facility is outfitted with a 2.0 million gallon storage tank with the capacity to produce in excess of 120,000 gallons of LNG per day. During 2019, net loss from this investment was \$2 million. On February 7, 2020, Southern Company Gas entered into an agreement with Dominion Modular LNG Holdings, Inc. for the sale of its interest in Pivotal LNG, which includes the investment in this facility in Jacksonville, Florida. The transaction is expected to be completed in the first half of 2020; however, the ultimate outcome cannot be determined at this time. See Note 15 under "Southern Company Gas – Proposed Sale of Pivotal LNG and Atlantic Coast Pipeline" for additional information.

Notes to Financial Statements

8. FINANCING

Long-term Debt

Maturities of long-term debt for the next five years are as follows:

	Southern Company ^{(a)(b)}	Alabama Power	Georgia Power ^(a)	Mississippi Power	Southern Power ^(b)	Southern Company Gas
	<i>(in millions)</i>					
2020	\$2,991	\$251	\$1,025	\$281	\$825	\$ —
2021	3,214	311	397	270	300	330
2022	2,003	751	527	—	677	46
2023	2,413	301	175	—	290	400
2024	492	22	477	—	—	—

(a) Amounts include principal amortization related to the FFB borrowings beginning in February 2020; however, the final maturity date is February 20, 2044. See "DOE Loan Guarantee Borrowings" herein for additional information.

(b) Southern Power's 2022 maturity represents euro-denominated debt at the U.S. dollar denominated hedge settlement amount.

In addition to the items described herein, long-term debt at December 31, 2019 and 2018 consists of senior notes (for all Registrants), junior subordinated notes (for Southern Company and Georgia Power), first mortgage bonds and medium-term notes (for Southern Company and Southern Company Gas), and bank term loans (for Southern Company and Alabama Power).

The traditional electric operating companies also have pollution control revenue bond obligations, which represent loans to the traditional electric operating companies from public authorities of funds derived from sales by such authorities of revenue bonds issued to finance pollution control and solid waste disposal facilities. In some cases, the pollution control revenue bond obligations represent obligations under installment sales agreements with respect to facilities constructed with the proceeds of revenue bonds issued by public authorities. The traditional electric operating companies are required to make payments sufficient for the authorities to meet principal and interest requirements of such bonds. Proceeds from certain issuances are restricted until qualifying expenditures are incurred.

Alabama Power has formed a wholly-owned trust subsidiary for the purpose of issuing preferred securities. The proceeds of the related equity investments and preferred security sales were loaned back to Alabama Power through the issuance of junior subordinated notes totaling \$206 million at December 31, 2019 and 2018, which constitute substantially all of the assets of this trust and are reflected in the balance sheets as long-term debt payable. Alabama Power considers that the mechanisms and obligations relating to the preferred securities issued for its benefit, taken together, constitute a full and unconditional guarantee by it of the trust's payment obligations with respect to these securities. See Note 1 under "Variable Interest Entities" for additional information on the accounting treatment for this trust and the related securities.

At December 31, 2019 and 2018, Mississippi Power had \$270 million aggregate principal amount outstanding of Mississippi Business Finance Corporation Taxable Revenue Bonds, 7.13% Series 1999A due October 20, 2021. Mississippi Power assumed the obligations in 2011 in connection with its election under its operating lease of Plant Daniel Units 3 and 4 to purchase the assets. The bonds were recorded at fair value at the date of assumption, or \$346 million, reflecting a premium of \$76 million. See "Secured Debt" herein for additional information. At December 31, 2019 and 2018, Mississippi Power also had \$50 million of tax-exempt revenue bond obligations outstanding representing loans to Mississippi Power from a public authority of funds derived from the sale by such authority of revenue bonds issued to finance a portion of the costs of constructing the Kemper County energy facility.

See Note 9 for information related to finance lease obligations.

DOE Loan Guarantee Borrowings

Pursuant to the loan guarantee program established under Title XVII of the Energy Policy Act of 2005 (Title XVII Loan Guarantee Program), Georgia Power and the DOE entered into a loan guarantee agreement in 2014 and the Amended and Restated Loan Guarantee Agreement in March 2019. Under the Amended and Restated Loan Guarantee Agreement, the DOE agreed to guarantee the obligations of Georgia Power under note purchase agreements among the DOE, Georgia Power, and the FFB and related promissory notes which provide for two multi-advance term loan facilities (FFB Credit Facilities). Under the FFB Credit Facilities, Georgia Power may make term loan borrowings through the FFB in an amount up to approximately \$5.130 billion, provided that total aggregate borrowings under the FFB Credit Facilities may not exceed 70% of (i) Eligible Project Costs minus (ii) approximately \$1.492 billion (reflecting the amounts received by Georgia Power under the Guarantee Settlement Agreement less the related customer refunds).

Notes to Financial Statements

In March and December 2019, Georgia Power made borrowings under the FFB Credit Facilities in an aggregate principal amount of \$835 million and \$383 million, respectively, with applicable interest rates of 3.213% and 2.537%, respectively, both for an interest period that extends to the final maturity date of February 20, 2044. At December 31, 2019 and 2018, Georgia Power had \$3.8 billion and \$2.6 billion of borrowings outstanding under the FFB Credit Facilities, respectively.

All borrowings under the FFB Credit Facilities are full recourse to Georgia Power, and Georgia Power is obligated to reimburse the DOE for any payments the DOE is required to make to the FFB under its guarantee. Georgia Power's reimbursement obligations to the DOE are full recourse and secured by a first priority lien on (i) Georgia Power's 45.7% undivided ownership interest in Plant Vogtle Units 3 and 4 (primarily the units under construction, the related real property, and any nuclear fuel loaded in the reactor core) and (ii) Georgia Power's rights and obligations under the principal contracts relating to Plant Vogtle Units 3 and 4. There are no restrictions on Georgia Power's ability to grant liens on other property.

In addition to the conditions described above, future advances are subject to satisfaction of customary conditions, as well as certification of compliance with the requirements of the Title XVII Loan Guarantee Program, including accuracy of project-related representations and warranties, delivery of updated project-related information, and evidence of compliance with the prevailing wage requirements of the Davis-Bacon Act of 1931, as amended, and certification from the DOE's consulting engineer that proceeds of the advances are used to reimburse Eligible Project Costs.

Upon satisfaction of all conditions described above, advances may be requested on a quarterly basis through 2023. The final maturity date for each advance under the FFB Credit Facilities is February 20, 2044. Interest is payable quarterly and principal payments will begin on February 20, 2020. Borrowings under the FFB Credit Facilities will bear interest at the applicable U.S. Treasury rate plus a spread equal to 0.375%.

Under the Amended and Restated Loan Guarantee Agreement, Georgia Power is subject to customary borrower affirmative and negative covenants and events of default. In addition, Georgia Power is subject to project-related reporting requirements and other project-specific covenants and events of default.

In the event certain mandatory prepayment events occur, the FFB's commitment to make further advances under the FFB Credit Facilities will terminate and Georgia Power will be required to prepay the outstanding principal amount of all borrowings under the FFB Credit Facilities over a period of five years (with level principal amortization). Among other things, these mandatory prepayment events include (i) the termination of the Vogtle Services Agreement or rejection of the Vogtle Services Agreement in any Westinghouse bankruptcy if Georgia Power does not maintain access to intellectual property rights under the related intellectual property licenses; (ii) termination of the Bechtel Agreement, unless the Vogtle Owners enter into a replacement agreement; (iii) cancellation of Plant Vogtle Units 3 and 4 by the Georgia PSC or by Georgia Power; (iv) failure of the holders of 90% of the ownership interests in Plant Vogtle Units 3 and 4 to vote to continue construction following certain schedule extensions; (v) cost disallowances by the Georgia PSC that could have a material adverse effect on completion of Plant Vogtle Units 3 and 4 or Georgia Power's ability to repay the outstanding borrowings under the FFB Credit Facilities; or (vi) loss of or failure to receive necessary regulatory approvals. Under certain circumstances, insurance proceeds and any proceeds from an event of taking must be applied to immediately prepay outstanding borrowings under the FFB Credit Facilities. Georgia Power also may voluntarily prepay outstanding borrowings under the FFB Credit Facilities. Under the FFB Credit Facilities, any prepayment (whether mandatory or optional) will be made with a make-whole premium or discount, as applicable.

In connection with any cancellation of Plant Vogtle Units 3 and 4, the DOE may elect to continue construction of Plant Vogtle Units 3 and 4. In such an event, the DOE will have the right to assume Georgia Power's rights and obligations under the principal agreements relating to Plant Vogtle Units 3 and 4 and to acquire all or a portion of Georgia Power's ownership interest in Plant Vogtle Units 3 and 4.

Secured Debt

Each of Southern Company's subsidiaries is organized as a legal entity, separate and apart from Southern Company and its other subsidiaries. There are no agreements or other arrangements among the Southern Company system companies under which the assets of one company have been pledged or otherwise made available to satisfy obligations of Southern Company or any of its other subsidiaries.

Notes to Financial Statements

Outstanding secured debt at December 31, 2019 and 2018 for the applicable Registrants was as follows:

	Georgia Power ^(a)	Mississippi Power ^(b)	Southern Company Gas ^(c)
		<i>(in millions)</i>	
December 31, 2019	\$3,999	\$270	\$1,575
December 31, 2018	2,767	270	1,325

(a) Includes Georgia Power's FFB loans that are secured by a first priority lien on (i) Georgia Power's 45.7% undivided ownership interest in Plant Vogtle Units 3 and 4 (primarily the units under construction, the related real property, and any nuclear fuel loaded in the reactor core) and (ii) Georgia Power's rights and obligations under the principal contracts relating to Plant Vogtle Units 3 and 4. See "Long-term Debt – DOE Loan Guarantee Borrowings" herein for additional information. Also includes finance lease obligations of \$156 million and \$142 million at December 31, 2019 and 2018, respectively. See Note 9 for additional information on finance lease obligations.

(b) Represents revenue bonds assumed in conjunction with Mississippi Power's purchase of Plant Daniel Units 3 and 4 that are secured by Plant Daniel Units 3 and 4 and certain related personal property. See "Long-term Debt" herein for additional information.

(c) Nicor Gas' first mortgage bonds are secured by substantially all of Nicor Gas' properties.

Each Registrant's senior notes, junior subordinated notes, pollution control and other revenue bond obligations, bank term loans, credit facility borrowings, and notes payable are effectively subordinated to all secured debt of each respective Registrant.

Equity Units

In August 2019, Southern Company issued 34.5 million 2019 Series A Equity Units (Equity Units), initially in the form of corporate units (Corporate Units), at a stated amount of \$50 per Corporate Unit, for a total stated amount of \$1.725 billion. Net proceeds from the issuance were approximately \$1.682 billion. The proceeds were used to repay short-term indebtedness and for other general corporate purposes, including investments in Southern Company's subsidiaries.

Each Corporate Unit is comprised of (i) a 1/40 undivided beneficial ownership interest in \$1,000 principal amount of Southern Company's Series 2019A Remarketable Junior Subordinated Notes (Series 2019A RSNs) due 2024, (ii) a 1/40 undivided beneficial ownership interest in \$1,000 principal amount of Southern Company's Series 2019B Remarketable Junior Subordinated Notes (together with the Series 2019A RSNs, the RSNs) due 2027, and (iii) a stock purchase contract, which obligates the holder to purchase from Southern Company, no later than August 1, 2022, a certain number of shares of Southern Company's common stock for \$50 in cash (Stock Purchase Contract). Southern Company has agreed to remarket the RSNs in 2022, at which time each interest rate on the RSNs will reset at the applicable market rate. Holders may choose to either remarket their RSNs, receive the proceeds, and use those funds to settle the related Stock Purchase Contract or retain the RSNs and use other funds to settle the related Stock Purchase Contract. If the remarketing is unsuccessful, holders will have the right to put their RSNs to Southern Company at a price equal to the principal amount. The Corporate Units carry an annual distribution rate of 6.75% of the stated amount, which is comprised of a quarterly interest payment on the RSNs of 2.70% per year and a quarterly purchase contract adjustment payment of 4.05% per year.

Each Stock Purchase Contract obligates the holder to purchase, and Southern Company to sell, for \$50 a number of shares of Southern Company common stock determined based on the applicable market value (as determined under the related Stock Purchase Contract) in accordance with the conversion ratios set forth below (subject to anti-dilution adjustments):

- If the applicable market value is equal to or greater than \$68.64, 0.7284 shares.
- If the applicable market value is less than \$68.64 but greater than \$57.20, a number of shares equal to \$50 divided by the applicable market value.
- If the applicable market value is less than or equal to \$57.20, 0.8741 shares.

A holder's ownership interest in the RSNs is pledged to Southern Company to secure the holder's obligation under the related Stock Purchase Contract. If a holder of a Stock Purchase Contract chooses at any time to have its RSNs released from the pledge, such holder's obligation under such Stock Purchase Contract must be secured by a U.S. Treasury security equal to the aggregate principal amount of the RSNs. At the time of issuance, the RSNs were recorded on Southern Company's consolidated balance sheet as long-term debt and the present value of the contract adjustment payments of \$198 million was recorded as a liability, representing the obligation to make contract adjustment payments, with an offsetting reduction to paid-in capital. The liability balance at December 31, 2019 was \$185 million, of which \$66 million was classified as current. The difference between the face value and present value of the contract adjustment payments will be accreted to interest expense on the consolidated statements of income over the three-year period ending in 2022. The liability recorded for the contract adjustment payments is considered non-cash and excluded from the consolidated statements of cash flows. To settle the Stock Purchase Contracts, Southern Company will be required to issue a maximum of 30.2 million shares of common stock (subject to anti-dilution adjustments and a make-whole adjustment if certain fundamental changes occur).

Notes to Financial Statements

Bank Credit Arrangements

At December 31, 2019, committed credit arrangements with banks were as follows:

Company	Expires			Total	Unused	Due within One Year
	2020	2022	2024			
	<i>(in millions)</i>					
Southern Company parent	\$ —	\$ —	\$2,000	\$2,000	\$1,999	\$ —
Alabama Power	3	525	800	1,328	1,328	3
Georgia Power	—	—	1,750	1,750	1,733	—
Mississippi Power	—	150	—	150	150	—
Southern Power ^(a)	—	—	600	600	591	—
Southern Company Gas ^(b)	—	—	1,750	1,750	1,745	—
SEGCO	30	—	—	30	30	30
Southern Company	\$33	\$675	\$6,900	\$7,608	\$7,576	\$33

(a) Southern Power's subsidiaries are not parties to its bank credit arrangement.

(b) Southern Company Gas, as the parent entity, guarantees the obligations of Southern Company Gas Capital, which is the borrower of \$1.25 billion of this arrangement. Southern Company Gas' committed credit arrangement also includes \$500 million for which Nicor Gas is the borrower and which is restricted for working capital needs of Nicor Gas. Pursuant to this multi-year credit arrangement, the allocations between Southern Company Gas Capital and Nicor Gas may be adjusted. See "Structural Considerations" herein for additional information.

The bank credit arrangements require payment of commitment fees based on the unused portion of the commitments or the maintenance of compensating balances with the banks. Commitment fees average less than 1/4 of 1% for Southern Company, the traditional electric operating companies, Southern Power, Southern Company Gas, and Nicor Gas. Compensating balances are not legally restricted from withdrawal.

Subject to applicable market conditions, Southern Company and its subsidiaries expect to renew or replace their bank credit arrangements as needed, prior to expiration. In connection therewith, Southern Company and its subsidiaries may extend the maturity dates and/or increase or decrease the lending commitments thereunder.

These bank credit arrangements, as well as the term loan arrangements of Alabama Power, Georgia Power, Southern Power, and SEGCO, contain covenants that limit debt levels and contain cross-acceleration or, in the case of Southern Power, cross-default provisions to other indebtedness (including guarantee obligations) that are restricted only to the indebtedness of the individual company. Such cross-default provisions to other indebtedness would trigger an event of default if Southern Power defaulted on indebtedness or guarantee obligations over a specified threshold. Such cross-acceleration provisions to other indebtedness would trigger an event of default if the applicable borrower defaulted on indebtedness, the payment of which was then accelerated. Southern Company's, Southern Company Gas', and Nicor Gas' credit arrangements contain covenants that limit debt levels to 70% of total capitalization, as defined in the agreements, and the other subsidiaries' bank credit arrangements contain covenants that limit debt levels to 65% of total capitalization, as defined in the agreements. For purposes of these definitions, debt excludes the long-term debt payable to affiliated trusts and, in certain arrangements, other hybrid securities. Additionally, for Southern Company and Southern Power, for purposes of these definitions, debt excludes any project debt incurred by certain subsidiaries of Southern Power to the extent such debt is non-recourse to Southern Power and capitalization excludes the capital stock or other equity attributable to such subsidiaries. At December 31, 2019, the Registrants, Nicor Gas, and SEGCO were in compliance with all such covenants. None of the bank credit arrangements contain material adverse change clauses at the time of borrowings.

A portion of the unused credit with banks is allocated to provide liquidity support to the revenue bonds of the traditional electric operating companies and the commercial paper programs of the Registrants and Nicor Gas. The amount of variable rate revenue bonds of the traditional electric operating companies outstanding requiring liquidity support at December 31, 2019 was approximately \$1.4 billion (comprised of approximately \$854 million at Alabama Power, \$550 million at Georgia Power, and \$40 million at Mississippi Power). In addition, at December 31, 2019, the traditional electric operating companies had approximately \$275 million (comprised of approximately \$87 million at Alabama Power and \$188 million at Georgia Power) of revenue bonds outstanding that are required to be remarketed within the next 12 months.

In addition to its credit arrangement described above, at December 31, 2019, Southern Power also had a \$120 million continuing letter of credit facility expiring in 2021 for standby letters of credit. At December 31, 2019, \$97 million had been used for letters of credit, primarily as credit support for PPA requirements, and \$23 million was unused. At December 31, 2018, the total amount used under this facility was \$103 million. Subsequent to December 31, 2019, Southern Power entered into an additional \$60 million continuing letter of credit facility expiring in 2023 for standby letters of credit. Southern Power's subsidiaries are not parties to these letter of credit facilities. Also, at December 31, 2019 and 2018, Southern Power had \$104 million and \$103 million, respectively, of cash collateral posted related to PPA requirements, which is included in other deferred charges and assets in Southern Power's consolidated balance sheets.

Notes to Financial Statements

Notes Payable

The Registrants, Nicor Gas, and SEGCO make short-term borrowings primarily through commercial paper programs that have the liquidity support of the committed bank credit arrangements described above under "Bank Credit Arrangements." Southern Power's subsidiaries are not parties or obligors to its commercial paper program. Southern Company Gas maintains commercial paper programs at Southern Company Gas Capital and at Nicor Gas. Nicor Gas' commercial paper program supports working capital needs at Nicor Gas as Nicor Gas is not permitted to make money pool loans to affiliates. All of Southern Company Gas' other subsidiaries benefit from Southern Company Gas Capital's commercial paper program. See "Structural Considerations" herein for additional information.

In addition, Southern Company and certain of its subsidiaries have entered into various bank term loan agreements. Unless otherwise stated, the proceeds of these loans were used to repay existing indebtedness and for general corporate purposes, including working capital and, for the subsidiaries, their continuous construction programs.

Commercial paper and short-term bank term loans are included in notes payable in the balance sheets. Details of short-term borrowings for the applicable Registrants were as follows:

	Notes Payable at December 31, 2019		Notes Payable at December 31, 2018	
	Amount Outstanding	Weighted Average Interest Rate	Amount Outstanding	Weighted Average Interest Rate
	<i>(in millions)</i>		<i>(in millions)</i>	
Southern Company				
Commercial paper	\$1,705	2.1%	\$1,064	3.0%
Short-term bank debt	350	2.3%	1,851	3.1%
Total	\$2,055	2.1%	\$2,915	3.1%
Georgia Power				
Commercial paper	\$ 115	2.1%	\$ 294	3.1%
Short-term bank debt	250	2.2%	—	—%
Total	\$ 365	2.2%	\$ 294	3.1%
Southern Power				
Commercial paper	\$ 449	2.1%	\$ —	—%
Short-term bank debt	100	2.6%	100	3.1%
Total	\$ 549	2.2%	\$ 100	3.1%
Southern Company Gas				
Commercial paper:				
Southern Company Gas Capital	\$ 372	2.1%	\$ 403	3.1%
Nicor Gas	278	1.8%	247	3.0%
Total	\$ 650	2.0%	\$ 650	3.0%

See "Bank Credit Arrangements" herein for information on bank term loan covenants that limit debt levels and cross-acceleration or cross-default provisions.

Outstanding Classes of Capital Stock

Southern Company

Common Stock

Stock Issued

During 2019, Southern Company issued approximately 19.5 million shares of common stock through employee equity compensation plans and received proceeds of approximately \$844 million.

See "Equity Units" herein for additional information.

Notes to Financial Statements

Shares Reserved

At December 31, 2019, a total of 104 million shares were reserved for issuance pursuant to the Southern Investment Plan, employee savings plans, the Outside Directors Stock Plan, the Omnibus Incentive Compensation Plan (which includes stock options and performance share units as discussed in Note 12), and an at-the-market program. Of the total 104 million shares reserved, 9 million shares are available for awards under the Omnibus Incentive Compensation Plan at December 31, 2019.

Diluted Earnings Per Share

For Southern Company, the only difference in computing basic and diluted earnings per share (EPS) is attributable to awards outstanding under stock-based compensation plans and the Equity Units. Earnings per share dilution resulting from stock-based compensation plans and the Equity Units issuance is determined using the treasury stock method. Shares used to compute diluted EPS were as follows:

	Average Common Stock Shares		
	2019	2018	2017
As reported shares	1,046	1,020	1,000
Effect of stock-based compensation	8	5	8
Diluted shares	1,054	1,025	1,008

Stock-based compensation awards that were not included in the diluted EPS calculation because they were anti-dilutive were immaterial in all years presented.

The Equity Units issued in August 2019 were excluded from the calculation of diluted EPS for 2019 as the dilutive stock price threshold was not met.

Redeemable Preferred Stock of Subsidiaries

The preferred stock of Alabama Power contains a feature that allows the holders to elect a majority of such subsidiary's board of directors if preferred dividends are not paid for four consecutive quarters. Because such a potential redemption-triggering event is not solely within the control of Alabama Power, this preferred stock is presented as "Redeemable Preferred Stock of Subsidiaries" on Southern Company's balance sheets and statements of capitalization in a manner consistent with temporary equity under applicable accounting standards.

The following table presents changes during the year in redeemable preferred stock of subsidiaries for Southern Company:

	Redeemable Preferred Stock of Subsidiaries
	(in millions)
Balance at December 31, 2016:	\$118
Issued ^(a)	250
Redeemed ^(a)	(38)
Issuance costs ^(a)	(6)
Balance at December 31, 2017:	324
Redeemed ^(b)	(33)
Balance at December 31, 2018 and 2019:	\$291

(a) See "Alabama Power" herein for additional information.

(b) See "Mississippi Power" herein for additional information.

Alabama Power

Alabama Power has preferred stock, Class A preferred stock, and common stock outstanding. Alabama Power also has authorized preference stock, none of which is outstanding. Alabama Power's preferred stock and Class A preferred stock, without preference between classes, rank senior to Alabama Power's common stock with respect to payment of dividends and voluntary and involuntary dissolution. The preferred stock and Class A preferred stock of Alabama Power contain a feature that allows the holders to elect a majority of Alabama Power's board of directors if preferred dividends are not paid for four consecutive quarters. Because such a potential redemption-triggering event is not solely within the control of Alabama Power, the preferred stock and Class A preferred stock is presented as "Redeemable Preferred Stock" on Alabama Power's balance sheets and statements of capitalization in a manner consistent with temporary equity under applicable accounting standards.

Alabama Power's preferred stock is subject to redemption at a price equal to the par value plus a premium. Alabama Power's Class A preferred stock is subject to redemption at a price equal to the stated capital. All series of Alabama Power's preferred stock currently are

Notes to Financial Statements

subject to redemption at the option of Alabama Power. The Class A preferred stock is subject to redemption on or after October 1, 2022, or following the occurrence of a rating agency event. Information for each outstanding series is in the table below:

Preferred Stock	Par Value/Stated Capital Per Share	Shares Outstanding	Redemption Price Per Share
4.92% Preferred Stock	\$100	80,000	\$103.23
4.72% Preferred Stock	\$100	50,000	\$102.18
4.64% Preferred Stock	\$100	60,000	\$103.14
4.60% Preferred Stock	\$100	100,000	\$104.20
4.52% Preferred Stock	\$100	50,000	\$102.93
4.20% Preferred Stock	\$100	135,115	\$105.00
5.00% Class A Preferred Stock	\$ 25	10,000,000	Stated Capital ^(*)

(*) Prior to October 1, 2022: \$25.50; on or after October 1, 2022: Stated Capital

In 2017, Alabama Power issued 10 million shares (\$250 million aggregate stated capital) of 5.00% Class A Preferred Stock, Cumulative, Par Value \$1 Per Share (Stated Capital \$25 Per Share). The proceeds were used in 2017 to redeem all 2 million shares (\$50 million aggregate stated capital) of 6.50% Series Preference Stock, 6 million shares (\$150 million aggregate stated capital) of 6.45% Series Preference Stock, and 1.52 million shares (\$38 million aggregate stated capital) of 5.83% Class A Preferred Stock and for other general corporate purposes, including Alabama Power's continuous construction program.

There were no changes for the years ended December 31, 2019 and 2018 in redeemable preferred stock of Alabama Power.

Georgia Power

Georgia Power has preferred stock, Class A preferred stock, preference stock, and common stock authorized, but only common stock outstanding as of December 31, 2019 and 2018. In 2017, Georgia Power redeemed all of its outstanding shares of Class A preferred stock and preference stock.

Mississippi Power

Mississippi Power has preferred stock and common stock authorized, but only common stock outstanding as of December 31, 2019. In October 2018, Mississippi Power completed the redemption of all outstanding shares and depository shares of its Preferred Stock that contained a feature allowing the holders to elect a majority of Mississippi Power's board of directors if preferred dividends were not paid for four consecutive quarters. Because such a potential redemption-triggering event was not solely within the control of Mississippi Power, this preferred stock was presented as "Cumulative Redeemable Preferred Stock" on Mississippi Power's balance sheets and statements of capitalization in a manner consistent with temporary equity under applicable accounting standards.

Dividend Restrictions

The income of Southern Company is derived primarily from equity in earnings of its subsidiaries. At December 31, 2019, consolidated retained earnings included \$5.3 billion of undistributed retained earnings of the subsidiaries.

The traditional electric operating companies and Southern Power can only pay dividends to Southern Company out of retained earnings or paid-in-capital.

See Note 7 under "Southern Power" for information regarding the distribution requirements for certain Southern Power subsidiaries.

By regulation, Nicor Gas is restricted, to the extent of its retained earnings balance, in the amount it can dividend or loan to affiliates and is not permitted to make money pool loans to affiliates. At December 31, 2019, the amount of Southern Company Gas' subsidiary retained earnings restricted for dividend payment totaled \$951 million.

Structural Considerations

Since Southern Company and Southern Company Gas are holding companies, the right of Southern Company and Southern Company Gas and, hence, the right of creditors of Southern Company or Southern Company Gas to participate in any distribution of the assets of any respective subsidiary of Southern Company or Southern Company Gas, whether upon liquidation, reorganization or otherwise, is subject to prior claims of creditors and preferred stockholders of such subsidiary.

Southern Company Gas' 100%-owned subsidiary, Southern Company Gas Capital, was established to provide for certain of Southern Company Gas' ongoing financing needs through a commercial paper program, the issuance of various debt, hybrid securities, and other financing arrangements. Southern Company Gas fully and unconditionally guarantees all debt issued by Southern Company Gas Capital. Nicor Gas is not permitted by regulation to make loans to affiliates or utilize Southern Company Gas Capital for its financing needs.

Notes to Financial Statements

Southern Power Company's senior notes, bank term loan, commercial paper, and bank credit arrangement are unsecured senior indebtedness, which rank equally with all other unsecured and unsubordinated debt of Southern Power Company. Southern Power's subsidiaries are not issuers, borrowers, or obligors, as applicable, under any of these unsecured senior debt arrangements, which are effectively subordinated to any future secured debt of Southern Power Company and any potential claims of creditors of Southern Power's subsidiaries.

9. LEASES

On January 1, 2019, the Registrants adopted the provisions of FASB ASC Topic 842 (as amended), Leases (ASC 842), which require lessees to recognize leases with a term of greater than 12 months on the balance sheet as lease obligations, representing the discounted future fixed payments due, along with ROU assets that will be amortized over the term of each lease.

The Registrants elected the transition methodology provided by ASC 842, whereby the applicable requirements were applied on a prospective basis as of the adoption date of January 1, 2019, without restating prior periods. The Registrants also elected the package of practical expedients provided by ASC 842 that allows prior determinations of whether existing contracts are, or contain, leases and the classification of existing leases to continue without reassessment. Additionally, the Registrants applied the use-of-hindsight practical expedient in determining lease terms as of the date of adoption and elected the practical expedient that allows existing land easements not previously accounted for as leases not to be reassessed.

Lessee

As lessee, the Registrants lease certain electric generating units (including renewable energy facilities), real estate/land, communication towers, railcars, and other equipment and vehicles. The major categories of lease obligations are as follows:

	As of December 31, 2019					Southern Company Gas
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	
	<i>(in millions)</i>					
Electric generating units	\$ 990	\$125	\$1,487	\$—	\$ —	\$ —
Real estate/land	782	4	54	2	398	74
Communication towers	154	2	3	—	—	18
Railcars	51	21	26	3	—	—
Other	93	8	12	1	—	—
Total	\$2,070	\$160	\$1,582	\$ 6	\$398	\$92

Real estate/land leases primarily consist of commercial real estate leases at Southern Company, Georgia Power, and Southern Company Gas and various land leases primarily associated with renewable energy facilities at Southern Power. The commercial real estate leases have remaining terms of up to 25 years while the land leases have remaining terms of up to 47 years, including renewal periods.

Communication towers are leased for the installation of equipment to provide cellular phone service to customers and to support the automated meter infrastructure programs at the traditional electric operating companies and Nicor Gas. Communication tower leases have terms of up to 15 years with options to renew for periods up to 20 years.

While renewal options exist in many of the leases, other than for land leases associated with renewable energy facilities at Southern Power and for communication tower leases at Southern Company Gas, the expected term used in calculating the lease obligation generally reflects only the noncancelable period of the lease as it is not considered reasonably certain that the lease will be extended. The expected term of land leases associated with renewable energy facilities includes renewal periods reasonably certain of exercise resulting in an expected lease term at least equal to the expected life of the renewable energy facilities.

Contracts that Contain a Lease

While not specifically structured as a lease, some of the PPAs at Alabama Power and Georgia Power are deemed to represent a lease of the underlying electric generating units when the terms of the PPA convey the right to control the use of the underlying assets. Amounts recorded for leases of electric generating units are generally based on the amount of scheduled capacity payments due over the remaining term of the PPA, which varies between three and 18 years. Georgia Power has several PPAs with Southern Power that Georgia Power accounts for as leases with a lease obligation of \$624 million at December 31, 2019. The amount paid for energy under these affiliate PPAs reflects a price that would be paid in an arm's-length transaction as those amounts have been reviewed and approved by the Georgia PSC.

During 2019, Alabama Power entered into additional long-term PPAs totaling approximately 640 MWs of additional generating capacity consisting of combined cycle generation expected to commence later in 2020 and solar generation coupled with battery energy storage

Notes to Financial Statements

systems expected to commence in 2022 through 2024. Both the combined cycle PPA and the 20-year term battery energy storage systems of the solar generation PPAs are deemed operating leases. The 28-year term battery energy storage systems of the solar generation PPAs are deemed finance leases. The estimated minimum lease payments for these agreements, which are contingent upon approval by the Alabama PSC, total \$95 million. See Note 2 under "Alabama Power – Petition for Certificate of Convenience and Necessity" for additional information.

Short-term Leases

Leases with an initial term of 12 months or less are not recorded on the balance sheet; the Registrants generally recognize lease expense for these leases on a straight-line basis over the lease term.

Residual Value Guarantees

Residual value guarantees exist primarily in railcar leases at Alabama Power and Georgia Power and the amounts probable of being paid under those guarantees are included in the lease payments. All such amounts are immaterial as of December 31, 2019.

Lease and Nonlease Components

For all asset categories, with the exception of electric generating units, gas pipelines, and real estate leases, the Registrants combine lease payments and any nonlease components, such as asset maintenance, for purposes of calculating the lease obligation and the right-of-use asset.

Balance sheet amounts recorded for operating and finance leases are as follows:

	As of December 31, 2019					Southern Company Gas
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	
	<i>(in millions)</i>					
Operating Leases						
Operating lease ROU assets, net	\$ 1,800	\$ 132	\$ 1,428	\$ 6	\$ 369	\$ 93
Operating lease obligations – current	\$ 229	\$ 49	\$ 144	\$ 2	\$ 22	\$ 14
Operating lease obligations – non-current	1,615	107	1,282	4	376	78
Total operating lease obligations	\$ 1,844	\$ 156	\$ 1,426	\$ 6	\$ 398	\$ 92
Finance Leases						
Finance lease ROU assets, net	\$ 216	\$ 4	\$ 130	\$ —	\$ —	\$ —
Finance lease obligations – current	\$ 21	\$ 1	\$ 11	\$ —	\$ —	\$ —
Finance lease obligations – non-current	205	3	145	—	—	—
Total finance lease obligations	\$ 226	\$ 4	\$ 156	\$ —	\$ —	\$ —

Lease costs for the year ended December 31, 2019, which includes both amounts recognized as operations and maintenance expense and amounts capitalized as part of the cost of another asset, are as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
2019						
Lease cost						
Operating lease cost	\$ 310	\$ 54	\$ 206	\$ 3	\$ 28	\$ 18
Finance lease cost:						
Amortization of ROU assets	28	1	15	—	—	—
Interest on lease obligations	12	—	18	—	—	—
Total finance lease cost	40	1	33	—	—	—
Short-term lease costs	48	19	22	—	—	—
Variable lease cost	105	6	85	—	7	—
Sublease income	—	(1)	—	—	—	—
Total lease cost	\$ 503	\$ 79	\$ 346	\$ 3	\$ 35	\$ 18

Georgia Power has variable lease payments that are based on the amount of energy produced by certain renewable generating facilities subject to PPAs.

Notes to Financial Statements

Rent expense and PPA capacity expense related to leases for 2018 and 2017, prior to the adoption of ASC 842, were as follows:

	Southern Company ^{(a)(b)(c)}	Alabama Power	Georgia Power ^(a)	Mississippi Power ^(b)	Southern Power ^(c)	Southern Company Gas
	<i>(in millions)</i>					
2018:						
Rent expense	\$ 192	\$ 23	\$ 34	\$ 4	\$ 31	\$ 15
PPA capacity expense	231	44	206	—	—	—
2017:						
Rent expense	\$ 176	\$ 25	\$ 31	\$ 3	\$ 29	\$ 15
PPA capacity expense	235	41	225	—	—	—

(a) Georgia Power's energy-only solar PPAs accounted for as leases contained contingent rent expense of \$72 million and \$73 million for 2018 and 2017, respectively, of which \$29 million in each of 2018 and 2017 related to solar PPAs with Southern Power.

(b) Mississippi Power's energy-only solar PPAs accounted for as operating leases contained contingent rent expense of \$10 million and \$5 million in 2018 and 2017, respectively.

(c) Rent expense includes contingent rent expense related to Southern Power's land leases based on wind production and escalation in the Consumer Price Index for All Urban Consumers.

Other information with respect to cash and noncash activities related to leases, as well as weighted-average lease terms and discount rates, is as follows:

	2019					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Other information						
Cash paid for amounts included in the measurements of lease obligations:						
Operating cash flows from operating leases	\$ 323	\$ 54	\$ 210	\$ 3	\$ 27	\$ 18
Operating cash flows from finance leases	10	—	19	—	—	—
Financing cash flows from finance leases	32	1	13	—	—	—
ROU assets obtained in exchange for new operating lease obligations	118	7	21	—	2	19
ROU assets obtained in exchange for new finance lease obligations	35	2	24	—	—	—

	As of December 31, 2019					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Weighted-average remaining lease term in years:						
Operating leases	14.2	3.1	10.2	7.0	32.8	9.9
Finance leases	18.8	12.1	10.5	N/A	N/A	N/A
Weighted-average discount rate:						
Operating leases	4.53%	3.33%	4.46%	4.02%	5.66%	3.70%
Finance leases	5.04%	3.60%	10.76%	N/A	N/A	N/A

Notes to Financial Statements

Maturities of lease liabilities are as follows:

	As of December 31, 2019					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Maturity Analysis						
Operating leases:						
2020	\$ 289	\$ 54	\$ 205	\$ 2	\$ 26	\$ 18
2021	268	52	198	1	23	17
2022	260	53	197	1	23	14
2023	208	4	198	1	24	11
2024	163	1	161	—	24	10
Thereafter	1,514	1	831	2	812	44
Total	2,702	165	1,790	7	932	114
Less: Present value discount	858	9	364	1	534	22
Operating lease obligations	\$1,844	\$156	\$1,426	\$ 6	\$398	\$ 92
Finance leases:						
2020	\$ 31	\$ 1	\$ 28	\$—	\$ —	\$ —
2021	25	1	24	—	—	—
2022	22	1	25	—	—	—
2023	18	1	25	—	—	—
2024	15	—	25	—	—	—
Thereafter	246	—	134	—	—	—
Total	357	4	261	—	—	—
Less: Present value discount	131	—	105	—	—	—
Finance lease obligations	\$ 226	\$ 4	\$ 156	\$—	\$ —	\$ —

Payments made under PPAs at Georgia Power for energy generated from certain renewable energy facilities accounted for as operating and finance leases are considered variable lease costs and are therefore not reflected in the above maturity analysis.

As of December 31, 2019, Southern Company, Alabama Power, Mississippi Power, and Southern Power have additional leases that have not yet commenced, as detailed in the following table:

	Southern Company	Alabama Power ^(a)	Mississippi Power ^(b)	Southern Power
Lease category	PPAs, land, pipelines, and aircraft	PPAs	Pipelines	Land
Expected commencement date	2020–2024	2020–2024	2020	2020
Longest lease term expiration	40 years	28 years	15 years	40 years
Estimated total obligations <i>(in millions)</i>	\$248	\$95	\$23	\$87

(a) See Note 2 under "Alabama Power – Petition for Certificate of Convenience and Necessity" for additional information. Alabama Power will have variable operating lease payments and variable finance lease payments that are based on the amount of energy produced by certain renewable generating facilities subject to PPAs.

(b) See Note 2 under "Mississippi Power – Kemper County Energy Facility – Lignite Mine and CO₂ Pipeline Facilities" for additional information. Estimated total obligations include non-lease components.

Lessor

The Registrants are each considered lessors in various arrangements that have been determined to contain a lease due to the customer's ability to control the use of the underlying asset owned by the applicable Registrant. For the traditional electric operating companies, these arrangements consist of outdoor lighting contracts accounted for as operating leases with initial terms of up to seven years, after which the contracts renew on a month-to-month basis at the customer's option. For Mississippi Power, these arrangements also include a tolling arrangement related to an electric generating unit accounted for as a sales-type lease with a term of 20 years. For Southern Power, these arrangements consist of PPAs related to electric generating units, including renewable energy facilities, accounted for as operating leases with terms of up to 27 years. For Southern Company, these arrangements also include PPAs related to fuel cells accounted for as operating leases with terms of up to 15 years. Southern Company Gas is the lessor in operating leases related to gas pipelines with remaining terms of up to 23 years.

Notes to Financial Statements

Lease income for the year ended December 31, 2019 is as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
2019						
Lease income – interest income on sales-type leases	\$ 9	\$ —	\$ —	\$ 9	\$ —	\$ —
Lease income – operating leases	273	24	71	—	160	35
Variable lease income	403	—	—	—	434	—
Total lease income	\$685	\$24	\$71	\$ 9	\$594	\$35

Lease income for Southern Power is included in wholesale revenues. Lease payments received under tolling arrangements and PPAs consist of either scheduled payments or variable payments based on the amount of energy produced by the underlying electric generating units. Scheduled payments to be received under outdoor lighting contracts, tolling arrangements, and PPAs accounted for as leases are presented in the following maturity analyses.

No profit or loss was recognized by Mississippi Power upon commencement of a tolling arrangement accounted for as a sales-type lease during the first quarter 2019. The undiscounted cash flows to be received under the lease are as follows:

	At December 31, 2019	
	Southern Company	Mississippi Power
	<i>(in millions)</i>	
2020	\$ 17	\$ 17
2021	15	15
2022	15	15
2023	14	14
2024	14	14
Thereafter	138	138
Total undiscounted cash flows	\$213	\$213
Lease receivable ^(*)	118	118
Difference between undiscounted cash flows and discounted cash flows	\$ 95	\$ 95

(*) Included in other current assets and other property and investments on the balance sheets.

The undiscounted cash flows to be received under operating leases and contracts accounted for as operating leases (adjusted for intercompany eliminations) are as follows:

	At December 31, 2019				
	Southern Company	Alabama Power	Georgia Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>				
2020	\$ 155	\$26	\$26	\$ 84	\$ 35
2021	141	23	19	86	35
2022	125	16	8	87	35
2023	110	7	2	88	34
2024	103	3	—	90	33
Thereafter	1,063	20	—	387	463
Total	\$1,697	\$95	\$55	\$822	\$ 635

Southern Power receives payments for renewable energy under PPAs accounted for as operating leases that are considered contingent rents and are therefore not reflected in the table above. Southern Power allocates revenue to the nonlease components of PPAs based on the stand-alone selling price of capacity and energy. The undiscounted cash flows to be received under outdoor lighting contracts accounted for as operating leases at Mississippi Power are immaterial.

10. INCOME TAXES

Southern Company files a consolidated federal income tax return and the Registrants file various state income tax returns, some of which are combined or unitary. Under a joint consolidated income tax allocation agreement, each Southern Company subsidiary's current and deferred tax expense is computed on a stand-alone basis and no subsidiary is allocated more current expense than would be paid if it filed a separate income tax return. In accordance with IRS regulations, each company is jointly and severally liable for the federal tax liability.

Notes to Financial Statements

Federal Tax Reform Legislation

Following the enactment of the Tax Reform Legislation, the SEC staff issued Staff Accounting Bulletin 118 – “Income Tax Accounting Implications of the Tax Cuts and Jobs Act” (SAB 118), which provided for a measurement period of up to one year from the enactment date to complete accounting under GAAP for the tax effects of the legislation. Due to the complex and comprehensive nature of the enacted tax law changes and their application under GAAP, the Registrants considered all amounts recorded in the financial statements as a result of the Tax Reform Legislation “provisional” as discussed in SAB 118 and subject to revision prior to filing the 2017 tax return in the fourth quarter 2018. As of December 31, 2018, each of the Registrants considered the measurement of impacts from the Tax Reform Legislation on deferred income tax assets and liabilities, primarily due to the impact of the reduction of the corporate income tax rate, to be complete.

Current and Deferred Income Taxes

Details of income tax provisions are as follows:

	2019					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Federal —						
Current	\$ 156	\$ 61	\$ 264	\$ (6)	\$ (717)	\$ (120)
Deferred	1,237	125	180	26	647	195
	1,393	186	444	20	(70)	75
State —						
Current	275	12	6	(1)	1	37
Deferred	130	72	22	11	13	18
	405	84	28	10	14	55
Total	\$ 1,798	\$ 270	\$ 472	\$ 30	\$ (56)	\$ 130

	2018					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Federal —						
Current	\$ 167	\$ 91	\$ 393	\$ (567)	\$ 85	\$ 334
Deferred	231	123	(249)	575	(154)	33
	398	214	144	8	(69)	367
State —						
Current	188	26	81	(10)	(9)	131
Deferred	(137)	51	(11)	(100)	(86)	(34)
	51	77	70	(110)	(95)	97
Total	\$ 449	\$ 291	\$ 214	\$ (102)	\$ (164)	\$ 464

	2017					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Federal —						
Current	\$ (62)	\$ 136	\$ 256	\$ 194	\$ (566)	\$ 103
Deferred	(6)	336	504	(753)	(312)	170
	(68)	472	760	(559)	(878)	273
State —						
Current	37	23	116	—	(110)	27
Deferred	173	73	(46)	27	49	67
	210	96	70	27	(61)	94
Total	\$ 142	\$ 568	\$ 830	\$ (532)	\$ (939)	\$ 367

Notes to Financial Statements

Southern Company's and Southern Power's ITCs and PTCs generated in the current tax year and carried forward from prior tax years that cannot be utilized in the current tax year are reclassified from current to deferred taxes in federal income tax expense in the tables above. Southern Power's ITCs and PTCs reclassified in this manner include \$51 million for 2019, \$128 million for 2018, and \$316 million for 2017. Southern Power received \$734 million and \$5 million of cash related to federal ITCs under renewable energy initiatives in 2019 and 2018, respectively. No cash was received in 2017. See "Deferred Tax Assets and Liabilities" and "Tax Credit Carryforwards" herein for additional information.

In accordance with regulatory requirements, deferred federal ITCs for the traditional electric operating companies are deferred and amortized over the average life of the related property, with such amortization normally applied as a credit to reduce depreciation and amortization in the statements of income. Southern Power's and the natural gas distribution utilities' deferred federal ITCs, as well as certain state ITCs for Nicor Gas, are deferred and amortized to income tax expense over the life of the respective asset. ITCs amortized in 2019, 2018, and 2017 were immaterial for the traditional electric operating companies and Southern Company Gas and were as follows for Southern Company and Southern Power:

	Southern Company	Southern Power
	<i>(in millions)</i>	
2019	\$181	\$151
2018	87	58
2017	79	57

Southern Power recognized tax credits and reduced the tax basis of the asset by 50% of the ITCs received, resulting in a net deferred tax asset. Southern Power has elected to recognize the tax benefit of this basis difference as a reduction to income tax expense in the year in which the plant reaches commercial operation. The tax benefit of the related basis differences reduced income tax expense by \$5 million in 2019, \$1 million in 2018, and \$18 million in 2017. See "Unrecognized Tax Benefits" herein for further information.

State ITCs and other state credits, which are recognized in the period in which the credits are generated, reduced Georgia Power's income tax expense by \$51 million in 2019, \$21 million in 2018, and \$37 million in 2017 and reduced Southern Power's income tax expense by \$32 million in 2017.

Southern Power's federal and state PTCs, which are recognized in the period in which the credits are generated, reduced Southern Power's income tax expense by \$12 million in 2019, \$141 million in 2018, and \$139 million in 2017.

Legal Entity Reorganizations

In April 2018, Southern Power completed the final stage of a legal entity reorganization of various direct and indirect subsidiaries that own and operate substantially all of its solar facilities, including certain subsidiaries owned in partnership with various third parties. In September 2018, Southern Power also completed a legal entity reorganization of eight operating wind facilities under a new holding company, SP Wind. The reorganizations resulted in net state tax benefits related to certain changes in apportionment rates totaling approximately \$65 million, which were recorded in 2018.

Effective Tax Rate

Southern Company's effective tax rate is typically lower than the statutory rate due to employee stock plans' dividend deduction, non-taxable AFUDC equity at the traditional electric operating companies, flowback of excess deferred income taxes at the regulated utilities, and federal income tax benefits from ITCs and PTCs primarily at Southern Power. Each Registrant's effective tax rate for 2018 varied significantly as compared to 2017 due to the 14% lower 2018 federal tax rate resulting from the Tax Reform Legislation.

Notes to Financial Statements

A reconciliation of the federal statutory income tax rate to the effective income tax rate is as follows:

2019						
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Federal statutory rate	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
State income tax, net of federal deduction	4.9	4.9	1.0	4.3	4.0	6.1
Employee stock plans' dividend deduction	(0.4)	—	—	—	—	—
Non-deductible book depreciation	0.3	0.6	0.5	0.4	—	—
Flowback of excess deferred income taxes	(2.1)	(5.3)	—	(12.6)	—	(6.0)
AFUDC-Equity	(0.4)	(0.8)	(0.6)	(0.1)	—	—
ITC basis difference	(0.1)	—	—	—	(1.9)	—
Amortization of ITC	(0.8)	(0.1)	(0.1)	(0.1)	(16.1)	(0.1)
Tax impact from sale of subsidiaries	5.1	—	—	—	(27.6)	(1.4)
Noncontrolling interests	—	—	—	—	0.8	—
Other	—	(0.4)	(0.3)	4.9	(0.6)	(1.4)
Effective income tax (benefit) rate	27.5%	19.9%	21.5%	17.8%	(20.4)%	18.2%

2018						
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Federal statutory rate	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
State income tax, net of federal deduction	1.8	5.0	5.5	(65.1)	(90.8)	9.2
Employee stock plans' dividend deduction	(1.0)	—	—	—	—	—
Non-deductible book depreciation	0.8	0.6	1.2	0.7	—	—
Flowback of excess deferred income taxes	(4.0)	(1.8)	—	(4.1)	—	(3.0)
AFUDC-Equity	(1.0)	(1.0)	(1.4)	—	—	—
ITC basis difference	(0.6)	—	—	—	(0.2)	—
Federal PTCs	(4.7)	—	—	—	(156.6)	—
Amortization of ITC	(2.0)	(0.1)	(0.2)	(0.2)	(55.4)	(0.1)
Tax impact from sale of subsidiaries	8.6	—	—	—	—	28.5
Tax Reform Legislation	(1.4)	—	(4.9)	(26.3)	96.1	(0.4)
Noncontrolling interests	(0.4)	—	—	—	(14.9)	—
Other	(0.8)	(0.1)	0.1	(1.4)	2.0	0.3
Effective income tax (benefit) rate	16.3%	23.6%	21.3%	(75.4)%	(198.8)%	55.5%

2017						
	Southern Company	Alabama Power	Georgia Power	Mississippi ^(*) Power	Southern Power	Southern Company Gas
Federal statutory rate	35.0%	35.0%	35.0%	(35.0)%	35.0%	35.0%
State income tax, net of federal deduction	12.5	4.5	2.0	0.6	(22.2)	10.0
Employee stock plans' dividend deduction	(4.0)	—	—	—	—	—
Non-deductible book depreciation	3.1	0.9	0.7	0.1	—	—
Flowback of excess deferred income taxes	(0.3)	—	(0.1)	—	—	(0.2)
AFUDC-Equity	(2.6)	(1.0)	(0.6)	—	—	—
AFUDC-Equity portion of Kemper IGCC charge	15.7	—	—	5.3	—	—
ITC basis difference	(1.7)	—	—	—	(10.0)	—
Federal PTCs	(12.1)	—	—	—	(72.5)	—
Amortization of ITC	(4.2)	(0.2)	(0.1)	—	(20.6)	(0.2)
Tax Reform Legislation	(25.6)	0.3	(0.4)	11.9	(416.1)	15.0
Noncontrolling interests	(1.4)	—	—	—	(8.6)	—
Other	(1.1)	0.1	0.2	—	(10.7)	0.6
Effective income tax (benefit) rate	13.3%	39.6%	36.7%	(17.1)%	(525.7)%	60.2%

(*) Represents effective income tax benefit rate for Mississippi Power due to a loss before income taxes in 2017.

Notes to Financial Statements

Deferred Tax Assets and Liabilities

The tax effects of temporary differences between the carrying amounts of assets and liabilities in the financial statements of the Registrants and their respective tax bases, which give rise to deferred tax assets and liabilities, are as follows:

	December 31, 2019					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Deferred tax liabilities —						
Accelerated depreciation	\$ 8,711	\$2,402	\$3,058	\$ 315	\$ 1,422	\$1,288
Property basis differences	1,843	912	643	143	—	133
Federal effect of net state deferred tax assets	—	—	—	24	—	—
Leveraged lease basis differences	236	—	—	—	—	—
Employee benefit obligations	704	242	351	38	12	12
Premium on reacquired debt	83	13	70	—	—	—
Regulatory assets —						
Storm damage reserves	109	—	109	—	—	—
Employee benefit obligations	1,174	311	403	55	—	45
Remaining book value of retired assets	341	174	159	8	—	—
AROs	1,723	613	1,066	44	—	—
AROs	814	360	405	—	—	—
Other	523	134	81	68	11	198
Total deferred income tax liabilities	16,261	5,161	6,345	695	1,445	1,676
Deferred tax assets —						
Federal effect of net state deferred tax liabilities	277	162	63	—	24	56
Employee benefit obligations	1,385	334	488	72	5	111
Other property basis differences	230	—	65	—	146	—
ITC and PTC carryforward	2,098	11	435	—	1,445	—
Other partnership basis difference	169	—	—	—	169	—
Other comprehensive losses	112	8	18	—	10	—
AROs	2,537	973	1,471	44	—	—
Estimated loss on plants under construction	283	—	283	—	—	—
Other deferred state tax attributes	402	—	13	251	72	8
Regulatory liability associated with the Tax Reform Legislation (not subject to normalization)	401	240	133	28	—	—
Other	786	173	154	56	46	287
Total deferred income tax assets	8,680	1,901	3,123	451	1,917	462
Valuation allowance	(137)	—	(35)	(41)	(36)	(5)
Net deferred income tax assets	8,543	1,901	3,088	410	1,881	457
Net deferred income taxes (assets)/liabilities	\$ 7,718	\$3,260	\$3,257	\$ 285	\$ (436)	\$1,219
Recognized in the balance sheets:						
Accumulated deferred income taxes – assets	\$ (170)	\$ —	\$ —	\$(139)	\$ (551)	\$ —
Accumulated deferred income taxes – liabilities	\$ 7,888	\$3,260	\$3,257	\$ 424	\$ 115	\$1,219

Notes to Financial Statements

December 31, 2018

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Deferred tax liabilities —						
Accelerated depreciation	\$ 8,461	\$2,236	\$3,005	\$ 335	\$ 1,483	\$1,176
Property basis differences	1,807	865	633	162	—	134
Federal effect of net state deferred tax assets	—	—	—	36	—	—
Leveraged lease basis differences	253	—	—	—	—	—
Employee benefit obligations	477	149	290	25	6	6
Premium on reacquired debt	88	14	74	—	—	—
Regulatory assets —						
Storm damage reserves	111	—	111	—	—	—
Employee benefit obligations	975	260	344	45	—	45
Remaining book value of retired assets	56	6	39	11	—	—
AROs	1,232	276	925	31	—	—
AROs	1,210	607	575	—	—	—
Other	537	171	102	57	34	132
Total deferred income tax liabilities	15,207	4,584	6,098	702	1,523	1,493
Deferred tax assets —						
Federal effect of net state deferred tax liabilities	260	155	71	—	22	46
Employee benefit obligations	1,273	286	444	62	7	150
Other property basis differences	251	—	61	—	172	—
ITC and PTC carryforward	2,730	11	430	—	2,128	—
Alternative minimum tax carryforward	62	—	—	32	21	—
Other partnership basis difference	162	—	—	—	162	—
Other comprehensive losses	82	10	3	—	—	—
AROs	2,442	883	1,500	31	—	—
Estimated loss on plants under construction	346	—	283	63	—	—
Other deferred state tax attributes	415	—	19	251	72	—
Regulatory liability associated with the Tax Reform Legislation (not subject to normalization)	294	130	127	29	—	8
Other	731	147	140	47	47	285
Total deferred income tax assets	9,048	1,622	3,078	515	2,631	489
Valuation allowance	(123)	—	(42)	(41)	(27)	(12)
Net deferred income tax assets	8,925	1,622	3,036	474	2,604	477
Net deferred income taxes (assets)/liabilities	\$ 6,282	\$2,962	\$3,062	\$ 228	\$(1,081)	\$1,016
Recognized in the balance sheets:						
Accumulated deferred income taxes – assets	\$ (276)	\$ —	\$ —	\$(150)	\$(1,186)	\$ —
Accumulated deferred income taxes – liabilities	\$ 6,558	\$2,962	\$3,062	\$ 378	\$ 105	\$1,016

The traditional electric operating companies and natural gas distribution utilities have tax-related regulatory assets (deferred income tax charges) and regulatory liabilities (deferred income tax credits). The regulatory assets are primarily attributable to tax benefits flowed through to customers in prior years, deferred taxes previously recognized at rates lower than the current enacted tax law, and taxes applicable to capitalized interest. The regulatory liabilities are primarily attributable to deferred taxes previously recognized at rates higher than the current enacted tax law and to unamortized ITCs. See Note 2 for each Registrant's related balances at December 31, 2019 and 2018.

Notes to Financial Statements

Tax Credit Carryforwards

Federal ITC/PTC carryforwards at December 31, 2019 were as follows:

	Southern Company	Alabama Power	Georgia Power	Southern Power
	<i>(in millions)</i>			
Federal ITC/PTC carryforwards	\$1,751	\$ 11	\$ 88	\$1,445
Year in which federal ITC/PTC carryforwards begin expiring	2032	2033	2032	2036
Year by which federal ITC/PTC carryforwards are expected to be utilized	2024	2022	2022	2024

The estimated tax credit utilization reflects the various sale transactions described in Note 15 and could be further delayed by numerous factors, including the acquisition of additional renewable projects, the purchase of rights to additional PTCs of Plant Vogtle Units 3 and 4 pursuant to certain joint ownership agreements, and changes in taxable income projections. See Note 2 under "Georgia Power – Nuclear Construction" for additional information on Plant Vogtle Units 3 and 4.

At December 31, 2019, Georgia Power also had approximately \$360 million in state investment and other state tax credit carryforwards for the State of Georgia that will expire between 2020 and 2029 and are not expected to be fully utilized. Georgia Power has a net state valuation allowance of \$28 million associated with these carryforwards.

The ultimate outcome of these matters cannot be determined at this time.

Net Operating Loss Carryforwards

Southern Company has fully utilized the carryforward from federal NOLs generated in 2016 and 2017. At December 31, 2019, the state and local NOL carryforwards for Southern Company's subsidiaries were as follows:

Company/Jurisdiction	Approximate NOL Carryforwards	Approximate Net State Income Tax Benefit	Tax Year NOL Begins Expiring
	<i>(in millions)</i>		
Mississippi Power			
Mississippi	\$5,099	\$201	2031
Southern Power			
Oklahoma	830	39	2035
Florida	258	11	2033
South Carolina	56	2	2034
Other states	21	2	Various
Southern Power Total	\$1,165	\$ 54	
Other^(*)			
Georgia	171	7	2020
New York	220	11	2035
New York City	207	15	2035
Other states	368	18	Various
Southern Company Total	\$7,230	\$306	

(*) Represents other Southern Company subsidiaries. Alabama Power, Georgia Power, and Southern Company Gas did not have material state or local NOL carryforwards at December 31, 2019.

State NOLs for Mississippi, Oklahoma, and Florida are not expected to be fully utilized prior to expiration. At December 31, 2019, Mississippi Power had a net state valuation allowance of \$32 million for the Mississippi NOL and Southern Power had net state valuation allowances of \$16 million for the Oklahoma NOL and \$11 million for the Florida NOL.

The ultimate outcome of these matters cannot be determined at this time.

Notes to Financial Statements

Unrecognized Tax Benefits

The Registrants had no material changes in unrecognized tax benefits during 2019. Unrecognized tax benefits changes in 2018 and 2017 for Southern Company, Mississippi Power, and Southern Power are provided below. The remaining Registrants did not have any material unrecognized tax benefits for the periods presented.

	Southern Company	Mississippi Power	Southern Power
		<i>(in millions)</i>	
Unrecognized tax benefits at December 31, 2016	\$ 484	\$ 465	\$ 17
Tax positions changes –			
Increase from current periods	10	—	—
Increase from prior periods	10	2	—
Decrease from prior periods	(196)	(177)	(17)
Reductions due to settlements	(290)	(290)	—
Unrecognized tax benefits at December 31, 2017	18	—	—
Tax positions changes –			
Decrease from prior periods	(18)	—	—
Unrecognized tax benefits at December 31, 2018	\$ —	\$ —	\$ —

Mississippi Power's tax positions changes from prior periods and reductions due to settlements for 2017 related to state tax benefits, deductions for R&E expenditures, and charitable contribution carryforwards that were impacted as a result of the settlement of R&E expenditures associated with the Kemper County energy facility, as well as federal income tax benefits from deferred ITCs. See Note 2 under "Mississippi Power – Kemper County Energy Facility" and "Section 174 Research and Experimental Deduction" herein for more information.

Southern Power's decrease from prior periods for 2017 primarily relates to federal income tax benefits from deferred ITCs.

The impact on the effective tax rate of Southern Company, if recognized, was as follows for 2017:

	Southern Company
	<i>(in millions)</i>
2017	
Tax positions impacting the effective tax rate	\$18
Tax positions not impacting the effective tax rate	—
Balance of unrecognized tax benefits	\$18

All of the Registrants classify interest on tax uncertainties as interest expense. Accrued interest for all tax positions other than the Section 174 R&E deductions was immaterial for all years presented. None of the Registrants accrued any penalties on uncertain tax positions.

It is reasonably possible that the amount of the unrecognized tax benefits could change within 12 months. New audit findings or settlements associated with ongoing audits could result in significant unrecognized tax benefits. At this time, a range of reasonably possible outcomes cannot be determined.

The IRS has finalized its audits of Southern Company's consolidated federal income tax returns through 2018. Southern Company is a participant in the Compliance Assurance Process of the IRS. The audits for the Registrants' state income tax returns have either been concluded, or the statute of limitations has expired, for years prior to 2015.

Section 174 Research and Experimental Deduction

Southern Company, on behalf of Mississippi Power, reflected deductions for R&E expenditures related to the Kemper County energy facility in its federal income tax returns, as amended, since 2008. In 2017, the U.S. Congress Joint Committee on Taxation approved a settlement between Southern Company and the IRS, resolving a methodology for these deductions. As a result of this approval, Mississippi Power recognized \$176 million in 2017 of previously unrecognized tax benefits and reversed \$36 million of associated accrued interest.

Notes to Financial Statements

11. RETIREMENT BENEFITS

The Southern Company system has a qualified defined benefit, trustee pension plan covering substantially all employees, with the exception of PowerSecure employees. The qualified pension plan is funded in accordance with requirements of the Employee Retirement Income Security Act of 1974, as amended (ERISA). In December 2019, the Registrants voluntarily contributed the following amounts to the qualified pension plan:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
			<i>(in millions)</i>			
Contributions to qualified pension plan	\$1,136	\$362	\$200	\$54	\$24	\$145

No mandatory contributions to the qualified pension plan are anticipated for the year ending December 31, 2020. The Southern Company system also provides certain non-qualified defined benefits for a select group of management and highly compensated employees, which are funded on a cash basis. In addition, the Southern Company system provides certain medical care and life insurance benefits for retired employees through other postretirement benefit plans. The traditional electric operating companies fund other postretirement trusts to the extent required by their respective regulatory commissions. Southern Company Gas has a separate unfunded supplemental retirement health care plan that provides medical care and life insurance benefits to employees of discontinued businesses. For the year ending December 31, 2020, no contributions to any other postretirement trusts are expected.

In January 2018, the qualified defined benefit pension plan of Southern Company Gas was merged into the Southern Company system's qualified defined benefit pension plan and the pension plan was reopened to all non-union employees of Southern Company Gas. Prior to January 2018, Southern Company Gas had a separate qualified defined benefit, trustee pension plan covering certain eligible employees, which was closed in 2012 to new employees. Also in January 2018, Southern Company Gas' non-qualified retirement plans were merged into the Southern Company system's non-qualified retirement plan (defined benefit and defined contribution).

Effective in December 2017, 538 employees transferred from SCS to Southern Power. Accordingly, Southern Power assumed various compensation and benefit plans including participation in the Southern Company system's qualified defined benefit, trustee pension plan covering substantially all employees. With the transfer of employees, Southern Power assumed the related benefit obligations from SCS of \$139 million for the qualified pension plan (along with trust assets of \$138 million) and \$11 million for other postretirement benefit plans, together with \$36 million in prior service costs and net gains/losses in OCI. In 2018, Southern Power also began providing certain defined benefits under the non-qualified pension plan for a select group of management and highly compensated employees. No obligation related to these benefits was assumed in the employee transfer; however, obligations for services rendered by employees following the transfer are being recognized by Southern Power and are funded on a cash basis. In addition, Southern Power provides certain medical care and life insurance benefits for retired employees through other postretirement benefit plans that are funded on a cash basis. Prior to the transfer of employees in December 2017, substantially all expenses charged by SCS, including pension and other postretirement benefit costs, were recorded in Southern Power's other operations and maintenance expense. The disclosures included herein exclude Southern Power for periods prior to the transfer of employees in December 2017.

On January 1, 2019, Southern Company completed the sale of Gulf Power to NextEra Energy. See Note 15 under "Southern Company" for additional information. The portion of the Southern Company system's pension and other postretirement benefit plans attributable to Gulf Power reflected in Southern Company's consolidated balance sheet as held for sale at December 31, 2018 consisted of:

	Pension Plans	Other Postretirement Benefit Plans
		<i>(in millions)</i>
Projected benefit obligation	\$526	\$ 69
Plan assets	492	17
Accrued liability	\$(34)	\$(52)

All amounts presented in the remainder of this note reflect the benefit plan obligations and related plan assets for the Southern Company system's pension and other postretirement benefit plans, including the amounts attributable to Gulf Power prior to January 1, 2019.

Notes to Financial Statements

Actuarial Assumptions

The weighted average rates assumed in the actuarial calculations used to determine both the net periodic costs for the pension and other postretirement benefit plans for the following year and the benefit obligations as of the measurement date are presented below.

Assumptions used to determine net periodic costs:	2019					Southern Company Gas
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	
Pension plans						
Discount rate – benefit obligations	4.49%	4.51%	4.48%	4.49%	4.65%	4.47%
Discount rate – interest costs	4.12	4.14	4.10	4.12	4.35	4.11
Discount rate – service costs	4.70	4.73	4.72	4.73	4.75	4.57
Expected long-term return on plan assets	7.75	7.75	7.75	7.75	7.75	7.75
Annual salary increase	4.34	4.46	4.46	4.46	4.46	3.07
Other postretirement benefit plans						
Discount rate – benefit obligations	4.37%	4.40%	4.36%	4.35%	4.50%	4.32%
Discount rate – interest costs	3.98	4.01	3.97	3.95	4.14	3.91
Discount rate – service costs	4.63	4.67	4.64	4.64	4.65	4.56
Expected long-term return on plan assets	6.86	6.76	6.85	6.79	—	6.49
Annual salary increase	4.34	4.46	4.46	4.46	4.46	3.07

Assumptions used to determine net periodic costs:	2018					Southern Company Gas
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	
Pension plans						
Discount rate – benefit obligations	3.80%	3.81%	3.79%	3.80%	3.94%	3.74%
Discount rate – interest costs	3.45	3.45	3.42	3.46	3.69	3.41
Discount rate – service costs	3.98	4.00	3.99	3.99	4.01	3.84
Expected long-term return on plan assets	7.95	7.95	7.95	7.95	7.95	7.95
Annual salary increase	4.34	4.46	4.46	4.46	4.46	3.07
Other postretirement benefit plans						
Discount rate – benefit obligations	3.68%	3.71%	3.68%	3.68%	3.81%	3.62%
Discount rate – interest costs	3.29	3.31	3.29	3.29	3.47	3.21
Discount rate – service costs	3.91	3.93	3.91	3.91	3.93	3.82
Expected long-term return on plan assets	6.83	6.83	6.80	6.99	—	5.89
Annual salary increase	4.34	4.46	4.46	4.46	4.46	3.07

Assumptions used to determine net periodic costs:	2017					Southern Company Gas
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	
Pension plans						
Discount rate – benefit obligations		4.40%	4.44%	4.40%	4.44%	4.39%
Discount rate – interest costs		3.77	3.76	3.72	3.81	3.76
Discount rate – service costs		4.81	4.85	4.83	4.83	4.64
Expected long-term return on plan assets		7.92	7.95	7.95	7.95	7.60
Annual salary increase		4.37	4.46	4.46	4.46	3.50
Other postretirement benefit plans						
Discount rate – benefit obligations		4.23%	4.27%	4.23%	4.22%	4.15%
Discount rate – interest costs		3.54	3.58	3.55	3.55	3.40
Discount rate – service costs		4.64	4.70	4.63	4.65	4.55
Expected long-term return on plan assets		6.84	6.83	6.79	6.88	6.03
Annual salary increase		4.37	4.46	4.46	4.46	3.50

Notes to Financial Statements

2019						
Assumptions used to determine benefit obligations:	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Pension plans						
Discount rate	3.41%	3.44%	3.40%	3.41%	3.52%	3.39%
Annual salary increase	4.73	4.73	4.73	4.73	4.73	4.73
Other postretirement benefit plans						
Discount rate	3.24%	3.28%	3.22%	3.22%	3.39%	3.19%
Annual salary increase	4.73	4.73	4.73	4.73	4.73	4.73

2018						
Assumptions used to determine benefit obligations:	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Pension plans						
Discount rate	4.49%	4.51%	4.48%	4.49%	4.65%	4.47%
Annual salary increase	4.34	4.46	4.46	4.46	4.46	3.07
Other postretirement benefit plans						
Discount rate	4.37%	4.40%	4.36%	4.35%	4.50%	4.32%
Annual salary increase	4.34	4.46	4.46	4.46	4.46	3.07

The Registrants estimate the expected rate of return on pension plan and other postretirement benefit plan assets using a financial model to project the expected return on each current investment portfolio. The analysis projects an expected rate of return on each of the different asset classes in order to arrive at the expected return on the entire portfolio relying on each trust's target asset allocation and reasonable capital market assumptions. The financial model is based on four key inputs: anticipated returns by asset class (based in part on historical returns), each trust's target asset allocation, an anticipated inflation rate, and the projected impact of a periodic rebalancing of each trust's portfolio.

An additional assumption used in measuring the accumulated other postretirement benefit obligations (APBO) was a weighted average medical care cost trend rate. The weighted average medical care cost trend rates used in measuring the APBO for the Registrants at December 31, 2019 were as follows:

	Initial Cost Trend Rate	Ultimate Cost Trend Rate	Year That Ultimate Rate is Reached
Pre-65	6.00%	4.50%	2027
Post-65 medical	5.00	4.50	2027
Post-65 prescription	6.50	4.50	2027

Pension Plans

The total accumulated benefit obligation for the pension plans at December 31, 2019 and 2018 was as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
<i>(in millions)</i>						
December 31, 2019	\$13,391	\$3,053	\$4,222	\$615	\$151	\$963
December 31, 2018	11,683	2,550	3,613	513	101	842

The actuarial loss of \$2.3 billion recorded in the remeasurement of the Southern Company system pension plans at December 31, 2019 was primarily due to a 108 basis point decrease in the overall discount rate used to calculate the benefit obligation as a result of lower market interest rates. The actuarial gain of \$1.1 billion recorded in the remeasurement of the Southern Company system pension plans at December 31, 2018 was primarily due to a 69 basis point increase in the overall discount rate used to calculate the benefit obligation as a result of higher market interest rates.

Notes to Financial Statements

Changes in the projected benefit obligations and the fair value of plan assets during the plan years ended December 31, 2019 and 2018 were as follows:

	2019					Southern Company Gas
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	
	<i>(in millions)</i>					
Change in benefit obligation						
Benefit obligation at beginning of year	\$12,763	\$2,816	\$3,905	\$557	\$123	\$ 907
Dispositions	(509)	—	—	—	—	—
Service cost	292	69	74	12	7	25
Interest cost	492	114	156	22	5	36
Benefits paid	(596)	(125)	(194)	(26)	(4)	(64)
Actuarial (gain) loss	2,346	530	669	106	54	163
Balance at end of year	14,788	3,404	4,610	671	185	1,067
Change in plan assets						
Fair value of plan assets at beginning of year	11,611	2,575	3,663	505	123	798
Dispositions	(509)	—	—	—	—	—
Actual return (loss) on plan assets	2,343	524	730	103	43	172
Employer contributions	1,208	383	243	59	7	144
Benefits paid	(596)	(125)	(194)	(26)	(4)	(64)
Fair value of plan assets at end of year	14,057	3,357	4,442	641	169	1,050
Accrued liability	\$ (731)	\$ (47)	\$ (168)	\$ (30)	\$ (16)	\$ (17)

	2018					Southern Company Gas
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	
	<i>(in millions)</i>					
Change in benefit obligation						
Benefit obligation at beginning of year	\$13,808	\$2,998	\$4,188	\$602	\$139	\$1,184
Dispositions	(107)	—	—	—	(3)	(104)
Service cost	359	78	87	17	9	34
Interest cost	464	101	139	20	5	39
Benefits paid	(618)	(124)	(191)	(24)	(3)	(98)
Actuarial (gain) loss	(1,143)	(237)	(318)	(58)	(24)	(148)
Balance at end of year	12,763	2,816	3,905	557	123	907
Change in plan assets						
Fair value of plan assets at beginning of year	12,992	2,836	4,058	563	138	1,068
Dispositions	(107)	—	—	—	(3)	(104)
Actual return (loss) on plan assets	(711)	(150)	(218)	(37)	(9)	(70)
Employer contributions	55	13	14	3	—	2
Benefits paid	(618)	(124)	(191)	(24)	(3)	(98)
Fair value of plan assets at end of year	11,611	2,575	3,663	505	123	798
Accrued liability	\$ (1,152)	\$ (241)	\$ (242)	\$ (52)	\$ —	\$ (109)

The projected benefit obligations for the qualified and non-qualified pension plans at December 31, 2019 are shown in the following table. All pension plan assets are related to the qualified pension plan.

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Projected benefit obligations:						
Qualified pension plan	\$14,055	\$3,286	\$4,480	\$639	\$159	\$999
Non-qualified pension plan	733	118	130	31	26	68

Notes to Financial Statements

Amounts recognized in the balance sheets at December 31, 2019 and 2018 related to the Registrants' pension plans consist of the following:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
December 31, 2019:						
Prepaid pension costs	\$ 2	\$ 71	\$ —	\$ 2	\$ 10	\$ —
Other regulatory assets, deferred ^(*)	4,072	1,130	1,416	204	—	172
Other deferred charges and assets	—	—	—	—	—	82
Other current liabilities	(54)	(8)	(11)	(2)	(2)	(2)
Employee benefit obligations	(679)	(110)	(157)	(30)	(24)	(97)
Other regulatory liabilities, deferred	(79)	—	—	—	—	—
AOCI	185	—	—	—	46	(14)
December 31, 2018:						
Prepaid pension costs	\$ —	\$ —	\$ —	\$ —	\$ 1	\$ —
Other regulatory assets, deferred ^(*)	3,566	955	1,230	167	—	160
Other deferred charges and assets	—	—	—	—	—	74
Other current liabilities	(55)	(12)	(15)	(3)	—	(3)
Employee benefit obligations	(1,097)	(229)	(227)	(49)	(1)	(179)
Other regulatory liabilities, deferred	(108)	—	—	—	—	—
AOCI	97	—	—	—	26	(44)

(*) Amounts for Southern Company exclude regulatory assets of \$252 million and \$268 million at December 31, 2019 and 2018, respectively, associated with unamortized amounts in Southern Company Gas' pension plans prior to its 2016 acquisition by Southern Company.

Presented below are the amounts included in regulatory assets at December 31, 2019 and 2018 related to the portion of the defined benefit pension plan attributable to Southern Company, the traditional electric operating companies, and Southern Company Gas that had not yet been recognized in net periodic pension cost.

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
	<i>(in millions)</i>				
Balance at December 31, 2019					
Regulatory assets:					
Prior service cost	\$ 13	\$ 6	\$ 10	\$ 2	\$ (15)
Net (gain) loss	3,980	1,124	1,406	201	113
Regulatory amortization	—	—	—	—	74
Total regulatory assets ^(*)	\$3,993	\$1,130	\$1,416	\$203	\$172
Balance at December 31, 2018					
Regulatory assets:					
Prior service cost	\$ 17	\$ 6	\$ 12	\$ 2	\$ (17)
Net (gain) loss	3,441	949	1,218	165	83
Regulatory amortization	—	—	—	—	94
Total regulatory assets ^(*)	\$3,458	\$ 955	\$1,230	\$167	\$160

(*) Amounts for Southern Company exclude regulatory assets of \$252 million and \$268 million at December 31, 2019 and 2018, respectively, associated with unamortized amounts in Southern Company Gas' pension plans prior to its 2016 acquisition by Southern Company.

Notes to Financial Statements

The changes in the balance of regulatory assets related to the portion of the defined benefit pension plan attributable to Southern Company, the traditional electric operating companies, and Southern Company Gas for the years ended December 31, 2019 and 2018 are presented in the following table:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
	<i>(in millions)</i>				
Regulatory assets (liabilities):^(*)					
Balance at December 31, 2017	\$3,155	\$ 890	\$1,105	\$158	\$217
Net (gain) loss	498	120	196	19	20
Change in prior service costs	1	—	—	—	(18)
Dispositions	12	—	—	—	(34)
Reclassification adjustments:					
Amortization of prior service costs	(4)	(1)	(2)	—	2
Amortization of net gain (loss)	(204)	(54)	(69)	(10)	(12)
Amortization of regulatory assets ^(*)	—	—	—	—	(15)
Total reclassification adjustments	(208)	(55)	(71)	(10)	(25)
Total change	303	65	125	9	(57)
Balance at December 31, 2018	\$3,458	\$ 955	\$1,230	\$167	\$160
Net (gain) loss	801	213	231	42	30
Dispositions	(144)	—	—	—	—
Reclassification adjustments:					
Amortization of prior service costs	(3)	(1)	(1)	—	2
Amortization of net gain (loss)	(119)	(37)	(44)	(6)	—
Amortization of regulatory assets ^(*)	—	—	—	—	(20)
Total reclassification adjustments	(122)	(38)	(45)	(6)	(18)
Total change	535	175	186	36	12
Balance at December 31, 2019	\$3,993	\$1,130	\$1,416	\$203	\$172

(*) Amounts for Southern Company exclude regulatory assets of \$252 million and \$268 million at December 31, 2019 and 2018, respectively, associated with unamortized amounts in Southern Company Gas' pension plans prior to its 2016 acquisition by Southern Company.

Presented below are the amounts included in AOCI at December 31, 2019 and 2018 related to the portion of the defined benefit pension plan attributable to Southern Company, Southern Power, and Southern Company Gas that had not yet been recognized in net periodic pension cost.

	Southern Company	Southern Power	Southern Company Gas
	<i>(in millions)</i>		
Balance at December 31, 2019			
AOCI:			
Prior service cost	\$ (3)	\$ —	\$ (6)
Net (gain) loss	188	46	(8)
Total AOCI	\$185	\$46	\$(14)
Balance at December 31, 2018			
AOCI:			
Prior service cost	\$ (3)	\$ —	\$ (6)
Net (gain) loss	100	26	(38)
Total AOCI	\$ 97	\$26	\$(44)

Notes to Financial Statements

The components of OCI related to the portion of the defined benefit pension plan attributable to Southern Company, Southern Power, and Southern Company Gas for the years ended December 31, 2019 and 2018 are presented in the following table:

	Southern Company	Southern Power	Southern Company Gas
		<i>(in millions)</i>	
AOCI:			
Balance at December 31, 2017	\$107	\$33	\$(42)
Net (gain) loss	7	(5)	6
Dispositions	(8)	—	(8)
Reclassification adjustments:			
Amortization of net gain (loss)	(9)	(2)	—
Total reclassification adjustments	(9)	(2)	—
Total change	(10)	(7)	(2)
Balance at December 31, 2018	\$ 97	\$26	\$(44)
Net (gain) loss	88	20	30
Balance at December 31, 2019	\$185	\$46	\$(14)

Components of net periodic pension cost for the Registrants were as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
						<i>(in millions)</i>
2019						
Service cost	\$ 292	\$ 69	\$ 74	\$ 12	\$ 7	\$ 25
Interest cost	492	114	156	22	5	36
Expected return on plan assets	(885)	(206)	(292)	(40)	(10)	(60)
Recognized net (gain) loss	120	37	44	6	1	2
Net amortization	2	—	1	—	—	14
Prior service cost	—	—	—	—	—	(3)
Net periodic pension cost	\$ 21	\$ 14	\$ (17)	\$ —	\$ 3	\$ 14
2018						
Service cost	\$ 359	\$ 78	\$ 87	\$ 17	\$ 9	\$ 34
Interest cost	464	101	139	20	5	39
Expected return on plan assets	(943)	(207)	(296)	(41)	(10)	(75)
Recognized net (gain) loss	213	54	69	10	1	12
Net amortization	4	1	2	—	—	15
Prior service cost	—	—	—	—	—	(2)
Net periodic pension cost	\$ 97	\$ 27	\$ 1	\$ 6	\$ 5	\$ 23
2017						
Service cost	\$ 293	\$ 63	\$ 74	\$ 15		\$ 23
Interest cost	455	98	138	20		42
Expected return on plan assets	(897)	(196)	(283)	(40)		(70)
Recognized net (gain) loss	162	42	57	7		18
Net amortization	12	2	3	1		1
Net periodic pension cost	\$ 25	\$ 9	\$ (11)	\$ 3		\$ 14

The service cost component of net periodic pension cost is included in operations and maintenance expenses and all other components of net periodic pension cost are included in other income (expense), net in the Registrants' statements of income.

Net periodic pension cost is the sum of service cost, interest cost, and other costs netted against the expected return on plan assets. The expected return on plan assets is determined by multiplying the expected rate of return on plan assets and the market-related value of plan assets. In determining the market-related value of plan assets, the Registrants have elected to amortize changes in the market value of return-seeking plan assets over five years and to recognize the changes in the market value of liability-hedging plan assets immediately. Given the significant concentration in return-seeking plan assets, the accounting value of plan assets that is used to calculate the expected return on plan assets differs from the current fair value of the plan assets.

Notes to Financial Statements

Future benefit payments reflect expected future service and are estimated based on assumptions used to measure the projected benefit obligation for the pension plans. At December 31, 2019, estimated benefit payments were as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Benefit Payments:						
2020	\$ 628	\$135	\$ 204	\$ 27	\$ 5	\$ 62
2021	646	141	208	28	6	62
2022	671	147	214	30	6	64
2023	693	153	220	30	6	62
2024	715	157	226	32	7	62
2025 to 2029	3,868	860	1,209	174	36	316

Other Postretirement Benefits

Changes in the APBO and the fair value of the Registrants' plan assets during the plan years ended December 31, 2019 and 2018 were as follows:

	2019					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Change in benefit obligation						
Benefit obligation at beginning of year	\$1,865	\$403	\$ 675	\$ 81	\$ 9	\$ 244
Dispositions	(69)	—	—	—	—	—
Service cost	18	5	5	1	1	1
Interest cost	69	16	26	3	—	9
Benefits paid	(126)	(27)	(47)	(6)	(1)	(17)
Actuarial (gain) loss	223	63	80	8	2	13
Retiree drug subsidy	5	2	3	—	—	—
Balance at end of year	1,985	462	742	87	11	250
Change in plan assets						
Fair value of plan assets at beginning of year	928	360	344	23	—	98
Dispositions	(18)	—	—	—	—	—
Actual return (loss) on plan assets	189	76	68	4	—	21
Employer contributions	83	2	35	5	1	13
Benefits paid	(121)	(25)	(44)	(6)	(1)	(17)
Fair value of plan assets at end of year	1,061	413	403	26	—	115
Accrued liability	\$ (924)	\$ (49)	\$ (339)	\$ (61)	\$ (11)	\$ (135)

Notes to Financial Statements

	2018					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Change in benefit obligation						
Benefit obligation at beginning of year	\$2,339	\$ 517	\$ 863	\$ 97	\$ 11	\$ 310
Dispositions	(18)	—	—	—	—	(18)
Service cost	24	6	6	1	1	2
Interest cost	75	17	28	3	—	10
Benefits paid	(129)	(28)	(47)	(5)	(1)	(17)
Actuarial (gain) loss	(432)	(111)	(178)	(15)	(2)	(43)
Retiree drug subsidy	6	2	3	—	—	—
Balance at end of year	1,865	403	675	81	9	244
Change in plan assets						
Fair value of plan assets at beginning of year	1,053	406	386	25	—	125
Dispositions	(18)	—	—	—	—	(18)
Actual return (loss) on plan assets	(57)	(25)	(20)	(1)	—	(5)
Employer contributions	73	5	22	4	1	13
Benefits paid	(123)	(26)	(44)	(5)	(1)	(17)
Fair value of plan assets at end of year	928	360	344	23	—	98
Accrued liability	\$ (937)	\$ (43)	\$(331)	\$(58)	\$ (9)	\$(146)

Amounts recognized in the balance sheets at December 31, 2019 and 2018 related to the Registrants' other postretirement benefit plans consist of the following:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
December 31, 2019:						
Other regulatory assets, deferred ^(a)	\$ 183	\$ 3	\$ 96	\$ 10	\$ —	\$ (11)
Other current liabilities	(5)	—	—	—	—	—
Employee benefit obligations ^(b)	(919)	(49)	(339)	(61)	(11)	(135)
Other regulatory liabilities, deferred	(62)	(2)	—	—	—	—
AOCI	2	—	—	—	2	(4)
December 31, 2018:						
Other regulatory assets, deferred ^(a)	\$ 99	\$ —	\$ 60	\$ 6	\$ —	\$ (4)
Other current liabilities	(6)	—	—	—	—	—
Employee benefit obligations ^(b)	(931)	(43)	(331)	(58)	(9)	146
Other regulatory liabilities, deferred	(77)	(8)	—	(2)	—	—
AOCI	(4)	—	—	—	1	(4)

(a) Amounts for Southern Company exclude regulatory assets of \$50 million and \$57 million at December 31, 2019 and 2018, respectively, associated with unamortized amounts in Southern Company Gas' other postretirement benefit plans prior to its 2016 acquisition by Southern Company.

(b) Included in other deferred credits and liabilities on Southern Power's consolidated balance sheets.

Notes to Financial Statements

Presented below are the amounts included in net regulatory assets (liabilities) at December 31, 2019 and 2018 related to the other postretirement benefit plans of Southern Company, the traditional electric operating companies, and Southern Company Gas that had not yet been recognized in net periodic other postretirement benefit cost.

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
	<i>(in millions)</i>				
Balance at December 31, 2019:					
Regulatory assets (liabilities):					
Prior service cost	\$ 11	\$ 3	\$ 4	\$ —	\$ 1
Net (gain) loss	110	(2)	92	10	(43)
Regulatory amortization	—	—	—	—	31
Total regulatory assets (liabilities)^(*)	\$121	\$ 1	\$96	\$10	\$(11)

Balance at December 31, 2018:

Regulatory assets (liabilities):					
Prior service cost	\$ 14	\$ 8	\$ 4	\$ —	\$ 2
Net (gain) loss	8	(16)	56	4	(43)
Regulatory amortization	—	—	—	—	37
Total regulatory assets (liabilities)^(*)	\$ 22	\$ (8)	\$60	\$ 4	\$(4)

(*) Amounts for Southern Company exclude regulatory assets of \$50 million and \$57 million at December 31, 2019 and 2018, respectively, associated with unamortized amounts in Southern Company Gas' other postretirement benefit plans prior to its 2016 acquisition by Southern Company.

The changes in the balance of net regulatory assets (liabilities) related to the other postretirement benefit plans for the plan years ended December 31, 2019 and 2018 are presented in the following table:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
	<i>(in millions)</i>				
Net regulatory assets (liabilities)^(*)					
Balance at December 31, 2017	\$ 341	\$ 56	\$ 202	\$ 17	\$ 46
Net (gain) loss	(298)	(60)	(132)	(12)	(42)
Change in prior service costs	—	—	—	—	(2)
Reclassification adjustments:					
Amortization of prior service costs	(7)	(4)	(1)	—	—
Amortization of net gain (loss)	(14)	(1)	(9)	(1)	—
Amortization of regulatory assets ^(*)	—	—	—	—	(6)
Total reclassification adjustments	(21)	(5)	(10)	(1)	(6)
Total change	(319)	(65)	(142)	(13)	(50)
Balance at December 31, 2018	\$ 22	\$ (9)	\$ 60	\$ 4	\$ (4)
Net (gain) loss	90	14	37	6	(1)
Dispositions	5	—	—	—	—
Change in prior service costs	5	—	—	—	—
Reclassification adjustments:					
Amortization of prior service costs	(3)	(4)	—	—	—
Amortization of net gain (loss)	2	—	(1)	—	—
Amortization of regulatory assets ^(*)	—	—	—	—	(6)
Total reclassification adjustments	(1)	(4)	(1)	—	(6)
Total change	99	10	36	6	(7)
Balance at December 31, 2019	\$ 121	\$ 1	\$ 96	\$ 10	\$(11)

(*) Amounts for Southern Company exclude regulatory assets of \$50 million and \$57 million at December 31, 2019 and 2018, respectively, associated with unamortized amounts in Southern Company Gas' other postretirement benefit plans prior to its 2016 acquisition by Southern Company.

Notes to Financial Statements

Presented below are the amounts included in AOCI at December 31, 2019 and 2018 related to the other postretirement benefit plans of Southern Company, Southern Power, and Southern Company Gas that had not yet been recognized in net periodic other postretirement benefit cost.

	Southern Company	Southern Power	Southern Company Gas
		<i>(in millions)</i>	
Balance at December 31, 2019			
AOCI:			
Prior service cost	\$ 1	\$ —	\$ 1
Net (gain) loss	1	2	(5)
Total AOCI	\$ 2	\$ 2	\$(4)
Balance at December 31, 2018			
AOCI:			
Prior service cost	\$ 1	\$ —	\$ 1
Net (gain) loss	(5)	1	(5)
Total AOCI	\$(4)	\$ 1	\$(4)

The components of OCI related to the other postretirement benefit plans for the plan years ended December 31, 2019 and 2018 are presented in the following table:

	Southern Company	Southern Power	Southern Company Gas
		<i>(in millions)</i>	
AOCI:			
Balance at December 31, 2017			
Net (gain) loss	\$ 4	\$ 3	\$(3)
Change from employee transfer	(8)	(2)	(2)
Total change	—	—	1
Balance at December 31, 2018	(8)	(2)	(1)
Net (gain) loss	\$ (4)	\$ 1	\$(4)
Reclassification adjustments:			
Amortization of net gain (loss)	5	1	—
Total change	1	—	—
Balance at December 31, 2019	6	1	—
	\$ 2	\$ 2	\$(4)

Components of the other postretirement benefit plans' net periodic cost for the Registrants were as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
<i>(in millions)</i>						
2019						
Service cost	\$ 18	\$ 5	\$ 5	\$ 1	\$ 1	\$ 1
Interest cost	69	16	26	3	—	9
Expected return on plan assets	(65)	(26)	(25)	(2)	—	(7)
Net amortization	—	4	1	—	—	6
Net periodic postretirement benefit cost	\$ 22	\$ (1)	\$ 7	\$ 2	\$ 1	\$ 9
2018						
Service cost	\$ 24	\$ 6	\$ 6	\$ 1	\$ 1	\$ 2
Interest cost	75	17	28	3	—	10
Expected return on plan assets	(69)	(26)	(25)	(2)	—	(7)
Net amortization	21	5	10	1	—	6
Net periodic postretirement benefit cost	\$ 51	\$ 2	\$ 19	\$ 3	\$ 1	\$11
2017						
Service cost	\$ 24	\$ 6	\$ 7	\$ 1		\$ 2
Interest cost	79	17	29	3		10
Expected return on plan assets	(66)	(25)	(25)	(1)		(7)
Net amortization	20	5	9	1		1
Net periodic postretirement benefit cost	\$ 57	\$ 3	\$ 20	\$ 4		\$ 6

Notes to Financial Statements

The service cost component of net periodic postretirement benefit cost is included in operations and maintenance expenses and all other components of net periodic postretirement benefit cost are included in other income (expense), net in the Registrants' statements of income.

The Registrants' future benefit payments, including prescription drug benefits, reflect expected future service and are estimated based on assumptions used to measure the APBO for the other postretirement benefit plans. The Registrants' estimated benefit payments are reduced by drug subsidy receipts expected as a result of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Benefit payments:						
2020	\$130	\$ 29	\$ 49	\$ 6	\$—	\$18
2021	129	29	49	6	—	18
2022	129	29	49	6	1	18
2023	130	29	49	6	1	19
2024	129	29	48	6	1	18
2025 to 2029	630	145	238	29	3	83
Subsidy receipts:						
2020	\$ (5)	\$ (1)	\$ (2)	\$—	\$—	\$—
2021	(6)	(2)	(2)	—	—	—
2022	(6)	(2)	(3)	—	—	—
2023	(6)	(2)	(3)	—	—	—
2024	(6)	(2)	(3)	(1)	—	—
2025 to 2029	(30)	(9)	(13)	(2)	—	—
Total:						
2020	\$125	\$ 28	\$ 47	\$ 6	\$—	\$18
2021	123	27	47	6	—	18
2022	123	27	46	6	1	18
2023	124	27	46	6	1	19
2024	123	27	45	5	1	18
2025 to 2029	600	136	225	27	3	83

Benefit Plan Assets

Pension plan and other postretirement benefit plan assets are managed and invested in accordance with all applicable requirements, including ERISA and the Internal Revenue Code. The Registrants' investment policies for both the pension plans and the other postretirement benefit plans cover a diversified mix of assets as described below. Derivative instruments may be used to gain efficient exposure to the various asset classes and as hedging tools. Additionally, the Registrants minimize the risk of large losses primarily through diversification but also monitor and manage other aspects of risk.

The investment strategy for plan assets related to the Southern Company system's qualified pension plan is to be broadly diversified across major asset classes. The asset allocation is established after consideration of various factors that affect the assets and liabilities of the pension plan including, but not limited to, historical and expected returns and interest rates, volatility, correlations of asset classes, the current level of assets and liabilities, and the assumed growth in assets and liabilities. Because a significant portion of the liability of the pension plan is long-term in nature, the assets are invested consistent with long-term investment expectations for return and risk. To manage the actual asset class exposures relative to the target asset allocation, the Southern Company system employs a formal rebalancing program. As additional risk management, external investment managers and service providers are subject to written guidelines to ensure appropriate and prudent investment practices. Management believes the portfolio is well-diversified with no significant concentrations of risk.

Notes to Financial Statements

Investment Strategies and Benefit Plan Asset Fair Values

A description of the major asset classes that the pension and other postretirement benefit plans are comprised of, along with the valuation methods used for fair value measurement, is provided below:

Description	Valuation Methodology
<p>Domestic equity: A mix of large and small capitalization stocks with generally an equal distribution of value and growth attributes, managed both actively and through passive index approaches.</p> <p>International equity: A mix of large and small capitalization growth and value stocks with developed and emerging markets exposure, managed both actively and through fundamental indexing approaches.</p>	<p>Domestic and international equities such as common stocks, American depositary receipts, and real estate investment trusts that trade on public exchanges are classified as Level 1 investments and are valued at the closing price in the active market. Equity funds with unpublished prices (such as commingled/pooled funds) are valued as Level 2 when the underlying holdings are comprised of Level 1 or Level 2 equity securities.</p>
<p>Fixed income: A mix of domestic and international bonds.</p>	<p>Investments in fixed income securities are generally classified as Level 2 investments and are valued based on prices reported in the market place. Additionally, the value of fixed income securities takes into consideration certain items such as broker quotes, spreads, yield curves, interest rates, and discount rates that apply to the term of a specific instrument.</p>
<p>Trust-owned life insurance (TOLI): Investments of taxable trusts aimed at minimizing the impact of taxes on the portfolio.</p>	<p>Investments in TOLI policies are classified as Level 2 investments and are valued based on the underlying investments held in the policy's separate accounts. The underlying assets are equity and fixed income pooled funds that are comprised of Level 1 and Level 2 securities.</p>
<p>Special situations: Investments in opportunistic strategies with the objective of diversifying and enhancing returns and exploiting short-term inefficiencies, as well as investments in promising new strategies of a longer-term nature.</p> <p>Real estate: Investments in traditional private market, equity-oriented investments in real properties (indirectly through pooled funds or partnerships) and in publicly traded real estate securities.</p> <p>Private equity: Investments in private partnerships that invest in private or public securities typically through privately-negotiated and/or structured transactions, including leveraged buyouts, venture capital, and distressed debt.</p>	<p>Investments in real estate, private equity, and special situations are generally classified as Net Asset Value as a Practical Expedient, since the underlying assets typically do not have publicly available observable inputs. The fund manager values the assets using various inputs and techniques depending on the nature of the underlying investments. Techniques may include purchase multiples for comparable transactions, comparable public company trading multiples, discounted cash flow analysis, prevailing market capitalization rates, recent sales of comparable investments, and independent third-party appraisals. The fair value of partnerships is determined by aggregating the value of the underlying assets less liabilities.</p>

The fair values, and actual allocations relative to the target allocations, of the Southern Company system's pension plans at December 31, 2019 and 2018 are presented below. The fair values presented are prepared in accordance with GAAP. For purposes of determining the fair value of the pension plan and other postretirement benefit plan assets and the appropriate level designation, management relies on information provided by the plan's trustee. This information is reviewed and evaluated by management with changes made to the trustee information as appropriate. The Registrants did not have any investments classified as Level 3 at December 31, 2019 or 2018.

Notes to Financial Statements

These fair values exclude cash, receivables related to investment income and pending investment sales, and payables related to pending investment purchases.

At December 31, 2019:	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
	(in millions)					
Southern Company						
Assets:						
Equity:					51%	51%
Domestic equity	\$2,220	\$ 898	\$ —	\$ 3,118		
International equity	2,360	1,286	—	3,646		
Fixed income:					23	29
U.S. Treasury, government, and agency bonds	—	965	—	965		
Mortgage- and asset-backed securities	—	9	—	9		
Corporate bonds	—	1,315	—	1,315		
Pooled funds	—	684	—	684		
Cash equivalents and other	1,317	—	—	1,317		
Real estate investments	539	—	1,418	1,957	14	12
Special situations	—	—	155	155	3	1
Private equity	—	—	953	953	9	7
Total	\$6,436	\$5,157	\$2,526	\$14,119	100%	100%
Liabilities:						
Derivatives	(1)	—	—	(1)		
Total	\$6,435	\$5,157	\$2,526	\$14,118	100%	100%
Alabama Power						
Assets:						
Equity:					51%	51%
Domestic equity	\$ 530	\$ 214	\$ —	\$ 744		
International equity	564	307	—	871		
Fixed income:					23	29
U.S. Treasury, government, and agency bonds	—	230	—	230		
Mortgage- and asset-backed securities	—	2	—	2		
Corporate bonds	—	314	—	314		
Pooled funds	—	163	—	163		
Cash equivalents and other	315	—	—	315		
Real estate investments	129	—	339	468	14	12
Special situations	—	—	37	37	3	1
Private equity	—	—	228	228	9	7
Total	\$1,538	\$1,230	\$ 604	\$ 3,372	100%	100%

Notes to Financial Statements

At December 31, 2019:	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
<i>(in millions)</i>						
Georgia Power						
Assets:						
Equity:					51%	51%
Domestic equity	\$ 701	\$ 284	\$ —	\$ 985		
International equity	746	407	—	1,153		
Fixed income:					23	29
U.S. Treasury, government, and agency bonds	—	305	—	305		
Mortgage- and asset-backed securities	—	3	—	3		
Corporate bonds	—	415	—	415		
Pooled funds	—	216	—	216		
Cash equivalents and other	416	—	—	416		
Real estate investments	170	—	448	618	14	12
Special situations	—	—	49	49	3	1
Private equity	—	—	301	301	9	7
Total	\$2,033	\$1,630	\$ 798	\$ 4,461	100%	100%
Mississippi Power						
Assets:						
Equity:					51%	51%
Domestic equity	\$ 101	\$ 41	\$ —	\$ 142		
International equity	108	59	—	167		
Fixed income:					23	29
U.S. Treasury, government, and agency bonds	—	44	—	44		
Corporate bonds	—	60	—	60		
Pooled funds	—	31	—	31		
Cash equivalents and other	60	—	—	60		
Real estate investments	25	—	65	90	14	12
Special situations	—	—	7	7	3	1
Private equity	—	—	43	43	9	7
Total	\$ 294	\$ 235	\$ 115	\$ 644	100%	100%
Southern Power						
Assets:						
Equity:					51%	51%
Domestic equity	\$ 27	\$ 11	\$ —	\$ 38		
International equity	28	16	—	44		
Fixed income:					23	29
U.S. Treasury, government, and agency bonds	—	12	—	12		
Corporate bonds	—	16	—	16		
Pooled funds	—	8	—	8		
Cash equivalents and other	16	—	—	16		
Real estate investments	6	—	17	23	14	12
Special situations	—	—	2	2	3	1
Private equity	—	—	11	11	9	7
Total	\$ 77	\$ 63	\$ 30	\$ 170	100%	100%

Notes to Financial Statements

At December 31, 2019:	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
<i>(in millions)</i>						
Southern Company Gas						
Assets:						
Equity:					51%	51%
Domestic equity	\$ 166	\$ 67	\$ —	\$ 233		
International equity	176	96	—	272		
Fixed income:					23	29
U.S. Treasury, government, and agency bonds	—	72	—	72		
Mortgage- and asset-backed securities	—	1	—	1		
Corporate bonds	—	98	—	98		
Pooled funds	—	51	—	51		
Cash equivalents and other	98	—	—	98		
Real estate investments	40	—	106	146	14	12
Special situations	—	—	12	12	3	1
Private equity	—	—	71	71	9	7
Total	\$ 480	\$ 385	\$ 189	\$ 1,054	100%	100%

At December 31, 2018:	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
<i>(in millions)</i>						
Southern Company						
Assets:						
Equity:					51%	53%
Domestic equity	\$2,102	\$1,030	\$ —	\$ 3,132		
International equity	1,344	1,325	—	2,669		
Fixed income:					23	24
U.S. Treasury, government, and agency bonds	—	930	—	930		
Mortgage- and asset-backed securities	—	7	—	7		
Corporate bonds	—	1,195	—	1,195		
Pooled funds	—	654	—	654		
Cash equivalents and other	270	2	—	272		
Real estate investments	419	—	1,361	1,780	14	15
Special situations	—	—	171	171	3	1
Private equity	—	—	821	821	9	7
Total	\$4,135	\$5,143	\$2,353	\$11,631	100%	100%

Notes to Financial Statements

At December 31, 2018:	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
	<i>(in millions)</i>					
Alabama Power						
Assets:						
Equity:					51%	53%
Domestic equity	\$ 466	\$ 228	\$ —	\$ 694		
International equity	298	293	—	591		
Fixed income:					23	24
U.S. Treasury, government, and agency bonds	—	206	—	206		
Mortgage- and asset-backed securities	—	2	—	2		
Corporate bonds	—	265	—	265		
Pooled funds	—	145	—	145		
Cash equivalents and other	60	1	—	61		
Real estate investments	93	—	302	395	14	15
Special situations	—	—	38	38	3	1
Private equity	—	—	182	182	9	7
Total	\$ 917	\$1,140	\$ 522	\$ 2,579	100%	100%
Georgia Power						
Assets:						
Equity:					51%	53%
Domestic equity	\$ 663	\$ 325	\$ —	\$ 988		
International equity	424	418	—	842		
Fixed income:					23	24
U.S. Treasury, government, and agency bonds	—	294	—	294		
Mortgage- and asset-backed securities	—	2	—	2		
Corporate bonds	—	377	—	377		
Pooled funds	—	206	—	206		
Cash equivalents and other	85	1	—	86		
Real estate investments	132	—	429	561	14	15
Special situations	—	—	54	54	3	1
Private equity	—	—	259	259	9	7
Total	\$1,304	\$1,623	\$ 742	\$ 3,669	100%	100%
Mississippi Power						
Assets:						
Equity:					51%	53%
Domestic equity	\$ 91	\$ 45	\$ —	\$ 136		
International equity	59	59	—	118		
Fixed income:					23	24
U.S. Treasury, government, and agency bonds	—	40	—	40		
Corporate bonds	—	52	—	52		
Pooled funds	—	28	—	28		
Cash equivalents and other	12	—	—	12		
Real estate investments	18	—	59	77	14	15
Special situations	—	—	7	7	3	1
Private equity	—	—	36	36	9	7
Total	\$ 180	\$ 224	\$ 102	\$ 506	100%	100%

Notes to Financial Statements

At December 31, 2018:	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
<i>(in millions)</i>						
Southern Power						
Assets:						
Equity:					51%	53%
Domestic equity	\$ 22	\$ 11	\$ —	\$ 33		
International equity	14	14	—	28		
Fixed income:					23	24
U.S. Treasury, government, and agency bonds	—	10	—	10		
Corporate bonds	—	13	—	13		
Pooled funds	—	7	—	7		
Cash equivalents and other	3	—	—	3		
Real estate investments	4	—	15	19	14	15
Special situations	—	—	2	2	3	1
Private equity	—	—	9	9	9	7
Total	\$ 43	\$ 55	\$ 26	\$ 124	100%	100%
Southern Company Gas						
Assets:						
Equity:					51%	53%
Domestic equity	\$ 145	\$ 71	\$ —	\$ 216		
International equity	92	91	—	183		
Fixed income:					23	24
U.S. Treasury, government, and agency bonds	—	64	—	64		
Corporate bonds	—	82	—	82		
Pooled funds	—	45	—	45		
Cash equivalents and other	19	—	—	19		
Real estate investments	29	—	94	123	14	15
Special situations	—	—	12	12	3	1
Private equity	—	—	56	56	9	7
Total	\$ 285	\$ 353	\$ 162	\$ 800	100%	100%

Notes to Financial Statements

The fair values of the applicable Registrants' other postretirement benefit plan assets at December 31, 2019 and 2018 are presented below. The Registrants did not have any investments classified as Level 3 at December 31, 2019 or 2018. These fair value measurements exclude cash, receivables related to investment income, pending investment sales, and payables related to pending investment purchases.

At December 31, 2019:	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
<i>(in millions)</i>						
Southern Company						
Assets:						
Equity:					63%	64%
Domestic equity	\$ 95	\$ 81	\$ —	\$ 176		
International equity	69	80	—	149		
Fixed income:					28	30
U.S. Treasury, government, and agency bonds	—	31	—	31		
Corporate bonds	—	35	—	35		
Pooled funds	—	82	—	82		
Cash equivalents and other	42	—	—	42		
Trust-owned life insurance	—	463	—	463		
Real estate investments	15	—	38	53	5	4
Special situations	—	—	4	4	1	—
Private equity	—	—	25	25	3	2
Total	\$ 221	\$ 772	\$ 67	\$ 1,060	100%	100%
Alabama Power						
Assets:						
Equity:					68%	67%
Domestic equity	\$ 26	\$ 8	\$ —	\$ 34		
International equity	21	11	—	32		
Fixed income:					24	27
U.S. Treasury, government, and agency bonds	—	10	—	10		
Corporate bonds	—	11	—	11		
Pooled funds	—	6	—	6		
Cash equivalents and other	12	—	—	12		
Trust-owned life insurance	—	281	—	281		
Real estate investments	5	—	12	17	4	4
Special situations	—	—	1	1	1	—
Private equity	—	—	8	8	3	2
Total	\$ 64	\$ 327	\$ 21	\$ 412	100%	100%
Georgia Power						
Assets:						
Equity:					60%	61%
Domestic equity	\$ 48	\$ 7	\$ —	\$ 55		
International equity	25	36	—	61		
Fixed income:					33	34
U.S. Treasury, government, and agency bonds	—	7	—	7		
Corporate bonds	—	11	—	11		
Pooled funds	—	45	—	45		
Cash equivalents and other	16	—	—	16		
Trust-owned life insurance	—	182	—	182		
Real estate investments	5	—	11	16	4	3
Special situations	—	—	1	1	1	—
Private equity	—	—	8	8	2	2
Total	\$ 94	\$ 288	\$ 20	\$ 402	100%	100%

Notes to Financial Statements

At December 31, 2019:	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
<i>(in millions)</i>						
Mississippi Power						
Assets:						
Equity:					43%	41%
Domestic equity	\$ 3	\$ 1	\$—	\$ 4		
International equity	4	2	—	6		
Fixed income:					37	42
U.S. Treasury, government, and agency bonds	—	6	—	6		
Corporate bonds	—	2	—	2		
Pooled funds	—	1	—	1		
Cash equivalents and other	2	—	—	2		
Real estate investments	1	—	2	3	11	10
Special situations	—	—	—	—	2	1
Private equity	—	—	1	1	7	6
Total	\$ 10	\$ 12	\$ 3	\$ 25	100%	100%
Southern Company Gas						
Assets:						
Equity:					72%	73%
Domestic equity	\$ 2	\$ 58	\$—	\$ 60		
International equity	2	21	—	23		
Fixed income:					26	25
U.S. Treasury, government, and agency bonds	—	1	—	1		
Corporate bonds	—	1	—	1		
Pooled funds	—	25	—	25		
Cash equivalents and other	2	—	—	2		
Real estate investments	—	—	1	1	1	1
Private equity	—	—	1	1	1	1
Total	\$ 6	\$106	\$ 2	\$ 114	100%	100%

Notes to Financial Statements

At December 31, 2018:	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
	<i>(in millions)</i>					
Southern Company						
Assets:						
Equity:					62%	62%
Domestic equity	\$100	\$ 76	\$—	\$176		
International equity	45	75	—	120		
Fixed income:					29	30
U.S. Treasury, government, and agency bonds	—	34	—	34		
Corporate bonds	—	35	—	35		
Pooled funds	—	81	—	81		
Cash equivalents and other	13	—	—	13		
Trust-owned life insurance	—	386	—	386		
Real estate investments	13	—	40	53	5	5
Special situations	—	—	4	4	1	—
Private equity	—	—	24	24	3	3
Total	\$171	\$687	\$68	\$926	100%	100%
Alabama Power						
Assets:						
Equity:					64%	66%
Domestic equity	\$ 35	\$ 10	\$—	\$ 45		
International equity	12	12	—	24		
Fixed income:					28	28
U.S. Treasury, government, and agency bonds	—	10	—	10		
Corporate bonds	—	11	—	11		
Pooled funds	—	6	—	6		
Cash equivalents and other	3	—	—	3		
Trust-owned life insurance	—	233	—	233		
Real estate investments	4	—	13	17	4	4
Special situations	—	—	2	2	1	—
Private equity	—	—	8	8	3	2
Total	\$ 54	\$282	\$23	\$359	100%	100%
Georgia Power						
Assets:						
Equity:					60%	59%
Domestic equity	\$ 41	\$ 9	\$—	\$ 50		
International equity	17	32	—	49		
Fixed income:					33	35
U.S. Treasury, government, and agency bonds	—	7	—	7		
Corporate bonds	—	10	—	10		
Pooled funds	—	44	—	44		
Cash equivalents and other	5	—	—	5		
Trust-owned life insurance	—	153	—	153		
Real estate investments	4	—	11	15	4	4
Special situations	—	—	2	2	1	—
Private equity	—	—	7	7	2	2
Total	\$ 67	\$255	\$20	\$342	100%	100%

Notes to Financial Statements

At December 31, 2018:	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
	<i>(in millions)</i>					
Mississippi Power						
Assets:						
Equity:					41%	42%
Domestic equity	\$ 3	\$ 2	\$—	\$ 5		
International equity	2	2	—	4		
Fixed income:					38	39
U.S. Treasury, government, and agency bonds	—	6	—	6		
Corporate bonds	—	2	—	2		
Pooled funds	—	1	—	1		
Cash equivalents and other	1	—	—	1		
Real estate investments	1	—	2	3	11	12
Special situations	—	—	—	—	3	1
Private equity	—	—	1	1	7	6
Total	\$ 7	\$ 13	\$ 3	\$ 23	100%	100%

Southern Company Gas

Assets:						
Equity:					71%	69%
Domestic equity	\$ 2	\$ 47	\$—	\$ 49		
International equity	1	17	—	18		
Fixed income:					25	28
U.S. Treasury, government, and agency bonds	—	1	—	1		
Corporate bonds	—	1	—	1		
Pooled funds	—	24	—	24		
Cash equivalents and other	1	—	—	1		
Real estate investments	—	—	1	1	2	2
Special situations	—	—	—	—	1	—
Private equity	—	—	1	1	1	1
Total	\$ 4	\$ 90	\$ 2	\$ 96	100%	100%

Employee Savings Plan

Southern Company and its subsidiaries also sponsor 401(k) defined contribution plans covering substantially all employees and provide matching contributions up to specified percentages of an employee's eligible pay. Total matching contributions made to the plans for 2019, 2018, and 2017 were as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
2019	\$113	\$25	\$27	\$4	\$ 2	\$15
2018	119	24	26	5	3	18
2017	118	23	26	5	N/A	19

12. STOCK COMPENSATION

Stock-Based Compensation

Stock-based compensation primarily in the form of Southern Company performance share units (PSU) and restricted stock units (RSU) may be granted through the Omnibus Incentive Compensation Plan to Southern Company system employees ranging from line management to executives. Southern Company Gas and Southern Power had no employee participants in the stock-based compensation plans until 2017 and 2018, respectively. In conjunction with the Merger, stock-based compensation in the form of Southern Company RSUs and PSUs was granted to certain executives of Southern Company Gas through the Southern Company Omnibus Incentive Compensation Plan.

Notes to Financial Statements

At December 31, 2019, the number of current and former employees participating in stock-based compensation programs for the Registrants was as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Number of employees	2,320	307	370	89	50	285

The majority of PSUs and RSUs awarded contain terms where employees become immediately vested in PSUs and RSUs upon retirement. As a result, compensation expense for employees that are retirement eligible at the grant date is recognized immediately, while compensation expense for employees that become retirement eligible during the vesting period is recognized over the period from grant date to the date of retirement eligibility. In addition, the Registrants recognize forfeitures as they occur.

All unvested PSUs and RSUs vest immediately upon a change in control where Southern Company is not the surviving corporation.

Performance Share Units

PSUs granted to employees vest at the end of a three-year performance period. Shares of Southern Company common stock are delivered to employees at the end of the performance period with the number of shares issued ranging from 0% to 200% of the target number of PSUs granted, based on achievement of the performance goals established by the Compensation Committee of the Southern Company Board of Directors.

Southern Company has issued three types of PSUs, each with a unique performance goal. These types of PSUs include total shareholder return (TSR) awards based on the TSR for Southern Company common stock during the three-year performance period as compared to a group of industry peers; ROE awards based on Southern Company's equity-weighted return over the performance period; and EPS awards based on Southern Company's cumulative EPS over the performance period. EPS awards were last granted in 2017.

The fair value of TSR awards is determined as of the grant date using a Monte Carlo simulation model to estimate the TSR of Southern Company's common stock among industry peers over the performance period. In determining the fair value of the TSR awards issued to employees, the expected volatility is based on the historical volatility of Southern Company's stock over a period equal to the performance period. The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant that covers the performance period of the awards. The following table shows the assumptions used in the pricing model and the weighted average grant-date fair value of TSR awards granted:

Year Ended December 31	2019	2018	2017
Expected volatility	15.6%	14.9%	15.6%
Expected term (<i>in years</i>)	3	3	3
Interest rate	2.4%	2.4%	1.4%
Weighted average grant-date fair value	\$62.71	\$43.75	\$49.08

The Registrants recognize TSR award compensation expense on a straight-line basis over the three-year performance period without remeasurement.

The fair values of EPS awards and ROE awards are based on the closing stock price of Southern Company common stock on the date of the grant. The weighted average grant-date fair value of the awards granted during 2019, 2018, and 2017 was \$49.38, \$43.49, and \$49.21, respectively. Compensation expense for EPS and ROE awards is generally recognized ratably over the three-year performance period adjusted for expected changes in EPS and ROE performance. Total compensation cost recognized for vested EPS awards and ROE awards reflects final performance metrics.

Southern Company had 2.5 million unvested PSUs outstanding at December 31, 2018. In February 2019, the PSUs that vested for the three-year performance period ended December 31, 2018 were converted into 1.7 million shares outstanding at a share price of \$49.24.

During 2019, Southern Company granted 1.2 million PSUs and 1.2 million PSUs were vested or forfeited, resulting in 2.5 million unvested PSUs outstanding at December 31, 2019. In February 2020, the PSUs that vested for the three-year performance period ended December 31, 2019 were converted into 1.8 million shares outstanding at a share price of \$68.59.

Notes to Financial Statements

Total PSU compensation cost, and the related tax benefit recognized in income, for the years ended December 31, 2019, 2018, and 2017 are as follows:

	2019	2018	2017
		<i>(in millions)</i>	
Southern Company			
Compensation cost recognized in income	\$77	\$91	\$74
Tax benefit of compensation cost recognized in income	20	24	29
Southern Company Gas			
Compensation cost recognized in income	\$14	\$11	\$ 8
Tax benefit of compensation cost recognized in income	4	3	3

Total PSU compensation cost and the related tax benefit recognized in income were immaterial for all periods presented for Alabama Power, Georgia Power, Mississippi Power, and Southern Power. The compensation cost related to the grant of Southern Company PSUs to the employees of each Subsidiary Registrant is recognized in each Subsidiary Registrant's financial statements with a corresponding credit to equity representing a capital contribution from Southern Company.

At December 31, 2019, Southern Company's total unrecognized compensation cost related to PSUs was \$31 million and is expected to be recognized over a weighted-average period of approximately 12 months. The total unrecognized compensation cost related to PSUs as of December 31, 2019 was immaterial for all other Registrants.

Restricted Stock Units

The fair value of RSUs is based on the closing stock price of Southern Company common stock on the date of the grant. The weighted average grant-date fair values of RSUs granted during 2019, 2018, and 2017 were \$50.44, \$43.81, and \$49.25, respectively. For most RSU awards, one-third of the RSUs vest each year throughout a three-year service period and compensation cost for RSUs is generally recognized over the corresponding one-, two-, or three-year vesting period. Shares of Southern Company common stock are delivered to employees at the end of each vesting period.

Southern Company had 1.1 million RSUs outstanding at December 31, 2018. During 2019, Southern Company granted 0.6 million RSUs and 0.4 million RSUs were vested or forfeited, resulting in 1.3 million unvested RSUs outstanding at December 31, 2019, including RSUs related to employee retention agreements.

For the years ended December 31, 2019, 2018, and 2017, Southern Company's total compensation cost for RSUs recognized in income was \$28 million, \$27 million, and \$25 million, respectively. The related tax benefit also recognized in income was \$7 million, \$7 million, and \$10 million for the years ended December 31, 2019, 2018, and 2017, respectively. Total unrecognized compensation cost related to RSUs as of December 31, 2019 for Southern Company of \$14 million will be recognized over a weighted-average period of approximately 10 months.

Total RSUs outstanding and total compensation cost and related tax benefit for the RSUs recognized in income for the years ended December 31, 2019, 2018, and 2017, as well as the total unrecognized compensation cost as of December 31, 2019, were immaterial for all other Registrants. The compensation cost related to the grant of Southern Company RSUs to the employees of each Subsidiary Registrant is recognized in such Subsidiary Registrant's financial statements with a corresponding credit to equity representing a capital contribution from Southern Company.

Stock Options

In 2015, Southern Company discontinued granting stock options. Stock options expire no later than 10 years after the grant date and the latest possible exercise will occur by November 2024. As of December 31, 2019, the weighted average remaining contractual term for the options outstanding and exercisable was approximately three years.

As of December 31, 2017, all stock option awards are vested and compensation cost fully recognized. Total compensation cost for stock option awards and the related tax benefits recognized in income for the year ended December 31, 2017 were immaterial for Southern Company, Alabama Power, Georgia Power, and Mississippi Power.

Southern Company's activity in the stock option program for 2019 is summarized below:

	Shares Subject to Option	Weighted Average Exercise Price
	<i>(in millions)</i>	
Outstanding at December 31, 2018	17.5	\$41.92
Exercised	11.6	41.62
Outstanding and Exercisable at December 31, 2019	5.9	\$42.52

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Southern Company's cash receipts from issuances related to stock options exercised under the share-based payment arrangements for the years ended December 31, 2019, 2018, and 2017 were \$482 million, \$41 million, and \$239 million, respectively.

At December 31, 2019, the aggregate intrinsic value for the options outstanding and exercisable was as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power
		<i>(in millions)</i>		
Total intrinsic value for outstanding and exercisable options	\$124	\$14	\$35	\$6

Total intrinsic value of options exercised, and the related tax benefit, for the years ended December 31, 2019, 2018, and 2017 are presented below:

Year Ended December 31	2019	2018	2017
		<i>(in millions)</i>	
Southern Company			
Intrinsic value of options exercised	\$167	\$ 9	\$64
Tax benefit of options exercised	35	2	25
Alabama Power			
Intrinsic value of options exercised	\$ 21	\$ 2	\$12
Tax benefit of options exercised	4	—	5
Georgia Power			
Intrinsic value of options exercised	\$ 30	\$ 2	\$13
Tax benefit of options exercised	6	—	5
Mississippi Power			
Intrinsic value of options exercised	\$ 4	\$ 1	\$ 2
Tax benefit of options exercised	1	—	1

Total intrinsic value of options exercised, and the related tax benefit recognized in income, for the years ended December 31, 2019 and 2018 was immaterial for Southern Power and Southern Company Gas.

Merger Stock Compensation

Southern Company Restricted Stock Awards

At the effective time of the Merger, each outstanding award of existing Southern Company Gas PSUs was converted into an award of Southern Company RSUs. Under the terms of the restricted stock awards, the employees received Southern Company stock when they satisfied the requisite service period by being continuously employed through the original three-year vesting schedule of the award being replaced. Southern Company issued 0.7 million RSUs with a grant-date fair value of \$53.83, based on the closing stock price of Southern Company common stock on the date of the grant. Approximately \$13 million of the grant date fair value, which was related to pre-combination service, was accounted for as Merger consideration. Southern Company Gas recognized the remaining fair value as compensation expense on a straight-line basis over the remaining vesting period. The compensation cost related to the grant of RSUs to Southern Company Gas employees is recognized in Southern Company Gas' financial statements with a corresponding credit to equity, representing a capital contribution from Southern Company. As of December 31, 2018, all RSUs were vested. For the years ended December 31, 2018 and 2017, total compensation cost for RSUs recognized in income and the related tax benefit were immaterial.

Southern Company Gas Change in Control Awards

Southern Company awarded PSUs to certain Southern Company Gas employees who continued their employment with the Southern Company in lieu of certain change in control benefits the employee was entitled to receive following the Merger (change in control awards). Shares of Southern Company common stock and/or cash equal to the dollar value of the change in control benefit vested and were issued one-third each year as long as the employee remained in service with Southern Company or its subsidiaries at each vest date. In addition to the change in control benefit, Southern Company common stock was issued to the employees at the end of a performance period based on achievement of certain Southern Company common stock price metrics, as well performance goals established by the Compensation Committee of the Southern Company Board of Directors (achievement shares).

The change in control benefits were accounted for as a liability award with the fair value equal to the guaranteed dollar value of the change in control benefit. The compensation cost of the change in control benefit was recognized in Southern Company Gas' financial statements with a corresponding credit to a liability. The grant-date fair value of the achievement portion of the award was determined using a Monte Carlo simulation model to estimate the number of achievement shares expected to vest based on the Southern Company common stock price. The compensation cost of the achievement shares was recognized in Southern Company Gas' financial statements with a corresponding credit to equity, representing a capital contribution from Southern Company. The expected payout was reevaluated

Notes to Financial Statements

annually with expense recognized to date increased or decreased proportionately based on the expected performance. The compensation cost ultimately recognized for the achievement shares was based on the actual performance. As of December 31, 2019, all change in control awards are vested. For the year ended December 31, 2017, total compensation cost and the related tax benefit for the change in control awards recognized in income was \$12 million and \$6 million, respectively. Total compensation cost and the related tax benefit for the change in control awards recognized in income were immaterial for all other periods presented.

13. FAIR VALUE MEASUREMENTS

Fair value measurements are based on inputs of observable and unobservable market data that a market participant would use in pricing the asset or liability. The use of observable inputs is maximized where available and the use of unobservable inputs is minimized for fair value measurement and reflects a three-tier fair value hierarchy that prioritizes inputs to valuation techniques used for fair value measurement.

- Level 1 consists of observable market data in an active market for identical assets or liabilities.
- Level 2 consists of observable market data, other than that included in Level 1, that is either directly or indirectly observable.
- Level 3 consists of unobservable market data. The input may reflect the assumptions of each Registrant of what a market participant would use in pricing an asset or liability. If there is little available market data, then each Registrant's own assumptions are the best available information.

In the case of multiple inputs being used in a fair value measurement, the lowest level input that is significant to the fair value measurement represents the level in the fair value hierarchy in which the fair value measurement is reported.

Net asset value as a practical expedient is the classification used for assets that do not have readily determinative fair values. Fund managers value the assets using various inputs and techniques depending on the nature of the underlying investments.

At December 31, 2019, assets and liabilities measured at fair value on a recurring basis during the period, together with their associated level of the fair value hierarchy, were as follows:

	Fair Value Measurements Using				Total
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value as a Practical Expedient (NAV)	
At December 31, 2019:					
	<i>(in millions)</i>				
Southern Company					
Assets:					
Energy-related derivatives ^{(a)(b)}	\$ 388	\$ 267	\$22	\$—	\$ 677
Interest rate derivatives	—	2	—	—	2
Foreign currency derivatives	—	16	—	—	16
Investments in trusts: ^{(c)(d)}					
Domestic equity	751	135	—	—	886
Foreign equity	68	220	—	—	288
U.S. Treasury and government agency securities	—	307	—	—	307
Municipal bonds	—	85	—	—	85
Pooled funds – fixed income	—	17	—	—	17
Corporate bonds	23	297	—	—	320
Mortgage and asset backed securities	—	87	—	—	87
Private equity	—	—	—	56	56
Cash and cash equivalents	1	—	—	—	1
Other	17	5	—	—	22
Cash equivalents	1,393	2	—	—	1,395
Other investments	9	21	—	—	30
Total	\$ 2,650	\$1,461	\$22	\$56	\$4,189
Liabilities:					
Energy-related derivatives ^{(a)(b)}	\$ 442	\$ 254	\$ 7	\$—	\$ 703
Interest rate derivatives	—	24	—	—	24
Foreign currency derivatives	—	24	—	—	24
Contingent consideration	—	—	19	—	19
Total	\$ 442	\$ 302	\$26	\$—	\$ 770

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At December 31, 2019:	Fair Value Measurements Using			Net Asset Value as a Practical Expedient (NAV)	Total
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)		
	<i>(in millions)</i>				
Alabama Power					
Assets:					
Energy-related derivatives	\$ —	\$ 4	\$ —	\$ —	\$ 4
Nuclear decommissioning trusts: ^(c)					
Domestic equity	488	123	—	—	611
Foreign equity	68	64	—	—	132
U.S. Treasury and government agency securities	—	21	—	—	21
Municipal bonds	—	1	—	—	1
Corporate bonds	23	144	—	—	167
Mortgage and asset backed securities	—	29	—	—	29
Private equity	—	—	—	56	56
Other	3	1	—	—	4
Cash equivalents	691	2	—	—	693
Other investments	—	21	—	—	21
Total	\$ 1,273	\$ 410	\$ —	\$56	\$1,739
Liabilities:					
Energy-related derivatives	\$ —	\$ 24	\$ —	\$ —	\$ 24
Georgia Power					
Assets:					
Energy-related derivatives	\$ —	\$ 4	\$ —	\$ —	\$ 4
Nuclear decommissioning trusts: ^{(c)(d)}					
Domestic equity	263	1	—	—	264
Foreign equity	—	152	—	—	152
U.S. Treasury and government agency securities	—	286	—	—	286
Municipal bonds	—	84	—	—	84
Corporate bonds	—	153	—	—	153
Mortgage and asset backed securities	—	57	—	—	57
Other	13	4	—	—	17
Total	\$ 276	\$ 741	\$ —	\$ —	\$1,017
Liabilities:					
Energy-related derivatives	\$ —	\$ 53	\$ —	\$ —	\$ 53
Interest rate derivatives	—	17	—	—	17
Total	\$ —	\$ 70	\$ —	\$ —	\$ 70
Mississippi Power					
Assets:					
Energy-related derivatives	\$ —	\$ 1	\$ —	\$ —	\$ 1
Cash equivalents	281	—	—	—	281
Total	\$ 281	\$ 1	\$ —	\$ —	\$ 282
Liabilities:					
Energy-related derivatives	\$ —	\$ 27	\$ —	\$ —	\$ 27

Notes to Financial Statements

At December 31, 2019:	Fair Value Measurements Using				Total
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value as a Practical Expedient (NAV)	
	<i>(in millions)</i>				
Southern Power					
Assets:					
Energy-related derivatives	\$ —	\$ 3	\$ —	\$ —	\$ 3
Foreign currency derivatives	—	16	—	—	16
Cash equivalents	113	—	—	—	113
Total	\$ 113	\$ 19	\$ —	\$ —	\$ 132
Liabilities:					
Energy-related derivatives	\$ —	\$ 3	\$ —	\$ —	\$ 3
Foreign currency derivatives	—	24	—	—	24
Contingent consideration	—	—	19	—	19
Total	\$ —	\$ 27	\$ 19	\$ —	\$ 46
Southern Company Gas					
Assets:					
Energy-related derivatives ^{(a)(b)}	\$ 388	\$ 255	\$ 22	\$ —	\$ 665
Interest rate derivatives	—	2	—	—	2
Non-qualified deferred compensation trusts:					
Domestic equity	—	11	—	—	11
Foreign equity	—	4	—	—	4
Pooled funds – fixed income	—	17	—	—	17
Cash equivalents	1	—	—	—	1
Cash equivalents	8	—	—	—	8
Total	\$ 397	\$ 289	\$ 22	\$ —	\$ 708
Liabilities:					
Energy-related derivatives ^{(a)(b)}	\$ 442	\$ 147	\$ 7	\$ —	\$ 596

(a) Energy-related derivatives exclude \$4 million associated with premiums and certain weather derivatives accounted for based on intrinsic value rather than fair value.

(b) Energy-related derivatives exclude cash collateral of \$99 million.

(c) Excludes receivables related to investment income, pending investment sales, payables related to pending investment purchases, and currencies. See Note 6 under "Nuclear Decommissioning" for additional information.

(d) Includes investment securities pledged to creditors and collateral received and excludes payables related to the securities lending program. See Note 6 under "Nuclear Decommissioning" for additional information.

Notes to Financial Statements

At December 31, 2018, assets and liabilities measured at fair value on a recurring basis during the period, together with their associated level of the fair value hierarchy, were as follows:

At December 31, 2018:	Fair Value Measurements Using				Total
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value as a Practical Expedient (NAV)	
	<i>(in millions)</i>				
Southern Company					
Assets:					
Energy-related derivatives ^{(a)(b)}	\$ 469	\$ 292	\$ —	\$ —	\$ 761
Foreign currency derivatives	—	75	—	—	75
Investments in trusts: ^{(c)(d)}					
Domestic equity	601	107	—	—	708
Foreign equity	53	173	—	—	226
U.S. Treasury and government agency	—	261	—	—	261
Municipal bonds	—	83	—	—	83
Pooled funds – fixed income	—	14	—	—	14
Corporate bonds	24	290	—	—	314
Mortgage and asset backed securities	—	68	—	—	68
Private equity	—	—	—	45	45
Cash and cash equivalents	16	—	—	—	16
Other	34	4	—	—	38
Cash equivalents	765	1	—	—	766
Other investments	—	12	—	—	12
Total	\$ 1,962	\$ 1,380	\$ —	\$ 45	\$ 3,387
Liabilities:					
Energy-related derivatives ^{(a)(b)}	\$ 648	\$ 316	\$ —	\$ —	\$ 964
Interest rate derivatives	—	49	—	—	49
Foreign currency derivatives	—	23	—	—	23
Contingent consideration	—	—	21	—	21
Total	\$ 648	\$ 388	\$ 21	\$ —	\$ 1,057
Alabama Power					
Assets:					
Energy-related derivatives	\$ —	\$ 6	\$ —	\$ —	\$ 6
Nuclear decommissioning trusts: ^(c)					
Domestic equity	396	95	—	—	491
Foreign equity	53	50	—	—	103
U.S. Treasury and government agency	—	18	—	—	18
Municipal bonds	—	1	—	—	1
Corporate bonds	24	135	—	—	159
Mortgage and asset backed securities	—	23	—	—	23
Private equity	—	—	—	45	45
Other	6	—	—	—	6
Cash equivalents	116	1	—	—	117
Other investments	—	12	—	—	12
Total	\$ 595	\$ 341	\$ —	\$ 45	\$ 981
Liabilities:					
Energy-related derivatives	\$ —	\$ 10	\$ —	\$ —	\$ 10

Notes to Financial Statements

At December 31, 2018:	Fair Value Measurements Using			Net Asset Value as a Practical Expedient (NAV)	Total
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)		
<i>(in millions)</i>					
Georgia Power					
Assets:					
Energy-related derivatives	\$ —	\$ 6	\$ —	\$ —	\$ 6
Nuclear decommissioning trusts: ^{(c)(d)}					
Domestic equity	205	1	—	—	206
Foreign equity	—	119	—	—	119
U.S. Treasury and government agency	—	243	—	—	243
Municipal bonds	—	82	—	—	82
Corporate bonds	—	155	—	—	155
Mortgage and asset backed securities	—	45	—	—	45
Other	19	4	—	—	23
Total	\$ 224	\$ 655	\$ —	\$ —	\$ 879
Liabilities:					
Energy-related derivatives	\$ —	\$ 21	\$ —	\$ —	\$ 21
Interest rate derivatives	—	2	—	—	2
Total	\$ —	\$ 23	\$ —	\$ —	\$ 23
Mississippi Power					
Assets:					
Energy-related derivatives	\$ —	\$ 3	\$ —	\$ —	\$ 3
Cash equivalents	255	—	—	—	255
Total	\$ 255	\$ 3	\$ —	\$ —	\$ 258
Liabilities:					
Energy-related derivatives	\$ —	\$ 9	\$ —	\$ —	\$ 9
Southern Power					
Assets:					
Energy-related derivatives	\$ —	\$ 4	\$ —	\$ —	\$ 4
Foreign currency derivatives	—	75	—	—	75
Cash equivalents	46	—	—	—	46
Total	\$ 46	\$ 79	\$ —	\$ —	\$ 125
Liabilities:					
Energy-related derivatives	\$ —	\$ 8	\$ —	\$ —	\$ 8
Foreign currency derivatives	—	23	—	—	23
Contingent consideration	—	—	21	—	21
Total	\$ —	\$ 31	\$ 21	\$ —	\$ 52
Southern Company Gas					
Assets:					
Energy-related derivatives ^{(a)(b)}	\$ 469	\$ 272	\$ —	\$ —	\$ 741
Non-qualified deferred compensation trusts:					
Domestic equity	—	11	—	—	11
Foreign equity	—	4	—	—	4
Pooled funds – fixed income	—	14	—	—	14
Cash equivalents	4	—	—	—	4
Cash equivalents	40	—	—	—	40
Total	\$ 513	\$ 301	\$ —	\$ —	\$ 814
Liabilities:					
Energy-related derivatives ^{(a)(b)}	\$ 648	\$ 261	\$ —	\$ —	\$ 909

(a) Energy-related derivatives exclude \$8 million associated with premiums and certain weather derivatives accounted for based on intrinsic value rather than fair value.

(b) Energy-related derivatives exclude cash collateral of \$277 million.

(c) Excludes receivables related to investment income, pending investment sales, payables related to pending investment purchases, and currencies.

See Note 6 under "Nuclear Decommissioning" for additional information.

(d) Includes investment securities pledged to creditors and collateral received and excludes payables related to the securities lending program.

See Note 6 under "Nuclear Decommissioning" for additional information.

Notes to Financial Statements

Valuation Methodologies

The energy-related derivatives primarily consist of exchange-traded and over-the-counter financial products for natural gas and physical power products, including, from time to time, basis swaps. These are standard products used within the energy industry and are valued using the market approach. The inputs used are mainly from observable market sources, such as forward natural gas prices, power prices, implied volatility, and overnight index swap interest rates. Interest rate derivatives are also standard over-the-counter products that are valued using observable market data and assumptions commonly used by market participants. The fair value of interest rate derivatives reflects the net present value of expected payments and receipts under the swap agreement based on the market's expectation of future interest rates. Additional inputs to the net present value calculation may include the contract terms, counterparty credit risk, and occasionally, implied volatility of interest rate options. The fair value of cross-currency swaps reflects the net present value of expected payments and receipts under the swap agreement based on the market's expectation of future foreign currency exchange rates. Additional inputs to the net present value calculation may include the contract terms, counterparty credit risk, and discount rates. The interest rate derivatives and cross-currency swaps are categorized as Level 2 under Fair Value Measurements as these inputs are based on observable data and valuations of similar instruments. See Note 14 for additional information on how these derivatives are used.

For fair value measurements of the investments within the nuclear decommissioning trusts and the non-qualified deferred compensation trusts, external pricing vendors are designated for each asset class with each security specifically assigned a primary pricing source. For investments held within commingled funds, fair value is determined at the end of each business day through the net asset value, which is established by obtaining the underlying securities' individual prices from the primary pricing source. A market price secured from the primary source vendor is then evaluated by management in its valuation of the assets within the trusts. As a general approach, fixed income market pricing vendors gather market data (including indices and market research reports) and integrate relative credit information, observed market movements, and sector news into proprietary pricing models, pricing systems, and mathematical tools. Dealer quotes and other market information, including live trading levels and pricing analysts' judgments, are also obtained when available.

The NRC requires licensees of commissioned nuclear power reactors to establish a plan for providing reasonable assurance of funds for future decommissioning. See Note 6 under "Nuclear Decommissioning" for additional information.

Southern Power has contingent payment obligations related to certain acquisitions whereby Southern Power is primarily obligated to make generation-based payments to the seller, which commenced at the commercial operation of the respective facility and continue through 2026. The obligation is categorized as Level 3 under Fair Value Measurements as the fair value is determined using significant unobservable inputs for the forecasted facility generation in MW-hours, as well as other inputs such as a fixed dollar amount per MW-hour, and a discount rate. The fair value of contingent consideration reflects the net present value of expected payments and any periodic change arising from forecasted generation is expected to be immaterial.

"Other investments" include investments traded in the open market that have maturities greater than 90 days, which are categorized as Level 2 under Fair Value Measurements and are comprised of corporate bonds, treasury bonds, and/or agency bonds.

The fair value measurements of private equity investments held in Alabama Power's nuclear decommissioning trusts that are calculated at net asset value per share (or its equivalent) as a practical expedient totaled \$56 million and \$45 million at December 31, 2019 and 2018, respectively. Unfunded commitments related to the private equity investments totaled \$70 million and \$50 million at December 31, 2019 and 2018, respectively. Private equity investments include high-quality private equity funds across several market sectors and funds that invest in real estate assets. Private equity funds do not have redemption rights. Distributions from these funds will be received as the underlying investments in the funds are liquidated.

Notes to Financial Statements

At December 31, 2019 and 2018, other financial instruments for which the carrying amount did not equal fair value were as follows:

	Southern Company ^{(a)(b)}	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas ^(b)
	<i>(in millions)</i>					
At December 31, 2019:						
Long-term debt, including securities due within one year:						
Carrying amount	\$44,561	\$8,517	\$11,660	\$1,589	\$4,398	\$5,845
Fair value	48,339	9,525	12,680	1,671	4,708	6,509
At December 31, 2018:						
Long-term debt, including securities due within one year:						
Carrying amount	\$45,023	\$8,120	\$ 9,838	\$1,579	\$5,017	\$5,940
Fair value	44,824	8,370	9,800	1,546	4,980	5,965

(a) Amounts at December 31, 2018 include long-term debt of Gulf Power, which was classified as liabilities held for sale on Southern Company's balance sheet at December 31, 2018. See Note 15 under "Southern Company" and "Assets Held for Sale" for additional information.

(b) The long-term debt of Southern Company Gas is recorded at amortized cost, including the fair value adjustments at the effective date of the Merger. Southern Company Gas amortizes the fair value adjustments over the lives of the respective bonds.

The fair values are determined using Level 2 measurements and are based on quoted market prices for the same or similar issues or on the current rates available to the Registrants.

Commodity Contracts with Level 3 Valuation Inputs

As of December 31, 2019, the fair value of Southern Company Gas' Level 3 physical natural gas forward contracts was \$14 million. Since commodity contracts classified as Level 3 typically include a combination of observable and unobservable components, the changes in fair value may include amounts due in part to observable market factors, or changes to assumptions on the unobservable components. The following table includes transfers to Level 3, which represent the fair value of Southern Company Gas' commodity derivative contracts that include a significant unobservable component for the first time during the period.

	2019
	<i>(in millions)</i>
Beginning balance	\$ —
Transfers to Level 3	(32)
Transfers from Level 3	3
Instruments realized or otherwise settled during period	(4)
Changes in fair value	47
Ending balance	\$ 14

Changes in fair value of Level 3 instruments represent changes in gains and losses for the periods that are reported on Southern Company Gas' statements of income in natural gas revenues.

The valuation of certain commodity contracts requires the use of certain unobservable inputs. All forward pricing used in the valuation of such contracts is directly based on third-party market data, such as broker quotes and exchange settlements, when that data is available. If third-party market data is not available, then industry standard methodologies are used to develop inputs that maximize the use of relevant observable inputs and minimize the use of unobservable inputs. Observable inputs, including some forward prices used for determining fair value, reflect the best available market information. Unobservable inputs are updated using industry standard techniques such as extrapolation, combining observable forward inputs supplemented by historical market and other relevant data. Level 3 physical natural gas forward contracts include unobservable forward price inputs (ranging from \$1.54 to \$2.92 per mmBtu). Forward price increases (decreases) as of December 31, 2019 would have resulted in higher (lower) values on a net basis.

Notes to Financial Statements

14. DERIVATIVES

Southern Company, the traditional electric operating companies, Southern Power, and Southern Company Gas are exposed to market risks, including commodity price risk, interest rate risk, weather risk, and occasionally foreign currency exchange rate risk. To manage the volatility attributable to these exposures, each company nets its exposures, where possible, to take advantage of natural offsets and enters into various derivative transactions for the remaining exposures pursuant to each company's policies in areas such as counterparty exposure and risk management practices. Southern Company Gas' wholesale gas operations use various contracts in its commercial activities that generally meet the definition of derivatives. For the traditional electric operating companies, Southern Power, and Southern Company Gas' other businesses, each company's policy is that derivatives are to be used primarily for hedging purposes and mandates strict adherence to all applicable risk management policies. Derivative positions are monitored using techniques including, but not limited to, market valuation, value at risk, stress testing, and sensitivity analysis. Derivative instruments are recognized at fair value in the balance sheets as either assets or liabilities and are presented on a net basis. See Note 13 for additional fair value information. In the statements of cash flows, any cash impacts of settled energy-related and interest rate derivatives are recorded as operating activities. Any cash impacts of settled foreign currency derivatives are classified as operating or financing activities to correspond with classification of the hedged interest or principal, respectively. See Note 1 under "Financial Instruments" for additional information.

Energy-Related Derivatives

The traditional electric operating companies, Southern Power, and Southern Company Gas enter into energy-related derivatives to hedge exposures to electricity, natural gas, and other fuel price changes. However, due to cost-based rate regulations and other various cost recovery mechanisms, the traditional electric operating companies and the natural gas distribution utilities have limited exposure to market volatility in energy-related commodity prices. Each of the traditional electric operating companies and certain of the natural gas distribution utilities of Southern Company Gas manage fuel-hedging programs, implemented per the guidelines of their respective state PSCs or other applicable state regulatory agencies, through the use of financial derivative contracts, which are expected to continue to mitigate price volatility. The traditional electric operating companies (with respect to wholesale generating capacity) and Southern Power have limited exposure to market volatility in energy-related commodity prices because their long-term sales contracts shift substantially all fuel cost responsibility to the purchaser. However, the traditional electric operating companies and Southern Power may be exposed to market volatility in energy-related commodity prices to the extent any uncontracted capacity is used to sell electricity. Southern Company Gas retains exposure to price changes that can, in a volatile energy market, be material and can adversely affect its results of operations.

Southern Company Gas also enters into weather derivative contracts as economic hedges of operating margins in the event of warmer-than-normal weather. Exchange-traded options are carried at fair value, with changes reflected in operating revenues. Non-exchange-traded options are accounted for using the intrinsic value method. Changes in the intrinsic value for non-exchange-traded contracts are reflected in operating revenues.

Energy-related derivative contracts are accounted for under one of three methods:

- *Regulatory Hedges* – Energy-related derivative contracts designated as regulatory hedges relate primarily to the traditional electric operating companies' and the natural gas distribution utilities' fuel-hedging programs, where gains and losses are initially recorded as regulatory liabilities and assets, respectively, and then are included in fuel expense as the underlying fuel is used in operations and ultimately recovered through the respective fuel cost recovery clauses.
- *Cash Flow Hedges* – Gains and losses on energy-related derivatives designated as cash flow hedges (which are mainly used to hedge anticipated purchases and sales) are initially deferred in AOCI before being recognized in the statements of income in the same period and in the same income statement line item as the earnings effect of the hedged transactions.
- *Not Designated* – Gains and losses on energy-related derivative contracts that are not designated or fail to qualify as hedges are recognized in the statements of income as incurred.

Some energy-related derivative contracts require physical delivery as opposed to financial settlement, and this type of derivative is both common and prevalent within the electric and natural gas industries. When an energy-related derivative contract is settled physically, any cumulative unrealized gain or loss is reversed and the contract price is recognized in the respective line item representing the actual price of the underlying goods being delivered.

Notes to Financial Statements

At December 31, 2019, the net volume of energy-related derivative contracts for natural gas positions, together with the longest hedge date over which the respective entity is hedging its exposure to the variability in future cash flows for forecasted transactions and the longest non-hedge date for derivatives not designated as hedges, were as follows:

	Net Purchased mmBtu	Longest Hedge Date	Longest Non-Hedge Date
	<i>(in millions)</i>		
Southern Company ^(*)	589	2023	2029
Alabama Power	88	2022	—
Georgia Power	175	2023	—
Mississippi Power	101	2023	—
Southern Power	7	2020	2020
Southern Company Gas ^(*)	218	2022	2029

(*) Southern Company Gas' derivative instruments include both long and short natural gas positions. A long position is a contract to purchase natural gas and a short position is a contract to sell natural gas. Southern Company Gas' volume represents the net of long natural gas positions of 4,096 million mmBtu and short natural gas positions of 3,878 million mmBtu at December 31, 2019, which is also included in Southern Company's total volume.

At December 31, 2019, the net volume of Southern Power's energy-related derivative contracts for power to be sold was 1 million MWHs, all of which expire in 2020.

In addition to the volumes discussed above, the traditional electric operating companies and Southern Power enter into physical natural gas supply contracts that provide the option to sell back excess natural gas due to operational constraints. The maximum expected volume of natural gas subject to such a feature is 23 million mmBtu for Southern Company, which includes 6 million mmBtu for Alabama Power, 7 million mmBtu for Georgia Power, 3 million mmBtu for Mississippi Power, and 7 million mmBtu for Southern Power.

For cash flow hedges of energy-related derivatives, the estimated pre-tax gains (losses) expected to be reclassified from AOCI to earnings for the year ending December 31, 2020 are immaterial for Southern Power.

Interest Rate Derivatives

Southern Company and certain subsidiaries may enter into interest rate derivatives to hedge exposure to changes in interest rates. The derivatives employed as hedging instruments are structured to minimize ineffectiveness. Derivatives related to existing variable rate securities or forecasted transactions are accounted for as cash flow hedges where the derivatives' fair value gains or losses are recorded in OCI and are reclassified into earnings at the same time and presented on the same income statement line item as the earnings effect of the hedged transactions. Derivatives related to existing fixed rate securities are accounted for as fair value hedges, where the derivatives' fair value gains or losses and hedged items' fair value gains or losses are both recorded directly to earnings on the same income statement line item. Fair value gains or losses on derivatives that are not designated or fail to qualify as hedges are recognized in the statements of income as incurred.

At December 31, 2019, the following interest rate derivatives were outstanding:

	Notional Amount	Interest Rate Received	Weighted Average Interest Rate Paid	Hedge Maturity Date	Fair Value Gain (Loss) December 31, 2019
	<i>(in millions)</i>				<i>(in millions)</i>
Cash Flow Hedges of Forecasted Debt					
Georgia Power	\$ 250	3-month LIBOR	2.23%	March 2025	\$ (6)
Georgia Power	250	3-month LIBOR	2.40%	March 2030	(11)
Southern Company Gas	200	3-month LIBOR	1.81%	September 2030	2
Fair Value Hedges of Existing Debt					
Southern Company parent	300	2.75%	3-month LIBOR + 0.92%	June 2020	—
Southern Company parent	1,500	2.35%	1-month LIBOR + 0.87%	July 2021	(7)
Southern Company	\$2,500				\$(22)

Notes to Financial Statements

The estimated pre-tax gains (losses) related to interest rate derivatives expected to be reclassified from AOCI to interest expense for the year ending December 31, 2020 total \$(22) million for Southern Company and are immaterial for all other Registrants. Deferred gains and losses related to interest rate derivatives are expected to be amortized into earnings through 2046 for the Southern Company parent entity, 2035 for Alabama Power, 2044 for Georgia Power, 2028 for Mississippi Power, and 2046 for Southern Company Gas.

Foreign Currency Derivatives

Southern Company and certain subsidiaries, including Southern Power, may enter into foreign currency derivatives to hedge exposure to changes in foreign currency exchange rates, such as that arising from the issuance of debt denominated in a currency other than U.S. dollars. Derivatives related to forecasted transactions are accounted for as cash flow hedges where the derivatives' fair value gains or losses are recorded in OCI and are reclassified into earnings at the same time and on the same income statement line as the earnings effect of the hedged transactions, including foreign currency gains or losses arising from changes in the U.S. currency exchange rates. The derivatives employed as hedging instruments are structured to minimize ineffectiveness.

At December 31, 2019, the following foreign currency derivatives were outstanding:

	Pay Notional	Pay Rate	Receive Notional	Receive Rate	Hedge Maturity Date	Fair Value Gain (Loss) at December 31, 2019
	(in millions)		(in millions)			(in millions)
Cash Flow Hedges of Existing Debt						
Southern Power	\$ 677	2.95%	€ 600	1.00%	June 2022	\$(7)
Southern Power	564	3.78%	500	1.85%	June 2026	(1)
Total	\$1,241		€1,100			\$(8)

The estimated pre-tax gains (losses) related to Southern Power's foreign currency derivatives expected to be reclassified from AOCI to earnings for the year ending December 31, 2020 are \$(24) million.

Derivative Financial Statement Presentation and Amounts

Southern Company, the traditional electric operating companies, Southern Power, and Southern Company Gas enter into derivative contracts that may contain certain provisions that permit intra-contract netting of derivative receivables and payables for routine billing and offsets related to events of default and settlements. Southern Company and certain subsidiaries also utilize master netting agreements to mitigate exposure to counterparty credit risk. These agreements may contain provisions that permit netting across product lines and against cash collateral. The fair value amounts of derivative assets and liabilities on the balance sheets are presented net to the extent that there are netting arrangements or similar agreements with the counterparties.

Notes to Financial Statements

At December 31, 2019 and 2018, the fair value of energy-related derivatives, interest rate derivatives, and foreign currency derivatives was reflected in the balance sheets as follows:

Derivative Category and Balance Sheet Location	2019		2018	
	Assets	Liabilities	Assets	Liabilities
	<i>(in millions)</i>			
Southern Company				
Derivatives designated as hedging instruments for regulatory purposes				
Energy-related derivatives:				
Other current assets/Other current liabilities	\$ 3	\$ 70	\$ 8	\$ 23
Other deferred charges and assets/Other deferred credits and liabilities	6	44	9	26
Assets held for sale, current/Liabilities held for sale, current	—	—	—	6
Total derivatives designated as hedging instruments for regulatory purposes	\$ 9	\$ 114	\$ 17	\$ 55
Derivatives designated as hedging instruments in cash flow and fair value hedges				
Energy-related derivatives:				
Other current assets/Other current liabilities	\$ 1	\$ 6	\$ 3	\$ 7
Other deferred charges and assets/Other deferred credits and liabilities	—	—	1	2
Interest rate derivatives:				
Other current assets/Other current liabilities	2	23	—	19
Other deferred charges and assets/Other deferred credits and liabilities	—	1	—	30
Foreign currency derivatives:				
Other current assets/Other current liabilities	—	24	—	23
Other deferred charges and assets/Other deferred credits and liabilities	16	—	75	—
Total derivatives designated as hedging instruments in cash flow and fair value hedges	\$ 19	\$ 54	\$ 79	\$ 81
Derivatives not designated as hedging instruments				
Energy-related derivatives:				
Other current assets/Other current liabilities	\$ 461	\$ 358	\$ 561	\$ 575
Other deferred charges and assets/Other deferred credits and liabilities	207	225	180	325
Total derivatives not designated as hedging instruments	\$ 668	\$ 583	\$ 741	\$ 900
Gross amounts recognized	\$ 696	\$ 751	\$ 837	\$1,036
Gross amounts offset^(a)	\$(463)	\$(562)	\$(524)	\$(801)
Net amounts recognized in the Balance Sheets^(b)	\$ 233	\$ 189	\$ 313	\$ 235

Alabama Power

Derivatives designated as hedging instruments for regulatory purposes

Energy-related derivatives:				
Other current assets/Other current liabilities	\$ 2	\$ 14	\$ 3	\$ 4
Other deferred charges and assets/Other deferred credits and liabilities	2	10	3	6
Total derivatives designated as hedging instruments for regulatory purposes	\$ 4	\$ 24	\$ 6	\$ 10
Gross amounts recognized	\$ 4	\$ 24	\$ 6	\$ 10
Gross amounts offset	\$ (2)	\$ (2)	\$ (4)	\$ (4)
Net amounts recognized in the Balance Sheets	\$ 2	\$ 22	\$ 2	\$ 6

Georgia Power

Derivatives designated as hedging instruments for regulatory purposes

Energy-related derivatives:				
Other current assets/Other current liabilities	\$ 1	\$ 32	\$ 2	\$ 8
Other deferred charges and assets/Other deferred credits and liabilities	3	21	4	13
Total derivatives designated as hedging instruments for regulatory purposes	\$ 4	\$ 53	\$ 6	\$ 21
Derivatives designated as hedging instruments in cash flow and fair value hedges				
Interest rate derivatives:				
Other current assets/Other current liabilities	\$ —	\$ 17	\$ —	\$ 2
Total derivatives designated as hedging instruments in cash flow and fair value hedges	\$ —	\$ 17	\$ —	\$ 2
Gross amounts recognized	\$ 4	\$ 70	\$ 6	\$ 23
Gross amounts offset	\$ (3)	\$ (3)	\$ (6)	\$ (6)
Net amounts recognized in the Balance Sheets	\$ 1	\$ 67	\$ —	\$ 17

Notes to Financial Statements

Derivative Category and Balance Sheet Location	2019		2018	
	Assets	Liabilities	Assets	Liabilities
	(in millions)			
Mississippi Power				
Derivatives designated as hedging instruments for regulatory purposes				
Energy-related derivatives:				
Other current assets/Other current liabilities	\$ —	\$ 15	\$ 1	\$ 3
Other deferred charges and assets/Other deferred credits and liabilities	1	12	2	6
Total derivatives designated as hedging instruments for regulatory purposes	\$ 1	\$ 27	\$ 3	\$ 9
Gross amounts recognized	\$ 1	\$ 27	\$ 3	\$ 9
Gross amounts offset	\$ (1)	\$ (1)	\$ (2)	\$ (2)
Net amounts recognized in the Balance Sheets	\$ —	\$ 26	\$ 1	\$ 7
Southern Power				
Derivatives designated as hedging instruments in cash flow and fair value hedges				
Energy-related derivatives:				
Other current assets/Other current liabilities	\$ 1	\$ 2	\$ 3	\$ 6
Other deferred charges and assets/Other deferred credits and liabilities	—	—	1	2
Foreign currency derivatives:				
Other current assets/Other current liabilities	—	24	—	23
Other deferred charges and assets/Other deferred credits and liabilities	16	—	75	—
Total derivatives designated as hedging instruments in cash flow and fair value hedges	\$ 17	\$ 26	\$ 79	\$ 31
Derivatives not designated as hedging instruments				
Energy-related derivatives:				
Other current assets/Other current liabilities	\$ 2	\$ 1	\$ —	\$ —
Total derivatives not designated as hedging instruments	\$ 2	\$ 1	\$ —	\$ —
Gross amounts recognized	\$ 19	\$ 27	\$ 79	\$ 31
Gross amounts offset	\$ —	\$ —	\$ (3)	\$ (3)
Net amounts recognized in the Balance Sheets	\$ 19	\$ 27	\$ 76	\$ 28
Southern Company Gas				
Derivatives designated as hedging instruments for regulatory purposes				
Energy-related derivatives:				
Assets from risk management activities/Liabilities from risk management activities-current	\$ —	\$ 9	\$ 2	\$ 8
Other deferred charges and assets/Other deferred credits and liabilities	—	1	—	1
Total derivatives designated as hedging instruments for regulatory purposes	\$ —	\$ 10	\$ 2	\$ 9
Derivatives designated as hedging instruments in cash flow and fair value hedges				
Energy-related derivatives:				
Assets from risk management activities/Liabilities from risk management activities-current	\$ —	\$ 4	\$ —	\$ 1
Interest rate derivatives:				
Assets from risk management activities/Liabilities from risk management activities-current	2	—	—	—
Total derivatives designated as hedging instruments in cash flow and fair value hedges	\$ 2	\$ 4	\$ —	\$ 1
Derivatives not designated as hedging instruments				
Energy-related derivatives:				
Assets from risk management activities/Liabilities from risk management activities-current	\$ 459	\$ 357	\$ 559	\$ 574
Other deferred charges and assets/Other deferred credits and liabilities	207	225	180	325
Total derivatives not designated as hedging instruments	\$ 666	\$ 582	\$ 739	\$ 899
Gross amounts recognized	\$ 668	\$ 596	\$ 741	\$ 909
Gross amounts offset^(a)	\$(456)	\$(555)	\$(508)	\$(785)
Net amounts recognized in the Balance Sheets^(b)	\$ 212	\$ 41	\$ 233	\$ 124

(a) Gross amounts offset include cash collateral held on deposit in broker margin accounts of \$99 million and \$277 million at December 31, 2019 and 2018, respectively.

(b) Net amounts of derivative instruments outstanding exclude premium and intrinsic value associated with weather derivatives of \$4 million and \$8 million at December 31, 2019 and 2018, respectively.

Notes to Financial Statements

Energy-related derivatives not designated as hedging instruments were immaterial for the traditional electric operating companies at December 31, 2019 and 2018.

At December 31, 2019 and 2018, the pre-tax effects of unrealized derivative gains (losses) arising from energy-related derivative instruments designated as regulatory hedging instruments and deferred were as follows:

Regulatory Hedge Unrealized Gain (Loss) Recognized in the Balance Sheet at December 31, 2019

Derivative Category and Balance Sheet Location	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
	<i>(in millions)</i>				
Energy-related derivatives:					
Other regulatory assets, current	\$(63)	\$(14)	\$(31)	\$(15)	\$(3)
Other regulatory assets, deferred	(37)	(8)	(18)	(11)	—
Other regulatory liabilities, current	6	2	—	—	4
Total energy-related derivative gains (losses)	\$(94)	\$(20)	\$(49)	\$(26)	\$ 1

Regulatory Hedge Unrealized Gain (Loss) Recognized in the Balance Sheet at December 31, 2018

Derivative Category and Balance Sheet Location	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
	<i>(in millions)</i>				
Energy-related derivatives:					
Other regulatory assets, current	\$(19)	\$(3)	\$(6)	\$(2)	\$(8)
Other regulatory assets, deferred	(16)	(3)	(9)	(4)	—
Assets held for sale, current	(6)	—	—	—	—
Other regulatory liabilities, current	1	—	—	—	1
Total energy-related derivative gains (losses)	\$(40)	\$(6)	\$(15)	\$(6)	\$(7)

For the years ended December 31, 2019, 2018, and 2017, the pre-tax effects of cash flow hedge accounting on AOCI for the applicable Registrants were as follows:

Gain (Loss) Recognized in OCI on Derivative	2019	2018	2017
	<i>(in millions)</i>		
Southern Company			
Energy-related derivatives	\$ (13)	\$ 17	\$ (47)
Interest rate derivatives	(57)	(1)	(2)
Foreign currency derivatives	(84)	(78)	140
Total	\$(154)	\$ (62)	\$ 91
Georgia Power			
Interest rate derivatives	\$ (59)	\$ —	\$ 1
Southern Power			
Energy-related derivatives	\$ (4)	\$ 10	\$ (38)
Foreign currency derivatives	(84)	(78)	140
Total	\$ (88)	\$ (68)	\$ 102
Southern Company Gas			
Energy-related derivatives	\$ (9)	\$ 7	\$ (9)
Interest rate derivatives	2	—	—
Total	\$ (7)	\$ 7	\$ (9)

For all years presented, the pre-tax effects of energy-related derivatives and interest rate derivatives designated as cash flow hedging instruments on AOCI were immaterial for the other Registrants. In addition, for the year ended December 31, 2017, there was no material ineffectiveness recorded in earnings for any Registrant. Upon the adoption of ASU 2017-12, beginning in 2018, ineffectiveness was no longer separately measured and recorded in earnings.

Notes to Financial Statements

The pre-tax effects of cash flow and fair value hedge accounting on income for the years ended December 31, 2019, 2018, and 2017 were as follows:

Location and Amount of Gain (Loss) Recognized in Income on Cash Flow and Fair Value Hedging Relationships	2019	2018	2017
		<i>(in millions)</i>	
Southern Company			
Total cost of natural gas	\$ 1,319	\$ 1,539	\$ 1,601
<i>Gain (loss) on energy-related cash flow hedges^(a)</i>	(2)	2	(2)
Total depreciation and amortization	3,038	3,131	3,010
<i>Gain (loss) on energy-related cash flow hedges^(a)</i>	(6)	7	(16)
Total interest expense, net of amounts capitalized	(1,736)	(1,842)	(1,694)
<i>Gain (loss) on interest rate cash flow hedges^(a)</i>	(20)	(21)	(21)
<i>Gain (loss) on foreign currency cash flow hedges^(a)</i>	(24)	(24)	(23)
<i>Gain (loss) on interest rate fair value hedges^(b)</i>	42	(12)	(22)
Total other income (expense), net	252	114	163
<i>Gain (loss) on foreign currency cash flow hedges^{(a)(c)}</i>	(24)	(60)	160
Alabama Power			
Total interest expense, net of amounts capitalized	\$ (336)	\$ (323)	\$ (305)
<i>Gain (loss) on interest rate cash flow hedges^(a)</i>	(6)	(6)	(6)
Georgia Power			
Total interest expense, net of amounts capitalized	\$ (409)	\$ (397)	\$ (419)
<i>Gain (loss) on interest rate cash flow hedges^(a)</i>	(3)	(4)	(4)
<i>Gain (loss) on interest rate fair value hedges^(b)</i>	2	2	(3)
Mississippi Power			
Total interest expense, net of amounts capitalized	\$ (69)	\$ (76)	\$ (42)
<i>Gain (loss) on interest rate cash flow hedges^(a)</i>	(2)	(2)	(2)
Southern Power			
Total depreciation and amortization	\$ 479	\$ 493	\$ 503
<i>Gain (loss) on energy-related cash flow hedges^(a)</i>	(6)	7	(17)
Total interest expense, net of amounts capitalized	(169)	(183)	(191)
<i>Gain (loss) on foreign currency cash flow hedges^(a)</i>	(24)	(24)	(23)
Total other income (expense), net	47	23	1
<i>Gain (loss) on foreign currency cash flow hedges^{(a)(c)}</i>	(24)	(60)	159
Southern Company Gas			
Total cost of natural gas	\$ 1,319	\$ 1,539	\$ 1,601
<i>Gain (loss) on energy-related cash flow hedges^(a)</i>	(2)	2	(2)

(a) Reclassified from AOCI into earnings.

(b) For fair value hedges, changes in the fair value of the derivative contracts are generally equal to changes in the fair value of the underlying debt and have no material impact on income.

(c) The reclassification from AOCI into other income (expense), net completely offsets currency gains and losses arising from changes in the U.S. currency exchange rates used to record the euro-denominated notes.

The pre-tax effects of cash flow hedge accounting on income for interest rate derivatives were immaterial for Southern Company Gas for all years presented.

Notes to Financial Statements

At December 31, 2019 and 2018, the following amounts were recorded on the balance sheets related to cumulative basis adjustments for fair value hedges:

Balance Sheet Location of Hedged Items	Carrying Amount of the Hedged Item		Cumulative Amount of Fair Value Hedging Adjustment included in Carrying Amount of the Hedged Item	
	At December 31, 2019	At December 31, 2018	At December 31, 2019	At December 31, 2018
	<i>(in millions)</i>		<i>(in millions)</i>	
Southern Company				
Securities due within one year	\$ —	\$ (498)	\$ —	\$ 2
Long-term debt	(2,093)	(2,052)	3	41
Georgia Power				
Securities due within one year	\$ —	\$ (498)	\$ —	\$ 2

The pre-tax effects of energy-related derivatives not designated as hedging instruments on the statements of income for the years ended December 31, 2019, 2018, and 2017 for the applicable Registrants were as follows:

Derivatives in Non-Designated Hedging Relationships	Statements of Income Location	Gain (Loss)		
		2019	2018	2017
		<i>(in millions)</i>		
Southern Company				
Energy-related derivatives	Natural gas revenues ^(*)	\$ 223	\$(122)	\$(80)
	Cost of natural gas	10	(6)	(2)
	Wholesale electric revenues	2	2	(4)
Total derivatives in non-designated hedging relationships		\$ 235	\$(126)	\$(86)
Southern Company Gas				
Energy-related derivatives	Natural gas revenues ^(*)	\$ 223	\$(122)	\$(80)
	Cost of natural gas	10	(6)	(2)
Total derivatives in non-designated hedging relationships		\$ 233	\$(128)	\$(82)

(*) Excludes the impact of weather derivatives recorded in natural gas revenues of \$3 million, \$5 million, and \$23 million for the years ended December 31, 2019, 2018, and 2017, respectively, as they are accounted for based on intrinsic value rather than fair value.

The pre-tax effects of energy-related derivatives not designated as hedging instruments were immaterial for all other Registrants for all years presented.

Contingent Features

Southern Company, the traditional electric operating companies, Southern Power, and Southern Company Gas do not have any credit arrangements that would require material changes in payment schedules or terminations as a result of a credit rating downgrade. There are certain derivatives that could require collateral, but not accelerated payment, in the event of various credit rating changes of certain Southern Company subsidiaries. At December 31, 2019, the Registrants had no collateral posted with derivative counterparties to satisfy these arrangements.

For the Registrants with interest rate derivatives at December 31, 2019, the fair value of interest rate derivative liabilities with contingent features and the maximum potential collateral requirements arising from the credit-risk-related contingent features, at a rating below BBB- and/or Baa3, was immaterial. At December 31, 2019, the fair value of energy-related derivative liabilities with contingent features and the maximum potential collateral requirements arising from the credit-risk-related contingent features, at a rating below BBB- and/or Baa3, were immaterial for all Registrants. The maximum potential collateral requirements arising from the credit-risk-related contingent features for the traditional electric operating companies and Southern Power include certain agreements that could require collateral in the event that one or more Southern Company power pool participants has a credit rating change to below investment grade. Following the sale of Gulf Power to NextEra Energy, Gulf Power is continuing to participate in the Southern Company power pool for a defined transition period that, subject to certain potential adjustments, is scheduled to end on January 1, 2024.

Notes to Financial Statements

Generally, collateral may be provided by a Southern Company guaranty, letter of credit, or cash. If collateral is required, fair value amounts recognized for the right to reclaim cash collateral or the obligation to return cash collateral are not offset against fair value amounts recognized for derivatives executed with the same counterparty.

Alabama Power and Southern Power maintain accounts with certain regional transmission organizations to facilitate financial derivative transactions. Based on the value of the positions in these accounts and the associated margin requirements, Alabama Power and Southern Power may be required to post collateral. At December 31, 2019, cash collateral posted in these accounts was immaterial. Southern Company Gas maintains accounts with brokers or the clearing houses of certain exchanges to facilitate financial derivative transactions. Based on the value of the positions in these accounts and the associated margin requirements, Southern Company Gas may be required to deposit cash into these accounts. At December 31, 2019, cash collateral held on deposit in broker margin accounts was \$99 million.

The Registrants are exposed to losses related to financial instruments in the event of counterparties' nonperformance. The Registrants only enter into agreements and material transactions with counterparties that have investment grade credit ratings by Moody's and S&P or with counterparties who have posted collateral to cover potential credit exposure. The Registrants have also established risk management policies and controls to determine and monitor the creditworthiness of counterparties in order to mitigate their exposure to counterparty credit risk. Prior to entering into a physical transaction, Southern Company Gas assigns physical wholesale counterparties an internal credit rating and credit limit based on the counterparties' Moody's, S&P, and Fitch ratings, commercially available credit reports, and audited financial statements. Southern Company Gas may require counterparties to pledge additional collateral when deemed necessary.

In addition, Southern Company Gas conducts credit evaluations and obtains appropriate internal approvals for the counterparty's line of credit before any transaction with the counterparty is executed. In most cases, the counterparty must have an investment grade rating, which includes a minimum long-term debt rating of Baa3 from Moody's and BBB- from S&P. Generally, Southern Company Gas requires credit enhancements by way of a guaranty, cash deposit, or letter of credit for transaction counterparties that do not have investment grade ratings.

Southern Company Gas also utilizes master netting agreements whenever possible to mitigate exposure to counterparty credit risk. When Southern Company Gas is engaged in more than one outstanding derivative transaction with the same counterparty and it also has a legally enforceable netting agreement with that counterparty, the "net" mark-to-market exposure represents the netting of the positive and negative exposures with that counterparty and a reasonable measure of Southern Company Gas' credit risk. Southern Company Gas also uses other netting agreements with certain counterparties with whom it conducts significant transactions. Master netting agreements enable Southern Company Gas to net certain assets and liabilities by counterparty. Southern Company Gas also nets across product lines and against cash collateral provided the master netting and cash collateral agreements include such provisions. Southern Company Gas may require counterparties to pledge additional collateral when deemed necessary.

The Registrants do not anticipate a material adverse effect on their respective financial statements as a result of counterparty nonperformance.

15. ACQUISITIONS AND DISPOSITIONS

Southern Company

On January 1, 2019, Southern Company completed the sale of all of the capital stock of Gulf Power to 700 Universe, LLC, a wholly-owned subsidiary of NextEra Energy, for an aggregate cash purchase price of approximately \$5.8 billion (less \$1.3 billion of indebtedness assumed), including the final working capital adjustments. The gain associated with the sale of Gulf Power totaled \$2.6 billion pre-tax (\$1.4 billion after tax). The assets and liabilities of Gulf Power were classified as assets held for sale and liabilities held for sale on Southern Company's balance sheet as of December 31, 2018. See "Assets Held for Sale" herein for additional information.

On July 22, 2019, PowerSecure completed the sale of its utility infrastructure services business for approximately \$65 million, including the final working capital adjustments. In contemplation of this sale, a goodwill impairment charge of \$32 million was recorded in the second quarter 2019.

On December 30, 2019, Southern Company completed the sale of one of its leveraged lease investments for an aggregate cash purchase price of approximately \$20 million. The sale resulted in an immaterial gain.

On December 31, 2019, PowerSecure completed the sale of its lighting business for approximately \$9 million, which included cash of \$4 million and a note receivable from the buyer of \$5 million. In contemplation of this sale, an impairment charge of \$18 million was recorded in the third quarter 2019 related to goodwill, identifiable intangibles, and other assets.

Notes to Financial Statements

Alabama Power

On September 6, 2019, Alabama Power entered into the Autauga Combined Cycle Acquisition, a purchase and sale agreement to acquire all of the equity interests in Tenaska Alabama II Partners, L.P. Tenaska Alabama II Partners, L.P. owns and operates an approximately 885-MW combined cycle generation facility in Autauga County, Alabama. The transaction is expected to close by September 1, 2020. As part of the Autauga Combined Cycle Acquisition, Alabama Power will assume an existing power sales agreement under which the full output of the generating facility remains committed to another third party for its remaining term of approximately three years. The estimated revenues from the power sales agreement are expected to offset the associated costs of operation during the remaining term.

The completion of the Autauga Combined Cycle Acquisition is subject to the satisfaction or waiver of certain conditions, including, among other customary conditions, approval by the Alabama PSC and the FERC. Alabama Power expects to obtain all regulatory approvals by the end of the third quarter 2020.

The ultimate outcome of this matter cannot be determined at this time.

Southern Power

During 2019 and 2018, Southern Power or one of its wholly-owned subsidiaries acquired, completed, or continued construction of the facilities discussed below. Acquisition-related costs were expensed as incurred and were not material for any of the years presented.

Acquisitions During 2019

During 2019, Southern Power acquired a controlling interest in the fuel cell generation facility listed below and acquired the Skookumchuck wind facility discussed under "Construction Projects" below.

Project Facility	Resource	Seller	Approximate Nameplate Capacity (MW)	Location	Southern Power Ownership Percentage	COD	PPA Remaining Period
DSGP ^(a)	Fuel Cell	Bloom Energy	28	Delaware	100% of Class B	N/A ^(b)	15 years

(a) During 2019, Southern Power made a total investment of approximately \$167 million in DSGP and now holds a controlling interest and consolidates 100% of DSGP's operating results. Southern Power records net income attributable to noncontrolling interests for approximately 10 MWs of the facility.

(b) Southern Power's 18-MW share of the facility was repowered between June and August 2019. In December 2019, a Class C member joined the existing partnership between the Class A member and Southern Power and made an investment to repower the remaining 10 MWs. In connection with the Class C member joining the partnership, the original fuel cells (before repower), which had a carrying value of approximately \$55 million, were distributed to the Class A member in a non-cash transaction that was excluded from the statements of cash flows.

Acquisitions During 2018

During 2018, Southern Power acquired and completed the project below and acquired the Wildhorse Mountain and Reading wind facilities discussed under "Construction Projects" below.

Project Facility	Resource	Seller	Approximate Nameplate Capacity (MW)	Location	Southern Power Ownership Percentage	COD	PPA Contract Period
Gaskell West 1	Solar	Recurrent Energy Development Holdings, LLC	20	Kern County, CA	100% of Class B ^(*)	March 2018	20 years

(*) Southern Power owns 100% of the Class B membership interests under a tax equity partnership.

The Gaskell West 1 facility did not have operating revenues or activities prior to being placed in service during March 2018.

Notes to Financial Statements

Construction Projects

During 2019, Southern Power completed construction of and placed in service the 385-MW Plant Mankato expansion and the Wildhorse Mountain facility, acquired and continued construction of the Skookumchuck facility, and continued construction of the Reading facility. Total aggregate construction costs, excluding acquisition costs, are expected to be between \$490 million and \$535 million for the two facilities under construction. At December 31, 2019, total costs of construction incurred for the two facilities under construction were \$417 million and are included in CWIP. The ultimate outcome of these matters cannot be determined at this time.

Project Facility	Resource	Approximate Nameplate Capacity (MW)	Location	Actual/Expected COD	PPA Contract Period
Projects Completed During the Year Ended December 31, 2019					
Mankato expansion ^(a)	Natural Gas	385	Mankato, MN	May 2019	20 years
Wildhorse Mountain ^(b)	Wind	100	Pushmataha County, OK	December 2019	20 years
Projects Under Construction at December 31, 2019					
Reading ^(c)	Wind	200	Osage and Lyon Counties, KS	Second quarter 2020	12 years
Skookumchuck ^(d)	Wind	136	Lewis and Thurston Counties, WA	Second quarter 2020	20 years

(a) Southern Power completed the sale of its equity interests in Plant Mankato, including the expansion, to a subsidiary of Xcel on January 17, 2020. The expansion unit started providing energy under a PPA with Northern States Power on June 1, 2019. See "Sales of Natural Gas and Biomass Plants" below and "Assets Held for Sale" herein for additional information.

(b) In May 2018, Southern Power purchased 100% of the membership interests of the Wildhorse Mountain facility. In December 2019, Southern Power entered into a tax equity partnership and, as a result, owns 100% of the Class B membership interests.

(c) In August 2018, Southern Power purchased 100% of the membership interests of the Reading facility pursuant to a joint development arrangement. Southern Power may enter into a tax equity partnership, in which case it would then own 100% of the Class B membership interests. The ultimate outcome of this matter cannot be determined at this time.

(d) In October 2019, Southern Power purchased 100% of the membership interests of the Skookumchuck facility pursuant to a joint development arrangement. In December 2019, Southern Power entered into a tax equity agreement as the Class B member with funding of the tax equity amounts expected to occur upon commercial operation. Shortly after commercial operation, Southern Power may sell a noncontrolling interest in these Class B membership interests to another partner. The ultimate outcome of this matter cannot be determined at this time.

Development Projects

Southern Power continues to evaluate and refine the deployment of the remaining wind turbine equipment purchased in 2016 and 2017 to development and construction projects. Wind projects utilizing equipment purchased in 2016 and 2017, and reaching commercial operation by the end of 2020 and 2021, are expected to qualify for 100% and 80% PTCs, respectively. The significant majority of this equipment either has been deployed to completed projects, projects under construction, or projects that are probable of being completed or has been sold to third parties. In 2018, as a result of a review of various options for probable dispositions of wind turbine equipment not deployed to development or construction projects, Southern Power recorded a \$36 million asset impairment charge on the equipment. Sales during 2019 resulted in gains totaling approximately \$17 million.

Sales of Renewable Facility Interests

In May 2018, Southern Power completed the sale of a noncontrolling 33% equity interest in SP Solar, a limited partnership indirectly owning substantially all of Southern Power's solar facilities, to Global Atlantic for approximately \$1.2 billion. Since Southern Power retained control of the limited partnership through its wholly-owned general partner, the sale was recorded as an equity transaction. On the date of the transaction, the noncontrolling interest was increased by \$511 million to reflect 33% of the carrying value of the partnership. This difference, partially offset by the tax impact and other related transaction charges, also resulted in a \$410 million decrease to Southern Power's common stockholder's equity.

In December 2018, Southern Power completed the sale of a noncontrolling tax equity interest in SP Wind, which owns a portfolio of eight operating wind facilities, to three financial investors for approximately \$1.2 billion. The tax equity investors together will generally receive 40% of the cash distributions from available cash and will receive 99% of the tax attributes, including future PTCs.

Southern Power consolidates each entity, as the primary beneficiary of the VIE, since it controls the most significant activities, including operating and maintaining the assets.

Notes to Financial Statements

Sales of Natural Gas and Biomass Plants

In December 2018, Southern Power completed the sale of all of its equity interests in the Florida Plants to NextEra Energy for \$203 million, including working capital adjustments. In contemplation of this sale transaction, Southern Power recorded an asset impairment charge of approximately \$119 million (\$89 million after tax) in May 2018.

On June 13, 2019, Southern Power completed the sale of its equity interests in Plant Nacogdoches, a 115-MW biomass facility located in Nacogdoches County, Texas, to Austin Energy, for a purchase price of approximately \$461 million, including working capital adjustments. Southern Power recorded a gain of \$23 million (\$88 million after tax) on the sale.

On January 17, 2020, Southern Power completed the sale of its equity interests in Plant Mankato (including the 385-MW expansion unit completed in May 2019) to a subsidiary of Xcel for a purchase price of approximately \$663 million, including estimated working capital adjustments. The sale resulted in a gain of approximately \$39 million (\$23 million after tax) in 2020. The assets and liabilities of Plant Mankato are classified as held for sale on Southern Company's and Southern Power's balance sheets as of December 31, 2019 and 2018. See "Assets Held for Sale" herein for additional information.

Southern Company Gas

Sale of Pivotal Home Solutions

In June 2018, Southern Company Gas completed the stock sale of Pivotal Home Solutions to American Water Enterprises LLC for a total cash purchase price of \$365 million, which includes the final working capital adjustment. This disposition resulted in a net loss of \$67 million, which includes \$34 million of income tax expense. In contemplation of the transaction, a goodwill impairment charge of \$42 million was recorded during the first quarter 2018. The income tax expense included tax on goodwill not deductible for tax purposes and for which a deferred tax liability had not been recorded previously. Southern Company Gas and American Water Enterprises LLC entered into a transition services agreement whereby Southern Company Gas provided certain administrative and operational services through November 4, 2018.

Sales of Elizabethtown Gas and Elkton Gas

In July 2018, a Southern Company Gas subsidiary, Pivotal Utility Holdings, completed the sales of the assets of two of its natural gas distribution utilities, Elizabethtown Gas and Elkton Gas, to South Jersey Industries, Inc. for a total cash purchase price of \$1.7 billion, which includes the final working capital and other adjustments. This disposition resulted in a pre-tax gain that was entirely offset by \$205 million of income tax expense, resulting in no material net income impact. The income tax expense included tax on goodwill not deductible for tax purposes and for which a deferred tax liability had not been recorded previously. Southern Company Gas and South Jersey Industries, Inc. entered into transition services agreements whereby Southern Company Gas will provide certain administrative and operational services through no later than July 31, 2020.

Sale of Florida City Gas

In July 2018, Southern Company Gas and its wholly-owned direct subsidiary, NUI Corporation, completed the stock sale of Pivotal Utility Holdings, which primarily consisted of Florida City Gas, to NextEra Energy for a total cash purchase price of \$587 million, which includes the final working capital adjustment. This disposition resulted in a net gain of \$16 million, which includes \$103 million of income tax expense. The income tax expense included tax on goodwill not deductible for tax purposes and for which a deferred tax liability had not been recorded previously. Southern Company Gas and NextEra Energy entered into a transition services agreement whereby Southern Company Gas will provide certain administrative and operational services through no later than July 29, 2020.

Sale of Triton

On May 29, 2019, Southern Company Gas sold its investment in Triton, a cargo container leasing company that was aggregated into Southern Company Gas' all other segment. This disposition resulted in a pre-tax loss of \$6 million and a net after-tax gain of \$7 million as a result of reversing a \$13 million federal income tax valuation allowance.

Notes to Financial Statements

Proposed Sale of Pivotal LNG and Atlantic Coast Pipeline

On February 7, 2020, Southern Company Gas entered into agreements with Dominion Modular LNG Holdings, Inc. and Dominion Atlantic Coast Pipeline, LLC for the sale of its interests in Pivotal LNG and Atlantic Coast Pipeline, respectively, for an aggregate purchase price of \$165 million, including estimated working capital and timing adjustments. Southern Company Gas may also receive two payments of \$5 million each, contingent upon certain milestones related to Pivotal LNG being met by Dominion Modular LNG Holdings, Inc. after the completion of the sale. Based on the terms of these pending transactions, Southern Company Gas recorded an asset impairment charge, exclusive of the contingent payments, for Pivotal LNG of approximately \$24 million (\$17 million after tax) as of December 31, 2019. The completion of each transaction is subject to the satisfaction or waiver of certain conditions, including, among other customary closing conditions, the completion of the other transaction and, for the sale of the interest in Atlantic Coast Pipeline, the expiration or termination of any applicable waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976. The transactions are expected to be completed in the first half of 2020; however, the ultimate outcome cannot be determined at this time. The assets and liabilities of Pivotal LNG and the interest in Atlantic Coast Pipeline are classified as held for sale as of December 31, 2019. See Notes 3 and 7 under "Southern Company Gas – Gas Pipeline Projects" and "Southern Company Gas – Equity Method Investments," respectively, and "Assets Held for Sale" herein for additional information.

Assets Held for Sale

As discussed previously, Southern Company, Southern Power, and Southern Company Gas each have assets and liabilities held for sale on their balance sheets at December 31, 2019 and/or 2018. Assets and liabilities held for sale have been classified separately on each company's balance sheet at the lower of carrying value or fair value less costs to sell at the time the criteria for held-for-sale classification were met. For assets and liabilities held for sale recorded at fair value on a nonrecurring basis, the fair value of assets held for sale is based primarily on unobservable inputs (Level 3), which includes the agreed upon sales prices in executed sales agreements.

Since the depreciation of the assets sold in the Gulf Power transaction and Southern Company Gas' Elizabethtown Gas, Elkton Gas, and Florida City Gas transactions continued to be reflected in customer rates through the closing date of each sale and was reflected in the carryover basis of the assets when sold, Southern Company and Southern Company Gas continued to record depreciation on those assets through the respective closing date of each transaction. Upon classification as held for sale in May 2018 for the Florida Plants, November 2018 for Plant Mankato, and April 2019 for Plant Nacogdoches, Southern Power ceased recognizing depreciation and amortization on the long-lived assets being sold.

The following table provides the major classes of assets and liabilities classified as held for sale for Southern Company, Southern Power, and Southern Company Gas at December 31, 2019 and/or 2018:

	Southern Company		Southern Power		Southern Company Gas
	At December 31,		At December 31,		At December 31,
	2019	2018	2019	2018	2019
	<i>(in millions)</i>		<i>(in millions)</i>		<i>(in millions)</i>
Assets Held for Sale:					
Current assets	\$ 19	\$ 393	\$ 17	\$ 8	\$ 2
Total property, plant, and equipment	565	4,583	547	536	18
Goodwill and other intangible assets	40	40	40	40	—
Equity investments in unconsolidated subsidiaries	151	—	—	—	151
Other non-current assets	14	727	14	—	—
Total Assets Held for Sale	\$789	\$5,743	\$618	\$584	\$171
Liabilities Held for Sale:					
Current liabilities	\$ 5	\$ 425	\$ 3	\$ 15	\$ 2
Long-term debt	—	1,286	—	—	—
Accumulated deferred income taxes	—	618	—	—	—
Other non-current liabilities	—	932	—	—	—
Total Liabilities Held for Sale	\$ 5	\$3,261	\$ 3	\$ 15	\$ 2

Notes to Financial Statements

Southern Company, Southern Power, and Southern Company Gas each concluded that the asset sales, both individually and combined, did not represent a strategic shift in operations that has, or is expected to have, a major effect on its operations and financial results; therefore, none of the assets related to the sales have been classified as discontinued operations for any of the periods presented.

Gulf Power and Southern Power's Florida Plants, Plant Nacogdoches, and Plant Mankato represented individually significant components of Southern Company and Southern Power, respectively; therefore, pre-tax income for these components for the years ended December 31, 2019, 2018, and 2017 are presented below:

	2019	2018	2017
		<i>(in millions)</i>	
Earnings before income taxes:^(a)			
Gulf Power	N/A	\$ 140	\$ 229
Southern Power's Florida Plants ^(b)	N/A	\$ 49	\$ 37
Southern Power's Plant Nacogdoches ^(c)	\$ 13	\$ 27	\$ 25
Southern Power's Plant Mankato	\$ 29	N/M	N/M

N/M – Not material

(a) Earnings before income taxes for Southern Power's components reflect the cessation of depreciation and amortization on the long-lived assets being sold upon classification as held for sale.

(b) Earnings before income taxes for the Florida Plants in 2018 represents the period from January 1, 2018 to December 4, 2018 (the divestiture date).

(c) Earnings before income taxes for Plant Nacogdoches in 2019 represents January 1, 2019 through June 13, 2019 (the divestiture date).

16. SEGMENT AND RELATED INFORMATION

Southern Company

Southern Company's reportable business segments are the sale of electricity by the traditional electric operating companies, the sale of electricity in the competitive wholesale market by Southern Power, and the sale of natural gas and other complementary products and services by Southern Company Gas. Revenues from sales by Southern Power to the traditional electric operating companies were \$398 million, \$435 million, and \$392 million in 2019, 2018, and 2017, respectively. Revenues from sales of natural gas from Southern Company Gas to the traditional electric operating companies and Southern Power were \$14 million and \$64 million, respectively, in 2019, \$32 million and \$119 million, respectively, in 2018, and \$23 million and \$119 million, respectively, in 2017. The "All Other" column includes the Southern Company parent entity, which does not allocate operating expenses to business segments. Also, this category includes segments below the quantitative threshold for separate disclosure. These segments include providing energy solutions to electric utilities and their customers in the areas of distributed generation, energy storage and renewables, and energy efficiency, as well as investments in telecommunications and leveraged lease projects. All other inter-segment revenues are not material.

Notes to Financial Statements

Financial data for business segments and products and services for the years ended December 31, 2019, 2018, and 2017 was as follows:

	Electric Utilities							Consolidated
	Traditional Electric Operating Companies	Southern Power	Eliminations	Total	Southern Company Gas	All Other	Eliminations	
<i>(in millions)</i>								
2019								
Operating revenues	\$ 15,569	\$ 1,938	\$ (412)	\$ 17,095	\$ 3,792	\$ 690	\$ (158)	\$ 21,419
Depreciation and amortization	1,993	479	—	2,472	487	79	—	3,038
Interest income	38	9	—	47	3	16	(6)	60
Earnings from equity method investments	2	3	—	5	157	—	—	162
Interest expense	818	169	—	987	232	517	—	1,736
Income taxes (benefit)	764	(56)	—	708	130	960	—	1,798
Segment net income (loss) ^{(a)(b)(c)(d)(e)}	2,929	339	—	3,268	585	908	(22)	4,739
Goodwill	—	2	—	2	5,015	263	—	5,280
Total assets	81,063	14,300	(713)	94,650	21,687	3,511	(1,148)	118,700
Gross property additions	5,748	489	—	6,237	1,418	159	—	7,814
2018								
Operating revenues	\$ 16,843	\$ 2,205	\$ (477)	\$ 18,571	\$ 3,909	\$ 1,213	\$ (198)	\$ 23,495
Depreciation and amortization	2,072	493	—	2,565	500	66	—	3,131
Interest income	23	8	—	31	4	8	(5)	38
Earnings from equity method investments	(1)	—	—	(1)	148	2	(1)	148
Interest expense	852	183	—	1,035	228	580	(1)	1,842
Income taxes (benefit)	371	(164)	—	207	464	(222)	—	449
Segment net income (loss) ^{(a)(b)(f)(g)}	2,117	187	—	2,304	372	(453)	3	2,226
Goodwill	—	2	—	2	5,015	298	—	5,315
Total assets	79,382	14,883	(306)	93,959	21,448	3,285	(1,778)	116,914
Gross property additions	6,077	315	—	6,392	1,399	414	—	8,205
2017								
Operating revenues	\$ 16,884	\$ 2,075	\$ (419)	\$ 18,540	\$ 3,920	\$ 741	\$ (170)	\$ 23,031
Depreciation and amortization	1,954	503	—	2,457	501	52	—	3,010
Interest income	14	7	—	21	3	11	(9)	26
Earnings from equity method investments	1	—	—	1	106	(1)	—	106
Interest expense	820	191	—	1,011	200	490	(7)	1,694
Income taxes (benefit)	1,021	(939)	—	82	367	(307)	—	142
Segment net income (loss) ^{(a)(b)(h)(i)}	(193)	1,071	—	878	243	(279)	—	842
Goodwill	—	2	—	2	5,967	299	—	6,268
Total assets	72,204	15,206	(325)	87,085	22,987	2,552	(1,619)	111,005
Gross property additions	3,836	268	—	4,104	1,525	355	—	5,984

(a) Attributable to Southern Company.

(b) Segment net income (loss) for the traditional electric operating companies includes pre-tax charges for estimated losses on plants under construction of \$24 million (\$24 million after tax) in 2019, \$1.1 billion (\$722 million after tax) in 2018, and \$3.4 billion (\$2.4 billion after tax) in 2017. See Note 2 under "Georgia Power – Nuclear Construction" and "Mississippi Power – Kemper County Energy Facility – Schedule and Cost Estimate" for additional information.

(c) Segment net income (loss) for Southern Power includes a \$23 million pre-tax gain (\$88 million gain after tax) on the sale of Plant Nacogdoches in 2019. See Note 15 under "Southern Power" for additional information.

Notes to Financial Statements

- (d) Segment net income (loss) for Southern Company Gas in 2019 includes pre-tax impairment charges totaling \$115 million (\$86 million after tax). See Notes 3 and 15 under "Other Matters – Southern Company Gas" and "Southern Company Gas – Proposed Sale of Pivotal LNG and Atlantic Coast Pipeline," respectively, for additional information.
- (e) Segment net income (loss) for the "All Other" column in 2019 includes the pre-tax gain associated with the sale of Gulf Power of \$2.6 billion (\$1.4 billion after tax), the pre-tax loss, including related impairment charges, on the sales of certain PowerSecure business units totaling \$58 million (\$52 million after tax), and a pre-tax impairment charge of \$17 million (\$13 million after tax) related to a leveraged lease investment. See Notes 3 and 15 under "Other Matters – Southern Company" and "Southern Company," respectively, for additional information.
- (f) Segment net income (loss) for Southern Power includes pre-tax impairment charges of \$156 million (\$117 million after tax) in 2018. See Note 15 under "Southern Power" for additional information.
- (g) Segment net income (loss) for Southern Company Gas includes a net gain on dispositions of \$291 million (\$51 million loss after tax) in 2018 related to the Southern Company Gas Dispositions and a goodwill impairment charge of \$42 million in 2018 related to the sale of Pivotal Home Solutions. See Note 15 under "Southern Company Gas" for additional information.
- (h) Segment net income (loss) for the traditional electric operating companies includes a pre-tax charge for the write-down of Gulf Power's ownership of Plant Scherer Unit 3 of \$33 million (\$20 million after tax) in 2017. See Note 2 under "Southern Company – Gulf Power" for additional information.
- (i) Segment net income (loss) includes income tax expense of \$367 million for the traditional electric operating companies, income tax benefit of \$743 million for Southern Power, and income tax expense of \$93 million for Southern Company Gas in 2017 related to the Tax Reform Legislation.

Products and Services

Electric Utilities' Revenues

Year	Retail	Wholesale	Other	Total
	<i>(in millions)</i>			
2019	\$14,084	\$2,152	\$859	\$17,095
2018	15,222	2,516	833	18,571
2017	15,330	2,426	784	18,540

Southern Company Gas' Revenues

Year	Gas Distribution Operations	Gas Marketing Services	All Other	Total
	<i>(in millions)</i>			
2019	\$3,001	\$456	\$335	\$3,792
2018	3,155	568	186	3,909
2017	3,024	860	36	3,920

Southern Company Gas

Southern Company Gas manages its business through four reportable segments – gas distribution operations, gas pipeline investments, wholesale gas services, and gas marketing services. The non-reportable segments are combined and presented as all other. During 2018, Southern Company Gas changed its reportable segments to further align the way its Chief Operating Decision Maker reviews operating results and reclassified prior year data to conform to the new reportable segment presentation. This change resulted in a new reportable segment, gas pipeline investments, which was formerly included in gas midstream operations.

Gas distribution operations is the largest component of Southern Company Gas' business and includes natural gas local distribution utilities that construct, manage, and maintain intrastate natural gas pipelines and gas distribution facilities in four states. In July 2018, Southern Company Gas sold three of its natural gas distribution utilities, Elizabethtown Gas, Elkton Gas, and Florida City Gas. See Note 15 under "Southern Company Gas" for additional information.

Gas pipeline investments consists of joint ventures in natural gas pipeline investments including a 50% interest in SNG, two significant pipeline construction projects, and a 50% joint ownership interest in the Dalton Pipeline. These natural gas pipelines enable the provision of diverse sources of natural gas supplies to the customers of Southern Company Gas. See Notes 3, 5, 7, and 15 for additional information.

Wholesale gas services provides natural gas asset management and/or related logistics services for each of Southern Company Gas' utilities except Nicor Gas as well as for non-affiliated companies. Additionally, wholesale gas services engages in natural gas storage and gas pipeline arbitrage and related activities.

Gas marketing services provides natural gas marketing to end-use customers primarily in Georgia and Illinois through SouthStar. In June 2018, Southern Company Gas sold Pivotal Home Solutions, which provided home equipment protection products and services. See Note 15 under "Southern Company Gas – Sale of Pivotal Home Solutions" for additional information.

The all other column includes segments below the quantitative threshold for separate disclosure, including storage and fuels operations, Pivotal LNG, the investment in Triton through its sale on May 29, 2019, and other subsidiaries that fall below the quantitative threshold for separate disclosure. See Note 15 under "Southern Company Gas – Proposed Sale of Pivotal LNG and Atlantic Coast Pipeline" for additional information.

Notes to Financial Statements

Financial data for business segments for the years ended December 31, 2019, 2018, and 2017 was as follows:

	Gas Distribution Operations ^{(a)(b)}	Gas Pipeline Investments	Wholesale Gas Services ^(c)	Gas Marketing Services ^{(b)(d)}	Total	All Other ^(e)	Eliminations	Consolidated
<i>(in millions)</i>								
2019								
Operating revenues	\$ 3,028	\$ 32	\$ 294	\$ 456	\$ 3,810	\$ 44	\$ (62)	\$ 3,792
Depreciation and amortization	422	5	1	26	454	33	—	487
Operating income (loss)	573	20	219	112	924	(154)	—	770
Earnings from equity method investments	—	162	—	—	162	(5)	—	157
Interest expense	(187)	(30)	(5)	(3)	(225)	(7)	—	(232)
Income taxes (benefit)	63	58	52	27	200	(70)	—	130
Segment net income (loss)	337	94	163	83	677	(92)	—	585
Gross property additions	1,433	1	1	4	1,439	27	—	1,466
Total assets at December 31, 2019	18,204	1,678	850	1,496	22,228	10,759	(11,300)	21,687
2018								
Operating revenues	\$ 3,186	\$ 32	\$ 144	\$ 568	\$ 3,930	\$ 55	\$ (76)	\$ 3,909
Depreciation and amortization	409	5	2	37	453	47	—	500
Operating income (loss)	904	20	70	19	1,013	(98)	—	915
Earnings from equity method investments	—	145	—	—	145	3	—	148
Interest expense	(178)	(34)	(9)	(6)	(227)	(1)	—	(228)
Income taxes (benefit)	409	28	4	54	495	(31)	—	464
Segment net income (loss)	334	103	38	(40)	435	(63)	—	372
Gross property additions	1,429	32	—	6	1,467	54	—	1,521
Total assets at December 31, 2018	17,266	1,763	1,302	1,587	21,918	11,112	(11,582)	21,448
2017								
Operating revenues	\$ 3,207	\$ 17	\$ 6	\$ 860	\$ 4,090	\$ 64	\$ (234)	\$ 3,920
Depreciation and amortization	391	2	2	62	457	44	—	501
Operating income (loss)	645	10	(51)	113	717	(57)	—	660
Earnings from equity method investments	—	103	—	—	103	3	—	106
Interest expense	(153)	(26)	(7)	(5)	(191)	(9)	—	(200)
Income taxes ^(f)	178	109	—	24	311	56	—	367
Segment net income (loss) ^(f)	353	(22)	(57)	84	358	(115)	—	243
Gross property additions	1,330	117	1	9	1,457	51	—	1,508
Total assets at December 31, 2017	19,358	1,699	1,096	2,147	24,300	12,726	(14,039)	22,987

(a) Operating revenues for the three gas distribution operations dispositions were \$244 million and \$399 million for 2018 and 2017, respectively. See Note 15 under "Southern Company Gas" for additional information.

(b) Segment net income for gas distribution operations includes a gain on dispositions of \$324 million (\$16 million after tax) in 2018. Segment net income for gas marketing services includes a loss on disposition of \$(33) million (\$(67) million loss after tax) and a goodwill impairment charge of \$42 million in 2018 recorded in contemplation of the sale of Pivotal Home Solutions. See Note 15 under "Southern Company Gas" for additional information.

(c) The revenues for wholesale gas services are netted with costs associated with its energy and risk management activities. A reconciliation of operating revenues and intercompany revenues is shown in the following table.

Notes to Financial Statements

	Third Party Gross Revenues	Intercompany Revenues	Total Gross Revenues	Less Gross Gas Costs	Operating Revenues
	<i>(in millions)</i>				
2019	\$5,703	\$ 275	\$5,978	\$5,684	\$294
2018	6,955	451	7,406	7,262	144
2017	6,152	481	6,633	6,627	6

(d) Operating revenues for the gas marketing services disposition were \$55 million and \$129 million in 2018 and 2017, respectively. See Note 15 under "Southern Company Gas" for additional information.

(e) Segment net income (loss) for the "All Other" column in 2019 includes pre-tax impairment charges totaling \$115 million (\$86 million after tax). See Notes 3 and 15 under "Other Matters – Southern Company Gas" and "Southern Company Gas – Proposed Sale of Pivotal LNG and Atlantic Coast Pipeline," respectively, for additional information.

(f) Includes the impact of the Tax Reform Legislation and new income tax apportionment factors in several states resulting from Southern Company Gas' inclusion in the consolidated Southern Company state tax filings.

17. QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

The tables below provide summarized quarterly financial information for each Registrant for 2019 and 2018. Each Registrant's business is influenced by seasonal weather conditions.

Quarter Ended	Southern Company ^(a)	Alabama Power	Georgia Power	Mississippi Power ^(b)	Southern Power ^(c)	Southern Company Gas ^(d)
	<i>(in millions)</i>					
March 2019						
Operating Revenues	\$5,412	\$1,408	\$1,833	\$287	\$443	\$1,474
Operating Income (Loss)	3,691	338	448	56	60	353
Net Income (Loss)	2,059	217	311	37	27	270
Net Income (Loss) Attributable to Registrant	2,084	217	311	37	56	270
June 2019						
Operating Revenues	\$5,098	\$1,513	\$2,117	\$313	\$510	\$ 689
Operating Income (Loss)	1,342	445	647	54	153	134
Net Income (Loss)	931	296	448	37	203	106
Net Income (Loss) Attributable to Registrant	899	296	448	37	174	106
September 2019						
Operating Revenues	\$5,995	\$1,841	\$2,755	\$370	\$574	\$ 498
Operating Income (Loss)	2,013	676	1,161	93	167	(35)
Net Income (Loss)	1,345	469	839	65	111	(29)
Net Income (Loss) Attributable to Registrant	1,316	469	839	65	86	(29)
December 2019						
Operating Revenues	\$4,914	\$1,363	\$1,703	\$294	\$411	\$1,131
Operating Income (Loss)	690	134	205	22	15	318
Net Income (Loss)	409	88	122	—	(12)	238
Net Income (Loss) Attributable to Registrant	440	88	122	—	23	238

(a) Southern Company recorded a preliminary pre-tax gain associated with the sale of Gulf Power of \$2.5 billion (\$1.3 billion after tax) in the first quarter 2019 and recorded subsequent adjustments of \$(15) million (\$11 million after tax) in the second quarter 2019, \$4 million (\$4 million after tax) in the third quarter 2019, and \$70 million (\$102 million after tax) in the fourth quarter 2019. In addition, Southern Company recorded a pre-tax loss, including related impairment charges, on the sales of certain PowerSecure business units totaling \$32 million in the second quarter 2019, \$14 million (\$15 million after tax) in the third quarter 2019, and \$12 million (\$5 million after tax) in the fourth quarter 2019, as well as a pre-tax impairment charge of \$17 million (\$13 million after tax) in the fourth quarter 2019 related to a leveraged lease investment. See Notes 3 and 15 under "Other Matters – Southern Company" and "Southern Company," respectively, for additional information. Also see notes (b), (c), and (d) below.

(b) Mississippi Power recorded total pre-tax charges to income of \$2 million (\$1 million after tax) in the first quarter 2019, \$4 million (\$3 million after tax) in the second quarter 2019, \$4 million (\$3 million after tax) in the third quarter 2019, and \$14 million (\$17 million after tax) in the fourth quarter 2019 as a result of abandonment and related closure costs and ongoing period costs, net of salvage proceeds, for the mine and gasifier-related assets at the Kemper County energy facility. The fourth quarter charges include impacts associated with the expected close out of a DOE contract related to the Kemper County energy facility, as well as an adjustment related to the tax abandonment of the Kemper IGCC following the filing of the 2018 tax return. See Note 2 under "Mississippi Power – Kemper County Energy Facility" for additional information.

(c) Southern Power recorded a pre-tax gain of \$23 million (\$88 million gain after tax) in the second quarter 2019 on the sale of Plant Nacogdoches. See Note 15 under "Southern Power" for additional information.

(d) Southern Company Gas recorded pre-tax impairment charges of \$92 million (\$65 million after tax) in the third quarter 2019, and a subsequent adjustment of \$(1) million (\$4 million after tax) in the fourth quarter 2019, related to a natural gas storage facility in Louisiana and \$24 million (\$17 million after tax) in the fourth quarter 2019 in contemplation of the sale of its interests in Pivotal LNG and Atlantic Coast Pipeline. See Notes 3 and 15 under "Other Matters – Southern Company Gas" and "Southern Company Gas – Proposed Sale of Pivotal LNG and Atlantic Coast Pipeline," respectively, for additional information.

Notes to Financial Statements

Quarter Ended	Southern Company ^(a)	Alabama Power	Georgia Power ^(b)	Mississippi Power ^(c)	Southern Power ^(d)	Southern Company Gas ^(e)
	<i>(in millions)</i>					
March 2018						
Operating Revenues	\$6,372	\$1,473	\$1,961	\$302	\$509	\$1,639
Operating Income (Loss)	1,376	372	513	7	60	388
Net Income (Loss)	936	225	352	(7)	115	279
Net Income (Loss) Attributable to Registrant	938	225	352	(7)	121	279
June 2018						
Operating Revenues	\$5,627	\$1,503	\$2,048	\$297	\$555	\$ 730
Operating Income (Loss)	63	380	(472)	54	16	49
Net Income (Loss)	(127)	259	(396)	46	45	(31)
Net Income (Loss) Attributable to Registrant	(154)	259	(396)	46	22	(31)
September 2018						
Operating Revenues	\$6,159	\$1,740	\$2,593	\$358	\$635	\$ 492
Operating Income (Loss)	2,174	561	991	80	136	374
Net Income (Loss)	1,222	373	664	47	146	46
Net Income (Loss) Attributable to Registrant	1,164	373	664	47	92	46
December 2018						
Operating Revenues	\$5,337	\$1,316	\$1,818	\$308	\$506	\$1,048
Operating Income (Loss)	578	164	257	52	30	104
Net Income (Loss)	269	73	173	149	(60)	78
Net Income (Loss) Attributable to Registrant	278	73	173	149	(48)	78

(a) See notes (b), (c), (d), and (e) below.

(b) Georgia Power recorded an estimated probable loss of \$1.1 billion in the second quarter 2018 to reflect its revised estimate to complete construction and start-up of Plant Vogtle Units 3 and 4. See Note 2 under "Georgia Power – Nuclear Construction" for additional information.

(c) As a result of the abandonment and related closure activities for the mine and gasifier-related assets at the Kemper County energy facility, Mississippi Power recorded total pre-tax charges to income of \$44 million (\$33 million after tax) in the first quarter 2018, immaterial amounts in the second and third quarters 2018, and a pre-tax credit to income of \$9 million in the fourth quarter 2018. In addition, Mississippi Power recorded a credit to earnings of \$95 million in the fourth quarter 2018 primarily resulting from the reduction of a valuation allowance for a state income tax NOL carryforward associated with the Kemper County energy facility. See Note 2 under "Mississippi Power – Kemper County Energy Facility" and Note 10 for additional information.

(d) Southern Power recorded pre-tax impairment charges of \$119 million (\$89 million after tax) in the second quarter 2018 in contemplation of the sale of the Florida Plants and \$36 million (\$27 million after tax) in the third quarter 2018 related to wind turbine equipment. See Note 15 under "Southern Power – Sales of Natural Gas and Biomass Plants" and " – Development Projects" for additional information. As a result of the Tax Reform Legislation, Southern Power recorded income tax expense of \$75 million in the fourth quarter 2018. See Note 10 for additional information.

(e) Southern Company Gas recorded a goodwill impairment charge of \$42 million in the first quarter 2018 in contemplation of the sale of Pivotal Home Solutions. Southern Company Gas also recorded gains (losses) on dispositions in the second, third, and fourth quarters 2018 of \$(36) million (\$(76) million after tax), \$353 million (\$40 million after tax), and \$(27) million (\$(15) million after tax), respectively. See Note 15 under "Southern Company Gas" for additional information.

Notes to Financial Statements

The table below provides quarterly earnings per share financial information for Southern Company common stock for 2019 and 2018.

Quarter Ended	Earnings Per Common Share ^(*)	
	Basic	Diluted
March 2019	\$ 2.01	\$ 1.99
June 2019	0.86	0.85
September 2019	1.26	1.25
December 2019	0.42	0.42
March 2018	\$ 0.93	\$ 0.92
June 2018	(0.15)	(0.15)
September 2018	1.14	1.13
December 2018	0.27	0.27

(*) See the notes below the two preceding tables for additional information.

Selected Consolidated Financial and Operating Data 2015-2019

	2019 ^(d)	2018	2017	2016 ^(e)	2015
Operating Revenues (in millions)	\$ 21,419	\$ 23,495	\$ 23,031	\$ 19,896	\$ 17,489
Total Assets (in millions)	\$ 118,700	\$ 116,914	\$ 111,005	\$ 109,697	\$ 78,318
Gross Property Additions (in millions)	\$ 7,814	\$ 8,205	\$ 5,984	\$ 7,624	\$ 6,169
Return on Average Common Equity (percent)^(a)	18.15	9.11	3.44	10.80	11.68
Cash Dividends Paid Per Share of Common Stock	\$ 2.4600	\$ 2.3800	\$ 2.3000	\$ 2.2225	\$ 2.1525
Consolidated Net Income Attributable to Southern Company (in millions)^(a)	\$ 4,739	\$ 2,226	\$ 842	\$ 2,448	\$ 2,367
Earnings Per Share —					
Basic	\$ 4.53	\$ 2.18	\$ 0.84	\$ 2.57	\$ 2.60
Diluted	4.50	2.17	0.84	2.55	2.59
Capitalization (in millions):					
Common stockholders' equity	\$ 27,505	\$ 24,723	\$ 24,167	\$ 24,758	\$ 20,592
Preferred and preference stock of subsidiaries and noncontrolling interests ^(b)	4,254	4,316	1,361	1,854	1,390
Redeemable preferred stock of subsidiaries	291	291	324	118	118
Redeemable noncontrolling interests	—	—	—	164	43
Long-term debt ^(c)	41,798	40,736	44,462	42,629	24,688
Total (excluding amounts due within one year) ^(c)	\$ 73,848	\$ 70,066	\$ 70,314	\$ 69,523	\$ 46,831
Capitalization Ratios (percent):					
Common stockholders' equity	37.2	35.3	34.4	35.6	44.0
Preferred and preference stock of subsidiaries and noncontrolling interests ^(b)	5.8	6.2	1.9	2.7	3.0
Redeemable preferred stock of subsidiaries	0.4	0.4	0.5	0.2	0.3
Redeemable noncontrolling interests	—	—	—	0.2	0.1
Long-term debt ^(c)	56.6	58.1	63.2	61.3	52.6
Total (excluding amounts due within one year) ^(c)	100.0	100.0	100.0	100.0	100.0
Other Common Stock Data:					
Book value per share	\$ 26.11	\$ 23.91	\$ 23.99	\$ 25.00	\$ 22.59
Market price per share:					
High	\$ 64.26	\$ 49.43	\$ 53.51	\$ 54.64	\$ 53.16
Low	43.26	42.38	46.71	46.00	41.40
Close (year-end)	63.70	43.92	48.09	49.19	46.79
Market-to-book ratio (year-end) (percent)	243.9	183.7	200.5	196.8	207.2
Price-earnings ratio (year-end) (times)	14.1	20.1	57.3	19.1	18.0
Dividends paid (in millions)	\$ 2,570	\$ 2,425	\$ 2,300	\$ 2,104	\$ 1,959
Dividend yield (year-end) (percent)	3.9	5.4	4.8	4.5	4.6
Dividend payout ratio (percent)	54.2	108.9	273.2	86.0	82.7
Shares outstanding (in thousands):					
Average	1,046,023	1,020,247	1,000,336	951,332	910,024
Year-end	1,053,251	1,033,788	1,007,603	990,394	911,721
Stockholders of record (year-end)	111,252	116,135	120,803	126,338	131,771

(a) Southern Company recorded a \$2.6 billion pre-tax (\$1.4 billion after tax) gain associated with the sale of Gulf Power in 2019. Georgia Power recorded a pre-tax estimated probable loss of \$1.1 billion (\$0.8 billion after tax) in the second quarter 2018 to reflect its revised estimate to complete construction and start-up of Plant Vogtle Units 3 and 4. In addition, pre-tax charges of \$3.4 billion (\$2.4 billion after tax) were recorded by Mississippi Power related to the suspension of the Kemper IGCC in 2017. Earnings in all periods presented were impacted by losses related to the Kemper IGCC. See Notes 2 and 15 to the financial statements herein for additional information.

(b) See Note 15 to the financial statements under "Southern Power – Sales of Renewable Facility Interests" herein for additional information on 2018 changes in noncontrolling interests.

(c) Amounts related to Gulf Power were reclassified to liabilities held for sale at December 31, 2018. See Note 15 to the financial statements under "Southern Company" herein for additional information.

(d) The 2019 selected financial and operating data excludes Gulf Power, which was sold effective January 1, 2019. See Note 15 to the financial statements under "Southern Company" herein for additional information.

(e) The 2016 selected financial and operating data includes the operations of Southern Company Gas from the date of the Merger, July 1, 2016, through December 31, 2016.

Selected Consolidated Financial and Operating Data 2015-2019 (continued)

	2019 ^(a)	2018	2017	2016 ^(b)	2015
Operating Revenues (in millions):					
Residential	\$ 6,012	\$ 6,608	\$ 6,515	\$ 6,614	\$ 6,383
Commercial	4,936	5,266	5,439	5,394	5,317
Industrial	3,021	3,224	3,262	3,171	3,172
Other	115	124	114	55	115
Total retail	14,084	15,222	15,330	15,234	14,987
Wholesale	2,152	2,516	2,426	1,926	1,798
Total revenues from sales of electricity	16,236	17,738	17,756	17,160	16,785
Natural gas revenues	3,792	3,854	3,791	1,596	—
Other revenues	1,391	1,903	1,484	1,140	704
Total	\$ 21,419	\$ 23,495	\$ 23,031	\$ 19,896	\$ 17,489
Kilowatt-Hour Sales (in millions):					
Residential	48,528	54,590	50,536	53,337	52,121
Commercial	49,101	53,451	52,340	53,733	53,525
Industrial	50,106	53,341	52,785	52,792	53,941
Other	726	799	846	883	897
Total retail	148,461	162,181	156,507	160,745	160,484
Wholesale sales	48,027	49,963	49,034	37,043	30,505
Total	196,488	212,144	205,541	197,788	190,989
Average Revenue Per Kilowatt-Hour (cents):					
Residential	12.39	12.10	12.89	12.40	12.25
Commercial	10.05	9.85	10.39	10.04	9.93
Industrial	6.03	6.04	6.18	6.01	5.88
Total retail	9.49	9.39	9.80	9.48	9.34
Wholesale	4.48	5.04	4.95	5.20	5.89
Total sales	8.26	8.36	8.64	8.68	8.79
Average Annual Kilowatt-Hour Use Per Residential Customer					
	12,135	12,514	11,618	12,387	13,318
Average Annual Revenue Per Residential Customer					
	\$ 1,503	\$ 1,555	\$ 1,498	\$ 1,541	\$ 1,630
Plant Nameplate Capacity Ratings (year-end) (megawatts)					
	41,940	45,824	46,936	46,291	44,223
Maximum Peak-Hour Demand (megawatts):					
Winter	30,022	36,429	31,956	32,272	36,794
Summer	34,209	34,841	34,874	35,781	36,195
System Reserve Margin (at peak) (percent)					
	28.1	29.8	30.8	34.2	33.2
Annual Load Factor (percent)					
	60.3	61.2	61.4	61.5	59.9
Plant Availability (percent):					
Fossil-steam	83.8	81.4	84.5	86.4	86.1
Nuclear	92.5	94.0	94.7	93.3	93.5

(a) The 2019 selected financial and operating data excludes Gulf Power, which was sold effective January 1, 2019. See Note 15 to the financial statements under "Southern Company" herein for additional information.

(b) The 2016 selected financial and operating data includes the operations of Southern Company Gas from the date of the Merger, July 1, 2016, through December 31, 2016.

Selected Consolidated Financial and Operating Data 2015-2019 (continued)

	2019 ^(a)	2018	2017	2016 ^(b)	2015
Source of Energy Supply (percent):					
Gas	47.0	43.0	42.6	41.9	42.8
Coal	20.3	25.7	26.5	30.2	32.2
Nuclear	14.7	13.8	14.5	14.6	15.3
Hydro	3.2	2.9	2.1	2.1	2.6
Other	5.9	5.4	5.3	2.3	0.8
Purchased power	8.9	9.2	9.0	8.9	6.3
Total	100.0	100.0	100.0	100.0	100.0
Gas Sales Volumes (mmBtu in millions):					
Firm	737	791	729	296	—
Interruptible	106	109	109	53	—
Total	843	900	838	349	—
Traditional Electric Operating Company Customers (year-end) (in thousands):					
Residential	3,688	4,053	4,011	3,970	3,928
Commercial	549	603	599	595	590
Industrial	17	17	18	17	17
Other	12	12	12	11	11
Total electric customers	4,266	4,685	4,640	4,593	4,546
Gas distribution operations customers	4,277	4,248	4,623	4,586	—
Total utility customers	8,543	8,933	9,263	9,179	4,546
Employees (year-end)	27,943	30,286	31,344	32,015	26,703

(a) The 2019 selected financial and operating data excludes Gulf Power, which was sold effective January 1, 2019. See Note 15 to the financial statements under "Southern Company" herein for additional information.

(b) The 2016 selected financial and operating data includes the operations of Southern Company Gas from the date of the Merger, July 1, 2016, through December 31, 2016.

Shareholder Information

Transfer Agent

EQ Shareowner Services is Southern Company's transfer agent, dividend-paying agent, investment plan administrator and registrar. If you have questions concerning your registered Southern Company shareowner account, please contact:

EQ Shareowner Services
1110 Centre Pointe Curve, Suite 101
Mendota Heights, Minnesota 55120

Telephone: 1.800.554.7626

Website: shareowneronline.com

Southern Company Shareholder Relations

Telephone: 404.506.0965

Email: shareholderservices@southernco.com

Southern Investment Plan

The Southern Investment Plan is a convenient way to become a Southern Company shareholder. Participants in the Plan can purchase additional shares in Southern Company through optional cash purchases and reinvestment of dividends. The Southern Investment Plan prospectus can be found at Investor.southerncompany.com.

Dividend Payments

Southern Company has paid dividends since 1948. Historically, dividends are declared and paid quarterly at the discretion of the Board of Directors.

Auditors

Deloitte & Touche LLP
191 Peachtree St. NE
Suite 2000
Atlanta, GA 30303

Investor Information

For information about earnings and dividends, stock quotes and current news releases, please visit us at investor.southerncompany.com.

Institutional Investor Inquiries

Southern Company maintains an investor relations office in Atlanta, Georgia, 404.506.0901, to meet the information needs of institutional investors and securities analysts.

Electronic Delivery of Proxy Materials

Any stockholder may enroll for electronic delivery of proxy materials by logging on at www.icsdelivery.com/so.

Environmental Information

Southern Company publishes information on its activities to meet environmental commitments at www.southerncompany.com/corporate-responsibility.

To request printed materials, write to:

Senior Vice President Planning and Environmental
600 North 18th St.
Bin 15N-8292
Birmingham, AL 35203-2206

Common Stock

Southern Company common stock is listed on the NYSE under the ticker symbol SO. On January 31, 2020, Southern Company had 110,780 shareholders of record.

The 2019 annual report is submitted for shareholders' information. It is not intended for use in connection with any sale or purchase of, or any solicitation of, offers to buy or sell securities.

Pages 15-228 of this 2019 annual report contain excerpts from Southern Company's Annual Report on Form 10-K for the year ended December 31, 2019, which was filed with the SEC on February 19, 2020. Information in these pages is provided as of the February 19, 2020 filing date and has not been updated for any subsequent events or developments.

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