UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Fiscal Year Ended December 31, 2023

Or

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

For the transition period from _____ to _____

Commission File Number: 1-11607

DTE Energy Company

Michigan	**38-3217752**
(State or other jurisdiction of incorporation or organization)	(I.R.S Employer Identification No.)

Commission File Number: 1-2198

DTE Electric Company

Michigan	**38-0478650**
(State or other jurisdiction of incorporation or organization)	(I.R.S Employer Identification No.)

Registrants address of principal executive offices: One Energy Plaza, Detroit, Michigan 48226-1279

Registrants telephone number, including area code: (313) 235-4000

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

Registrant	Title of Each Class	Trading Symbol(s)	Name of Exchange on which Registered
DTE Energy Company (DTE Energy)	Common stock, without par value	DTE	New York Stock Exchange
DTE Energy	2017 Series E 5.25% Junior Subordinated Debentures due 2077	DTW	New York Stock Exchange
DTE Energy	2020 Series G 4.375% Junior Subordinated Debentures due 2080	DTB	New York Stock Exchange
DTE Energy	2021 Series E 4.375% Junior Subordinated Debentures due 2081	DTG	New York Stock Exchange
DTE Electric Company (DTE Electric)	None		None

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

DTE Energy	**None**	**DTE Electric**	**None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

DTE Energy	**Yes**	☒	**No**	☐	**DTE Electric**	**Yes**	☒	**No**	☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

DTE Energy	**Yes**	☐	**No**	☒	**DTE Electric**	**Yes**	☐	**No**	☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

DTE Energy	**Yes**	☒	**No**	☐	**DTE Electric**	**Yes**	☒	**No**	☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

DTE Energy	**Yes**	☒	**No**	☐	**DTE Electric**	**Yes**	☒	**No**	☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

DTE Energy	**Large accelerated filer**	**Accelerated filer**	**Non-accelerated filer**	**Smaller reporting company**	**Emerging growth company**
	☒	☐	☐	☐	☐
DTE Electric	**Large accelerated filer**	**Accelerated filer**	**Non-accelerated filer**	**Smaller reporting company**	**Emerging growth company**
	☐	☐	☒	☐	☐

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

DTE Energy	**Yes**	☒	**No**	☐	**DTE Electric**	**Yes**	☐	**No**	☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflects the correction of an error to previously issued financial statements.

DTE Energy	☐	**DTE Electric**	☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive based compensation received by any of the registrants' executive officers during the relevant recovery period pursuant to §240.10D-1(b).

DTE Energy	☐	**DTE Electric**	☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).

DTE Energy	**Yes**	☐	**No**	☒	**DTE Electric**	**Yes**	☐	**No**	☒

On June 30, 2023, the aggregate market value of DTE Energy's voting and non voting common equity held by non-affiliates was approximately $22.6 billion (based on the New York Stock Exchange closing price on such date).

Number of shares of Common Stock outstanding at January 31, 2024:

Registrant	Description	Shares
DTE Energy	Common Stock, without par value	206,452,985
DTE Electric	Common Stock, $10 par value, indirectly-owned by DTE Energy	138,632,324

DOCUMENTS INCORPORATED BY REFERENCE

Certain information in DTE Energy's definitive Proxy Statement for its 2024 Annual Meeting of Common Shareholders to be held May 2, 2024, which will be filed with the Securities and Exchange Commission pursuant to Regulation 14A, not later than 120 days after the end of the Registrants' fiscal year covered by this report on Form 10-K, is incorporated herein by reference to Part III (Items 10, 11, 12, 13, and 14) of this Form 10-K.

This combined Form 10-K is filed separately by two registrants: DTE Energy and DTE Electric. Information contained herein relating to any individual registrant is filed by such registrant solely on its own behalf. DTE Electric makes no representation as to information relating exclusively to DTE Energy.

DTE Electric, an indirect wholly-owned subsidiary of DTE Energy, meets the conditions set forth in General Instructions I(1)(a) and (b) of Form 10-K and is therefore filing this form with the reduced disclosure format specified in General Instruction I(2) of Form 10-K.

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DEFINITIONS

AFUDC	Allowance for Funds Used During Construction
ASU	Accounting Standards Update issued by the FASB
CAD	Canadian Dollar (C$)
CARB	California Air Resources Board that administers California's Low Carbon Fuel Standard
Carbon emissions	Emissions of carbon containing compounds, including carbon dioxide and methane, that are identified as greenhouse gases
CCR	Coal Combustion Residuals
CFTC	U.S. Commodity Futures Trading Commission
COVID-19	Coronavirus disease of 2019
DOE	U.S. Department of Energy
DTE Electric	DTE Electric Company (an indirect wholly-owned subsidiary of DTE Energy) and subsidiary companies
DTE Energy	DTE Energy Company, directly or indirectly the parent of DTE Electric, DTE Gas, and numerous non-utility subsidiaries
DTE Gas	DTE Gas Company (an indirect wholly-owned subsidiary of DTE Energy) and subsidiary companies
DTE Securitization I	DTE Electric Securitization Funding I, LLC, a special purpose entity wholly-owned by DTE Electric. The entity was created to issue securitization bonds for qualified costs related to the River Rouge generation plant and tree trimming surge program and to recover debt service costs from DTE Electric customers
DTE Securitization II	DTE Electric Securitization Funding II, LLC, a special purpose entity wholly-owned by DTE Electric. The entity was created to issue securitization bonds for qualified costs related to the St. Clair and Trenton Channel generation plants and to recover debt service costs from DTE Electric customers
DTE Sustainable Generation	DTE Sustainable Generation Holdings, LLC (an indirect wholly-owned subsidiary of DTE Energy) and subsidiary companies
DT Midstream	DT Midstream, Inc., formerly DTE Energy's natural gas pipeline, storage, and gathering non-utility business comprising the Gas Storage and Pipelines segment and certain DTE Energy holding company activity in the Corporate and Other segment, which separated from DTE Energy and became an independent public company on July 1, 2021
EGLE	Michigan Department of Environment, Great Lakes, and Energy, formerly known as Michigan Department of Environmental Quality
ELG	Effluent Limitations Guidelines
EPA	U.S. Environmental Protection Agency
Equity units	DTE Energy's 2019 equity units issued in November 2019, which were used to finance the former Gas Storage and Pipelines segment acquisition on December 4, 2019
EWR	Energy Waste Reduction program, which includes a mechanism authorized by the MPSC allowing DTE Electric and DTE Gas to recover through rates certain costs relating to energy waste reduction
FASB	Financial Accounting Standards Board
FERC	Federal Energy Regulatory Commission
FGD	Flue Gas Desulfurization
FOV	Finding of Violation
FTRs	Financial Transmission Rights are financial instruments that entitle the holder to receive payments related to costs incurred for congestion on the transmission grid
GCR	A Gas Cost Recovery mechanism authorized by the MPSC that allows DTE Gas to recover through rates its natural gas costs

DEFINITIONS

GHGs	Greenhouse gases
Green Bond	A financing option to fund projects that have a positive environmental impact based upon a specified set of criteria. The proceeds are required to be used for eligible green expenditures
Interconnection sales	Sales of power by DTE Electric into the energy market through MISO, generally resulting from excess generation compared to customer demand
IRS	Internal Revenue Service
ISO	Independent System Operator
LLC	DTE Energy Corporate Services, LLC, a subsidiary of DTE Energy
MGP	Manufactured Gas Plant
MISO	Midcontinent Independent System Operator, Inc.
MPSC	Michigan Public Service Commission
MTM	Mark-to-market
NAV	Net Asset Value
NEIL	Nuclear Electric Insurance Limited
Net zero	Goal for DTE Energy's utility operations and gas suppliers at DTE Gas that any carbon emissions put into the atmosphere will be balanced by those taken out of the atmosphere. Achieving this goal will include collective efforts to reduce carbon emissions and actions to offset any remaining emissions. Progress towards net zero goals is estimated and methodologies and calculations may vary from those of other utility businesses with similar targets
Non-utility	An entity that is not a public utility. Its conditions of service, prices of goods and services, and other operating related matters are not directly regulated by the MPSC
NO_X	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NRC	U.S. Nuclear Regulatory Commission
PLD	City of Detroit's Public Lighting Department
PSCR	A Power Supply Cost Recovery mechanism authorized by the MPSC that allows DTE Electric to recover through rates its fuel, fuel-related, and purchased power costs
REC	Renewable Energy Credit
REF	Reduced Emissions Fuel
Registrants	DTE Energy and DTE Electric
Retail access	Michigan legislation provided customers the option of access to alternative suppliers for electricity and natural gas
RPS	Renewable Portfolio Standard program, which includes a mechanism authorized by the MPSC allowing DTE Electric to recover through rates its renewable energy costs
RTO	Regional Transmission Organization
SEC	Securities and Exchange Commission
SO_2	Sulfur Dioxide
SOFR	Secured Overnight Financing Rate
TCJA	Tax Cuts and Jobs Act of 2017, which reduced the corporate Federal income tax rate from 35% to 21%
Topic 606	FASB issued ASU No. 2014-09, Revenue from Contracts with Customers, as amended
Topic 842	FASB issued ASU No, 2016-02, Leases, as amended

DEFINITIONS

TRIA	Terrorism Risk Insurance Program Reauthorization Act of 2015
TRM	A Transitional Reconciliation Mechanism authorized by the MPSC that allows DTE Electric to recover through rates the deferred net incremental revenue requirement associated with the transition of PLD customers to DTE Electric's distribution system
USD	United States Dollar ($)
VEBA	Voluntary Employees Beneficiary Association
VIE	Variable Interest Entity

Units of Measurement

Bcf	Billion cubic feet of natural gas
BTU	British thermal unit, heat value (energy content) of fuel
kWh	Kilowatt-hour of electricity
MDth/d	Million dekatherms per day
MMBtu	One million BTU
MW	Megawatt of electricity
MWh	Megawatt-hour of electricity

FILING FORMAT

This combined Form 10-K is separately filed by DTE Energy and DTE Electric. Information in this combined Form 10-K relating to each individual Registrant is filed by such Registrant on its own behalf. DTE Electric makes no representation regarding information relating to any other companies affiliated with DTE Energy other than its own subsidiaries. Neither DTE Energy, nor any of DTE Energy’s other subsidiaries (other than DTE Electric), has any obligation in respect of DTE Electric's debt securities, and holders of such debt securities should not consider the financial resources or results of operations of DTE Energy nor any of DTE Energy’s other subsidiaries (other than DTE Electric and its own subsidiaries (in relevant circumstances)) in making a decision with respect to DTE Electric's debt securities. Similarly, none of DTE Electric nor any other subsidiary of DTE Energy has any obligation with respect to debt securities of DTE Energy. This combined Form 10-K should be read in its entirety. No one section of this combined Form 10-K deals with all aspects of the subject matter of this combined Form 10-K.

FORWARD-LOOKING STATEMENTS

Certain information presented herein includes "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 with respect to the financial condition, results of operations, and businesses of the Registrants. Words such as "anticipate," "believe," "expect," "may," "could," "projected," "aspiration," "plans," and "goals" signify forward-looking statements. Forward-looking statements are not guarantees of future results and conditions, but rather are subject to numerous assumptions, risks, and uncertainties that may cause actual future results to be materially different from those contemplated, projected, estimated, or budgeted. Many factors may impact forward-looking statements of the Registrants including, but not limited to, the following:

- impact of regulation by the EPA, EGLE, the FERC, the MPSC, the NRC, and for DTE Energy, the CFTC and CARB, as well as other applicable governmental proceedings and regulations, including any associated impact on rate structures;
- the amount and timing of cost recovery allowed as a result of regulatory proceedings, related appeals, or new legislation, including legislative amendments and retail access programs;
- economic conditions and population changes in the Registrants' geographic area resulting in changes in demand, customer conservation, and thefts of electricity and, for DTE Energy, natural gas;
- the operational failure of electric or gas distribution systems or infrastructure;
- impact of volatility in prices in the international steel markets and in prices of environmental attributes generated from renewable natural gas investments on the operations of DTE Vantage;
- the risk of a major safety incident;
- environmental issues, laws, regulations, and the increasing costs of remediation and compliance, including actual and potential new federal and state requirements;
- the cost of protecting assets and customer data against, or damage due to, cyber incidents and terrorism;
- health, safety, financial, environmental, and regulatory risks associated with ownership and operation of nuclear facilities;
- volatility in commodity markets, deviations in weather, and related risks impacting the results of DTE Energy's energy trading operations;
- changes in the cost and availability of coal and other raw materials, purchased power, and natural gas;
- advances in technology that produce power, store power, or reduce power consumption;
- changes in the financial condition of significant customers and strategic partners;
- the potential for losses on investments, including nuclear decommissioning and benefit plan assets and the related increases in future expense and contributions;

- access to capital markets and the results of other financing efforts which can be affected by credit agency ratings;
- instability in capital markets which could impact availability of short and long-term financing;
- impacts of inflation and the timing and extent of changes in interest rates;
- the level of borrowings;
- the potential for increased costs or delays in completion of significant capital projects;
- changes in, and application of, federal, state, and local tax laws and their interpretations, including the Internal Revenue Code, regulations, rulings, court proceedings, and audits;
- the effects of weather and other natural phenomena, including climate change, on operations and sales to customers, and purchases from suppliers;
- unplanned outages at our generation plants;
- employee relations and the impact of collective bargaining agreements;
- the availability, cost, coverage, and terms of insurance and stability of insurance providers;
- cost reduction efforts and the maximization of generation and distribution system performance;
- the effects of competition;
- changes in and application of accounting standards and financial reporting regulations;
- changes in federal or state laws and their interpretation with respect to regulation, energy policy, and other business issues;
- successful execution of new business development and future growth plans;
- contract disputes, binding arbitration, litigation, and related appeals;
- the ability of the electric and gas utilities to achieve goals for carbon emission reductions; and
- the risks discussed in the Registrants' public filings with the Securities and Exchange Commission.

New factors emerge from time to time. The Registrants cannot predict what factors may arise or how such factors may cause results to differ materially from those contained in any forward-looking statement. Any forward-looking statements speak only as of the date on which such statements are made. The Registrants undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events.

Part I

Items 1. and 2. *Business and Properties*

General

In 1995, DTE Energy incorporated in the State of Michigan. DTE Energy's utility operations consist primarily of DTE Electric and DTE Gas. DTE Energy also has two other segments that are engaged in a variety of energy-related businesses.

DTE Electric is a Michigan corporation organized in 1903 and is an indirect wholly-owned subsidiary of DTE Energy. DTE Electric is a public utility engaged in the generation, purchase, distribution, and sale of electricity to approximately 2.3 million customers in southeastern Michigan.

DTE Gas is a Michigan corporation organized in 1898 and is an indirect wholly-owned subsidiary of DTE Energy. DTE Gas is a public utility engaged in the purchase, storage, transportation, distribution, and sale of natural gas to approximately 1.3 million customers throughout Michigan and the sale of storage and transportation capacity.

DTE Energy's other businesses include 1) DTE Vantage which is primarily involved in renewable natural gas projects and providing custom energy solutions to industrial, commercial, and institutional customers, and 2) energy marketing and trading operations.

DTE Electric and DTE Gas are regulated by the MPSC. Certain activities of DTE Electric and DTE Gas, as well as various other aspects of businesses under DTE Energy, are regulated by the FERC. In addition, the Registrants are regulated by other federal and state regulatory agencies including the NRC, the EPA, EGLE, and for DTE Energy, the CFTC and CARB.

The Registrants' annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements, and all amendments to such reports are available free of charge through the Investor Relations SEC Filings page of DTE Energy's website: *www.dteenergy.com*, as soon as reasonably practicable after they are filed with or furnished to the SEC.

The DTE Energy Code of Ethics and Standards of Behavior, Board of Directors' Mission and Guidelines, Board Committee Charters, and Categorical Standards for Director Independence are also posted on the DTE Energy website. The information on DTE Energy's website is not part of this report or any other report that DTE Energy files with, or furnishes to, the SEC.

Additionally, the public may read and copy any materials the Registrants file electronically with the SEC at *www.sec.gov*.

Corporate Structure

DTE Energy sets strategic goals, allocates resources, and evaluates performance based on the following structure. For financial information by segment for the last three years, see Note 22 to the Consolidated Financial Statements, "Segment and Related Information."

Electric

- The Electric segment consists principally of DTE Electric, which is engaged in the generation, purchase, distribution, and sale of electricity to approximately 2.3 million residential, commercial, and industrial customers in southeastern Michigan.

Gas

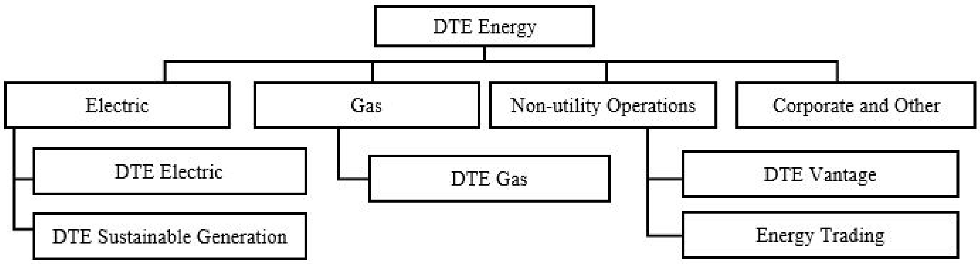
- The Gas segment consists principally of DTE Gas, which is engaged in the purchase, storage, transportation, distribution, and sale of natural gas to approximately 1.3 million residential, commercial, and industrial customers throughout Michigan and the sale of storage and transportation capacity.

Non-utility Operations

- DTE Vantage is comprised primarily of renewable energy projects that sell electricity and pipeline-quality gas and projects that deliver custom energy solutions to industrial, commercial, and institutional customers.
- Energy Trading consists of energy marketing and trading operations.

Corporate and Other

- Corporate and Other includes various holding company activities, holds certain non-utility debt, and holds certain investments, including funds supporting regional development and economic growth.



Refer to Management's Discussion and Analysis in Item 7 of this Report for an in-depth analysis of each segment's financial results. A description of each business unit follows.

ELECTRIC

Description

DTE Energy's Electric segment consists principally of DTE Electric, an electric utility engaged in the generation, purchase, distribution, and sale of electricity to approximately 2.3 million customers in southeastern Michigan. DTE Electric is regulated by numerous federal and state governmental agencies, including, but not limited to, the MPSC, the FERC, the NRC, the EPA, and EGLE. Electricity is primarily generated by two coal-fired plants, a combined cycle natural gas plant, a hydroelectric pumped storage plant, a nuclear plant, wind and solar assets, and is supplemented with purchased power. The electricity is sold, or distributed through the retail access program, to three major classes of customers: residential, commercial, and industrial, throughout southeastern Michigan.

Weather, economic factors, competition, energy waste reduction initiatives, and electricity prices affect sales levels to customers. DTE Electric's peak load and highest total system sales generally occur during the third quarter of the year, driven by air conditioning and other cooling-related demands. DTE Electric's operations are not dependent upon a limited number of customers, and the loss of any one or a few customers would not have a material adverse effect on the results of DTE Electric.

The Electric segment also includes non-utility operations relating to renewable energy projects at DTE Sustainable Generation, which were acquired to support DTE Energy's renewable energy goals.

For a summary of Electric segment operating revenues by service, see Note 5 to the Consolidated Financial Statements, "Revenue."

Fuel Supply and Purchased Power

DTE Electric's power is generated primarily from a variety of fuels and is supplemented with renewable generation and purchased power. DTE Electric expects to have an adequate supply of power to meet its obligation to serve customers. DTE Electric's generating capability is largely dependent upon the availability of coal and natural gas.

Coal is purchased from various sources in different geographic areas under agreements that vary in both pricing and terms. DTE Electric expects to obtain the majority of its coal requirements through long-term contracts, with the balance to be obtained through short-term agreements and spot purchases. DTE Electric has long-term and short-term contracts for the purchase of approximately 8.6 million tons of low-sulfur western coal and approximately 1.0 million tons of Appalachian coal to be delivered from 2024 to 2025. All of these contracts have pricing schedules. DTE Electric has 97% of its expected coal requirements under contract for 2024. DTE Electric leases a fleet of rail cars and has the expected western and eastern coal rail requirements under multi-year contracts. DTE Electric's 2024 rail transportation is covered under long-term agreements. DTE Electric expects to cover all of its 2024 vessel transportation requirements for delivery of purchased coal to electric generating facilities through existing agreements.

DTE Electric's natural gas supply requirements are expected to be met through a combination of short and long-term agreements, agreements with local distribution companies, and spot market purchases. Natural gas purchase requirements for 2024 are expected to be approximately 63 Bcf. DTE Electric has contracts for firm gas transportation and storage capacity to ensure reliable and flexible gas supply to its power plants. Given the geographic diversity of supply, DTE Electric believes it can meet its expected generation requirements.

DTE Electric participates in the energy market through MISO. DTE Electric offers its generation in the market on a day-ahead and real-time basis and bids for power in the market to serve its load. DTE Electric is a net purchaser of power that supplements its generation capability to meet customer demand during peak cycles or during major plant outages.

Properties

DTE Electric owns generating facilities that are located in the State of Michigan. Substantially all of DTE Electric's property is subject to the lien of a mortgage.

Generating facilities owned and in service as of December 31, 2023 for the electric segment are shown in the following table:

Facility	Location by Michigan County	Year in Service	Net Generation Capacity[a] (MW)
Fossil-fueled Steam-Electric			
Coal			
Monroe[b]	Monroe	1971, 1973, and 1974	3,066
Belle River[c]	St. Clair	1984 and 1985	1,034
Natural Gas/Oil			
Greenwood	St. Clair	1979	785
Natural Gas/Combined Cycle			
Blue Water Energy Center	St. Clair	2022	1,143
Dearborn	Wayne	2019	35
			6,063
Natural gas and Oil-fueled Peaking Units	Various	1966-1971, 1981, 1999, 2002, and 2003	1,969
Nuclear-fueled Steam-Electric Fermi 2	Monroe	1988	1,141
Hydroelectric Pumped Storage Ludington[d]	Mason	1973	1,122
Renewables[e]			
Wind Utility	Various	2011-2023	1,491
Wind Non-Utility	Various	2019 and 2020	106
Solar Utility	Various	2010-2021	65
Solar Non-Utility	Delta	2019 and 2022	2
			1,664
			11,959

(a) Represents summer net rating for all units with the exception of renewable facilities. The summer net rating is based on operating experience, the physical condition of units, environmental control limitations, and customer requirements for steam, which would otherwise be used for electric generation. Wind and solar facilities reflect name plate capacity measured in alternating current.
(b) The Monroe generating plant provided 32% of DTE Electric's total 2023 power plant generation.
(c) Represents DTE Electric's 81% interest in Belle River with a total capability of 1,270 MW. See Note 7 to the Consolidated Financial Statements, "Jointly-Owned Utility Plant."
(d) Represents DTE Electric's 49% interest in Ludington with a total capability of 2,290 MW. See Note 7 to the Consolidated Financial Statements, "Jointly-Owned Utility Plant."
(e) In addition to the owned renewable facilities described above, DTE Electric has long-term contracts for 560 MW of renewable power generated from wind, solar, and biomass facilities. Of that amount, currently 52 MW relates to power purchase agreements with DTE Sustainable Generation.

See "Capital Investments" in Management's Discussion and Analysis in Item 7 of this Report for information regarding plant retirements and future capital expenditures.

DTE Electric owns and operates 701 distribution substations with a capacity of approximately 37,650,000 kilovolt-amperes (kVA) and approximately 453,700 line transformers with a capacity of approximately 33,359,000 kVA.

Circuit miles of electric distribution lines owned and in service as of December 31, 2023 are shown in the following table:

	Circuit Miles	
Operating Voltage-Kilovolts (kV)	**Overhead**	**Underground**
4.8 kV to 13.2 kV	28,556	13,454
24 kV	170	701
40 kV	2,338	445
120 kV	58	8
	31,122	**14,608**

There are numerous interconnections that allow the interchange of electricity between DTE Electric and electricity providers external to the DTE Electric service area. These interconnections are generally owned and operated by ITC Transmission, an unrelated company, and connect to neighboring energy companies.

Regulation

DTE Electric is subject to the regulatory jurisdiction of various agencies, including, but not limited to, the MPSC, the FERC, and the NRC. The MPSC issues orders pertaining to rates, recovery of certain costs, including the costs of generating facilities and regulatory assets, conditions of service, accounting, and operating-related matters. DTE Electric's MPSC-approved rates charged to customers have historically been designed to allow for the recovery of costs, plus an authorized rate of return on investments. The FERC regulates DTE Electric with respect to financing authorization, wholesale electric market activities, certain affiliate transactions, the acquisition and disposition of certain generation and other facilities, and, in conjunction with the NERC, compliance with mandatory reliability standards. The NRC has regulatory jurisdiction over all phases of the operation, construction, licensing, and decommissioning of DTE Electric's nuclear plant operations. DTE Electric is subject to the requirements of other regulatory agencies with respect to safety, the environment, and health.

See Notes 8, 9, 12, 18, and 19 to the Consolidated Financial Statements, "Asset Retirement Obligations," "Regulatory Matters," "Fair Value," "Commitments and Contingencies," and " Nuclear Operations."

Energy Assistance Programs

Energy assistance programs, funded by the federal government and the State of Michigan, remain critical to DTE Electric’s ability to control its uncollectible accounts receivable and collections expenses. DTE Electric’s uncollectible accounts receivable expense is directly affected by the level of government-funded assistance that qualifying customers receive. DTE Electric works continuously with the State of Michigan and others to determine whether the share of funding allocated to customers is representative of the number of low-income individuals in the service territory. DTE Electric also partners with federal, state, and local officials to attempt to increase the share of low-income funding allocated to customers.

Strategy and Competition

DTE Electric's electrical generation operations seek to provide the energy needs of customers in a cost-effective manner and support DTE Energy's goal to reduce carbon emissions by 65% in 2028, 85% in 2032, and 90% by 2040 from 2005 carbon emissions levels, as well as net zero emissions by 2050. With potential capacity constraints in the MISO region, there will be increased dependency on DTE Electric's generation to provide reliable service and price stability for customers.

Additionally, as a result of legislation passed by the state of Michigan in the fourth quarter 2023, DTE Electric will be required to meet a 100% clean energy portfolio standard by 2040. Clean energy sources include renewables, nuclear, and natural gas-fired plants, provided such plants utilize a carbon capture and storage system that is at least 90% effective to offset carbon emissions. The legislation also requires 50% of an electric utility's energy to be generated from renewable sources by 2030 and 60% by 2035. DTE Electric is currently assessing the impacts of this legislation and will include updates in its next Integrated Resource Plan to comply with the new requirements.

To maintain reliability and meet carbon reduction goals in the near-term, DTE Electric will continue its energy waste reduction initiatives and transition away from coal-fired plants to renewable energy and other sources, including leveraging existing infrastructure at the Belle River power plant through a coal to natural gas conversion. To achieve long-term carbon reduction goals, DTE Electric plans to end the use of coal-fired power plants in 2032 and plans significant investments in solar, wind, and battery storage. DTE Electric expects this transition to renewables and natural gas to reduce future operating and fuel costs. DTE Electric will also continue to monitor the advancement of emerging technologies such as long-duration storage, modular nuclear reactors, hydrogen, and carbon capture and sequestration, and how these technologies may support clean, reliable generation and customer affordability.

DTE Electric's distribution operations focus is on distributing energy in a safe, cost-effective, and reliable manner to customers. An increasing intensity of wind storms and other weather events, coupled with increasing electric vehicle adoption, will drive a continued need for substantial grid investment over the long-term. DTE Electric is hardening and upgrading its infrastructure and has plans to build substations to provide additional capacity as customers shift to more electrification, including electric vehicles. DTE Electric seeks to increase operational efficiencies to maintain rate affordability and increase reliability and customer satisfaction through accelerated tree trimming, pole maintenance, enhanced grid automation to reduce outage duration, and increased underground distribution.

To enhance customer affordability, DTE Electric is also working to optimize opportunities from the Inflation Reduction Act to generate production tax credits for wind and solar production and existing nuclear generation, as well as investment tax credits for solar and energy storage. DTE Electric expects these tax credits to reduce the cost of owning assets that support its clean energy transition, thereby reducing customer rate impacts from any future cost recoveries.

The electric retail access program in Michigan gives electric customers the option of retail access to alternative electric suppliers, subject to limits. Energy legislation enacted by the State of Michigan has placed a 10% cap on total retail access. This cap mitigates some of the unfavorable effects of electric retail access on DTE Electric's financial performance and full-service customer rates. Customers with retail access to alternative electric suppliers consist primarily of industrial and commercial customers and represented approximately 10% of retail sales in 2023, 2022, and 2021. DTE Electric expects that customers with retail access to alternative electric suppliers will remain at approximately 10% of retail sales in 2024 and future years.

Competition in the regulated electric distribution business is primarily from the on-site generation of industrial customers and from distributed generation applications by industrial and commercial customers. DTE Electric does not expect significant competition for distribution to any group of customers in the near term.

Revenues from year to year will vary due to weather conditions, economic factors, regulatory events, and other risk factors as discussed in the "Risk Factors" in Item 1A. of this Report.

GAS

Description

DTE Energy's Gas segment consists principally of DTE Gas, a natural gas utility engaged in the purchase, storage, transportation, distribution, and sale of natural gas to approximately 1.3 million residential, commercial, and industrial customers throughout Michigan, and the sale of storage and transportation capacity.

DTE Gas' natural gas sales, end-user transportation, and intermediate transportation volumes, revenues, and Net Income are impacted by weather. Given the seasonal nature of the business, revenues and earnings are concentrated in the first and fourth quarters of the calendar year. By the end of the first quarter, the heating season is largely over, and DTE Gas typically realizes substantially reduced revenues and earnings in the second quarter, and losses in the third quarter. The impacts of changes in annual average customer usage may be minimized by Revenue Decoupling Mechanisms authorized by the MPSC.

DTE Gas operations are not dependent upon a limited number of customers, and the loss of any one or a few customers would not have a material adverse effect on the results of DTE Gas.

For a summary of Gas segment operating revenues by service, see Note 5 to the Consolidated Financial Statements, "Revenue."

Natural Gas Supply

DTE Gas' gas distribution system has a planned maximum daily send-out capacity of 2.4 Bcf, with approximately 65% of the volume coming from underground storage for 2023. Peak-use requirements are met through utilization of storage facilities, pipeline transportation capacity, and purchased gas supplies. Because of the geographic diversity of supply and its pipeline transportation and storage capacity, DTE Gas is able to reliably meet supply requirements. DTE Gas believes natural gas supply and pipeline capacity will be sufficiently available to meet market demands in the foreseeable future.

DTE Gas purchases natural gas supplies in the open market by contracting with producers and marketers and maintains a diversified portfolio of natural gas supply contracts. Supplier, producing region, quantity, and available transportation diversify DTE Gas' natural gas supply base. Natural gas supply is obtained from various sources in different geographic areas (Appalachian, Gulf Coast, Mid-Continent, Canada, and Michigan) under agreements that vary in both pricing and terms. Gas supply pricing is generally tied to the New York Mercantile Exchange and published price indices to approximate current market prices combined with MPSC-approved fixed price supplies with varying terms and volumes through 2026.

DTE Gas is directly connected to interstate pipelines, providing access to most of the major natural gas supply producing regions in the Appalachian, Gulf Coast, Mid-Continent, and Canadian regions. The primary long-term transportation supply contracts at December 31, 2023 are listed below.

	Availability (MDth/d)	Contract Expiration
Vector Pipeline L.P.	18	2025
Viking Gas Transmission Company	21	2027
Great Lakes Gas Transmission L.P.	33	2028
ANR Pipeline Company	174	2028
Panhandle Eastern Pipeline Company	80	2029
NEXUS Pipeline	75	2033

Properties

DTE Gas owns distribution, storage, and transportation properties that are located in the State of Michigan. The distribution system includes approximately 21,000 miles of distribution mains, approximately 1.2 million service pipelines, and approximately 1.3 million active meters. DTE Gas also owns approximately 2,000 miles of transmission pipelines that deliver natural gas to the distribution districts and interconnect DTE Gas storage fields with the sources of supply and the market areas.

DTE Gas owns storage properties relating to four underground natural gas storage fields with an aggregate working gas storage capacity of approximately 139 Bcf. These facilities are important in providing reliable and cost-effective service to DTE Gas customers. In addition, DTE Gas sells storage services to third parties.

Most of DTE Gas' distribution and transportation property is located on property owned by others and used by DTE Gas through easements, permits, or licenses. Substantially all of DTE Gas' property is subject to the lien of a mortgage.

DTE Gas leases a portion of its pipeline system through a finance lease arrangement. See Note 17 to the Consolidated Financial Statements, "Leases."

Regulation

DTE Gas is subject to the regulatory jurisdiction of the MPSC, which issues orders pertaining to rates, recovery of certain costs, including the costs of regulatory assets, conditions of service, accounting, and operating-related matters. DTE Gas' MPSC-approved rates charged to customers have historically been designed to allow for the recovery of costs, plus an authorized rate of return on investments. DTE Gas operates natural gas storage and transportation facilities in Michigan as intrastate facilities regulated by the MPSC and provides intrastate storage and transportation services pursuant to a MPSC-approved tariff.

DTE Gas also provides interstate storage and transportation services in accordance with an Operating Statement on file with the FERC. The FERC's jurisdiction is limited and extends to the rates, non-discriminatory requirements, and the terms and conditions applicable to storage and transportation provided by DTE Gas in interstate markets. FERC granted DTE Gas authority to provide storage and related services in interstate commerce at market-based rates. DTE Gas provides transportation services in interstate commerce at cost-based rates approved by the MPSC and filed with the FERC.

DTE Gas is subject to the requirements of other regulatory agencies with respect to safety, the environment, and health.

See Notes 9 and 18 to the Consolidated Financial Statements, "Regulatory Matters" and "Commitments and Contingencies."

Energy Assistance Programs

Energy assistance programs, funded by the federal government and the State of Michigan, remain critical to DTE Gas' ability to control its uncollectible accounts receivable and collections expenses. DTE Gas' uncollectible accounts receivable expense is directly affected by the level of government-funded assistance its qualifying customers receive. DTE Gas works continuously with the State of Michigan and others to determine whether the share of funding allocated to customers is representative of the number of low-income individuals in the service territory. DTE Gas also partners with federal, state, and local officials to attempt to increase the share of low-income funding allocated to customers.

Strategy and Competition

DTE Gas' strategy is to ensure the safe, reliable, and cost-effective delivery of natural gas service within its franchised markets in Michigan. In addition, DTE Gas is promoting the extension of its distribution system to underserved markets and the increased use of natural gas furnaces, water heaters, and appliances within its current customer base. DTE Gas continues to focus on the reduction of operating costs and the delivery of energy waste reduction products and services to its customers, making natural gas service the preferred fuel and even more affordable for its customers.

Competition in the gas business primarily involves other natural gas transportation providers, as well as providers of alternative fuels and energy sources. The primary focus of competition for end-user transportation is cost and reliability. Some large commercial and industrial customers have the ability to switch to alternative fuel sources such as coal, electricity, oil, and steam. If these customers were to choose an alternative fuel source, they would not have a need for DTE Gas' end-user transportation service. DTE Gas competes against alternative fuel sources by providing competitive pricing and reliable service, supported by its storage capacity.

Having an extensive transportation pipeline system has enabled marketing of DTE Gas' storage and transportation services to gas producers, marketers, distribution companies, end-user customers, and other pipeline companies. The business operates in a central geographic location with connections to major Midwestern interstate pipelines that extend throughout the Midwest, eastern United States, and eastern Canada.

DTE Gas' storage capacity is used to store natural gas for delivery to its customers and is also sold to third parties under a variety of arrangements. Prices are influenced primarily by market conditions, weather, and natural gas pricing.

DTE Energy plans to reduce the carbon emissions from its gas utility operations by 65% by 2030 and 80% by 2040, and is committed to a goal of net zero carbon emissions by 2050 from internal gas operations and gas suppliers. To achieve net zero, DTE Gas is working to source gas with lower methane intensity, reduce emissions through its main renewal and pipeline integrity programs, and if necessary, use carbon offsets to address any remaining emissions. DTE Energy also aims to help DTE Gas customers reduce their emissions by approximately 35% by 2040 by increasing energy efficiency, pursuing advanced technologies such as hydrogen and carbon capture and sequestration, and through the CleanVision Natural Gas Balance program which provides customers the option to use carbon offsets and renewable natural gas.

DTE VANTAGE

Description

DTE Vantage is comprised primarily of renewable energy projects that sell electricity and pipeline-quality gas and projects that deliver customer energy solutions to industrial, commercial, and institutional customers. This business segment provides services using project assets usually located on or near the customers' premises in the agricultural, steel, automotive, airport, chemical, and other industries as follows:

Renewable Energy

- *Renewable Gas Recovery* — DTE Vantage has ownership interests in, and operates, twenty-two gas recovery sites in nine states. The sites recover methane from landfills and agricultural businesses and convert the gas to generate electricity and replace fossil fuels in industrial and manufacturing operations. Certain sites also refine the methane to produce pipeline-quality gas and generate environmental attributes, including environmental credits from California's Low Carbon Fuel Standard (LCFS) and the federal Renewable Fuel Standard (RFS), and in some cases may generate tax credits. The gas is then sold to off-takers, along with the environmental attributes, to be used as low carbon transportation fuel.

- *Wholesale Power and Renewables* — DTE Vantage holds ownership interests in, and operates, three renewable generating plants with a capacity of 114 MWs. The electric output is sold under long-term power purchase agreements.

Custom Energy Solutions

- *On-Site Energy* — DTE Vantage provides power generation, steam production, chilled water production, wastewater treatment, and compressed air supply to industrial customers. DTE Vantage also provides utility-type services using project assets usually located on or near the customers' premises in the automotive, airport, chemical, and other industries.

- *Steel and Petroleum Coke* — DTE Vantage produces metallurgical coke from a coke battery with a capacity of 1 million tons per year and has an investment in a second coke battery with a capacity of 1.2 million tons per year. DTE Vantage supplies metallurgical and petroleum coke to the steel and other industries.

Emerging Ventures

- *Carbon Capture and Sequestration* — DTE Vantage is currently developing multiple carbon capture projects across the United States to help customers reduce their emissions and meet their evolving environmental commitments. This process captures carbon dioxide from industrial emitters and transports it to sequestration sites where it is injected deep underground, preventing release into the atmosphere.

Properties and Other

The following are significant properties owned by DTE Vantage as of December 31, 2023:

Business Areas	Location	Service Type
Renewable Energy		
Renewable Gas Recovery	AZ, CA, MI, NC, OH, SD, TX, UT, and WI	Electric Generation and Renewable Natural Gas
Wholesale Power and Renewables	CA	Electric Generation
Custom Energy Solutions		
On-Site Energy		
Automotive	IN, MI, NY, and OH	Electric Distribution, Chilled Water, Wastewater, Steam, Cooling Tower Water, Reverse Osmosis Water, Compressed Air, Mist, and Dust Collectors
Airports	MI and PA	Electricity and Hot and Chilled Water
Chemical Manufacturing	KY and OH	Electricity, Steam, Natural Gas, Compressed Air, and Wastewater
Consumer Manufacturing	OH	Electricity, Steam, Wastewater, and Sewer
Hospital and University	CA and IL	Electricity, Steam, and Chilled Water
Casino and Gaming	NJ	Electricity, Steam, and Chilled Water
Steel and Petroleum Coke		
Coke Production	MI	Metallurgical Coke Supply
Other Investment in Coke Production and Petroleum Coke	IN and MS	Metallurgical Coke Supply and Pulverized Petroleum Coke

Regulation

Certain electric generating facilities within DTE Vantage have market-based rate authority from the FERC to sell power. The facilities are subject to FERC reporting requirements and market behavior rules. Certain projects of DTE Vantage are also subject to the applicable laws, rules, and regulations related to the EPA, U.S. Department of Homeland Security, DOE, CARB, and various state utility commissions.

Strategy and Competition

DTE Vantage will continue leveraging its energy-related operating experience and project management capability to grow its renewable energy and custom energy solutions businesses and develop its carbon capture and sequestration business. DTE Vantage will also continue to pursue opportunities to provide asset management and operations services to third parties. There are limited competitors for DTE Vantage's existing disparate businesses who provide similar products and services. DTE Vantage's operations are dependent upon a limited number of customers, and the loss of any one or a few customers could have a material adverse effect on the results of DTE Vantage.

DTE Vantage anticipates building around its core strengths in the markets where it operates. In determining the markets in which to compete, DTE Vantage examines closely the regulatory and competitive environment, new and pending legislation, the number of competitors, and its ability to achieve sustainable margins. DTE Vantage plans to maximize the effectiveness of its related businesses as it expands, including optimizing tax credit opportunities from the Inflation Reduction Act related to renewable natural gas and carbon capture and sequestration.

DTE Vantage intends to focus on the following areas for growth:

- Acquiring and developing renewable energy projects and other energy projects
- Providing energy and utility-type services to commercial and industrial customers
- Developing decarbonization opportunities related to carbon capture and sequestration projects

ENERGY TRADING

Description

Energy Trading focuses on physical and financial power, natural gas and environmental marketing and trading, structured transactions, enhancement of returns from its asset portfolio, and optimization of contracted natural gas pipeline transportation and storage positions. Energy Trading also provides natural gas, power, environmental and related services which may include the management of associated storage and transportation contracts on the customers' behalf and the supply or purchase of environmental attributes to various customers. Energy Trading's customer base is predominantly utilities, local natural gas distribution companies, pipelines, producers and generators, and other marketing and trading companies. Energy Trading also provides commodity risk management services to the other businesses within DTE Energy.

Energy Trading enters into derivative financial instruments as part of its marketing and hedging activities. These financial instruments are generally accounted for under the MTM method, which results in the recognition in earnings of unrealized gains and losses from changes in the fair value of the derivatives. Energy Trading utilizes forwards, futures, swaps, and option contracts to mitigate risk associated with marketing and trading activity, as well as for proprietary trading within defined risk guidelines.

Significant portions of the Energy Trading portfolio are economically hedged. Most financial instruments, physical power and natural gas contracts, and certain environmental contracts are deemed derivatives; whereas, natural gas and environmental inventory, contracts for pipeline transportation, storage assets, and some environmental contracts are not derivatives. As a result, this segment will experience earnings volatility as derivatives are marked-to-market without revaluing the underlying non-derivative contracts and assets. The business' strategy is to economically manage the price risk of these underlying non-derivative contracts and assets with futures, forwards, swaps, and options. This results in gains and losses that are recognized in different interim and annual accounting periods.

Regulation

Energy Trading has market-based rate authority from the FERC to sell power and blanket authority from the FERC to sell natural gas at market prices. Energy Trading is subject to FERC reporting requirements and market behavior rules. Energy Trading is also subject to the applicable laws, rules, and regulations related to the CFTC, U.S. Department of Homeland Security, and DOE. In addition, Energy Trading is subject to applicable laws, rules, and regulations in Canada.

Strategy and Competition

DTE Energy's strategy for the Energy Trading business is to deliver value-added services to DTE Energy customers. DTE Energy seeks to manage this business in a manner complementary to the growth of DTE Energy's other business segments. Energy Trading focuses on physical marketing and the optimization of its portfolio of energy assets. The segment competes with electric and gas marketers, financial institutions, traders, utilities, and other energy providers. The Energy Trading business is dependent upon the availability of capital and an investment grade credit rating. DTE Energy believes it has ample available capital capacity to support Energy Trading activities. DTE Energy monitors its use of capital closely to ensure that its commitments do not exceed capacity. A material credit restriction would negatively impact Energy Trading's financial performance. Competitors with greater access to capital, or at a lower cost, may have a competitive advantage. DTE Energy has risk management and credit processes to monitor and mitigate risk.

CORPORATE AND OTHER

Corporate and Other includes various holding company activities, holds certain non-utility debt, and holds certain investments, including funds supporting regional development and economic growth.

ENVIRONMENTAL MATTERS

The Registrants are subject to extensive environmental regulation and expect to continue recovering environmental costs related to utility operations through rates charged to customers. The following table summarizes DTE Energy's, including DTE Electric's, estimated significant future environmental expenditures based upon current regulations. Pending or future reconsideration of current regulations may impact the estimated expenditures summarized in the table below. Actual costs to comply could vary substantially. Additional costs may result as the effects of various substances on the environment are studied and governmental regulations are developed and implemented.

	DTE Electric	DTE Gas	Total
		(In millions)	
Water	$ 54	$ —	$ 54
Contaminated and other sites	7	13	20
Coal combustion residuals and effluent limitations guidelines	417	—	417
Estimated total future expenditures through 2028	$ 478	$ 13	$ 491
Estimated 2024 expenditures	$ 53	$ 4	$ 57
Estimated 2025 expenditures	$ 54	$ 6	$ 60

For additional information regarding environmental matters, refer to Notes 8, 9, and 18 to the Consolidated Financial Statements, "Asset Retirement Obligations," "Regulatory Matters," and "Commitments and Contingencies."

HUMAN CAPITAL MANAGEMENT

DTE Energy and its subsidiaries had approximately 9,950 employees as of December 31, 2023, of which approximately 4,900 were represented by unions. DTE Electric had approximately 4,450 employees as of December 31, 2023, of which approximately 2,550 were represented by unions. The workforce is comprised almost entirely of full-time employees.

DTE Energy and utilities across the country are managing the turnover of our workforce due to a significant number of retirements expected in the next ten years - a period that will be impacted by major transformation of our business through technology investments, changes to our electric generation portfolio, and upgrades to our distribution infrastructure.

DTE Energy's non-represented workforce is also facing a transition period as a portion of employees are expected to separate from the company as a result of the voluntary separation incentive program announced in January 2024. For additional information, refer to the "Voluntary Separation Incentive Program" disclosure in Management's Discussion and Analysis in Item 7 of this report.

Amidst these challenges, DTE Energy is working to build a culture of highly engaged employees with skills and expertise in engineering, technology, and skilled trades, which are in high demand and critical to our industry. DTE Energy has set strategic talent management objectives to attract and retain the best talent and build a culture of service excellence for both external and internal customers. DTE Energy has also set talent management objectives around employee diversity, equity, and inclusion; health, safety, and wellbeing; and market-competitive compensation and benefits, which are discussed further in the sections below. DTE Energy has put in place a comprehensive governance structure to ensure these strategic talent management objectives are met, which includes Board of Directors, Chief Executive Officer, and senior executive oversight of talent decisions.

DTE Energy also aims to deliver world-class leadership development and technical training. DTE Energy provides an internal learning platform that includes free instructor-led and online courses, learning-focused events with expert guest speakers, and a comprehensive development program for new front-line leaders. Training efforts and a focus on succession planning have been critical in supporting employees transitioning to new roles as coal-fired plants are retired and replaced with new, cleaner generation.

Diversity, Equity, and Inclusion (DEI)

DTE Energy is committed to building a diverse, empowered, and engaged team that delivers safe, reliable service and energy to our customers. A diverse workforce and inclusive culture contribute to DTE Energy's success and sustainability by driving innovation and creating trusted relationships with employees, customers, suppliers, and community partners. By tapping into the talent, unique perspectives, and cultural and life experiences of every employee, DTE Energy can ensure its continued success.

As of December 31, 2023, DTE Energy’s workforce was comprised of 28% women and 31% minorities. DTE Energy measures DEI performance by its workforce representation of women, minorities, veterans, and employees with disabilities, as well as the following:

- Employee engagement, including specific elements that measure a culture of inclusion
- Number of DEI related communications and events
- Supplier diversity spend
- Rankings and scores from DEI benchmarking surveys
- Formal training programs, including unconscious bias training for employees and leaders

DTE Energy has an Inclusion and Diversity Team (IDT) to provide DEI oversight, focus on its strategic objectives, and accelerate our progress. The IDT committee, which is led by DTE Energy's Chairman and Chief Executive Officer, prioritizes an effective pipeline of underrepresented talent, works to create a speak-up culture that welcomes diverse voices, and makes DEI a defining and pervasive message in all of DTE Energy's communications. DTE Energy also has nine employee resource groups providing individuals with a shared interest or identity the opportunity to connect. The energy groups are an important component of DTE Energy's overall DEI strategy, providing opportunities for volunteering, skill building, mentoring, and cultural celebrations.

Health, Safety, and Wellbeing

The health, safety, and wellbeing of people is DTE Energy's top priority - for employees, contractors, customers, and everyone in the communities that DTE Energy serves. DTE Energy's health, safety, and wellbeing culture is maintained and strengthened with the help of multiple safety and wellbeing committees spanning all levels of the company. Members include union representatives, DTE Energy executives, office workers, and field employees.

Safety

DTE Energy empowers its employees to be responsible for their own safety and the safety of everyone around them, and has a culture where employees can stop the job any time they feel unsure or have questions. The use of pre-job briefs, safety standards, and regular training guides employees to identify hazardous work, categorize hazards according to risk, and mitigate the potential for any serious injuries.

DTE Energy monitors its safety performance through many measures, with a primary focus on the rate of safety incidents, as defined by the Office of Safety and Health Administration ("OSHA rate"). All workplace injuries and incidents are documented thoroughly and reviewed for measures designed to prevent reoccurrence. The most serious injuries, those sustained as a result of a release of high-energy where a serious injury or fatality is sustained ("HSIF"), as well as those that had the potential to result in a serious injury or fatality ("PSIF"), are closely monitored and thoroughly investigated.

Culture of Health and Wellbeing

DTE Energy aspires to become the healthiest and most supportive organization of wellbeing. DTE Energy is focused on supporting employees holistically, including physical health, emotional wellbeing, social connectivity, and financial security. Resources are provided to promote and support healthier lifestyles, including an on-site clinic, fitness centers, on-site and virtual wellbeing classes, and a team of wellbeing coordinators, registered dieticians and athletic trainers. DTE Energy offers a Healthy Living Program to complete both an annual physical with biometric screenings and a Health Risk Assessment to ensure employees have a relationship with a trusted physician and early detection of health conditions. Additionally, DTE Energy offers extensive wellbeing education and disease management programs.

DTE Energy's Wellbeing Executive Leadership Committee (WELCOM) provides oversight of our culture of health and wellbeing strategy and monitors performance across various metrics including an Employer Health Opportunity Assessment, completion of required wellbeing trainings, and measurement of collective health of the DTE family including medical trends and spend. In 2023, DTE Energy was recognized as the winner of the C. Everett Koop National Health Award for best-in-class workplace health and wellbeing programs.

Compensation and Benefits

DTE Energy is committed to offering compensation that is competitive, market driven, and internally equitable. Approximately half of DTE Energy's employees are represented by labor unions through which pay is uniformly determined through collectively bargained agreements. For non-represented employees, DTE Energy's human resources professionals establish pay ranges for each job classification and work with hiring leaders to make competitive offers within the range to candidates based on objective factors like years of experience and extent of preferred qualifications, if applicable. Annually, DTE Energy conducts a review of compensation practices as part of its affirmative action program and makes adjustments as needed to ensure that pay is fair and equitable.

DTE Energy provides competitive, customizable benefits for all regular full-time and regular part-time employees. Innovative compensation and benefits initiatives at DTE Energy include:

- A 401(k) plan/Employee Stock Ownership Plan that is available to all regular full-time and regular part-time employees, including automatic enrollment of new hires, automatic annual escalation of employee 401(k) contributions up to 10% of pay, and 401(k) matching contributions
- Competitive health and welfare benefits
- Child bonding/parental leave of absence
- Additional vacation days available for employee purchase
- Competitive incentive plans, which are offered to all non-represented employees to create alignment of corporate and individual goals

Incentive Plans

DTE Energy has two primary types of incentives that reward individuals for performance. The incentives are designed to tie compensation to performance and encourage individuals to align their interests with those of the shareholders and customers of the Company.

- Annual incentive plans allow DTE Energy to reward individuals with annual cash bonuses for performance against pre-established objectives based on work performed in the prior year. Objectives are aligned with our core priorities and include metrics for employee engagement and safety, customer satisfaction, utility operating excellence, and financial metrics such as earnings per share and cash flows.

- Long-term incentive plans allow DTE Energy to grant individuals long-term equity incentives to encourage continued employment with DTE Energy, to accomplish pre-defined long-term performance objectives, and to create shareholder alignment. Metrics generally include total shareholder return relative to industry peers, utility return on equity, balance sheet health, and cumulative operating earnings per share.

For additional information on the metrics above, please see the "Annual and Long-term Incentives" section of DTE Energy's Proxy Statement.

Additionally, refer to DTE Energy's annual Sustainability report for further information on metrics tracked for DEI, health and safety, and other components of DTE Energy's human capital management. The report is available through the Environmental, Social, and Governance section of the Investor Relations page on DTE Energy's website (*www.dteenergy.com*), and shall not be deemed incorporated by reference into this Form 10-K.

Item 1A. *Risk Factors*

There are various risks associated with the operations of the Registrants' utility businesses and DTE Energy's non-utility businesses. To provide a framework to understand the operating environment of the Registrants, below is a brief explanation of the more significant risks associated with their businesses. Although the Registrants have tried to identify and discuss key risk factors, others could emerge in the future. Each of the following risks could affect performance.

Regulatory, Legislative, and Legal Risks

The Registrants are subject to rate regulation. Electric and gas rates for the utilities are set by the MPSC and the FERC and cannot be changed without regulatory authorization. The Registrants may be negatively impacted by new regulations or interpretations by the MPSC, the FERC, or other regulatory bodies. The Registrants' ability to recover costs may be impacted by the time lag between the incurring of costs and the recovery of the costs in customers' rates. Regulators also may decide to disallow recovery of certain costs in customers' rates if they determine that those costs do not meet the standards for recovery under current governing laws and regulations. Regulators may also disagree with the Registrants' rate calculations under the various mechanisms that are intended to mitigate the risk to their utilities related to certain aspects of the business. If the Registrants cannot agree with regulators on an appropriate reconciliation of those mechanisms, it may impact the Registrants' ability to recover certain costs through customer rates. Regulators may also decide to eliminate these mechanisms in future rate cases, which may make it more difficult for the Registrants to recover their costs in the rates charged to customers. The Registrants cannot predict what rates the MPSC will authorize in future rate cases, and unfavorable rate relief could impact our plans for significant capital investment. New legislation, regulations, or interpretations could change how the business operates, impact the Registrants' ability to recover costs through rates or the timing of such recovery, or require the Registrants to incur additional expenses.

Changes to Michigan's electric retail access program could negatively impact the Registrants' financial performance. The State of Michigan currently experiences a hybrid market, where the MPSC continues to regulate electric rates for DTE Electric customers, while alternative electric suppliers charge market-based rates. MPSC rate orders, and energy legislation enacted by the State of Michigan, have placed a 10% cap on the total potential retail access migration. However, even with the legislated 10% cap on participation, there continues to be legislative and financial risk associated with the electric retail access program. Electric retail access migration is sensitive to market price and full service electric price changes. The Registrants are required under current regulation to provide full service to retail access customers that choose to return, potentially resulting in the need for additional generating capacity.

Environmental laws and liability may be costly. The Registrants are subject to, and affected by, numerous environmental regulations. These regulations govern air emissions, water quality, wastewater discharge, and disposal of solid and hazardous waste. Compliance with these regulations can significantly increase capital spending, operating expenses, and plant down times, and can negatively affect the affordability of the rates charged to customers.

Uncertainty around future environmental regulations creates difficulty planning long-term capital projects in the Registrants' generation fleet and for DTE Energy's gas distribution businesses. These laws and regulations require the Registrants to seek a variety of environmental licenses, permits, inspections, and other regulatory approvals. The Registrants could be required to install expensive pollution control measures or limit or cease activities, including the retirement of certain generating plants, based on these regulations. Additionally, the Registrants may become a responsible party for environmental cleanup at sites identified by a regulatory body. The Registrants cannot predict with certainty the amount and timing of future expenditures related to environmental matters because of the difficulty of estimating cleanup costs. There is also uncertainty in quantifying liabilities under environmental laws that impose joint and several liability on potentially responsible parties.

The Registrants may also incur liabilities as a result of potential future requirements to address climate change issues. Proposals for voluntary initiatives and mandatory controls are being discussed in Michigan, the United States, and worldwide to reduce GHGs such as carbon dioxide, a by-product of burning fossil fuels. If increased regulations of GHG emissions are implemented, or if existing deadlines for these regulations are accelerated, the operations of DTE Electric's fossil-fueled generation assets may be significantly impacted. Increased environmental regulation may also result in greater energy efficiency requirements and decreased demand at both the electric and gas utilities. Since there can be no assurances that environmental costs may be recovered through the regulatory process, the Registrants' financial performance may be negatively impacted as a result of environmental matters.

Any perceived or alleged failure by the Registrants to comply with environmental regulations could lead to fines or penalties imposed by regulatory bodies or could result in adverse public statements and reputational damage affecting the Registrants. Adverse statements, whether or not driven by political or public sentiment, may also result in investigations by regulators, legislators and law enforcement officials or in legal claims.

The Renewable Portfolio Standard and energy waste reduction may affect the Registrants' business and federal and state fuel standards may affect DTE Energy's non-utility investments. The Registrants are subject to existing Michigan, and potential future, federal legislation and regulation requiring them to secure sources of renewable energy. The Registrants have complied with the existing federal and state legislation, but do not know what requirements may be added by federal or state legislation in the future. In addition, the Registrants expect to comply with new Michigan legislation increasing the percentage of power required to be provided by renewable energy sources. The Registrants cannot predict the financial impact or costs associated with complying with potential future legislation and regulations. Compliance with these requirements can significantly increase capital expenditures and operating expenses and can negatively affect the affordability of the rates charged to customers.

In addition, the Registrants are also required by Michigan legislation to implement energy waste reduction measures and provide energy waste reduction customer awareness and education programs. These requirements necessitate expenditures, and implementation of these programs creates the risk of reducing the Registrants' revenues as customers decrease their energy usage. The Registrants cannot predict how these programs will impact their business and future operating results.

DTE Energy's non-utility renewable natural gas investments are also dependent on the federal Renewable Fuel Standard and California's Low Carbon Fuel Standard. Changes to these standards may affect DTE Energy's business and result in lower earnings.

DTE Energy's ability to utilize tax credits may be limited. To promote U.S. climate initiatives, the Internal Revenue Code provides tax credits as an incentive for taxpayers to produce energy from alternative sources. The Registrants have generated tax credits from renewable energy generation and DTE Energy has generated tax credits from renewable gas recovery, reduced emission fuel, and gas production operations. If the Registrants' tax credits were disallowed in whole or in part as a result of an IRS audit or changes in tax law, there could be additional tax liabilities owed for previously recognized tax credits that could significantly impact the Registrants' earnings and cash flows.

Operational Risks

The Registrants' electric distribution system and DTE Energy's gas distribution system are subject to risks from their operation, which could reduce revenues, increase expenses, and have a material adverse effect on their business, financial position, and results of operations. The Registrants' electric distribution and DTE Energy’s gas distribution systems are subject to many operational risks. These operational systems and infrastructure have been in service for many years. Equipment, even when maintained in accordance with good utility practices, is subject to operational failure, including events that are beyond the Registrants' control, and could require significant operation and maintenance expense or capital expenditures to operate efficiently. Because the Registrants’ distribution systems are interconnected with those of third parties, the operation of the Registrants’ systems could be adversely affected by unexpected or uncontrollable events occurring on the systems of such third parties.

Construction and capital improvements to the Registrants' power facilities and DTE Energy's distribution systems subject them to risk. The Registrants are managing ongoing, and planning future, significant construction and capital improvement projects at the Registrants' multiple power generation and distribution facilities and at DTE Energy's gas distribution system. Many factors that could cause delays or increased prices for these complex projects are beyond the Registrants' control, including the cost of materials and labor, subcontractor performance, timing and issuance of necessary permits or approvals (including required certificates from regulatory agencies), construction disputes, impediments to acquiring rights-of-way or land rights on a timely basis and on acceptable terms, cost overruns, and weather conditions. Failure to complete these projects on schedule and on budget for any reason could adversely affect the Registrants' financial performance, operations, or expected investment returns at the affected facilities, businesses and development projects.

Operation of a nuclear facility subjects the Registrants to risk. Ownership of an operating nuclear generating plant subjects the Registrants to significant additional risks. These risks include, among others, plant security, environmental regulation and remediation, changes in federal nuclear regulation, increased capital expenditures to meet industry requirements, and operational factors that can significantly impact the performance and cost of operating a nuclear facility compared to other generation options. Insurance maintained by the Registrants for various nuclear-related risks may not be sufficient to cover the Registrants' costs in the event of an accident or business interruption at the nuclear generating plant, which may affect the Registrants' financial performance. In addition, the Registrants' nuclear decommissioning trust fund, to finance the decommissioning of the nuclear generating plant, may not be sufficient to fund the cost of decommissioning. A decline in market value of assets held in decommissioning trust funds due to poor investment performance or other factors may increase the funding requirements for these obligations. Any increase in funding requirements may have a material impact on the Registrants’ liquidity, financial position, or results of operations.

The supply and/or price of energy commodities and/or related services may impact the Registrants' financial results. The Registrants are dependent on coal for much of their electrical generating capacity as well as uranium for their nuclear operations. DTE Energy's access to natural gas supplies is critical to ensure reliability of service for utility gas customers. DTE Energy's non-utility businesses are also dependent upon supplies and prices of energy commodities and services. Price fluctuations and changes in transportation costs, driven by inflation or other factors, as well as fuel supply disruptions, could have a negative impact on the amounts DTE Electric charges utility customers for electricity and DTE Gas charges utility customers for gas, and on the profitability of DTE Energy's non-utility businesses. The Registrants' hedging strategies and regulatory recovery mechanisms may be insufficient to mitigate the negative fluctuations in commodity supply prices at their utility or DTE Energy's non-utility businesses, and the Registrants' financial performance may therefore be negatively impacted by price fluctuations.

The price of energy also impacts the market for DTE Energy's non-utility businesses, particularly those that compete with utilities and alternative electric suppliers. The price of environmental attributes generated by DTE Energy's renewable natural gas investments, including those related to the federal Renewable Fuel Standard and California's Low Carbon Fuel Standard, may also impact the market and financial results for DTE Energy's non-utility businesses.

The supply and/or price of other industrial raw and finished inputs and/or related services may impact the Registrants' financial results. The Registrants are dependent on supplies of certain commodities, such as copper and limestone, among others, and industrial materials, and services in order to maintain day-to-day operations and maintenance of their facilities. Price fluctuations, driven by inflation or other factors, or supply interruptions for these commodities and other items, could have a negative impact on the amounts charged to customers for the Registrants' utility products and, for DTE Energy, on the profitability of the non-utility businesses.

Weather significantly affects operations. As weather patterns exhibit increased deviations from historical trends, our utilities may experience financial and operational challenges. Mild temperatures can result in decreased utilization of the Registrants' assets, lowering income and cash flows. At DTE Electric, high winds, floods, tornadoes, or ice storms can damage the electric distribution system infrastructure and power generation facilities and require it to perform emergency repairs and incur material unplanned expenses. The expenses of storm restoration efforts may not be fully recoverable through the regulatory process. Prolonged and/or more frequent outages caused by increasingly extreme weather may result in decreased revenues and could also negatively impact DTE Energy's reputation and customer satisfaction or result in increased regulatory oversight. Related damages to customer assets could subject DTE Energy to litigation. DTE Gas can also experience higher than anticipated expenses from emergency repairs on its gas distribution infrastructure required as a result of weather-related issues.

Unplanned power plant outages may be costly. Unforeseen maintenance may be required to safely produce electricity or comply with environmental regulations. As a result of unforeseen maintenance, the Registrants may be required to make spot market purchases of electricity that exceed the costs of generation. The Registrants' financial performance may be negatively affected if unable to recover such increased costs.

A work interruption may adversely affect the Registrants. There are several bargaining units for DTE Energy's approximately 4,900 and DTE Electric's approximately 2,550 represented employees. The majority of represented employees are under contracts that expire in 2027. A union choosing to strike would have an impact on the Registrants' businesses. The Registrants are unable to predict the effect a work stoppage would have on their costs of operations and financial performance.

DTE Energy may not achieve the carbon emissions goals of its electric and gas utilities. DTE Energy has announced the voluntary commitments of its electric and gas utilities to achieve net zero carbon emissions by 2050, along with intermediate emissions reduction goals at various points in the intervening years. DTE Energy must also comply with the state of Michigan's requirement to meet a 100% clean energy standard by 2040. Technology research and developments, innovations, and advancements are critical to DTE Energy's ability to achieve these commitments, but they may not evolve as anticipated in order to provide cost-effective alternatives to traditional energy sources. State and municipal restrictions on the siting of renewable energy assets could also impair efforts to meet our stated targets. Additionally, we cannot guarantee that we will continue to receive regulatory approval of our capital plans to transition to renewable energy and other new technologies. Other factors that may impact DTE Energy's ability to achieve these emissions reduction goals include our service territory size and capacity needs remaining in line with current expectations, the impacts on our business of future regulations or legislation, the price and availability of carbon offsets, adoption of alternative energy products by the public such as greater use of electric vehicles, greater standardization of emissions reporting, and our ability over time to transition our electric generating portfolio. DTE Energy's emissions reduction goals require making assumptions that involve risks and uncertainties. Should one or more of these underlying assumptions prove incorrect, our actual results and ability to achieve our emissions reduction goals could differ materially from expectations. In addition, DTE Energy cannot predict the ultimate impact of achieving these objectives, or the various implementation aspects on its reliability, availability or price of purchased power, or on its results of operations, financial condition, or liquidity. DTE Energy could suffer financial loss, reputational damage, litigation, or other negative repercussions if we are unable to meet our voluntary emissions reductions goals.

Financial, Economic, and Market Risks

DTE Energy's non-utility businesses may not perform to its expectations. DTE Energy relies on non-utility businesses for a portion of earnings and will depend on the successful execution of new business development in its non-utilities to help achieve overall growth targets. DTE Energy also expects to grow the non-utility businesses over the long-term by developing or acquiring projects related to renewable energy, carbon capture and sequestration, and customer energy solutions; however, such opportunities may not materialize as anticipated. If DTE Energy's current and contemplated non-utility investments do not perform at expected levels, DTE Energy could experience diminished earnings and a corresponding decline in shareholder value.

Adverse changes in the Registrants' credit ratings may negatively affect them. Regional and national economic conditions, increased scrutiny of the energy industry and regulatory changes, as well as changes in the Registrants' economic performance, could result in credit agencies reexamining their credit ratings. While credit ratings reflect the opinions of the credit agencies issuing such ratings and may not necessarily reflect actual performance, a downgrade in the Registrants' credit ratings below investment grade could restrict or discontinue their ability to access capital markets and could result in an increase in their borrowing costs, a reduced level of capital expenditures, and could impact future earnings and cash flows. In addition, a reduction in the Registrants' credit ratings may require them to post collateral related to various physical or financially settled contracts for the purchase of energy-related commodities, products, and services, which could impact their liquidity.

Poor investment performance of pension and other postretirement benefit plan assets and other factors impacting benefit plan costs could unfavorably impact the Registrants' liquidity and results of operations. The Registrants' costs of providing non-contributory defined benefit pension plans and other postretirement benefit plans are dependent upon a number of factors, such as the rates of return on plan assets, the level of interest rates used to measure the required minimum funding levels of the plans, future government regulation, and the Registrants' required or voluntary contributions made to the plans. The performance of the debt and equity markets affects the value of assets that are held in trust to satisfy future obligations under the Registrants' plans. The Registrants have significant benefit obligations and hold significant assets in trust to satisfy these obligations. These assets are subject to market fluctuations and will yield uncertain returns, which may fall below the Registrants' projected return rates. A decline in the market value of the pension and other postretirement benefit plan assets will increase the funding needs under the pension and other postretirement benefit plans if the actual asset returns do not recover these declines in the foreseeable future. Additionally, the pension and other postretirement benefit plan liabilities are sensitive to changes in interest rates. If interest rates decrease, the liabilities increase, resulting in increasing benefit expense and funding needs. Also, if future increases in pension and other postretirement benefit costs as a result of reduced plan assets are not recoverable from the Registrants' utility customers, the results of operations and financial position of the Registrants could be negatively affected. Without sustained growth in the plan investments over time to increase the value of plan assets, the Registrants could be required to fund these plans with significant amounts of cash. Such cash funding obligations could have a material impact on the Registrants' cash flows, financial position, or results of operations.

The Registrants' ability to access capital markets is important. The Registrants' ability to access capital markets is important to operate their businesses and to fund capital investments. Turmoil in credit markets may constrain the ability of Registrants and their subsidiaries to issue new debt, including commercial paper, and to refinance existing debt. Macroeconomic events may lead to higher interest rates on debt and could increase financing costs and adversely affect the Registrants' results of operations. Rising interest rates could also reduce investor interest in DTE Energy's common stock, negatively impacting its share price and increasing its cost of equity. In addition, the level of borrowing by other energy companies and the market as a whole could limit the Registrants' access to capital markets. The Registrants' long-term revolving credit facilities do not expire until 2027, but the Registrants regularly access capital markets to refinance existing debt or fund new projects at the Registrants' utilities and DTE Energy's non-utility businesses, and the Registrants cannot predict the pricing or demand for those future transactions.

Emerging technologies may have a material adverse effect on the Registrants. Advances in technology that produce power or reduce power consumption include cost-effective renewable energy technologies, distributed generation, energy waste reduction technologies, and energy storage devices. Such developments may impact the price of energy, may affect energy deliveries as customer-owned generation becomes more cost-effective, may require further improvements to our distribution systems to address changing load demands, and could make portions of our electric system power supply and/or distribution facilities obsolete prior to the end of their useful lives. Such technologies could also result in further declines in commodity prices or demand for delivered energy. Each of these factors could materially affect the Registrants’ results of operations, cash flows, or financial position.

DTE Energy's participation in energy trading markets subjects it to risk. Events in the energy trading industry have increased the level of scrutiny on the energy trading business and the energy industry as a whole. In certain situations, DTE Energy may be required to post collateral to support trading operations, which could be substantial. If access to liquidity to support trading activities is curtailed, DTE Energy could experience decreased earnings potential and cash flows. Energy trading activities take place in volatile markets and expose DTE Energy to risks related to commodity price movements, deviations in weather, and other related risks. DTE Energy's trading business routinely has speculative trading positions in the market, within strict policy guidelines DTE Energy sets, resulting from the management of DTE Energy's business portfolio. To the extent speculative trading positions exist, fluctuating commodity prices can improve or diminish DTE Energy's financial results and financial position. DTE Energy manages its exposure by establishing and enforcing strict risk limits and risk management procedures. During periods of extreme volatility, these risk limits and risk management procedures may not work as planned and cannot eliminate all risks associated with these activities.

Regional, national, and international economic conditions can have an unfavorable impact on the Registrants. The Registrants' utility and DTE Energy's non-utility businesses follow the economic cycles of the customers they serve and credit risk of counterparties they do business with. Should the financial conditions of some of DTE Energy's significant customers deteriorate as a result of regional, national or international economic conditions, reduced volumes of electricity and gas, and demand for energy services DTE Energy supplies, collections of accounts receivable, reductions in federal and state energy assistance funding, and potentially higher levels of lost gas or stolen gas and electricity could result in decreased earnings and cash flows.

If DTE Energy's goodwill becomes impaired, it may be required to record a charge to earnings. DTE Energy annually reviews the carrying value of goodwill associated with acquisitions it has made for impairment. Goodwill is also reviewed on a quarterly basis whenever events or circumstances indicate that the carrying value of these assets may not be recoverable. Factors that may be considered for purposes of this analysis include a decline in stock price and market capitalization, slower industry growth rates, or material changes with customers or contracts that could negatively impact future cash flows. DTE Energy cannot predict the timing, strength, or duration of such changes or any subsequent recovery. If the carrying value of any goodwill is determined to be not recoverable, DTE Energy may take a non-cash impairment charge, which could materially impact DTE Energy's results of operations and financial position.

The Registrants may not be fully covered by insurance. The Registrants have a comprehensive insurance program in place to provide coverage for various types of risks, including catastrophic damage as a result of severe weather or other natural disasters, war, terrorism, cyber incidents, liability claims against the Registrants, or a combination of other significant unforeseen events that could impact the Registrants' operations. Economic losses might not be covered in full by insurance, or the Registrants' insurers may be unable to meet contractual obligations.

Safety and Security Risks

The Registrants' businesses have safety risks. The Registrants' electric distribution system, power plants, renewable energy equipment, and other facilities, and DTE Energy's gas distribution system, gas infrastructure, and other facilities, could be involved in incidents that result in injury, death, or property loss to employees, customers, third parties, or the public. Although the Registrants have insurance coverage for many potential incidents, depending upon the nature and severity of any incident, they could experience financial loss, damage to their reputation, and negative consequences from regulatory agencies or other public authorities.

Threats of cyber incidents, physical security, and terrorism could affect the Registrants' business. Issues may threaten the Registrants such as cyber incidents, physical security, or terrorism that may disrupt the Registrants' operations, and could harm the Registrants' operating results.

Information security risks have increased in recent years as a result of the proliferation of new technologies and the increased sophistication and frequency of cyberattacks, and data security breaches. The Registrants' industry requires the continued operation of sophisticated information and control technology systems and network infrastructure. All of the Registrants' technology systems are vulnerable to disability or failures due to cyber incidents, physical security threats, acts of war or terrorism, and other causes, as well as loss of operational control of the Registrants' electric generation and distribution assets and, DTE Energy's gas distribution assets. The Registrants have experienced, and expect to continue to be subject to, cybersecurity threats and incidents. If the Registrants' information technology systems were to fail and they were unable to recover in a timely way, the Registrants may be unable to fulfill critical business functions, which could have a material adverse effect on the Registrants' business, operating results, and financial condition.

Suppliers, vendors, contractors, and information technology providers have access to systems that support the Registrants’ operations and maintain customer and employee data. A breach of these third-party systems could adversely affect the business as if it was a breach of our own system. Also, because the Registrants’ generation and distribution systems are part of an interconnected system, a disruption caused by a cyber incident at another utility, electric generator, system operator, or commodity supplier could also adversely affect the Registrants’ businesses, operating results, and financial condition.

In addition, the Registrants' generation plants and electrical distribution facilities may be targets of physical security threats or terrorist activities that could disrupt the Registrants' ability to produce or distribute some portion of their products. The Registrants have increased security as a result of past events and may be required by regulators or by the future threat environment to make investments in security that the Registrants cannot currently predict.

Failure to maintain the security of personally identifiable information could adversely affect the Registrants. In connection with the Registrants' businesses, they collect and retain personally identifiable information of their customers, shareholders, and employees. Customers, shareholders, and employees expect that the Registrants will adequately protect their personal information. The regulatory environment surrounding information security and privacy is increasingly demanding. A significant theft, loss, or fraudulent use of customer, shareholder, employee, or Registrant data by cybercrime or otherwise, could adversely impact the Registrants' reputation, and could result in significant costs, fines, and litigation.

General and Other Risks

Failure to attract and retain key executive officers and other skilled professional and technical employees could have an adverse effect on the Registrants' operations. The Registrants' businesses are dependent on their ability to attract and retain skilled employees. Competition for skilled employees in some areas is high, and the inability to attract and retain these employees could adversely affect the Registrants' business and future operating results. In addition, the failure of a successful transfer of knowledge and expertise from any departing employees could negatively impact the Registrants' operations.

DTE Energy relies on cash flows from subsidiaries. DTE Energy is a holding company. Cash flows from the utility and non-utility subsidiaries are required to pay interest expenses and dividends on DTE Energy debt and securities. Should a major subsidiary not be able to pay dividends or transfer cash flows to DTE Energy, its ability to pay interest and dividends would be restricted.

Item 1B. *Unresolved Staff Comments*

None.

Item 1C. *Cybersecurity*

Risk Management and Strategy

DTE Energy maintains cybersecurity measures designed to protect its physical and digital infrastructure in order to provide safe and reliable delivery of energy to customers. These measures serve to maintain compliance with regulations and protect the confidentiality, integrity and availability of confidential and proprietary information, DTE Energy's computing resources, and the electrical and gas systems.

To protect against cybersecurity threats, DTE Energy employs a dedicated cybersecurity team led by the Chief Information Officer. The cybersecurity team is responsible for implementing proper safeguards to mitigate the risk of cyber threats, including but not limited to firewalls, continuous monitoring, and training. DTE Energy also engages with third parties to conduct cybersecurity maturity assessments to provide an independent and objective view of our cybersecurity and assess opportunities for improvement. The National Institute of Standards and Technology (NIST) Cybersecurity Framework (CSF) is the basis for these assessments to manage cyber risks, mature and monitor existing security controls, and communicate security posture coherently. The NIST CSF provides a common language to understand, manage, and express cyber risks internally and externally.

Another component of DTE Energy's cybersecurity team is the Cybersecurity Defense Center (CSDC), which has the primary responsibility for monitoring and responding to cybersecurity incidents. The CSDC maintains an incident response plan designed to protect against, detect, evaluate, and respond to and recover from a cyber incident. The CSDC may receive incident reports from DTE Energy employees, corporate security, or external sources. The incident response plan is intended to be flexible so it may be adapted to an array of potential scenarios. Depending on the incident, the CSDC may decide to engage external resources for assistance with responding to the incident. DTE Energy regularly conducts exercises to help ensure the plan's effectiveness and overall preparedness.

DTE Energy engages third-party service providers to assist with managing various aspects of its business. These service providers are subject to due diligence reviews of their information security programs prior to onboarding. DTE Energy also contractually requires service providers with access to its information technology (IT) systems, sensitive business data, or personal information to implement and maintain appropriate security controls and restricts their ability to use such data for purposes other than to provide services to DTE Energy, except as required by law. Third-party service providers are also contractually required to notify DTE Energy promptly of cyber incidents that may affect any systems or data. DTE Energy collaborates with its service providers to help determine whether their information security protocols are sufficient and monitors their compliance with DTE Energy security requirements; however, DTE Energy may not have the ability in all cases to effectively oversee the implementation of these control measures.

The CSDC monitors and responds to actual and potential compromises from third-party service providers. Access from a potentially compromised third-party is restricted until DTE Energy receives confirmation the compromise has been mitigated.

As of December 31, 2023, cybersecurity risks have not materially affected the Registrants' business strategy, results of operations, or financial condition.

Governance

DTE Energy has an enterprise risk management program to reduce overall risk, including risks related to cybersecurity, through comprehensive risk assessments and execution of corresponding mitigation plans. Risks are reported and managed through various internal committees, which meet regularly and report at least annually to the Board of Directors. These committees include:

- The Risk Management Committee (RMC) is chaired by the Chief Executive Officer and comprised of the Chief Financial Officer, Chief Legal Officer, General Auditor, and other senior officers. The RMC directs the development and maintenance of comprehensive risk management policies and procedures. The RMC also sets, reviews, and monitors risk limits for enterprise-level risk and other exposures

- The Operational Risk and Resilience (ORR) Committee is chaired by the President and Chief Operating Officer and comprised of operational leaders in DTE Energy's business units. The ORR is responsible for managing operational risks including safety, reliability, and cybersecurity at DTE Energy's generation plants, substations, and other operating sites

- The Technology Cybersecurity Committee (TCC) is a sub-committee of the ORR that focuses on information and operational technology risks related to cybersecurity, chaired by operational leaders in DTE Energy's business units and includes the Chief Information Officer

Members of the Board of Directors serve roles on various committees responsible for their respective oversight and risk management. The Audit Committee of the Board of Directors, comprised solely of independent directors, is responsible for reviewing DTE Energy's cybersecurity risks, the results of any cybersecurity risk assessments and audits, and reports of investigations into significant events presented by DTE Energy's IT department. The Audit Committee reports to the Board of Directors and may include any significant matters involving cybersecurity within its reporting. All members of the Board of Directors, including the Audit Committee, have either managerial knowledge or working knowledge of technology and cybersecurity matters.

DTE Energy's Chief Information Officer leads the cybersecurity team and has responsibility for assessing and managing cybersecurity risks. The Chief Information Officer has held this position for over 10 years and has decades of experience in IT, including oversight of information protection security (IPS). The IPS cybersecurity team is also led by two full-time directors with over 40 combined years of industry experience, including (1) the director of cybersecurity operations responsible for the CSDC, identity and access assurance, and cloud security and (2) the IPS director of cybersecurity governance, risk, and compliance who is also responsible for engagement and outreach to internal and external stakeholders.

The Chief Information Officer provides regular updates to the Audit Committee and senior leaders regarding DTE Energy's management of cyber risks, including but not limited to the status of various training metrics to safeguard against phishing, malware, and other cyber threats. The Chief Information Officer also provides an annual cybersecurity update directly to the Board of Directors. If cybersecurity risks arise, the CSDC executes the incident response plan and communicates the appropriate details to executive management, the Board of Directors, or any related committees.

A cybersecurity incident may also require various levels of external reporting. The CSDC coordinates with the legal department and controller's organization in reporting incidents externally. Depending on the nature of the incident, reporting may be required to various federal and state government agencies. DTE Energy has forged trusted partnerships with such agencies and with other companies and organizations to share best practices, tools, and threat information. This includes partnering with others in the utilities industry to form the Electricity Subsector Coordination Council (ESCC). The ESCC is the principal liaison between the energy sector and the federal government in coordinating efforts to prepare for and respond to any threats to critical infrastructure.

Item 3. *Legal Proceedings*

For more information on legal proceedings and matters related to the Registrants, see Notes 9 and 18 to the Consolidated Financial Statements, "Regulatory Matters" and "Commitments and Contingencies," respectively.

For environmental proceedings in which the government is a party, the Registrants include disclosures if any sanctions of $1 million or greater are expected.

Item 4. *Mine Safety Disclosures*

Not applicable.

Part II

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

DTE Energy common stock is listed under the ticker symbol "DTE" on the New York Stock Exchange, which is the principal market for such stock.

At December 31, 2023, there were 206,357,070 shares of DTE Energy common stock outstanding. These shares were held by a total of 41,918 shareholders of record.

All of the 138,632,324 issued and outstanding shares of DTE Electric common stock, par value $10 per share, are indirectly-owned by DTE Energy, and constitute 100% of the voting securities of DTE Electric. Therefore, no market exists for DTE Electric's common stock.

For information on DTE Energy dividend restrictions, see Note 16 to the Consolidated Financial Statements, "Short-Term Credit Arrangements and Borrowings."

All of DTE Energy's equity compensation plans that provide for the annual awarding of stock-based compensation have been approved by shareholders. For additional detail, see Note 21 to the Consolidated Financial Statements, "Stock-Based Compensation."

See the following table for information as of December 31, 2023:

	Number of Securities to be Issued Upon Exercise of Outstanding Options	Weighted-Average Exercise Price of Outstanding Options	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans
Plans approved by shareholders	—	$ —	2,820,677

UNREGISTERED SALES OF DTE ENERGY EQUITY SECURITIES AND USE OF PROCEEDS

Purchases of DTE Energy Equity Securities by the Issuer and Affiliated Purchasers

The following table provides information about DTE Energy's purchases of equity securities that are registered by DTE Energy pursuant to Section 12 of the Exchange Act of 1934 for the quarter ended December 31, 2023:

	Number of Shares Purchased[(a)]	Average Price Paid per Share[(a)]	Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Average Price Paid per Share	Maximum Dollar Value that May Yet Be Purchased Under the Plans or Programs
10/01/2023 — 10/31/2023	1,125	$ 101.71	—	—	—
11/01/2023 — 11/30/2023	851	$ 109.23	—	—	—
12/01/2023 — 12/31/2023	759	$ 113.15	—	—	—
Total	**2,735**		—		

(a) Primarily represents shares of DTE Energy common stock withheld to satisfy income tax obligations upon the vesting of restricted stock based on the market price at the vesting date.

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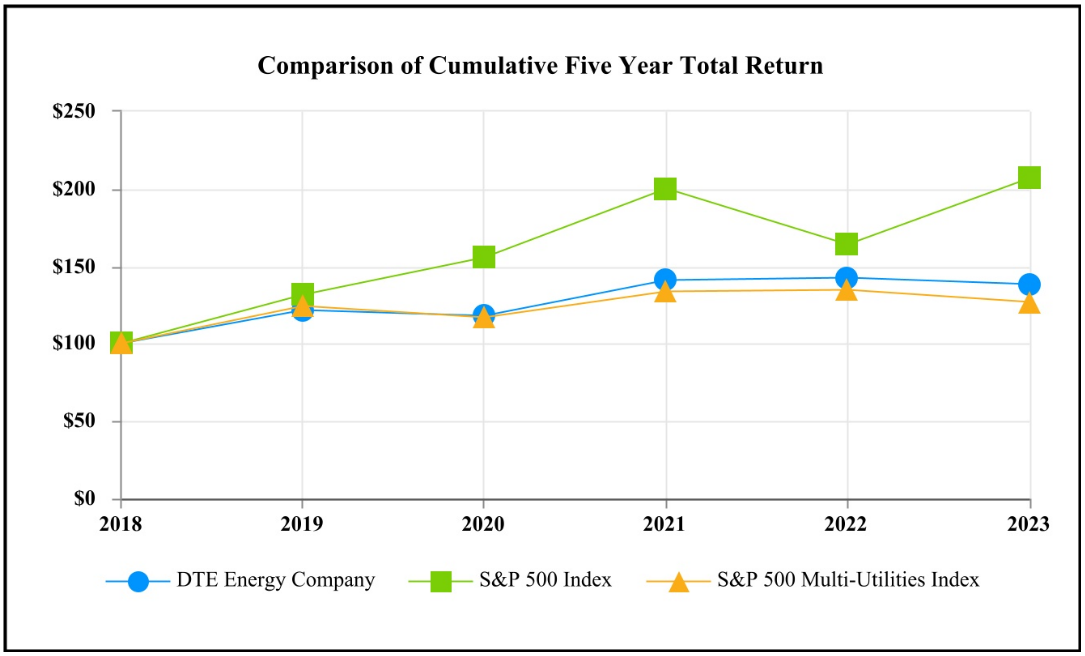
COMPARISON OF CUMULATIVE FIVE YEAR TOTAL RETURN

Total Return to DTE Energy Shareholders

(Includes reinvestment of dividends)

	Annual Return Percentage Year Ended December 31,				
Company/Index	**2019**	**2020**	**2021**	**2022**	**2023**
DTE Energy Company	21.36	(2.90)	19.42	1.27	**(2.81)**
S&P 500 Index	31.48	18.39	28.68	(18.13)	**26.26**
S&P 500 Multi-Utilities Index	24.36	(5.87)	14.17	0.62	**(5.82)**

	Indexed Returns Year Ended December 31,					
Company/Index	**Base Period 2018**	**2019**	**2020**	**2021**	**2022**	**2023**
DTE Energy Company	100.00	121.36	117.84	140.72	142.50	**138.49**
S&P 500 Index	100.00	131.48	155.65	200.29	163.98	**207.04**
S&P 500 Multi-Utilities Index	100.00	124.36	117.06	133.64	134.46	**126.63**



Item 6. ***[Reserved]***

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

The following combined discussion is separately filed by DTE Energy and DTE Electric. However, DTE Electric does not make any representations as to information related solely to DTE Energy or the subsidiaries of DTE Energy other than itself.

EXECUTIVE OVERVIEW

DTE Energy is a diversified energy company with 2023 Operating Revenues of approximately $12.7 billion and Total Assets of approximately $44.8 billion. DTE Energy is the parent company of DTE Electric and DTE Gas, regulated electric and natural gas utilities engaged primarily in the business of providing electricity and natural gas sales, distribution, and storage services throughout Michigan. DTE Energy also operates two energy-related non-utility segments with operations throughout the United States.

On July 1, 2021, DTE Energy completed the separation of DT Midstream, its former natural gas pipeline, storage, and gathering non-utility business. Financial results of DT Midstream are presented as discontinued operations in the Consolidated Financial Statements. Refer to Note 4 to the Consolidated Financial Statements, "Discontinued Operations," for additional information.

Management's Discussion and Analysis of Financial Condition and Results of Operations below reflect DTE Energy's continuing operations, unless noted otherwise. The following table summarizes DTE Energy's financial results:

	Years Ended December 31,		
	2023	**2022**	**2021**
	(In millions, except per share amounts)		
Net Income Attributable to DTE Energy Company — Continuing operations	**$ 1,397**	$ 1,083	$ 796
Diluted Earnings per Common Share — Continuing operations	**$ 6.76**	$ 5.52	$ 4.10

The increase in 2023 Net Income Attributable to DTE Energy Company was primarily due to higher earnings in the Energy Trading, DTE Vantage, and Gas segments, partially offset by lower earnings in the Electric and Corporate and Other segments. The increase in 2022 Net Income Attributable to DTE Energy Company was primarily due to higher earnings in the Electric, Gas, and Corporate and Other segments, partially offset by lower earnings in the DTE Vantage and Energy Trading segments.

STRATEGY

DTE Energy's strategy is to achieve long-term earnings per share growth with a strong balance sheet and attractive dividend.

DTE Energy's utilities are investing capital to support a modern, reliable grid and cleaner, affordable energy through investments in base infrastructure and new generation. Increasing intensity of wind storms and other weather events, coupled with increasing electric vehicle adoption, will drive a continued need for substantial grid investment over the long-term.

DTE Energy plans to reduce the carbon emissions of its electric utility operations by 65% in 2028, 85% in 2032, and 90% by 2040 from 2005 carbon emissions levels. DTE Energy plans to end its use of coal-fired power plants in 2032 and is committed to a net zero carbon emissions goal by 2050 for its electric and gas utility operations.

Additionally, as a result of legislation passed by the state of Michigan in the fourth quarter 2023, DTE Energy will be required to meet a 100% clean energy portfolio standard by 2040. Clean energy sources include renewables, nuclear, and natural gas-fired plants equipped with a carbon capture and storage system that is at least 90% effective in reducing carbon emissions to the atmosphere. The legislation also requires 50% of an electric utility's energy to be generated from renewable sources by 2030 and 60% by 2035. DTE Energy is currently assessing the impacts of this legislation and will include updates in its next Integrated Resource Plan to comply with the new requirements.

To achieve carbon reduction goals at the electric utility, DTE Energy will continue its transition away from coal-powered energy sources and is replacing or offsetting the generation from these facilities with renewable energy, natural gas, battery storage, and energy waste reduction initiatives. Refer to the "Capital Investments" section below for further discussion regarding DTE Energy's retirement of its aging coal-fired plants and transition to renewable energy and other sources. Over the long-term, DTE Energy is also monitoring the advancement of emerging technologies such as long-duration storage, modular nuclear reactors, hydrogen, and carbon capture and sequestration, and how these technologies may support clean, reliable generation and customer affordability.

For the gas utility, DTE Energy aims to cut carbon emissions across the entire value chain. DTE Energy plans to reduce the carbon emissions from its gas utility operations by 65% by 2030 and 80% by 2040, and is committed to a goal of net zero emissions by 2050 from internal gas operations and gas suppliers. To achieve net zero, DTE Energy is working to source gas with lower methane intensity, reduce emissions through its gas main renewal and pipeline integrity programs, and if necessary, use carbon offsets to address any remaining emissions. DTE Energy also aims to help DTE Gas customers reduce their emissions by approximately 35% by 2040 by increasing energy efficiency, pursuing advanced technologies such as hydrogen and carbon capture and sequestration, and through the CleanVision Natural Gas Balance program which provides customers the option to use carbon offsets and renewable natural gas.

DTE Energy expects that these initiatives at the electric and gas utilities will continue to provide significant opportunities for capital investments and result in earnings growth. DTE Energy is focused on executing its plans to achieve operational excellence and customer satisfaction with a focus on customer affordability. To support its goals for customer affordability, DTE Energy is working to implement operational efficiencies and optimize opportunities from the Inflation Reduction Act to generate tax credits relating to renewable energy, nuclear generation, energy storage, and carbon capture and sequestration. These tax credits may reduce the cost of owning related assets and reduce customer rate impacts from any future cost recoveries. DTE Energy's utilities operate in a constructive regulatory environment and have solid relationships with their regulators.

DTE Energy also has significant investments in non-utility businesses and expects growth opportunities in its DTE Vantage segment. DTE Energy employs disciplined investment criteria when assessing growth opportunities that leverage its assets, skills, and expertise, and provides attractive returns and diversity in earnings and geography. Specifically, DTE Energy invests in targeted markets with attractive competitive dynamics where meaningful scale is in alignment with its risk profile.

A key priority for DTE Energy is to maintain a strong balance sheet which facilitates access to capital markets and reasonably priced financing. Growth will be funded through internally generated cash flows and the issuance of debt and equity. DTE Energy has an enterprise risk management program that, among other things, is designed to monitor and manage exposure to earnings and cash flow volatility related to commodity price changes, interest rates, and counterparty credit risk.

CAPITAL INVESTMENTS

DTE Energy's utility businesses will require significant capital investments to maintain and improve the electric generation and electric and natural gas distribution infrastructure and to comply with environmental regulations and achieve goals for carbon emission reductions. Capital plans may be regularly updated as these requirements and goals evolve and may be subject to regulatory approval.

DTE Electric's capital investments over the 2024-2028 period are estimated at $20 billion, comprised of $9 billion for distribution infrastructure, $4 billion for base infrastructure, and $7 billion for cleaner generation including renewables. DTE Electric has retired all eleven coal-fired generation units at the Trenton Channel, River Rouge, and St. Clair facilities and has announced plans to retire its remaining six coal-fired generating units. DTE Electric plans to convert the two units at the Belle River facility from a base load coal plant to a natural gas peaking resource in 2025-2026. The four units at the Monroe facility are expected to be retired in two stages in 2028 and 2032. Generation from the retired facilities will continue to be replaced or offset with a combination of renewables, energy waste reduction, demand response, battery storage, and natural gas fueled generation.

DTE Gas' capital investments over the 2024-2028 period are estimated at $3.7 billion, comprised of $2.1 billion for base infrastructure and $1.6 billion for the gas renewal program, which includes main and service renewals, meter move-out, and pipeline integrity projects.

DTE Electric and DTE Gas plan to seek regulatory approval for capital expenditures consistent with ratemaking treatment.

DTE Energy's non-utility businesses' capital investments are primarily for expansion, growth, and ongoing maintenance in the DTE Vantage segment, including approximately $1 billion to $1.5 billion from 2024-2028 for renewable energy and custom energy solutions, while expanding into carbon capture and sequestration.

ENVIRONMENTAL MATTERS

The Registrants are subject to extensive environmental regulations, including those addressing climate change. Additional costs may result as the effects of various substances on the environment are studied and governmental regulations are developed and implemented. Actual costs to comply could vary substantially. The Registrants expect to continue recovering environmental costs related to utility operations through rates charged to customers, as authorized by the MPSC.

Increased costs for energy produced from traditional coal-based sources due to recent, pending, and future regulatory initiatives could also increase the economic viability of energy produced from renewable, natural gas fueled generation, and/or nuclear sources, energy waste reduction initiatives, and the potential development of market-based trading of carbon instruments.

Refer to the "Environmental Matters" section within Items 1. and 2. Business and Properties and Note 18 to the Consolidated Financial Statements, "Commitments and Contingencies," for further discussion of Environmental Matters.

OUTLOOK

The next few years will be a period of rapid change for DTE Energy and for the energy industry. DTE Energy's strong utility base, combined with its integrated non-utility operations, position it well for long-term growth.

Looking forward, DTE Energy will focus on several areas that are expected to improve future performance:

- electric and gas customer satisfaction;
- electric distribution system reliability;
- new electric generation and storage;
- gas distribution system renewal;
- reducing carbon emissions at the electric and gas utilities;
- rate competitiveness and affordability;
- regulatory stability and investment recovery for the electric and gas utilities;
- strategic investments in growth projects at DTE Vantage;
- employee engagement, health, safety and wellbeing, and diversity, equity, and inclusion;
- cost structure optimization across all business segments; and
- cash, capital, and liquidity to maintain or improve financial strength.

DTE Energy will continue to pursue opportunities to grow its businesses in a disciplined manner if it can secure opportunities that meet its strategic, financial, and risk criteria.

Voluntary Separation Incentive Program

In January 2024, DTE Energy announced a voluntary separation incentive program ("VSIP") for certain non-represented employees within the electric and gas utilities and corporate support organizations. Under the program, employees can elect a benefits and compensation package and exit the company to retire or pursue other opportunities. DTE Energy currently expects the VSIP to result in approximately $40 to $50 million of one-time costs in the first half of 2024, primarily in the first quarter. The costs will be allocated to Operation and maintenance expense primarily at the Electric and Gas segments. Actual costs may differ from current estimates as elections under the VSIP are finalized. For the remainder of 2024, cost savings from the VSIP are expected to offset a portion of the one-time costs incurred early in the year. Over the long-term, cost savings from the VSIP will support DTE Energy's goals for customer affordability.

RESULTS OF OPERATIONS

The following sections provide a detailed discussion of the operating performance and future outlook of DTE Energy's segments. Segment information, described below, includes intercompany revenues, expenses, and other income and deductions that are eliminated in the Consolidated Financial Statements.

	2023	2022	2021
		(In millions)	
Net Income (Loss) Attributable to DTE Energy by Segment			
Electric	**$ 772**	$ 956	$ 864
Gas	**294**	272	214
DTE Vantage	**153**	92	168
Energy Trading	**336**	(92)	(83)
Corporate and Other	**(158)**	(145)	(367)
Income From Continuing Operations	**1,397**	1,083	796
Discontinued Operations	**—**	—	111
Net Income Attributable to DTE Energy Company	**$ 1,397**	$ 1,083	$ 907

ELECTRIC

The Results of Operations discussion for DTE Electric is presented in a reduced disclosure format in accordance with General Instruction I(2)(a) of Form 10-K for wholly-owned subsidiaries.

The Electric segment consists principally of DTE Electric. Electric results and outlook are discussed below:

	2023	2022	2021
		(In millions)	
Operating Revenues			
Utility operations	**$ 5,804**	$ 6,397	$ 5,809
Non-utility operations	**14**	15	12
	5,818	6,412	5,821
Operating Expenses			
Fuel and purchased power — utility	**1,481**	1,978	1,531
Operation and maintenance	**1,417**	1,564	1,556
Depreciation and amortization	**1,340**	1,218	1,122
Taxes other than income	**339**	339	321
Asset (gains) losses and impairments, net	**27**	8	1
	4,604	5,107	4,531
Operating Income	**1,214**	1,305	1,290
Other (Income) and Deductions	**364**	324	322
Income Tax Expense	**78**	25	104
Net Income Attributable to DTE Energy Company	**$ 772**	$ 956	$ 864

See DTE Electric's Consolidated Statements of Operations in Item 8 of this Report for a complete view of its results. Differences between the Electric segment and DTE Electric's Consolidated Statements of Operations are primarily due to non-utility operations at DTE Sustainable Generation (some of which includes intra-segment activity that is eliminated in consolidation) and the classification of certain benefit costs. Refer to Note 20 to the Consolidated Financial Statements, "Retirement Benefits and Trusteed Assets" for additional information.

Operating Revenues decreased $594 million in 2023 and increased $591 million in 2022. Revenues associated with certain mechanisms and surcharges, including recovery of fuel and purchased power, are offset by related expenses elsewhere in the Registrants' Consolidated Statements of Operations. The change in both periods was due to the following:

	2023	2022
	(In millions)	
Power Supply Cost Recovery	**$ (287)**	$ 365
Weather	**(235)**	(13)
Interconnection sales	**(128)**	164
Base sales	**(71)**	(84)
COVID-19 voluntary refund amortization in 2022	**(30)**	30
Tree trim voluntary refund in 2021	**—**	90
Regulatory mechanism - DTE Securitization I and II	**26**	29
Implementation of new rates	**43**	3
Rate mix	**63**	(6)
Other regulatory mechanisms and other[a]	**25**	13
	$ (594)	$ 591

(a) Primarily includes regulatory mechanisms relating to EWR, RPS, and TRM.

Revenue results are impacted by changes in sales volumes, which are summarized in the table below:

	2023	2022	2021
		(In thousands of MWh)	
DTE Electric Sales			
Residential	**14,452**	15,844	16,386
Commercial	**15,916**	16,296	16,393
Industrial	**8,551**	8,548	8,487
Other	**204**	210	216
	39,123	40,898	41,482
Interconnection sales	**7,658**	6,615	4,263
Total DTE Electric Sales	**46,781**	47,513	45,745
DTE Electric Deliveries			
Retail and wholesale	**39,123**	40,898	41,482
Electric retail access, including self-generators[a]	**4,381**	4,486	4,357
Total DTE Electric Sales and Deliveries	**43,504**	45,384	45,839

(a) Represents deliveries for self-generators that have purchased power from alternative energy suppliers to supplement their power requirements.

DTE Electric sales and deliveries decreased in 2023 primarily due to unfavorable weather compared to 2022. The decrease in 2022 was primarily due to a decrease in residential sales as customers resumed more pre-pandemic activities and worked less from their homes.

Fuel and purchased power — utility expense decreased $497 million in 2023 and increased $447 million in 2022. The change in both periods was due to the following:

		2023
		(In millions)
Purchased power - lower market prices and lower purchase volumes due to lower demand	$	(351)
Coal - lower consumption due to coal plant retirements, partially offset by higher prices		(82)
Gas - lower prices, partially offset by higher consumption primarily due to Blue Water Energy Center		(78)
Nuclear fuel - higher amortization due to refueling outage in 2022		17
Other		(3)
	$	(497)

		2022
		(In millions)
Gas - higher consumption primarily due to Blue Water Energy Center and higher prices	$	231
Purchased power - higher prices and higher volumes		202
Coal - higher prices, partially offset by lower consumption due to coal plant retirements		10
Nuclear fuel - lower amortization due to refueling outage in 2022		(16)
Other		20
	$	447

Operation and maintenance expense decreased $147 million in 2023 and increased $8 million in 2022. The decrease in 2023 was primarily due to lower plant generation expense of $108 million (primarily due to lower outage costs and coal plant retirements), lower benefits and other compensation expense of $67 million, lower corporate support costs of $55 million, and lower legal expense of $14 million. These decreases were partially offset by higher distribution operations expense of $99 million, which was primarily due to higher storm restoration costs.

The increase in 2022 was primarily due to higher EWR expense of $29 million and higher distribution operations expense of $7 million, partially offset by lower benefits and other compensation expense of $17 million and lower legal and environmental expense of $12 million.

Depreciation and amortization expense increased $122 million in 2023 and $96 million in 2022. In 2023, the increase was primarily due to a $113 million increase from a higher depreciable base and an increase of $10 million associated with the TRM. In 2022, the increase was primarily due to a $101 million increase from a higher depreciable base, partially offset by a decrease of $9 million associated with the TRM.

Taxes other than income had no change in 2023 and increased $18 million in 2022. In 2022, the increase was primarily due to higher property taxes of $16 million as a result of a higher tax base.

Asset (gains) losses and impairments, net increased $19 million in 2023 and $7 million in 2022. The increases for both periods were primarily due to MPSC disallowances of previously recorded capital expenditures, including $25 million from the December 2023 rate order and $8 million from the November 2022 rate order. There were no such disallowances in 2021.

Other (Income) and Deductions increased $40 million in 2023 and $2 million in 2022. The increase in 2023 was primarily due to higher net interest expense of $48 million and higher non-operating retirement benefits expense of $26 million, partially offset by a favorable change in investment earnings of $19 million and higher AFUDC equity of $14 million. The increase in 2022 was primarily due to higher net interest expense of $27 million and an unfavorable change in investment earnings of $19 million, partially offset by lower non-operating retirement benefits expense of $37 million and a $4 million decrease in non-operational costs that ceased with the retirement of a power plant.

Income Tax Expense increased $53 million in 2023 and decreased $79 million in 2022. The increase in 2023 was primarily due to lower amortization of the TCJA regulatory liability, partially offset by lower earnings. The decrease in 2022 was primarily due to higher amortization of the TCJA regulatory liability and higher production tax credits, partially offset by higher earnings.

Outlook — DTE Electric will continue to move forward in its efforts to achieve operational excellence, sustain strong cash flows, and earn its authorized return on equity. DTE Electric expects that planned significant capital investments will result in earnings growth. DTE Electric will maintain a strong focus on customers by increasing reliability and satisfaction while keeping customer rate increases affordable. Looking forward, additional factors may impact earnings such as weather, the outcome of regulatory proceedings, benefit plan design changes, uncertainty of legislative or regulatory actions regarding climate change, and effects of energy waste reduction programs.

GAS

The Gas segment consists principally of DTE Gas. Gas results and outlook are discussed below:

	2023	2022	2021
		(In millions)	
Operating Revenues — Utility operations	**$ 1,748**	$ 1,924	$ 1,553
Operating Expenses			
Cost of gas — utility	**469**	632	422
Operation and maintenance	**488**	552	521
Depreciation and amortization	**209**	192	177
Taxes other than income	**108**	101	93
Asset (gains) losses and impairments, net	**—**	—	4
	1,274	1,477	1,217
Operating Income	**474**	447	336
Other (Income) and Deductions	**87**	87	84
Income Tax Expense	**93**	88	38
Net Income Attributable to DTE Energy Company	**$ 294**	$ 272	$ 214

Operating Revenues — Utility operations decreased $176 million in 2023 and increased $371 million in 2022. Revenues associated with certain mechanisms and surcharges, including recovery of the cost of gas, are offset by related expenses elsewhere in DTE Energy's Consolidated Statements of Operations. The change in both periods was due to the following:

	2023	2022
	(In millions)	
Gas Cost Recovery	**$ (161)**	$ 210
Weather	**(85)**	47
Implementation of new rates	**—**	80
Regulatory mechanism — EWR	**4**	8
Home Protection Program	**5**	6
Base sales	**7**	18
Voluntary refund	**10**	(5)
Infrastructure recovery mechanism	**39**	1
Other	**5**	6
	$ (176)	$ 371

Revenue results are impacted by changes in sales volumes, which are summarized in the table below:

	2023	2022	2021
		(In Bcf)	
Gas Markets			
Gas sales	**129**	145	128
End-user transportation	**174**	168	165
	303	313	293
Intermediate transportation	**541**	527	488
Total Gas sales	**844**	840	781

The change in sales in 2023 was primarily due to unfavorable weather. The change in sales in 2022 was primarily due to favorable weather. Intermediate transportation volumes fluctuate period to period based on available market opportunities.

Cost of gas — utility expense decreased $163 million in 2023 and increased $210 million in 2022. The decrease in 2023 was primarily due to a lower cost of gas of $92 million and lower sales volumes of $71 million. The increase in 2022 was primarily due to a higher cost of gas of $153 million and higher sales volumes of $57 million.

Operation and maintenance expense decreased $64 million in 2023 and increased $31 million in 2022. The decrease in 2023 was primarily due to lower gas operations expense of $36 million, lower corporate support costs of $24 million, and lower benefits and other compensation expense of $7 million, partially offset by higher legal expense of $3 million. The increase in 2022 was primarily due to higher gas operations expense of $17 million, higher corporate support costs of $10 million, and higher EWR expense of $7 million, partially offset by lower benefits and other compensation expense of $4 million.

Depreciation and amortization expense increased $17 million in 2023 and $15 million in 2022. The increase in both periods was primarily due to a higher depreciable base.

Taxes other than income increased $7 million in 2023 and $8 million in 2022. The increase in both periods was primarily due to higher property taxes.

Asset (gains) losses and impairments, net had no change in 2023 and decreased $4 million in 2022. The decrease in 2022 was primarily due to capital write-offs of $4 million in 2021.

Other (Income) and Deductions had no change in 2023 and increased $3 million in 2022. The activity in 2023 included higher net interest expense of $10 million that was offset by a favorable change in investment earnings of $10 million. The increase in 2022 was primarily due to an unfavorable change in investment earnings of $9 million and higher net interest expense of $7 million, partially offset by 2021 contributions to the DTE Energy Foundation and other not-for-profit organizations of $12 million.

Income Tax Expense increased $5 million in 2023 and $50 million in 2022. The increase in 2023 was primarily due to higher earnings. The increase in 2022 was primarily due to higher earnings and lower amortization of the TCJA regulatory liability.

Outlook — DTE Gas will continue to move forward in its efforts to achieve operational excellence, sustain strong cash flows, and earn its authorized return on equity. DTE Gas expects that planned significant infrastructure capital investments will result in earnings growth. Looking forward, additional factors may impact earnings such as weather, the outcome of regulatory proceedings, and benefit plan design changes. DTE Gas expects to continue its efforts to improve productivity and decrease costs while improving customer satisfaction with consideration of customer rate affordability.

DTE Gas filed a rate case with the MPSC on January 8, 2024 requesting an increase in base rates of $266 million based on a projected twelve-month period ending September 30, 2025, and an increase in return on equity from 9.9% to 10.25%. The request reflects a net increase to customer rates of only $160 million, as an existing IRM surcharge of $106 million would be rolled into the new base rates. The requested increase is primarily due to increased investments in plant related to system reliability and pipeline safety and inflationary impacts on operating costs, partially offset by higher sales. A final MPSC order in this case is expected in November 2024.

DTE VANTAGE

The DTE Vantage segment is comprised primarily of renewable energy projects that sell electricity and pipeline-quality gas and projects that deliver custom energy solutions to industrial, commercial, and institutional customers. DTE Vantage formerly included projects that produced reduced emissions fuel; however, these projects were closed as planned in 2022 upon REF facilities exhausting their eligibility for generating production tax credits. DTE Vantage results and outlook are discussed below:

	2023	2022	2021
		(In millions)	
Operating Revenues — Non-utility operations	**$ 809**	$ 848	$ 1,482
Operating Expenses			
Fuel, purchased power, and gas — non-utility	**421**	431	1,086
Operation and maintenance	**232**	267	301
Depreciation and amortization	**53**	52	71
Taxes other than income	**9**	10	11
Asset (gains) losses and impairments, net	**(10)**	(7)	28
	705	753	1,497
Operating Income (Loss)	**104**	95	(15)
Other (Income) and Deductions	**(27)**	(15)	(142)
Income Taxes			
Expense	**38**	27	37
Tax Credits	**(60)**	(9)	(68)
	(22)	18	(31)
Net Income	**153**	92	158
Less: Net Loss Attributable to Noncontrolling Interests	**—**	—	(10)
Net Income Attributable to DTE Energy Company	**$ 153**	$ 92	$ 168

Operating Revenues — Non-utility operations decreased $39 million in 2023 and $634 million in 2022. The changes were due to the following:

	2023
	(In millions)
Lower demand and prices in the On-site business	**$ (42)**
Sale of project in the On-site business	**(29)**
Lower sales in the Renewables business	**(3)**
Higher demand and prices in the Steel business	**36**
Other	**(1)**
	$ (39)

	2022
	(In millions)
Closure of the REF business	$ (766)
Termination of a contract in the Steel business in 2021	(39)
Higher sales in the Renewables business	9
New contract in the Renewables business	18
Higher prices partially offset by a terminated contract in the On-site business	27
Higher demand and prices in the Steel business	117
	$ (634)

Fuel, purchased power, and gas — non-utility expense decreased $10 million in 2023 and $655 million in 2022. The changes were due to the following:

	2023
	(In millions)
Lower demand and prices in the On-site business	$ (38)
Sale of project in the On-site business	(9)
Higher demand and prices in the Steel business	13
Higher costs in the Renewables business	26
Other	(2)
	$ (10)

	2022
	(In millions)
Closure of the REF business	$ (773)
Termination of a contract in the Steel business in 2021	(16)
Higher sales in the Renewables business	2
New contract in the Renewables business	4
Higher prices partially offset by a terminated contract in the On-site business	27
Higher demand and prices in the Steel business	101
	$ (655)

Operation and maintenance expense decreased $35 million in 2023 and $34 million in 2022. The 2023 decrease was primarily due to lower operating costs in the Renewables business of $13 million and lower operating costs in the On-site business of $24 million, which was primarily driven by a decrease of $11 million due to the sale of a project. The 2022 decrease was primarily due to $37 million associated with the closure of the REF business and $6 million of lower corporate overhead costs, partially offset by an $8 million increase due to a new contract in the Renewables business.

Depreciation and amortization increased $1 million in 2023 and decreased $19 million in 2022. The decrease in 2022 was primarily due to the closure of the REF business.

Asset (gains) losses and impairments, net changed by $3 million in 2023 from the net gain of $7 million in 2022, and changed by $35 million in 2022 from the net loss of $28 million in 2021. The change in 2023 was primarily due to a gain of $17 million resulting from a change in estimate of an asset retirement obligation in the Steel business, partially offset by asset write-offs in other business units of $7 million. The net gain for 2023 was also partially offset by $7 million due to settlement of contingent consideration relating to a 2017 acquisition in the Renewables business, which resulted in a loss of $2 million in 2023 compared to a gain of $5 million recorded in 2022.

The change in 2022 was primarily due to an asset impairment of $27 million recorded in the Steel business in 2021 for the anticipated closure of a pulverized coal facility, as well as the $5 million gain recorded in the Renewables business in 2022 related to contingent consideration.

Other (Income) and Deductions increased $12 million in 2023 and decreased $127 million in 2022. The 2023 increase was primarily due to $7 million higher equity investment earnings in the Renewables business and $4 million higher interest income associated with a new project in the Steel business. The 2022 decrease was primarily due to $143 million lower income associated with the closure of the REF business, partially offset by $14 million lower interest expense.

Income Taxes — Expense increased $11 million in 2023 and decreased $10 million in 2022. The increase in 2023 was primarily due to a $6 million impact from higher pre-tax income. The increase was also due to $5 million higher deferred tax expense related to the reduction in tax basis on property that generated investment tax credits. The decrease in 2022 was primarily due to changes in pre-tax income, inclusive of pre-tax income (loss) at non-controlling interests.

Income Taxes — Tax Credits increased $51 million in 2023 and decreased by $59 million in 2022. The increase in 2023 was primarily due to investment tax credits of $39 million related to new projects in the Renewables business and $9 million for a new project in the On-site business. The decrease in 2022 was primarily due to the closure of the REF business.

Net Loss Attributable to Noncontrolling Interests had no change in 2023 and decreased by $10 million in 2022. The decrease in 2022 was primarily due to the closure of the REF business.

Outlook — In December 2022, DTE Vantage entered into a series of agreements with a large industrial customer to design, construct, own, and operate certain energy infrastructure assets at the customer's planned electric vehicle and battery manufacturing plant in Tennessee. In December 2023, DTE Vantage executed an agreement to significantly expand the scope of its investment and services to be provided. Project construction is expected to reach substantial completion in the first quarter 2024 and achieve commercial operations in late 2024 for a term of 20 years.

DTE Vantage will continue to leverage its extensive energy-related operating experience and project management capability to develop additional renewable natural gas projects and other projects that provide customer specific energy solutions. DTE Vantage is also developing decarbonization opportunities relating to carbon capture and sequestration projects.

ENERGY TRADING

Energy Trading focuses on physical and financial power, natural gas and environmental marketing and trading, structured transactions, enhancement of returns from its asset portfolio, and optimization of contracted natural gas pipeline transportation and storage positions. Energy Trading also provides natural gas, power, environmental and related services, which may include the management of associated storage and transportation contracts on the customers' behalf and the supply or purchase of environmental attributes to various customers. Energy Trading results and outlook are discussed below:

	2023	2022	2021
		(In millions)	
Operating Revenues — Non-utility operations	**$ 4,612**	$ 10,308	$ 6,831
Operating Expenses			
Purchased power, gas, and other — non-utility	**4,068**	10,331	6,825
Operation and maintenance	**78**	64	81
Depreciation and amortization	**4**	5	6
Taxes other than income	**5**	7	5
Asset (gains) losses and impairments, net	**—**	2	—
	4,155	10,409	6,917
Operating Income (Loss)	**457**	(101)	(86)
Other (Income) and Deductions	**9**	22	24
Income Tax Expense (Benefit)	**112**	(31)	(27)
Net Income (Loss) Attributable to DTE Energy Company	**$ 336**	$ (92)	$ (83)

Operating Revenues — Non-utility operations decreased $5,696 million in 2023 and increased $3,477 million in 2022. The following tables detail changes relative to comparable prior periods:

	2023
	(In millions)
Gas structured and gas transportation strategies - primarily significantly lower gas prices ($5,673), and settled financial hedges ($114)	**$ (5,787)**
Unrealized MTM - gains of $171 compared to losses of ($28) in the prior period	**199**
Other realized gain (loss)	**(108)**
	$ (5,696)

	2022
	(In millions)
Gas structured and gas transportation strategies - primarily significantly higher gas prices $3,664, and settled financial hedges $95	$ 3,759
Unrealized MTM - losses of ($28) compared to losses of ($67) in the prior period	39
Other realized gain (loss)	(321)
	$ 3,477

Purchased power, gas, and other — non-utility expense decreased $6,263 million in 2023 and increased $3,506 million in 2022. The following tables detail changes relative to comparable prior periods:

	2023
	(In millions)
Gas structured and gas transportation strategies - primarily significantly lower gas prices	$ (5,780)
Unrealized MTM - gains of ($122) compared to losses of $108 in the prior period	(230)
Other realized (gain) loss	(253)
	$ (6,263)

	2022
	(In millions)
Gas structured and gas transportation strategies - primarily significantly higher gas prices	$ 3,768
Unrealized MTM - losses of $107 compared to losses of $89 in the prior period	18
Other realized (gain) loss	(280)
	$ 3,506

Operation and maintenance expense increased $14 million in 2023 and decreased $17 million in 2022. The increase in 2023 was primarily due to higher compensation costs. The decrease in 2022 was primarily due to lower compensation costs.

Natural gas structured transactions typically involve a physical purchase or sale of natural gas in the future and/or natural gas basis financial instruments which are derivatives and a related non-derivative pipeline transportation contract. These gas structured transactions can result in significant earnings volatility as the derivative components are marked-to-market without revaluing the related non-derivative contracts.

Operating Income (Loss) increased $558 million in 2023, which includes a $429 million favorable change in timing-related gains and losses primarily related to gas strategies subject to reversal in future periods as the underlying contracts settle. The increase also includes a $19 million favorable change in timing-related losses primarily related to gas strategies that were recognized in previous periods and subsequently reversed as the underlying contracts settled.

Operating Income (Loss) decreased $15 million in 2022, which includes a $26 million unfavorable change in timing-related losses primarily related to gas strategies subject to reversal in future periods as the underlying contracts settle. The decrease also includes a $66 million favorable change in timing-related gains and losses primarily related to gas strategies that were recognized in previous periods and subsequently reversed as the underlying contracts settled.

Other (Income) and Deductions decreased $13 million in 2023 and decreased $2 million in 2022. The decrease in 2023 was primarily due to $10 million of lower contributions to not-for-profit organizations and lower net interest expense of $3 million. The decrease in 2022 was primarily due to $10 million of lower contributions to not-for-profit organizations, partially offset by higher net interest expense of $7 million.

Outlook — In the near-term, Energy Trading expects market conditions to remain challenging. The profitability of this segment may be impacted by the volatility in commodity prices and the uncertainty of impacts associated with regulatory changes, and changes in operating rules of RTOs. Significant portions of the Energy Trading portfolio are economically hedged. Most financial instruments, physical power and natural gas contracts, and certain environmental contracts are deemed derivatives; whereas, natural gas and environmental inventory, contracts for pipeline transportation, storage assets, and some environmental contracts are not derivatives. As a result, Energy Trading will experience earnings volatility as derivatives are marked-to-market without revaluing the underlying non-derivative contracts and assets. Energy Trading's strategy is to economically manage the price risk of these underlying non-derivative contracts and assets with futures, forwards, swaps, and options. This results in gains and losses that are recognized in different interim and annual accounting periods.

See also the "Fair Value" section herein and Notes 12 and 13 to the Consolidated Financial Statements, "Fair Value" and "Financial and Other Derivative Instruments," respectively.

CORPORATE AND OTHER

Corporate and Other includes various holding company activities, holds certain non-utility debt, and holds certain investments, including funds supporting regional development and economic growth. The 2023 net loss of $158 million represents an increase of $13 million from the 2022 net loss of $145 million. This increase was primarily due to higher net interest expense, partially offset by lower equity investment losses, lower valuation allowances, lower corporate overhead costs, and lower benefits expense.

The 2022 net loss of $145 million represents a decrease of $222 million from the 2021 net loss of $367 million. This decrease was primarily due to one-time items following the separation of DT Midstream in 2021, including a $294 million earnings impact from losses on debt extinguishment, partially offset by a reduction to Income Tax Expense of $85 million for the remeasurement of state deferred taxes. The remaining decrease of $13 million in 2022 was primarily due to lower state income taxes, lower valuation allowances, and a gain on sale of assets, partially offset by equity investment losses and benefits expenses.

Outlook — Corporate and Other will continue to support DTE Energy's goals to achieve long-term earnings growth by managing corporate costs such as interest and tax expense while making prudent investments. Corporate and Other will continue to support DTE Energy in achieving a strong balance sheet, access to capital markets, and market priced financing in order to manage interest costs that have increased in recent periods and could impact future earnings.

CAPITAL RESOURCES AND LIQUIDITY

Cash Requirements

DTE Energy uses cash to maintain and invest in the electric and natural gas utilities, to grow the non-utility businesses, to retire and pay interest on long-term debt, and to pay dividends. DTE Energy believes it will have sufficient internal and external capital resources to fund anticipated capital and operating requirements. DTE Energy expects that cash from operations in 2024 will be approximately $3.3 billion. DTE Energy anticipates base level utility capital investments, including environmental, renewable, and energy waste reduction expenditures, and expenditures for non-utility businesses of approximately $4.7 billion in 2024. DTE Energy plans to seek regulatory approval to include utility capital expenditures in regulatory rate base consistent with prior treatment. Capital spending for growth of existing or new non-utility businesses will depend on the existence of opportunities that meet strict risk-return and value creation criteria.

Refer below for analysis of cash flows relating to operating, investing, and financing activities, which reflect DTE Energy's change in financial condition. Any significant non-cash items are included in the Supplemental disclosure of non-cash investing and financing activities within the Consolidated Statements of Cash Flows.

	2023	2022	2021
		(In millions)	
Cash, Cash Equivalents, and Restricted Cash at Beginning of Period	**$ 43**	$ 35	$ 516
Net cash from operating activities	**3,220**	1,977	3,067
Net cash used for investing activities	**(4,095)**	(3,431)	(3,863)
Net cash from financing activities	**883**	1,462	315
Net Increase (Decrease) in Cash, Cash Equivalents, and Restricted Cash	**8**	8	(481)
Cash, Cash Equivalents, and Restricted Cash at End of Period	**$ 51**	$ 43	$ 35

Cash from Operating Activities

A majority of DTE Energy's operating cash flows are provided by the electric and natural gas utilities, which are significantly influenced by factors such as weather, electric retail access, regulatory deferrals, regulatory outcomes, economic conditions, changes in working capital, and operating costs.

Net cash from operations increased $1.2 billion in 2023. The increase was primarily due to higher cash from working capital items and increases in Net income, Depreciation and amortization, and Deferred income taxes.

The change in working capital items in 2023 was primarily due to an increase in cash related to Accounts receivable, net and Regulatory assets and liabilities, partially offset by a decrease in cash related to Prepaid postretirement benefit costs, Accounts payable, Derivative assets and liabilities, and Other current and noncurrent assets and liabilities.

Net cash from operations decreased $1.1 billion in 2022. The reduction was primarily due to lower cash from working capital items. The reduction was also partially due to changes in Net income, which decreased year-over-year if adjusted for the Loss on extinguishment of debt in 2021, primarily driven by the separation of DT Midstream in July 2021 and the closure of the REF business at DTE Vantage in 2022.

The change in working capital items in 2022 was primarily due to a decrease in cash related to Regulatory assets and liabilities, Accounts receivable, net, and Accounts payable, partially offset by increases related to Prepaid postretirement benefit costs, Accrued pension liability, and Other current and noncurrent assets and liabilities.

Changes in working capital during 2022 were significantly impacted by higher prices for natural gas and electricity, including Accounts receivable at the utilities, Accounts payable in the Electric and Energy Trading segments, and Regulatory assets attributed to the PSCR mechanism at DTE Electric. Refer to "Quantitative and Qualitative Disclosures About Market Risk" within Item 7A of this Report for additional information regarding DTE Energy's management of commodity price and other market risks.

Cash used for Investing Activities

Cash inflows associated with investing activities are primarily generated from the sale of assets, while cash outflows are the result of plant and equipment expenditures and acquisitions. In any given year, DTE Energy looks to realize cash from under-performing or non-strategic assets or matured, fully valued assets.

Capital spending within the utility businesses is primarily to maintain and improve electric generation and the electric and natural gas distribution infrastructure, and to comply with environmental regulations and renewable energy goals.

Capital spending within the non-utility businesses is primarily for ongoing maintenance, expansion, and growth. DTE Energy looks to make growth investments that meet strict criteria in terms of strategy, management skills, risks, and returns. All new investments are analyzed for their rates of return and cash payback on a risk adjusted basis. DTE Energy has been disciplined in how it deploys capital and will not make investments unless they meet the criteria. For new business lines, DTE Energy initially invests based on research and analysis. DTE Energy starts with a limited investment, evaluates the results, and either expands or exits the business based on those results. In any given year, the amount of growth capital will be determined by the underlying cash flows of DTE Energy, with a clear understanding of any potential impact on its credit ratings.

Net cash used for investing activities increased $664 million in 2023 due primarily to increases in utility plant and equipment expenditures and cash used related to Notes receivable.

Net cash used for investing activities decreased $432 million in 2022 due primarily to decreases in utility plant and equipment expenditures and non-utility plant and equipment expenditures.

Cash from Financing Activities

DTE Energy relies on both short-term borrowing and long-term financing as a source of funding for capital requirements not satisfied by its operations.

DTE Energy's strategy is to have a targeted debt portfolio blend of fixed and variable interest rates and maturity. DTE Energy targets balance sheet financial metrics to ensure it is consistent with the objective of a strong investment grade debt rating.

Net cash from financing activities decreased $579 million in 2023. The decrease was primarily due to the Issuance of common stock in 2022 and a decrease in Short-term borrowings, net, partially offset by an increase in Issuance of long-term debt, net of issuance costs.

Net cash from financing activities increased $1.1 billion in 2022. The increase was primarily due to the Issuance of common stock in 2022, decreases in Redemption of long-term debt and Prepayment costs for extinguishment of long-term debt, and lower Dividends on common stock. The increase was partially offset by decreases in Issuance of long-term debt, net of issuance costs and Short-term borrowings, net. The lower amount of long-term debt activity was primarily due to $3.1 billion of new issuances and $2.6 billion of redemptions in 2021 related to the separation of DT Midstream.

Outlook

Sources of Cash

DTE Energy expects cash flows from operations to increase over the long-term, primarily as a result of growth from the utility and non-utility businesses. Growth in the utilities is expected to be driven primarily by capital spending which will increase the base from which rates are determined. DTE Energy expects long-term growth in sales related to vehicle electrification, but no significant impacts in the near-term. Non-utility growth is expected from additional investments in the DTE Vantage segment, primarily related to renewable energy and custom energy solutions, while expanding into carbon capture and sequestration. DTE Vantage expects enhanced growth opportunities in decarbonization as a result of the Inflation Reduction Act, including tax credits for renewable natural gas and carbon capture projects.

DTE Energy's utilities may be impacted by the timing of collection or refund of various recovery and tracking mechanisms as a result of timing of MPSC orders. Energy prices are likely to be a source of volatility with regard to working capital requirements for the foreseeable future. DTE Energy continues its efforts to identify opportunities to improve cash flows through working capital initiatives and maintaining flexibility in the timing and extent of long-term capital projects.

At the discretion of management and depending upon economic and financial market conditions, DTE Energy expects to issue up to $100 million of equity in 2024. DTE Energy anticipates these discretionary equity issuances would be made through contributions to the dividend reinvestment plan and/or employee benefit plans.

Over the long-term, DTE Energy does not have any equity commitments and will continue to evaluate equity needs on an annual basis. DTE Energy currently expects its primary source of long-term financing to be the issuance of debt and is monitoring the impact of rising interest rates on the cost of borrowing.

Uses of Cash

DTE Energy has $2.1 billion in long-term debt, including securitization bonds and finance leases, maturing in the next twelve months. Repayment of the debt is expected to be made through internally generated funds and the issuance of short-term and/or long-term debt.

DTE Energy has paid quarterly cash dividends for more than 100 consecutive years and expects to continue paying regular cash dividends in the future, including approximately $0.8 billion in 2024. Any payment of future dividends is subject to approval by the Board of Directors and may depend on DTE Energy's future earnings, capital requirements, and financial condition. Over the long-term, DTE Energy expects continued dividend growth and is targeting a payout ratio consistent with pure-play utility companies. Dividends are subject to certain restrictions as discussed in Note 16 to the Consolidated Financial Statements, "Short-Term Credit Arrangements and Borrowings." However, these restrictions are not expected to impact DTE Energy's planned dividend payments.

Various subsidiaries and equity investees of DTE Energy have entered into derivative and non-derivative contracts which contain ratings triggers and are guaranteed by DTE Energy. These contracts contain provisions which allow the counterparties to require that DTE Energy post cash or letters of credit as collateral in the event that DTE Energy's credit rating is downgraded below investment grade. Certain of these provisions (known as "hard triggers") state specific circumstances under which DTE Energy can be required to post collateral upon the occurrence of a credit downgrade, while other provisions (known as "soft triggers") are not as specific. For contracts with soft triggers, it is difficult to estimate the amount of collateral which may be requested by counterparties and/or which DTE Energy may ultimately be required to post. The amount of such collateral which could be requested fluctuates based on commodity prices (primarily natural gas, power, and environmental) and the provisions and maturities of the underlying transactions. As of December 31, 2023, DTE Energy's contractual obligation to post collateral in the form of cash or letters of credit in the event of a downgrade to below investment grade, under both hard trigger and soft trigger provisions, was $463 million.

For cash obligations related to leases and future purchase commitments, refer to Note 17 and Note 18 to the Consolidated Financial Statements, "Leases." and "Commitments and Contingencies," respectively. Purchase commitments include capital expenditures that are contractually obligated. Also refer to the "Capital Investments" section above for additional information on DTE Energy's capital strategy and estimated spend over the next five years.

Other obligations are further described in the following Combined Notes to the Consolidated Financial Statements:

Note	Title
1	Organization and Basis of Presentation
8	Asset Retirement Obligations
9	Regulatory Matters
10	Income Taxes
13	Financial and Other Derivative Instruments
14	Long-Term Debt
16	Short-Term Credit Arrangements and Borrowings
18	Commitments and Contingencies
20	Retirement Benefits and Trusteed Assets
21	Stock-Based Compensation

Liquidity

DTE Energy has approximately $1.8 billion of available liquidity at December 31, 2023, consisting primarily of cash and cash equivalents and amounts available under unsecured revolving credit agreements.

DTE Energy believes it will have sufficient operating flexibility, cash resources and funding sources to maintain adequate liquidity and to meet future operating cash and capital expenditure needs. However, virtually all DTE Energy's businesses are capital intensive, or require access to capital, and the inability to access adequate capital could adversely impact earnings and cash flows.

Credit Ratings

Credit ratings are intended to provide banks and capital market participants with a framework for comparing the credit quality of securities and are not a recommendation to buy, sell, or hold securities. DTE Energy, DTE Electric, and DTE Gas' credit ratings affect their costs of capital and other terms of financing, as well as their ability to access the credit and commercial paper markets. DTE Energy, DTE Electric, and DTE Gas' management believes that the current credit ratings provide sufficient access to capital markets. However, disruptions in the banking and capital markets not specifically related to DTE Energy, DTE Electric, and DTE Gas may affect their ability to access these funding sources or cause an increase in the return required by investors.

As part of the normal course of business, DTE Electric, DTE Gas, and various non-utility subsidiaries of DTE Energy routinely enter into physical or financially settled contracts for the purchase and sale of electricity, natural gas, coal, capacity, storage, and other energy-related products and services. Certain of these contracts contain provisions which allow the counterparties to request that DTE Energy posts cash or letters of credit in the event that the senior unsecured debt rating of DTE Energy is downgraded below investment grade. The amount of such collateral which could be requested fluctuates based upon commodity prices and the provisions and maturities of the underlying transactions and could be substantial. Also, upon a downgrade below investment grade, DTE Energy, DTE Electric, and DTE Gas could have restricted access to the commercial paper market, and if DTE Energy is downgraded below investment grade, the non-utility businesses could be required to restrict operations due to a lack of available liquidity. A downgrade below investment grade could potentially increase the borrowing costs of DTE Energy, DTE Electric, and DTE Gas and their subsidiaries and may limit access to the capital markets. The impact of a downgrade will not affect DTE Energy, DTE Electric, and DTE Gas' ability to comply with existing debt covenants. While DTE Energy, DTE Electric, and DTE Gas currently do not anticipate such a downgrade, they cannot predict the outcome of current or future credit rating agency reviews.

CRITICAL ACCOUNTING ESTIMATES

The preparation of the Registrants' Consolidated Financial Statements in conformity with generally accepted accounting principles requires that management apply accounting policies and make estimates and assumptions that affect the results of operations and the amounts of assets and liabilities reported in the Consolidated Financial Statements. The Registrants' management believes that the areas described below require significant judgment in the application of accounting policy or in making estimates and assumptions in matters that are inherently uncertain and that may change in subsequent periods. Additional discussion of these accounting policies can be found in the Combined Notes to Consolidated Financial Statements in Item 8 of this Report.

Regulation

A significant portion of the Registrants' businesses are subject to regulation. This results in differences in the application of generally accepted accounting principles between regulated and non-regulated businesses. DTE Electric and DTE Gas are required to record regulatory assets and liabilities for certain transactions that would have been treated as revenue or expense in non-regulated businesses. Future regulatory changes or changes in the competitive environment could result in the discontinuance of this accounting treatment for regulatory assets and liabilities for some or all of the Registrants' businesses. The Registrants' management believes that currently available facts support the continued use of regulatory assets and liabilities and that all regulatory assets and liabilities are recoverable or refundable in the current rate environment.

See Note 9 to the Consolidated Financial Statements, "Regulatory Matters."

Derivatives

Derivatives are generally recorded at fair value and shown as Derivative assets or liabilities. Changes in the fair value of the derivative instruments are recognized in earnings in the period of change. The normal purchases and normal sales exception requires, among other things, physical delivery in quantities expected to be used or sold over a reasonable period in the normal course of business. Contracts that are designated as normal purchases and normal sales are not recorded at fair value. Substantially all of the commodity contracts entered into by DTE Electric and DTE Gas meet the criteria specified for this exception.

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date in a principal or most advantageous market. Fair value is a market-based measurement that is determined based on inputs, which refer broadly to assumptions that market participants use in pricing assets or liabilities. These inputs can be readily observable, market corroborated, or generally unobservable inputs. The Registrants make certain assumptions they believe that market participants would use in pricing assets or liabilities, including assumptions about risk, and the risks inherent in the inputs to valuation techniques. Credit risk of the Registrants and their counterparties is incorporated in the valuation of assets and liabilities through the use of credit reserves, the impact of which was immaterial at December 31, 2023 and 2022. The Registrants believe they use valuation techniques that maximize the use of observable market-based inputs and minimize the use of unobservable inputs.

The fair values the Registrants calculate for their derivatives may change significantly as inputs and assumptions are updated for new information. Actual cash returns realized on derivatives may be different from the results the Registrants estimate using models. As fair value calculations are estimates based largely on commodity prices, the Registrants perform sensitivity analyses on the fair values of forward contracts. See the sensitivity analysis in Item 7A. of this report, "Quantitative and Qualitative Disclosures About Market Risk." See also the "Fair Value" section herein.

See Notes 12 and 13 to the Consolidated Financial Statements, "Fair Value" and "Financial and Other Derivative Instruments," respectively.

Goodwill

Certain of DTE Energy's reporting units have goodwill or allocated goodwill resulting from business combinations. DTE Energy performs an impairment test for each of the reporting units with goodwill annually or whenever events or circumstances indicate that the value of goodwill may be impaired.

In performing the impairment test, DTE Energy compares the fair value of the reporting unit to its carrying value including goodwill. If the carrying value including goodwill were to exceed the fair value of a reporting unit, an impairment loss would be recognized. A goodwill impairment loss is measured as the amount by which a reporting unit's carrying value exceeds fair value, not to exceed the carrying amount of goodwill.

DTE Energy estimates the reporting unit's fair value using standard valuation techniques, including techniques which use estimates of projected future results and cash flows to be generated by the reporting unit. For all reporting units except Energy Trading, the fair values were calculated using a weighted combination of the income approach, which estimates fair value based on discounted cash flows, and the market approach, which estimates fair value based on market comparables within the utility and energy industries. For the Energy Trading reporting unit, only the income approach was used due to the lack of comparable market information.

Discounted cash flows used in the income approach are based on DTE Energy's internal business plan for the next five years plus a terminal value. DTE Energy capitalizes the terminal value for each reporting unit using a weighted average cost of capital (WACC) less an assumed long-term growth rate. The income approach cash flow valuations involve a number of estimates that require broad assumptions and significant judgment by management regarding future performance.

One of the most significant assumptions utilized in determining the fair value of reporting units under the market approach is implied market multiples for certain peer companies. Management selects comparable peers based on each peer’s primary business mix, operations, and market capitalization compared to the applicable reporting unit and calculates implied market multiples based on available projected earnings guidance and peer company market values as of the test date.

DTE Energy performs an annual impairment test each October. In between annual tests, DTE Energy monitors its estimates and assumptions regarding estimated future cash flows, including the impact of movements in market indicators in future quarters, and will update the impairment analyses if a triggering event occurs. While DTE Energy believes the assumptions are reasonable, actual results may differ from projections. To the extent projected results or cash flows are revised downward, the reporting unit may be required to write down all or a portion of its goodwill, which would adversely impact DTE Energy's earnings.

DTE Energy performed its annual impairment test as of October 1, 2023. In estimating fair value for the income approach, DTE Energy used discounted rates ranging from 6.9% to 10.0%. Based on the weighting of the estimated fair value using an income and market approach, DTE Energy determined that the estimated fair value of each reporting unit substantially exceeded its carrying value, and no impairment existed.

Long-Lived Assets

The Registrants evaluate the carrying value of long-lived assets, excluding goodwill, when circumstances indicate that the carrying value of those assets may not be recoverable. Conditions that could have an adverse impact on the cash flows and fair value of the long-lived assets are deteriorating business climate, condition of the asset, or plans to dispose of the asset before the end of its useful life. The review of long-lived assets for impairment requires significant assumptions about operating strategies and estimates of future cash flows, which require assessments of current and projected market conditions. An impairment evaluation is based on an undiscounted cash flow analysis at the lowest level for which independent cash flows of long-lived assets can be identified from other groups of assets and liabilities. Impairment may occur when the carrying value of the asset exceeds the future undiscounted cash flows. When the undiscounted cash flow analysis indicates a long-lived asset is not recoverable, the amount of the impairment loss is determined by measuring the excess of the long-lived asset over its fair value. An impairment would require the Registrants to reduce both the long-lived asset and current period earnings by the amount of the impairment, which would adversely impact their earnings.

Pension and Other Postretirement Costs

DTE Energy sponsors both funded and unfunded defined benefit pension plans and other postretirement benefit plans for eligible employees of the Registrants. The measurement of the plan obligations and cost of providing benefits under these plans involve various factors, including numerous assumptions and accounting elections. When determining the various assumptions that are required, DTE Energy considers historical information as well as future expectations. The benefit costs are affected by, among other things, the actual rate of return on plan assets, the long-term expected return on plan assets, the discount rate applied to benefit obligations, the incidence of mortality, the expected remaining service period of plan participants, level of compensation and rate of compensation increases, employee age, length of service, the anticipated rate of increase of health care costs, benefit plan design changes, and the level of benefits provided to employees and retirees. Pension and other postretirement benefit costs attributed to the segments are included with labor costs and ultimately allocated to projects within the segments, some of which are capitalized.

DTE Energy had pension credits of $69 million in 2023 and pension costs of $123 million and $139 million in 2022 and 2021, respectively. Other postretirement benefit credits were $38 million in 2023, $66 million in 2022, and $59 million in 2021. Pension and other postretirement benefit credits for 2023 were calculated based upon several actuarial assumptions, including an expected long-term rate of return on plan assets of 7.60% for the pension plans and 7.20% for the other postretirement benefit plans. In developing the expected long-term rate of return assumptions, DTE Energy evaluated asset class risk and return expectations, as well as inflation assumptions. Projected returns are based on broad equity, bond, and other markets. DTE Energy's 2024 expected long-term rate of return on pension plan assets is based on an asset allocation assumption utilizing active and passive investment management of 25% in equity markets, 48% in fixed income markets, including long duration bonds, and 27% invested in other assets. DTE Energy's 2024 expected long-term rate of return on other postretirement plan assets is based on an asset allocation assumption utilizing active and passive investment management of 9% in equity markets, 61% in fixed income markets - including long duration bonds, and 30% invested in other assets. Because of market volatility, DTE Energy periodically reviews the asset allocation and rebalances the portfolio when considered appropriate. DTE Energy is increasing its long-term rate of return assumption for the pension plans to 8.00% and increasing the other postretirement plans to 7.60% for 2024. DTE Energy believes these rates are reasonable assumptions for the long-term rates of return on the plans' assets for 2024 given their respective asset allocations and DTE Energy's capital market expectations. DTE Energy will continue to evaluate the actuarial assumptions, including its expected rate of return, at least annually.

DTE Energy calculates the expected return on pension and other postretirement benefit plan assets by multiplying the expected return on plan assets by the market-related value (MRV) of plan assets at the beginning of the year, taking into consideration anticipated contributions and benefit payments that are to be made during the year. Current accounting rules provide that the MRV of plan assets can be either fair value or a calculated value that recognizes changes in fair value in a systematic and rational manner over not more than five years. For the pension plans, DTE Energy uses a calculated value when determining the MRV of the pension plan assets and recognizes changes in fair value over a three-year period. Accordingly, the future value of assets will be impacted as previously deferred gains or losses are recognized. As of December 31, 2023, DTE Energy had $478 million of cumulative losses related to investment performance in prior years that were not yet recognized in the calculation of the MRV of pension assets. For other postretirement benefit plans, DTE Energy uses fair value when determining the MRV of plan assets; therefore, all investment gains and losses have been recognized in the calculation of MRV for these plans.

The discount rate that DTE Energy utilizes for determining future pension and other postretirement benefit obligations is based on a yield curve approach and a review of bonds that receive one of the two highest ratings given by a recognized rating agency. The yield curve approach matches projected pension plan and other postretirement benefit payment streams with bond portfolios reflecting actual liability duration unique to the plans. The discount rate determined on this basis was 5.00% for both the pension and other postretirement plans at December 31, 2023 compared to 5.19% for both the pension and other postretirement plans at December 31, 2022.

DTE Energy periodically changes its mortality assumptions to reflect any updated projection scales published by the Society of Actuaries. The mortality assumptions used at December 31, 2023 are the PRI-2012 mortality table projected to 2018 using Scale MP-2019, and projected forward from 2018 using Scale MP-2021 with generational projection. The base mortality tables vary by type of plan, employee's union status and employment status, with additional adjustments to reflect the actual experience and credibility of each population.

DTE Energy estimates a total pension credit of approximately $20 million for 2024, compared to the credit of $69 million in 2023. The expected change is primarily related to the recognition of deferred investment losses. The 2024 other postretirement benefit credit is estimated at approximately $40 million, comparable to the credit of $38 million in 2023.

The health care trend rates for DTE Energy assume 7.75% for pre-65 participants and 8.25% for post-65 participants for 2024, trending down to 4.50% for both pre-65 and post-65 participants in 2035.

Future actual pension and other postretirement benefit costs or credits will depend on future investment performance, changes in future discount rates, and various other factors related to plan design.

Lowering the expected long-term rate of return on the plan assets by one percentage point would have decreased the 2023 pension credit by approximately $46 million. Lowering the discount rate and the salary increase assumptions by one percentage point would have decreased the 2023 pension credit by approximately $17 million. Lowering the expected long-term rate of return on plan assets by one percentage point would have decreased the 2023 other postretirement credit by approximately $16 million. Lowering the discount rate and the salary increase assumptions by one percentage point would have decreased the 2023 other postretirement credit by approximately $9 million.

The value of the qualified pension and other postretirement benefit plan assets was $5.6 billion at December 31, 2023 and $5.5 billion at December 31, 2022. At December 31, 2023, DTE Energy's qualified pension plans were underfunded by $254 million and its other postretirement benefit plans were over-funded by $331 million. In 2023, the funded status of the pension plans and other postretirement benefit plans improved primarily due to favorable asset returns.

Pension and other postretirement costs and pension cash funding requirements may increase in future years without typical returns in the financial markets. Any required pension funding will be made by contributing amounts consistent with the provisions of the Pension Protection Act of 2006. DTE Energy did not make contributions to its qualified pension plans in 2023 or 2022, and does not anticipate making any material contributions in 2024. DTE Gas transferred $50 million of qualified pension plan funds to DTE Electric in 2023 in exchange for cash consideration. DTE Energy does not expect a material amount of contributions to its qualified pension plans over the next five years. DTE Energy did not make other postretirement benefit plan contributions in 2023 or 2022 and does not anticipate making any contributions to the other postretirement plans in 2024 or over the next five years. All planned contributions will be at the discretion of management and subject to any changes in financial market conditions.

See Note 20 to the Consolidated Financial Statements, "Retirement Benefits and Trusteed Assets."

Legal Reserves

The Registrants are involved in various legal proceedings, claims, and litigation arising in the ordinary course of business. The Registrants regularly assess their liabilities and contingencies in connection with asserted or potential matters and establish reserves when appropriate. Legal reserves are based upon the Registrants' management’s assessment of pending and threatened legal proceedings and claims against the Registrants.

Accounting for Tax Obligations

The Registrants are required to make judgments regarding the potential tax effects of various financial transactions and results of operations in order to estimate their obligations to taxing authorities. The Registrants account for uncertain income tax positions using a benefit recognition model with a two-step approach, a more-likely-than-not recognition criterion, and a measurement attribute that measures the position as the largest amount of tax benefit that is greater than 50% likely of being realized upon ultimate settlement. If the benefit does not meet the more likely than not criteria for being sustained on its technical merits, no benefit will be recorded. Uncertain tax positions that relate only to timing of when an item is included on a tax return are considered to have met the recognition threshold. The Registrants also have non-income tax obligations related to property, sales and use, and employment-related taxes, and ongoing appeals related to these tax matters.

Accounting for tax obligations requires judgments, including assessing whether tax benefits are more likely than not to be sustained, and estimating reserves for potential adverse outcomes regarding tax positions that have been taken. The Registrants also assess their ability to utilize tax attributes, including those in the form of carry-forwards, for which the benefits have already been reflected in the Consolidated Financial Statements. The Registrants believe the resulting tax reserve balances as of December 31, 2023 and 2022 are appropriate. The ultimate outcome of such matters could result in favorable or unfavorable adjustments to the Registrants' Consolidated Financial Statements, and such adjustments could be material.

See Note 10 to the Consolidated Financial Statements, "Income Taxes."

NEW ACCOUNTING PRONOUNCEMENTS

See Note 3 to the Consolidated Financial Statements, "New Accounting Pronouncements."

FAIR VALUE

Derivatives are generally recorded at fair value and shown as Derivative assets or liabilities. Contracts DTE Energy typically classifies as derivative instruments include power, natural gas, some environmental contracts, and certain forwards, futures, options and swaps, and foreign currency exchange contracts. Items DTE Energy does not generally account for as derivatives include natural gas and environmental inventory, pipeline transportation contracts, storage assets, and some environmental contracts. See Notes 12 and 13 to the Consolidated Financial Statements, "Fair Value" and "Financial and Other Derivative Instruments," respectively.

The tables below do not include the expected earnings impact of non-derivative natural gas storage, transportation, certain power contracts, and some environmental contracts which are subject to accrual accounting. Consequently, gains and losses from these positions may not match with the related physical and financial hedging instruments in some reporting periods, resulting in volatility in the Registrants' reported period-by-period earnings; however, the financial impact of the timing differences will reverse at the time of physical delivery and/or settlement.

The Registrants manage their MTM risk on a portfolio basis based upon the delivery period of their contracts and the individual components of the risks within each contract. Accordingly, the Registrants record and manage the energy purchase and sale obligations under their contracts in separate components based on the commodity (e.g. electricity or natural gas), the product (e.g. electricity for delivery during peak or off-peak hours), the delivery location (e.g. by region), the risk profile (e.g. forward or option), and the delivery period (e.g. by month and year).

The Registrants have established a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value in three broad levels. The fair value hierarchy gives the highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). For further discussion of the fair value hierarchy, see Note 12 to the Consolidated Financial Statements, "Fair Value."

The following table provides details on changes in DTE Energy's MTM net asset (or liability) position:

	Total
	(In millions)
MTM at December 31, 2022	$ (224)
Reclassified to realized upon settlement	(103)
Changes in fair value recorded to income	383
Amounts recorded to unrealized income	280
Changes in fair value recorded in Regulatory liabilities	9
Amounts recorded in other comprehensive income, pretax	(17)
Change in collateral	49
MTM at December 31, 2023	**$ 97**

The table below shows the maturity of DTE Energy's MTM positions. The positions from 2027 and beyond principally represent longer tenor gas structured transactions:

Source of Fair Value	2024	2025	2026	2027 and Beyond	Total Fair Value
	(In millions)				
Level 1	$ (38)	$ (11)	$ (1)	$ —	$ (50)
Level 2	—	6	9	(15)	—
Level 3	101	17	1	(44)	75
MTM before collateral adjustments	$ 63	$ 12	$ 9	$ (59)	25
Collateral adjustments					72
MTM at December 31, 2023					**$ 97**

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

Market Price Risk

The Electric and Gas businesses have commodity price risk, primarily related to the purchases of coal, natural gas, uranium, and electricity. However, the Registrants do not bear significant exposure to earnings risk, as such changes are included in the PSCR and GCR regulatory rate-recovery mechanisms. Earnings may be indirectly impacted if PSCR or GCR charges increase such that it impacts the collectability of receivables and increases uncollectible expense. Refer to the Allowance for Doubtful Accounts section below for additional information.

Changes in the price of natural gas can also impact the valuation of lost and unaccounted for gas, storage sales, and transportation services revenue at the Gas segment. The Gas segment manages its market price risk related to storage sales revenue primarily through the sale of long-term storage contracts. The Registrants are exposed to short-term cash flow or liquidity risk as a result of the time differential between actual cash settlements and regulatory rate recovery.

The DTE Vantage segment is subject to price risk for electricity, natural gas, coal products, and environmental attributes generated from its renewable natural gas investments. DTE Energy manages its exposure to commodity price risk through the use of long-term contracts and hedging instruments, when available.

DTE Energy's Energy Trading business segment has exposure to electricity, natural gas, environmental, crude oil, heating oil, and foreign currency exchange price fluctuations. These risks are managed by the energy marketing and trading operations through the use of forward energy, capacity, storage, options, and futures contracts, within predetermined risk parameters.

Credit Risk

Allowance for Doubtful Accounts

The Registrants regularly review contingent matters, existing and future economic conditions, customer trends and other factors relating to customers and their contracts and record provisions for amounts considered at risk of probable loss in the allowance for doubtful accounts. The Registrants believe their accrued amounts are adequate for probable loss. The Registrants manage this risk by working at the state and federal levels to promote funding programs for low-income customers, providing energy assistance programs and support, and promoting timely customer payments through adherence to MPSC billing practice rules relating to payment arrangements, energy disconnects, and restores.

Trading Activities

DTE Energy is exposed to credit risk through trading activities. Credit risk is the potential loss that may result if the trading counterparties fail to meet their contractual obligations. DTE Energy utilizes both external and internal credit assessments when determining the credit quality of trading counterparties.

The following table displays the credit quality of DTE Energy's trading counterparties as of December 31, 2023:

	Credit Exposure Before Cash Collateral	Cash Collateral	Net Credit Exposure
		(In millions)	
Investment Grade[(a)]			
A- and Greater	$ 469	$ —	$ 469
BBB+ and BBB	418	(3)	415
BBB-	13	—	13
Total Investment Grade	900	(3)	897
Non-investment grade[(b)]	9	—	9
Internally Rated — investment grade[(c)]	427	—	427
Internally Rated — non-investment grade[(d)]	13	—	13
Total	**$ 1,349**	**$ (3)**	**$ 1,346**

____

(a) This category includes counterparties with minimum credit ratings of Baa3 assigned by Moody's Investors Service (Moody's) or BBB- assigned by Standard & Poor's Rating Group, a division of McGraw-Hill Companies, Inc. (Standard & Poor's). The five largest counterparty exposures, combined, for this category represented 25% of the total gross credit exposure.

(b) This category includes counterparties with credit ratings that are below investment grade. The five largest counterparty exposures, combined, for this category represented less than 1% of the total gross credit exposure.

(c) This category includes counterparties that have not been rated by Moody's or Standard & Poor's but are considered investment grade based on DTE Energy's evaluation of the counterparty's creditworthiness. The five largest counterparty exposures, combined, for this category represented 11% of the total gross credit exposure.

(d) This category includes counterparties that have not been rated by Moody's or Standard & Poor's and are considered non-investment grade based on DTE Energy's evaluation of the counterparty's creditworthiness. The five largest counterparty exposures, combined, for this category represented less than 1% of the total gross credit exposure.

Other

The Registrants engage in business with customers that are non-investment grade. The Registrants closely monitor the credit ratings of these customers and, when deemed necessary and permitted under the tariffs, request collateral or guarantees from such customers to secure their obligations.

Interest Rate Risk

DTE Energy is subject to interest rate risk in connection with the issuance of debt. In order to manage interest costs, DTE Energy may use treasury locks and interest rate swap agreements. DTE Energy's exposure to interest rate risk arises primarily from changes in U.S. Treasury rates, commercial paper rates, credit spreads, and SOFR. As of December 31, 2023, DTE Energy had floating rate debt of $1.3 billion and a floating rate debt-to-total debt ratio of 6.4%.

Foreign Currency Exchange Risk

DTE Energy has foreign currency exchange risk arising from market price fluctuations associated with fixed priced contracts. These contracts are denominated in Canadian dollars and are primarily for the purchase and sale of natural gas and power, as well as for long-term transportation capacity. To limit DTE Energy's exposure to foreign currency exchange fluctuations, DTE Energy has entered into a series of foreign currency exchange forward contracts through December 2032.

Summary of Sensitivity Analyses

Sensitivity analyses were performed on the fair values of commodity contracts for DTE Energy and long-term debt obligations for the Registrants. The commodity contracts listed below principally relate to energy marketing and trading activities. The sensitivity analyses involved increasing and decreasing forward prices and rates at December 31, 2023 and 2022 by a hypothetical 10% and calculating the resulting change in the fair values. The hypothetical losses related to long-term debt would be realized only if DTE Energy transferred all of its fixed-rate long-term debt to other creditors.

The results of the sensitivity analyses:

Activity	Assuming a 10% Increase in Prices/Rates As of December 31, 2023	2022	Assuming a 10% Decrease in Prices/Rates As of December 31, 2023	2022	Change in the Fair Value of
	(In millions)				
Gas contracts	**$ 40**	$ 16	**$ (40)**	$ (16)	Commodity contracts
Power contracts	**$ 1**	$ 4	**$ (1)**	$ (4)	Commodity contracts
Environmental contracts	**$ (7)**	$ (5)	**$ 7**	$ 5	Commodity contracts
Oil contracts	**$ 1**	$ 2	**$ (1)**	$ (2)	Commodity contracts
Interest rate risk — DTE Energy	**$ (733)**	$ (650)	**$ 786**	$ 699	Long-term debt
Interest rate risk — DTE Electric	**$ (492)**	$ (419)	**$ 535**	$ 458	Long-term debt

For further discussion of market risk, see Management's Discussion and Analysis in Item 7 of this Report and Note 13 to the Consolidated Financial Statements, "Financial and Other Derivative Instruments."

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

The following Consolidated Financial Statements are included herein:

DTE Energy — Controls and Procedures

(a) Evaluation of disclosure controls and procedures

Management of DTE Energy carried out an evaluation, under the supervision and with the participation of DTE Energy's Chief Executive Officer (CEO) and Chief Financial Officer (CFO), of the effectiveness of the design and operation of DTE Energy's disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) as of December 31, 2023, which is the end of the period covered by this report. Based on this evaluation, DTE Energy's CEO and CFO have concluded that such disclosure controls and procedures are effective in providing reasonable assurance that information required to be disclosed by DTE Energy in reports that it files or submits under the Exchange Act (i) is recorded, processed, summarized, and reported within the time periods specified in the U.S. Securities and Exchange Commission's rules and forms and (ii) is accumulated and communicated to DTE Energy's management, including its CEO and CFO, as appropriate to allow timely decisions regarding required disclosure. Due to the inherent limitations in the effectiveness of any disclosure controls and procedures, management cannot provide absolute assurance that the objectives of its disclosure controls and procedures will be attained.

(b) Management's report on internal control over financial reporting

Management of DTE Energy is responsible for establishing and maintaining adequate internal control over financial reporting as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Internal control over financial reporting is a process designed by, or under the supervision of, DTE Energy's CEO and CFO, 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.

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.

Management of DTE Energy has assessed the effectiveness of DTE Energy's internal control over financial reporting as of December 31, 2023. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (2013 COSO) in *Internal Control - Integrated Framework*. Based on this assessment, management concluded that, as of December 31, 2023, DTE Energy's internal control over financial reporting was effective based on those criteria.

The effectiveness of DTE Energy's internal control over financial reporting as of December 31, 2023 has been audited by PricewaterhouseCoopers, LLP, an independent registered public accounting firm who also audited DTE Energy's financial statements, as stated in their report which appears herein.

(c) Changes in internal control over financial reporting

There have been no changes in DTE Energy's internal control over financial reporting during the quarter ended December 31, 2023 that have materially affected, or are reasonably likely to materially affect, DTE Energy's internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of DTE Energy Company

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated statements of financial position of DTE Energy Company and its subsidiaries (the "Company") as of December 31, 2023 and 2022, and the related consolidated statements of operations, of comprehensive income, of changes in equity and of cash flows for each of the three years in the period ended December 31, 2023, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and 2022**,** and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

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

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

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

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Accounting for the Effects of New, or Changes to Existing, Regulatory Matters

As described in Note 9 to the consolidated financial statements, the Company recorded $7,075 million of regulatory assets and $2,674 million of regulatory liabilities as of December 31, 2023. The Company is required to record regulatory assets and liabilities for certain transactions that would have been treated as revenue or expense in non-regulated businesses. Continued applicability of regulatory accounting treatment requires that rates be designed to recover specific costs of providing regulatory services and be charged to and collected from customers. Future regulatory changes could result in a discontinuance of this accounting treatment for regulatory assets and liabilities for some or all of the Company’s regulated businesses and may require the write-off of the portion of any regulatory asset or liability that was no longer probable of recovery through regulated rates. Management believes that currently available facts support the continued use of regulatory assets and liabilities and that all regulatory assets and liabilities are recoverable or refundable in the current regulatory environment.

The principal considerations for our determination that performing procedures relating to accounting for the effects of new, or changes to existing, regulatory matters is a critical audit matter are (i) the significant judgment by management in assessing the potential outcomes and related accounting impacts associated with new, or changes to existing, regulatory matters and (ii) a high degree of auditor judgment, subjectivity and effort in performing procedures and evaluating the appropriateness of management’s assessment and audit evidence related to the assessment.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management’s assessment and implementation of new regulatory matters or changes to existing regulatory matters. These procedures also included, among others, (i) evaluating the reasonableness of management’s assessment of impacts arising from correspondence with regulators and changes in laws and regulations; (ii) evaluating the sufficiency of the disclosures in the consolidated financial statements; and (iii) testing, on a sample basis, the regulatory assets and liabilities, including those subject to pending rate orders and regulatory proceedings, by considering (a) the provisions and formulas outlined in rate orders; (b) other regulatory correspondence; and (c) application of relevant regulatory precedents.

/s/ PricewaterhouseCoopers LLP

Detroit, Michigan
February 8, 2024

We have served as the Company’s auditor since 2008.

DTE Energy Company

Consolidated Statements of Operations

	Year Ended December 31,		
	2023	2022	2021
	(In millions, except per share amounts)		
Operating Revenues			
Utility operations	**$ 7,466**	$ 8,243	$ 7,288
Non-utility operations	**5,279**	10,985	7,676
	12,745	19,228	14,964
Operating Expenses			
Fuel, purchased power, and gas — utility	**1,845**	2,505	1,904
Fuel, purchased power, gas, and other — non-utility	**4,413**	10,655	7,304
Operation and maintenance	**2,160**	2,400	2,420
Depreciation and amortization	**1,606**	1,468	1,377
Taxes other than income	**462**	457	431
Asset (gains) losses and impairments, net	**16**	(5)	33
	10,502	17,480	13,469
Operating Income	**2,243**	1,748	1,495
Other (Income) and Deductions			
Interest expense	**791**	675	630
Interest income	**(57)**	(46)	(22)
Non-operating retirement benefits, net	**9**	(1)	17
Loss on extinguishment of debt	**—**	—	393
Other income	**(102)**	(58)	(254)
Other expenses	**36**	66	75
	677	636	839
Income Before Income Taxes	**1,566**	1,112	656
Income Tax Expense (Benefit)	**169**	29	(130)
Net Income from Continuing Operations	**1,397**	1,083	786
Net Income from Discontinued Operations, Net of Taxes (Note 4)	**—**	—	117
Net Income	**1,397**	1,083	903
Less: Net Income (Loss) Attributable to Noncontrolling Interests			
Continuing operations	**—**	—	(10)
Discontinued operations	**—**	—	6
Net Income Attributable to DTE Energy Company	**$ 1,397**	$ 1,083	$ 907
Basic Earnings per Common Share			
Continuing operations	**$ 6.77**	$ 5.53	$ 4.11
Discontinued operations	**—**	—	0.57
Total	**$ 6.77**	$ 5.53	$ 4.68
Diluted Earnings per Common Share			
Continuing operations	**$ 6.76**	$ 5.52	$ 4.10
Discontinued operations	**—**	—	0.57
Total	**$ 6.76**	$ 5.52	$ 4.67
Weighted Average Common Shares Outstanding			
Basic	**206**	195	193
Diluted	**206**	196	194

See Combined Notes to Consolidated Financial Statements

DTE Energy Company

Consolidated Statements of Comprehensive Income

	Year Ended December 31,		
	2023	**2022**	**2021**
		(In millions)	
Net Income	**$ 1,397**	$ 1,083	$ 903
Other comprehensive income (loss), net of tax:			
Benefit obligations, net of taxes of $2, $12, and $4, respectively	**6**	43	8
Net unrealized gains (losses) on derivatives, net of taxes of $(4), $3, and $2, respectively	**(13)**	7	7
Foreign currency translation	**2**	—	—
Other comprehensive income (loss)	**(5)**	50	15
Comprehensive income	**1,392**	1,133	918
Less: Comprehensive loss attributable to noncontrolling interests	**—**	—	(4)
Comprehensive Income Attributable to DTE Energy Company	**$ 1,392**	$ 1,133	$ 922

See Combined Notes to Consolidated Financial Statements

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DTE Energy Company

Consolidated Statements of Financial Position

	December 31, 2023	December 31, 2022
	(In millions)	
ASSETS		
Current Assets		
Cash and cash equivalents	$ 26	$ 33
Restricted cash	25	10
Accounts receivable (less allowance for doubtful accounts of $63 and $79, respectively)		
Customer	1,632	2,038
Other	155	144
Inventories		
Fuel and gas	421	433
Materials, supplies, and other	633	509
Derivative assets	297	328
Regulatory assets	108	450
Other	242	235
	3,539	4,180
Investments		
Nuclear decommissioning trust funds	2,041	1,825
Investments in equity method investees	166	165
Other	168	165
	2,375	2,155
Property		
Property, plant, and equipment	37,274	39,346
Accumulated depreciation and amortization	(9,105)	(10,579)
	28,169	28,767
Other Assets		
Goodwill	1,993	1,993
Regulatory assets	6,209	3,886
Securitized regulatory assets	758	206
Intangible assets	156	166
Notes receivable	420	331
Derivative assets	109	105
Prepaid postretirement costs	633	571
Operating lease right-of-use assets	132	89
Other	262	234
	10,672	7,581
Total Assets	$ 44,755	$ 42,683

See Combined Notes to Consolidated Financial Statements

DTE Energy Company

Consolidated Statements of Financial Position — (Continued)

	December 31,	
	2023	2022
	(In millions, except shares)	
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	**$ 1,361**	$ 1,604
Accrued interest	**170**	154
Dividends payable	**210**	196
Short-term borrowings	**1,283**	1,162
Current portion long-term debt, including securitization bonds and finance leases	**2,142**	1,124
Derivative liabilities	**177**	342
Regulatory liabilities	**71**	34
Operating lease liabilities	**17**	13
Other	**452**	544
	5,883	5,173
Long-Term Debt (net of current portion)		
Mortgage bonds, notes, and other	**15,819**	15,807
Securitization bonds	**705**	172
Junior subordinated debentures	**883**	883
Finance lease obligations	**13**	11
	17,420	16,873
Other Liabilities		
Deferred income taxes	**2,649**	2,394
Regulatory liabilities	**2,603**	2,673
Asset retirement obligations	**3,556**	3,460
Unamortized investment tax credit	**181**	182
Derivative liabilities	**132**	315
Accrued pension liability	**350**	378
Accrued postretirement liability	**301**	287
Nuclear decommissioning	**320**	282
Operating lease liabilities	**108**	68
Other	**197**	197
	10,397	10,236
Commitments and Contingencies (Notes 9 and 18)		
Equity		
Common stock (No par value, 400,000,000 shares authorized, and 206,357,070 and 205,632,393 shares issued and outstanding at December 31, 2023 and December 31, 2022, respectively)	**6,713**	6,651
Retained earnings	**4,404**	3,808
Accumulated other comprehensive loss	**(67)**	(62)
Total DTE Energy Company Equity	**11,050**	10,397
Noncontrolling interests	**5**	4
Total Equity	**11,055**	10,401
Total Liabilities and Equity	**$ 44,755**	$ 42,683

See Combined Notes to Consolidated Financial Statements

DTE Energy Company

Consolidated Statements of Cash Flows

	Year Ended December 31,		
	2023	2022	2021
	(In millions)		
Operating Activities			
Net Income	**$ 1,397**	$ 1,083	$ 903
Adjustments to reconcile Net Income to Net cash from operating activities:			
Depreciation and amortization	**1,606**	1,468	1,459
Nuclear fuel amortization	**59**	42	58
Allowance for equity funds used during construction	**(42)**	(29)	(27)
Deferred income taxes	**181**	44	(32)
Equity (earnings) losses of equity method investees	**(3)**	14	(97)
Dividends from equity method investees	**3**	4	79
Loss on extinguishment of debt	**—**	—	393
Asset (gains) losses and impairments, net	**16**	(5)	50
Changes in assets and liabilities:			
Accounts receivable, net	**398**	(352)	(146)
Inventories	**(110)**	(98)	(153)
Prepaid postretirement benefit costs	**(62)**	107	(117)
Accounts payable	**(306)**	109	308
Accrued pension liability	**(28)**	39	(458)
Accrued postretirement liability	**14**	(71)	(49)
Derivative assets and liabilities	**(321)**	65	187
Regulatory assets and liabilities	**594**	(766)	862
Other current and noncurrent assets and liabilities	**(176)**	323	(153)
Net cash from operating activities	**3,220**	1,977	3,067
Investing Activities			
Plant and equipment expenditures — utility	**(3,872)**	(3,311)	(3,633)
Plant and equipment expenditures — non-utility	**(62)**	(67)	(139)
Proceeds from sale of assets	**3**	24	3
Proceeds from sale of nuclear decommissioning trust fund assets	**681**	879	1,047
Investment in nuclear decommissioning trust funds	**(678)**	(878)	(1,046)
Distributions from equity method investees	**25**	16	18
Contributions to equity method investees	**(27)**	(13)	(8)
Notes receivable	**(86)**	(30)	(74)
Other	**(79)**	(51)	(31)
Net cash used for investing activities	**(4,095)**	(3,431)	(3,863)

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DTE Energy Company

Consolidated Statements of Cash Flows — (Continued)

Financing Activities			
Issuance of long-term debt, net of discount and issuance costs	**3,167**	2,171	4,457
Redemption of long-term debt	**(1,616)**	(1,587)	(3,522)
Short-term borrowings, net	**121**	404	720
Issuance of common stock	**—**	1,300	—
Repurchase of common stock	**—**	(55)	(66)
Dividends paid on common stock	**(752)**	(685)	(791)
Contributions from noncontrolling interests	**2**	3	44
Distributions to noncontrolling interests	**(1)**	(7)	(45)
Prepayment costs for extinguishment of long-term debt	**—**	—	(361)
Transfer of cash to DT Midstream at separation	**—**	—	(37)
Other	**(38)**	(82)	(84)
Net cash from financing activities	**883**	1,462	315
Net Increase (Decrease) in Cash, Cash Equivalents, and Restricted Cash	**8**	8	(481)
Cash, Cash Equivalents, and Restricted Cash at Beginning of Period	**43**	35	516
Cash, Cash Equivalents, and Restricted Cash at End of Period	**$ 51**	$ 43	$ 35
Supplemental disclosure of cash information			
Cash paid (received) for:			
Interest, net of interest capitalized	**$ 751**	$ 638	$ 671
Income taxes	**$ (5)**	$ (3)	$ (3)
Supplemental disclosure of non-cash investing and financing activities			
Plant and equipment expenditures in accounts payable	**$ 490**	$ 435	$ 353
Separation of DT Midstream net assets, excluding cash transferred	**$ —**	$ —	$ 3,973

See Combined Notes to Consolidated Financial Statements

DTE Energy Company

Consolidated Statements of Changes in Equity

	Common Stock		Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Noncontrolling Interests	Total
	Shares	Amount				
	(Dollars in millions, shares in thousands)					
Balance, December 31, 2020	193,771	$ 5,406	$ 7,156	$ (137)	$ 164	$ 12,589
Net Income (Loss)	—	—	907	—	(4)	903
Dividends declared on common stock ($3.88 per Common Share)	—	—	(752)	—	—	(752)
Repurchase of common stock	(529)	(66)	—	—	—	(66)
Other comprehensive income, net of tax	—	—	—	15	—	15
Stock-based compensation, net distributions to noncontrolling interests, and other	506	39	(4)	—	(1)	34
Separation of DT Midstream	—	—	(3869)	10	(151)	(4,010)
Balance, December 31, 2021	193,748	$ 5,379	$ 3,438	$ (112)	$ 8	$ 8,713
Net Income	—	—	1,083	—	—	1,083
Dividends declared on common stock ($3.61 per Common Share)	—	—	(710)	—	—	(710)
Issuance of common stock	11,887	1,300	—	—	—	1,300
Repurchase of common stock	(465)	(55)	—	—	—	(55)
Other comprehensive income, net of tax	—	—	—	50	—	50
Stock-based compensation, net distributions to noncontrolling interests, and other	462	27	(3)	—	(4)	20
Balance, December 31, 2022	205,632	$ 6,651	$ 3,808	$ (62)	$ 4	$ 10,401
Net Income	—	—	1,397	—	—	1,397
Dividends declared on common stock ($3.88 per Common Share)	—	—	(800)	—	—	(800)
Issuance of common stock	318	35	—	—	—	35
Other comprehensive loss, net of tax	—	—	—	(5)	—	(5)
Stock-based compensation, net contributions from noncontrolling interests, and other	407	27	(1)	—	1	27
Balance, December 31, 2023	**206,357**	**$ 6,713**	**$ 4,404**	**$ (67)**	**$ 5**	**$ 11,055**

See Combined Notes to Consolidated Financial Statements

DTE Electric — Controls and Procedures

(a) Evaluation of disclosure controls and procedures

Management of DTE Electric carried out an evaluation, under the supervision and with the participation of DTE Electric's Chief Executive Officer (CEO) and Chief Financial Officer (CFO), of the effectiveness of the design and operation of DTE Electric's disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) as of December 31, 2023, which is the end of the period covered by this report. Based on this evaluation, DTE Electric's CEO and CFO have concluded that such disclosure controls and procedures are effective in providing reasonable assurance that information required to be disclosed by DTE Electric in reports that it files or submits under the Exchange Act (i) is recorded, processed, summarized, and reported within the time periods specified in the U.S. Securities and Exchange Commission's rules and forms and (ii) is accumulated and communicated to DTE Electric's management, including its CEO and CFO, as appropriate to allow timely decisions regarding required disclosure. Due to the inherent limitations in the effectiveness of any disclosure controls and procedures, management cannot provide absolute assurance that the objectives of its disclosure controls and procedures will be attained.

(b) Management's report on internal control over financial reporting

Management of DTE Electric is responsible for establishing and maintaining adequate internal control over financial reporting as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Internal control over financial reporting is a process designed by, or under the supervision of, DTE Electric's CEO and CFO, 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.

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.

Management of DTE Electric has assessed the effectiveness of DTE Electric's internal control over financial reporting as of December 31, 2023. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (2013 COSO) in *Internal Control - Integrated Framework.* Based on this assessment, management concluded that, as of December 31, 2023, DTE Electric's internal control over financial reporting was effective based on those criteria.

This annual report does not include an audit report of DTE Electric's independent registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to audit by DTE Electric's independent registered public accounting firm pursuant to rules of the Securities and Exchange Commission that permit DTE Electric to provide only management's report in this annual report.

(c) Changes in internal control over financial reporting

There have been no changes in DTE Electric's internal control over financial reporting during the quarter ended December 31, 2023 that have materially affected, or are reasonably likely to materially affect, DTE Electric's internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholder of DTE Electric Company

Opinion on the Financial Statements

We have audited the accompanying consolidated statements of financial position of DTE Electric Company and its subsidiaries (the "Company") as of December 31, 2023 and 2022, and the related consolidated statements of operations, of comprehensive income, of changes in shareholder's equity and of cash flows for each of the three years in the period ended December 31, 2023, including the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and 2022, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023 in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Accounting for the Effects of New, or Changes to Existing, Regulatory Matters

As described in Note 9 to the consolidated financial statements, the Company recorded $6,453 million of regulatory assets and $1,759 million of regulatory liabilities as of December 31, 2023. The Company is required to record regulatory assets and liabilities for certain transactions that would have been treated as revenue or expense in non-regulated businesses. Continued applicability of regulatory accounting treatment requires that rates be designed to recover specific costs of providing regulatory services and be charged to and collected from customers. Future regulatory changes could result in a discontinuance of this accounting treatment for regulatory assets and liabilities for some or all of the Company's regulated businesses and may require the write-off of the portion of any regulatory asset or liability that was no longer probable of recovery through regulated rates. Management believes that currently available facts support the continued use of regulatory assets and liabilities and that all regulatory assets and liabilities are recoverable or refundable in the current regulatory environment.

The principal considerations for our determination that performing procedures relating to accounting for the effects of new, or changes to existing, regulatory matters is a critical audit matter are (i) the significant judgment by management in assessing the potential outcomes and related accounting impacts associated with new, or changes to existing, regulatory matters and (ii) a high degree of auditor judgment, subjectivity and effort in performing procedures and evaluating the appropriateness of management's assessment and audit evidence related to the assessment.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's assessment and implementation of new regulatory matters or changes to existing regulatory matters. These procedures also included, among others, (i) evaluating the reasonableness of management's assessment of impacts arising from correspondence with regulators and changes in laws and regulations; (ii) evaluating the sufficiency of the disclosures in the consolidated financial statements; and (iii) testing, on a sample basis, the regulatory assets and liabilities, including those subject to pending rate orders and regulatory proceedings, by considering (a) the provisions and formulas outlined in rate orders; (b) other regulatory correspondence; and (c) application of relevant regulatory precedents.

/s/ PricewaterhouseCoopers LLP

Detroit, Michigan
February 8, 2024

We have served as the Company's auditor since 2008.

DTE Electric Company

Consolidated Statements of Operations

	Year Ended December 31,		
	2023	2022	2021
	(In millions)		
Operating Revenues — Utility operations	**$ 5,804**	$ 6,397	$ 5,809
Operating Expenses			
Fuel and purchased power — utility	**1,492**	1,990	1,541
Operation and maintenance	**1,421**	1,538	1,569
Depreciation and amortization	**1,326**	1,204	1,109
Taxes other than income	**338**	338	320
Asset (gains) losses and impairments, net	**26**	8	1
	4,603	5,078	4,540
Operating Income	**1,201**	1,319	1,269
Other (Income) and Deductions			
Interest expense	**429**	370	335
Interest income	**(20)**	(8)	—
Non-operating retirement benefits, net	**(4)**	(3)	(2)
Other income	**(87)**	(65)	(71)
Other expenses	**33**	44	37
	351	338	299
Income Before Income Taxes	**850**	981	970
Income Tax Expense	**78**	26	104
Net Income	**$ 772**	$ 955	$ 866

See Combined Notes to Consolidated Financial Statements

DTE Electric Company

Consolidated Statements of Comprehensive Income

	Year Ended December 31,		
	2023	2022	2021
	(In millions)		
Net Income	**$ 772**	$ 955	$ 866
Other comprehensive income	—	—	—
Comprehensive Income	**$ 772**	$ 955	$ 866

See Combined Notes to Consolidated Financial Statements

DTE Electric Company

Consolidated Statements of Financial Position

	December 31,	
	2023	2022
	(In millions)	
ASSETS		
Current Assets		
Cash and cash equivalents	**$ 15**	$ 15
Restricted cash	**17**	9
Accounts receivable (less allowance for doubtful accounts of $41 and $49, respectively)		
Customer	**764**	727
Affiliates	**12**	8
Other	**55**	75
Inventories		
Fuel	**191**	167
Materials and supplies	**409**	331
Regulatory assets	**99**	421
Other	**114**	98
	1,676	1,851
Investments		
Nuclear decommissioning trust funds	**2,041**	1,825
Other	**53**	44
	2,094	1,869
Property		
Property, plant, and equipment	**27,936**	30,591
Accumulated depreciation and amortization	**(6,570)**	(8,095)
	21,366	22,496
Other Assets		
Regulatory assets	**5,596**	3,219
Securitized regulatory assets	**758**	206
Prepaid postretirement costs — affiliates	**378**	345
Operating lease right-of-use assets	**101**	56
Other	**216**	194
	7,049	4,020
Total Assets	**$ 32,185**	$ 30,236

See Combined Notes to Consolidated Financial Statements

DTE Electric Company

Consolidated Statements of Financial Position — (Continued)

	December 31,	
	2023	**2022**
	(In millions, except shares)	
LIABILITIES AND SHAREHOLDER'S EQUITY		
Current Liabilities		
Accounts payable		
Affiliates	**$ 58**	$ 71
Other	**696**	637
Accrued interest	**113**	105
Current portion long-term debt, including securitization bonds and finance leases	**166**	248
Regulatory liabilities	**49**	33
Short-term borrowings		
Affiliates	**—**	27
Other	**385**	568
Operating lease liabilities	**15**	9
Other	**169**	204
	1,651	1,902
Long-Term Debt (net of current portion)		
Mortgage bonds, notes, and other	**10,174**	9,282
Securitization bonds	**705**	172
Finance lease liabilities	**4**	1
	10,883	9,455
Other Liabilities		
Deferred income taxes	**3,109**	2,946
Regulatory liabilities	**1,710**	1,778
Asset retirement obligations	**3,326**	3,221
Unamortized investment tax credit	**181**	182
Nuclear decommissioning	**320**	282
Accrued pension liability — affiliates	**334**	387
Accrued postretirement liability — affiliates	**290**	275
Operating lease liabilities	**81**	39
Other	**76**	74
	9,427	9,184
Commitments and Contingencies (Notes 9 and 18)		
Shareholder's Equity		
Common stock ($10 par value, 400,000,000 shares authorized, and 138,632,324 shares issued and outstanding for both periods)	**7,361**	6,602
Retained earnings	**2,863**	3,093
Total Shareholder's Equity	**10,224**	9,695
Total Liabilities and Shareholder's Equity	**$ 32,185**	$ 30,236

See Combined Notes to Consolidated Financial Statements

DTE Electric Company

Consolidated Statements of Cash Flows

	Year Ended December 31,		
	2023	2022	2021
	(In millions)		
Operating Activities			
Net Income	**$ 772**	$ 955	$ 866
Adjustments to reconcile Net Income to Net cash from operating activities:			
Depreciation and amortization	**1,326**	1,204	1,109
Nuclear fuel amortization	**59**	42	58
Allowance for equity funds used during construction	**(40)**	(26)	(25)
Deferred income taxes	**82**	25	122
Asset (gains) losses and impairments, net	**26**	8	1
Changes in assets and liabilities:			
Accounts receivable, net	**(14)**	(40)	68
Inventories	**(99)**	(26)	(11)
Prepaid postretirement benefit costs — affiliates	**(33)**	57	(67)
Accounts payable	**(9)**	23	65
Accrued pension liability — affiliates	**(53)**	(18)	(326)
Accrued postretirement liability — affiliates	**15**	(65)	(44)
Regulatory assets and liabilities	**461**	(653)	716
Other current and noncurrent assets and liabilities	**(218)**	204	(216)
Net cash from operating activities	**2,275**	1,690	2,316
Investing Activities			
Plant and equipment expenditures	**(3,089)**	(2,626)	(3,017)
Proceeds from sale of nuclear decommissioning trust fund assets	**681**	879	1,047
Investment in nuclear decommissioning trust funds	**(678)**	(878)	(1,046)
Notes receivable and other	**(47)**	(40)	(31)
Net cash used for investing activities	**(3,133)**	(2,665)	(3,047)
Financing Activities			
Issuance of long-term debt, net of discount and issuance costs	**1,881**	1,118	985
Redemption of long-term debt	**(541)**	(337)	(321)
Capital contribution by parent company	**759**	600	555
Short-term borrowings, net — affiliates	**(27)**	(26)	(48)
Short-term borrowings, net — other	**(183)**	415	153
Dividends paid on common stock	**(1,002)**	(763)	(588)
Other	**(21)**	(17)	(12)
Net cash from financing activities	**866**	990	724
Net Increase (Decrease) in Cash and Cash Equivalents	**8**	15	(7)
Cash and Cash Equivalents at Beginning of Period	**24**	9	16
Cash and Cash Equivalents at End of Period	**$ 32**	$ 24	$ 9
Supplemental disclosure of cash information			
Cash paid (received) for:			
Interest, net of interest capitalized	**$ 409**	$ 350	$ 321
Income taxes	**$ 15**	$ (33)	$ 5
Supplemental disclosure of non-cash investing and financing activities			
Plant and equipment expenditures in accounts payable	**$ 403**	$ 335	$ 286

See Combined Notes to Consolidated Financial Statements

DTE Electric Company

Consolidated Statements of Changes in Shareholder's Equity

	Common Stock		Additional Paid-in Capital	Retained Earnings	Total
	Shares	Amount			
	(Dollars in millions, shares in thousands)				
Balance, December 31, 2020	138,632	$ 1,386	$ 4,061	$ 2,623	$ 8,070
Net Income	—	—	—	866	866
Dividends declared on common stock	—	—	—	(588)	(588)
Capital contribution by parent company	—	—	555	—	555
Balance, December 31, 2021	138,632	$ 1,386	$ 4,616	$ 2,901	$ 8,903
Net Income	—	—	—	955	955
Dividends declared on common stock	—	—	—	(763)	(763)
Capital contribution by parent company	—	—	600	—	600
Balance, December 31, 2022	138,632	$ 1,386	$ 5,216	$ 3,093	$ 9,695
Net Income	—	—	—	772	772
Dividends declared on common stock	—	—	—	(1,002)	(1,002)
Capital contribution by parent company	—	—	759	—	759
Balance, December 31, 2023	**138,632**	**$ 1,386**	**$ 5,975**	**$ 2,863**	**$ 10,224**

See Combined Notes to Consolidated Financial Statements

Index of Combined Notes to Consolidated Financial Statements

The Combined Notes to Consolidated Financial Statements are a combined presentation for DTE Energy and DTE Electric. The following list indicates the Registrant(s) to which each note applies:

Note 1	Organization and Basis of Presentation	DTE Energy and DTE Electric
Note 2	Significant Accounting Policies	DTE Energy and DTE Electric
Note 3	New Accounting Pronouncements	DTE Energy and DTE Electric
Note 4	Discontinued Operations	DTE Energy
Note 5	Revenue	DTE Energy and DTE Electric
Note 6	Property, Plant, and Equipment	DTE Energy and DTE Electric
Note 7	Jointly-Owned Utility Plant	DTE Energy and DTE Electric
Note 8	Asset Retirement Obligations	DTE Energy and DTE Electric
Note 9	Regulatory Matters	DTE Energy and DTE Electric
Note 10	Income Taxes	DTE Energy and DTE Electric
Note 11	Earnings Per Share	DTE Energy
Note 12	Fair Value	DTE Energy and DTE Electric
Note 13	Financial and Other Derivative Instruments	DTE Energy and DTE Electric
Note 14	Long-Term Debt	DTE Energy and DTE Electric
Note 15	Preferred and Preference Securities	DTE Energy and DTE Electric
Note 16	Short-Term Credit Arrangements and Borrowings	DTE Energy and DTE Electric
Note 17	Leases	DTE Energy and DTE Electric
Note 18	Commitments and Contingencies	DTE Energy and DTE Electric
Note 19	Nuclear Operations	DTE Energy and DTE Electric
Note 20	Retirement Benefits and Trusteed Assets	DTE Energy and DTE Electric
Note 21	Stock-Based Compensation	DTE Energy and DTE Electric
Note 22	Segment and Related Information	DTE Energy
Note 23	Related Party Transactions	DTE Electric

NOTE 1 — ORGANIZATION AND BASIS OF PRESENTATION

Corporate Structure

DTE Energy owns the following businesses:

- DTE Electric is a public utility engaged in the generation, purchase, distribution, and sale of electricity to approximately 2.3 million customers in southeastern Michigan;
- DTE Gas is a public utility engaged in the purchase, storage, transportation, distribution, and sale of natural gas to approximately 1.3 million customers throughout Michigan and the sale of storage and transportation capacity; and
- Other businesses include 1) DTE Vantage, which is primarily involved in renewable natural gas projects and providing custom energy solutions to industrial, commercial, and institutional customers, and 2) energy marketing and trading operations.

DTE Electric and DTE Gas are regulated by the MPSC. Certain activities of DTE Electric and DTE Gas, as well as various other aspects of businesses under DTE Energy, are regulated by the FERC. In addition, the Registrants are regulated by other federal and state regulatory agencies including the NRC, the EPA, EGLE, and for DTE Energy, the CFTC and CARB.

Basis of Presentation

The accompanying Consolidated Financial Statements of the Registrants are prepared using accounting principles generally accepted in the United States of America. These accounting principles require management to use estimates and assumptions that impact reported amounts of assets, liabilities, revenues and expenses, and the disclosure of contingent assets and liabilities. Actual results may differ from the Registrants' estimates.

The information in these combined notes relates to each of the Registrants as noted in the Index of Combined Notes to Consolidated Financial Statements. However, DTE Electric does not make any representation as to information related solely to DTE Energy or the subsidiaries of DTE Energy other than itself.

Certain prior year balances for the Registrants were reclassified to match the current year's Consolidated Financial Statements presentation.

Separation of DT Midstream

On July 1, 2021, DTE Energy completed the separation of DT Midstream, its former natural gas pipeline, storage and gathering non-utility business. Financial results of DT Midstream are presented as Income from discontinued operations, net of taxes on DTE Energy's Consolidated Statements of Operations.

No adjustments were made to the historical activity within the Consolidated Statements of Comprehensive Income, Consolidated Statements of Cash Flows, or the Consolidated Statements of Changes in Equity. Unless noted otherwise, discussion in the Notes to the Consolidated Financial Statements relate to continuing operations. Refer to Note 4 to the Consolidated Financial Statements, “Discontinued Operations,” for additional information.

Principles of Consolidation

The Registrants consolidate all majority-owned subsidiaries and investments in entities in which they have controlling influence. Non-majority owned investments are accounted for using the equity method when the Registrants are able to significantly influence the operating policies of the investee. When the Registrants do not influence the operating policies of an investee, the equity investment is valued at cost minus any impairments, if applicable. These Consolidated Financial Statements also reflect the Registrants' proportionate interests in certain jointly-owned utility plants. The Registrants eliminate all intercompany balances and transactions.

The Registrants evaluate whether an entity is a VIE whenever reconsideration events occur. The Registrants consolidate VIEs for which they are the primary beneficiary. If a Registrant is not the primary beneficiary and an ownership interest is held, the VIE is accounted for under the equity method of accounting. When assessing the determination of the primary beneficiary, a Registrant considers all relevant facts and circumstances, including: the power, through voting or similar rights, to direct the activities of the VIE that most significantly impact the VIE's economic performance and the obligation to absorb the expected losses and/or the right to receive the expected returns of the VIE. The Registrants perform ongoing reassessments of all VIEs to determine if the primary beneficiary status has changed.

Legal entities within the DTE Vantage segment enter into long-term contractual arrangements with customers to supply energy-related products or services. The entities are generally designed to pass-through the commodity risk associated with these contracts to the customers, with DTE Energy retaining operational and customer default risk. These entities generally are VIEs and consolidated when DTE Energy is the primary beneficiary. In addition, DTE Energy has interests in certain VIEs through which control of all significant activities is shared with partners, and therefore are generally accounted for under the equity method.

The Registrants hold ownership interests in certain limited partnerships. The limited partnerships include investment funds which support regional development and economic growth, and an operational business providing energy-related products. These entities are generally VIEs as a result of certain characteristics of the limited partnership voting rights. The ownership interests are accounted for under the equity method as the Registrants are not the primary beneficiaries.

DTE Energy has variable interests in VIEs through certain of its long-term purchase and sale contracts. DTE Electric has variable interests in VIEs through certain of its long-term purchase contracts. As of December 31, 2023, the carrying amount of assets and liabilities in DTE Energy's Consolidated Statements of Financial Position that relate to its variable interests under long-term purchase and sale contracts are predominantly related to working capital accounts and generally represent the amounts owed by or to DTE Energy for the deliveries associated with the current billing cycle under the contracts. As of December 31, 2023, the carrying amount of assets and liabilities in DTE Electric's Consolidated Statements of Financial Position that relate to its variable interests under long-term purchase contracts are predominantly related to working capital accounts and generally represent the amounts owed by DTE Electric for the deliveries associated with the current billing cycle under the contracts. The Registrants have not provided any significant form of financial support associated with these long-term contracts. There is no material potential exposure to loss as a result of DTE Energy's variable interests through these long-term purchase and sale contracts. In addition, there is no material potential exposure to loss as a result of DTE Electric's variable interests through these long-term purchase contracts.

During 2022, DTE Electric financed regulatory assets for previously deferred costs related to the River Rouge generation plant and tree trimming surge program through the sale of bonds by a wholly-owned special purpose entity, DTE Securitization I. During 2023, DTE Electric similarly financed regulatory assets for previously deferred costs related to the Trenton Channel and St. Clair generation plants through the sale of bonds by a wholly-owned special purpose entity, DTE Securitization II. DTE Securitization I and DTE Securitization II (collectively "the DTE Securitization entities") are VIEs. DTE Electric has the power to direct the most significant activities of the DTE Securitization entities, including performing servicing activities such as billing and collecting surcharge revenue. Accordingly, DTE Electric is the primary beneficiary and the DTE Securitization entities are consolidated by the Registrants. Securitization bond holders have no recourse to the Registrants' assets, except for those held by the DTE Securitization entities. Surcharges collected by DTE Electric to pay for bond servicing and other qualified costs reflect securitization property solely owned by the DTE Securitization entities. These surcharges are remitted to a trustee and are not available to other creditors of the Registrants.

The maximum risk exposure for consolidated VIEs is reflected on the Registrants' Consolidated Statements of Financial Position. For non-consolidated VIEs, the maximum risk exposure of the Registrants is generally limited to their investment, notes receivable, and future funding commitments.

The table below summarizes the major Consolidated Statements of Financial Position items for consolidated VIEs as of December 31, 2023 and 2022. All assets and liabilities of a consolidated VIE are presented where it has been determined that a consolidated VIE has either (1) assets that can be used only to settle obligations of the VIE or (2) liabilities for which creditors do not have recourse to the general credit of the primary beneficiary. Assets and liabilities of the DTE Securitization entities have been aggregated due to their similar nature and are separately stated in the table below, comprising the entirety of the DTE Electric amounts. For all other VIEs, assets and liabilities are also aggregated due to their similar nature and presented together with the DTE Securitization entities in the DTE Energy amounts below. VIEs, in which DTE Energy holds a majority voting interest and is the primary beneficiary, that meet the definition of a business and whose assets can be used for purposes other than the settlement of the VIE's obligations have been excluded from the table.

During 2023, a consolidated VIE of DTE Vantage entered into a contract that restricts certain assets of the VIE to be used only to settle the VIE's obligations. As a result, the assets and liabilities of the VIE, which primarily include receivables and payables recognized in 2023, no longer meet the exclusion criteria above. Accordingly, these assets and liabilities have been added to the DTE Energy amounts in the table below.

Amounts for the Registrants' consolidated VIEs are as follows:

	December 31,			
	2023		2022	
	DTE Energy	DTE Electric	DTE Energy	DTE Electric
	(In millions)			
ASSETS				
Cash and cash equivalents	**$ 7**	**$ —**	$ 14	$ —
Restricted cash	**25**	**17**	9	9
Accounts receivable	**85**	**6**	6	3
Securitized regulatory assets	**758**	**758**	206	206
Notes receivable	**183**	**—**	81	—
Other current and long-term assets	**4**	**1**	8	—
	$ 1,062	**$ 782**	$ 324	$ 218
LIABILITIES				
Accounts payable	**$ 59**	**$ —**	$ 3	$ —
Short-term borrowings	**—**	**—**	81	—
Securitization bonds[(a)]	**769**	**769**	211	211
Other current and long-term liabilities	**26**	**14**	11	9
	$ 854	**$ 783**	$ 306	$ 220

(a) Includes $64 million and $39 million reported in Current portion of long-term debt on the Registrants' Consolidated Statements of Financial Position for the periods ended December 31, 2023 and December 31, 2022, respectively.

Amounts for DTE Energy's non-consolidated VIEs are as follows:

	December 31,	
	2023	2022
	(In millions)	
Investments in equity method investees	**$ 112**	$ 137
Notes receivable	**$ 15**	$ 15
Future funding commitments	**$ 1**	$ 2

Equity Method Investments

Investments in non-consolidated affiliates that are not controlled by the Registrants, but over which they have significant influence, are accounted for using the equity method. Certain of the equity method investees are also considered VIEs and disclosed in the non-consolidated VIEs table above.

At December 31, 2023 and 2022, DTE Energy's Investments in equity method investees were $166 million and $165 million, respectively. The balances are primarily comprised of investments in the DTE Vantage and Corporate and Other segments, of which no investment is individually significant. DTE Vantage investments include projects that deliver energy and utility-type products and services to industrial customers, sell electricity and gas from renewable energy projects, and produce and sell metallurgical coke. Corporate and Other holds various ownership interests in limited partnerships that include investment funds supporting regional development and economic growth. For further information by segment, see Note 22 to the Consolidated Financial Statements, "Segment and Related Information."

At December 31, 2023 and 2022, DTE Energy's share of the underlying equity in the net assets of the investees exceeded the carrying amounts of Investments in equity method investees by $101 million and $99 million, respectively. The difference is being amortized over the life of the underlying assets.

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES

Other Income

Other income for the Registrants is recognized for non-operating income such as equity earnings of equity method investees, allowance for equity funds used during construction, contract services, and certain investment income, primarily from trading securities held in DTE Energy's rabbi trust. For 2021, the DTE Vantage segment also recognized Other income in connection with the sale of membership interests in reduced emissions fuel facilities to investors.

The following is a summary of DTE Energy's Other income:

	2023	2022	2021
		(In millions)	
Allowance for equity funds used during construction	**$ 42**	$ 29	$ 27
Contract services	**26**	28	27
Investment income[(a)]	**17**	3	14
Equity earnings (losses) of equity method investees	**3**	(14)	38
Income from REF entities	**—**	—	141
Other	**14**	12	7
	$ 102	$ 58	$ 254

(a) Investment losses are recorded separately to Other expenses on the Consolidated Statements of Operations.

The following is a summary of DTE Electric's Other income:

	2023	2022	2021
		(In millions)	
Allowance for equity funds used during construction	**$ 40**	$ 26	$ 25
Contract services	**25**	27	27
Investment income[(a)]	**11**	3	10
Other	**11**	9	9
	$ 87	$ 65	$ 71

(a) Investment losses are recorded separately to Other expenses on the Consolidated Statements of Operations.

For information on equity earnings of equity method investees by segment, see Note 22 to the Consolidated Financial Statements, "Segment and Related Information."

Accounting for ISO Transactions

DTE Electric participates in the energy market through MISO. MISO requires that DTE Electric submit hourly day-ahead, real-time, and FTR bids and offers for energy at locations across the MISO region. DTE Electric accounts for MISO transactions on a net hourly basis in each of the day-ahead, real-time, and FTR markets. In any single hour, transactions in each of the MISO energy markets are netted based on MWh to determine if DTE Electric is in a net sale or purchase position. Net purchases are recorded in Fuel, purchased power, and gas — utility and net sales are recorded in Operating Revenues — Utility operations on the Registrants' Consolidated Statements of Operations.

The Energy Trading segment participates in the energy markets through various ISOs and RTOs. These markets require that Energy Trading submits hourly day-ahead, real-time bids and offers for energy at locations across each region. Energy Trading submits bids in the annual and monthly auction revenue rights and FTR auctions to the RTOs. Energy Trading accounts for these transactions on a net hourly basis for the day-ahead, real-time, and FTR markets. These transactions are related to trading contracts which, if derivatives, are presented on a net basis in Operating Revenues — Non-utility operations, and if non-derivatives, the realized gains and losses for sales are recorded in Operating Revenues — Non-utility operations and purchases are recorded in Fuel, purchased power, gas, and other — non-utility in the DTE Energy Consolidated Statements of Operations.

DTE Electric and Energy Trading record accruals for future net purchases adjustments based on historical experience and reconcile accruals to actual costs when invoices are received from MISO and other ISOs and RTOs.

Derivatives

Energy Trading classifies derivative transactions as revenue or expense based on the intent of the transaction (buy or sell). Revenues are recorded on a gross or net basis within the income statement depending upon whether it represents a non-trading activity or trading activity, respectively. Cash flows associated with derivative instruments, including related gains and losses, are presented as Operating Activities within the Registrants' Consolidated Statements of Cash Flows. For additional information, refer to Note 13 to the Consolidated Financial Statements, "Financial and Other Derivative Instruments".

Changes in Accumulated Other Comprehensive Income (Loss)

Comprehensive income (loss) is the change in common shareholders' equity during a period from transactions and events from non-owner sources, including Net Income. The amounts recorded to Accumulated other comprehensive income (loss) for DTE Energy include changes in benefit obligations, consisting of deferred actuarial losses and prior service costs, unrealized gains and losses from derivatives accounted for as cash flow hedges, and foreign currency translation adjustments, if any. DTE Energy releases income tax effects from accumulated other comprehensive income when the circumstances upon which they are premised cease to exist.

Changes in Accumulated other comprehensive income (loss) are presented in DTE Energy's Consolidated Statements of Changes in Equity and DTE Electric's Consolidated Statements of Changes in Shareholder's Equity, if any. For the years ended December 31, 2023 and 2022, reclassifications out of Accumulated other comprehensive income (loss) were not material.

The following table summarizes the changes in DTE Energy's Accumulated other comprehensive income (loss) by component[(a)] for the years ended December 31, 2023 and 2022:

	Net Unrealized Gain (Loss) on Derivatives	Benefit Obligations[(b)]	Foreign Currency Translation	Total
		(In millions)		
Balance, December 31, 2021	$ (11)	$ (101)	$ —	$ (112)
Other comprehensive income before reclassifications	5	—	—	5
Amounts reclassified from Accumulated other comprehensive loss	2	43	—	45
Net current period Other comprehensive income	7	43	—	50
Balance, December 31, 2022	$ (4)	$ (58)	$ —	$ (62)
Other comprehensive income (loss) before reclassifications	(14)	3	2	(9)
Amounts reclassified from Accumulated other comprehensive loss	1	3	—	4
Net current period Other comprehensive income (loss)	(13)	6	2	(5)
Balance, December 31, 2023	**$ (17)**	**$ (52)**	**$ 2**	**$ (67)**

(a) All amounts are net of tax, except for Foreign currency translation.
(b) Benefit obligations activity includes changes in actuarial (gain) loss and prior service cost in DTE Energy's pension and other postretirement benefit plans. Refer to Note 20 to the Consolidated Financial Statements, "Retirement Benefits and Trusteed Assets", for details regarding this activity. For 2022, the change in benefit obligations due to actuarial (gain) loss increased from prior years, primarily due to higher discount rates and other plan changes.

Cash, Cash Equivalents, and Restricted Cash

Cash and cash equivalents include cash on hand, cash in banks, and temporary investments purchased with remaining maturities of three months or less. Restricted cash includes funds held in separate bank accounts and principally consists of amounts at DTE Securitization I and DTE Securitization II to pay for debt service and other qualified costs. Restricted cash also consists of funds held to satisfy contractual obligations related to a large construction project at DTE Vantage. Restricted cash designated for payments within one year is classified as a Current Asset.

Financing Receivables

Financing receivables are primarily composed of trade receivables, notes receivable, and unbilled revenue. The Registrants' financing receivables are stated at net realizable value.

DTE Energy had unbilled revenues of $882 million and $1.2 billion at December 31, 2023 and 2022, respectively, including $311 million and $290 million of DTE Electric unbilled revenues, respectively, included in Customer Accounts receivable.

The Registrants monitor the credit quality of their financing receivables on a regular basis by reviewing credit quality indicators and monitoring for trigger events, such as a credit rating downgrade or bankruptcy. Credit quality indicators include, but are not limited to, ratings by credit agencies where available, collection history, collateral, counterparty financial statements and other internal metrics. Utilizing such data, the Registrants have determined three internal grades of credit quality. Internal grade 1 includes financing receivables for counterparties where credit rating agencies have ranked the counterparty as investment grade. To the extent credit ratings are not available, the Registrants utilize other credit quality indicators to determine the level of risk associated with the financing receivable. Internal grade 1 may include financing receivables for counterparties for which credit rating agencies have ranked the counterparty as below investment grade; however, due to favorable information on other credit quality indicators, the Registrants have determined the risk level to be similar to that of an investment grade counterparty. Internal grade 2 includes financing receivables for counterparties with limited credit information and those with a higher risk profile based upon credit quality indicators. Internal grade 3 reflects financing receivables for which the counterparties have the greatest level of risk, including those in bankruptcy status.

The following represents the Registrants' financing receivables by year of origination, classified by internal grade of credit risk, including current year-to-date gross write-offs, if any. The related credit quality indicators and risk ratings utilized to develop the internal grades have been updated through December 31, 2023.

	DTE Energy				DTE Electric
	Year of origination				
	2023	2022	2021 and prior	Total	2023 and prior
	(In millions)				
Notes receivable					
Internal grade 1	$ 19	$ —	$ 4	$ 23	$ 18
Internal grade 2	23	112	17	152	1
Total notes receivable[(a)]	**$ 42**	**$ 112**	**$ 21**	**$ 175**	**$ 19**
Net investment in leases					
Internal grade 1	$ —	$ —	$ 37	$ 37	$ —
Internal grade 2	—	66	184	250	—
Total net investment in leases[(a)]	**$ —**	**$ 66**	**$ 221**	**$ 287**	**$ —**

(a) For DTE Energy and DTE Electric, the current portion is included in Current Assets — Other on the respective Consolidated Statements of Financial Position. For DTE Electric, the noncurrent portion is included in Other Assets — Other.

The allowance for doubtful accounts on accounts receivable for the utility entities is generally calculated using an aging approach that utilizes rates developed in reserve studies. DTE Electric and DTE Gas establish an allowance for uncollectible accounts based on historical losses and management's assessment of existing and future economic conditions, customer trends and other factors. Customer accounts are generally considered delinquent if the amount billed is not received by the due date, which is typically in 21 days, however, factors such as assistance programs may delay aggressive action. DTE Electric and DTE Gas generally assess late payment fees on trade receivables based on past-due terms with customers. Customer accounts are written off when collection efforts have been exhausted. The time period for write-off is 150 days after service has been terminated.

The customer allowance for doubtful accounts for non-utility businesses and other receivables for both utility and non-utility businesses is generally calculated based on specific review of probable future collections based on receivable balances generally in excess of 30 days. Existing and future economic conditions, customer trends and other factors are also considered. Receivables are written off on a specific identification basis and determined based upon the specific circumstances of the associated receivable.

Notes receivable for DTE Energy are primarily comprised of finance lease receivables and loans that are included in Notes Receivable and Other current assets on DTE Energy's Consolidated Statements of Financial Position. Notes receivable for DTE Electric are primarily comprised of loans.

The Registrants establish an allowance for credit loss for principal and interest amounts due that are estimated to be uncollectible in accordance with the contractual terms of the note receivable. In determining the allowance for credit losses for notes receivable, the Registrants consider the historical payment experience and other factors that are expected to have a specific impact on the counterparty's ability to pay including existing and future economic conditions. Notes receivable are typically considered delinquent when payment is not received for periods ranging from 60 to 120 days. If amounts are no longer probable of collection, the Registrants may consider the note receivable impaired, adjust the allowance, and cease accruing interest (nonaccrual status).

Cash payments received on nonaccrual status notes receivable, that do not bring the account contractually current, are first applied to the contractually owed past due interest, with any remainder applied to principal. Accrual of interest is generally resumed when the note receivable becomes contractually current.

The following tables present a roll-forward of the activity for the Registrants' financing receivables credit loss reserves:

	DTE Energy			DTE Electric
	Trade accounts receivable	Other receivables	Total	Trade and other accounts receivable
	(In millions)			
Balance at December 31, 2020	$ 101	$ 3	$ 104	$ 57
Current period provision	53	1	54	36
Write-offs charged against allowance	(126)	(1)	(127)	(77)
Recoveries of amounts previously written off	61	—	61	38
Balance at December 31, 2021	$ 89	$ 3	$ 92	$ 54
Current period provision	49	—	49	33
Write-offs charged against allowance	(105)	(2)	(107)	(66)
Recoveries of amounts previously written off	45	—	45	28
Balance at December 31, 2022	$ 78	$ 1	$ 79	$ 49
Current period provision	52	—	52	36
Write-offs charged against allowance	(112)	—	(112)	(72)
Recoveries of amounts previously written off	44	—	44	28
Balance at December 31, 2023	**$ 62**	**$ 1**	**$ 63**	**$ 41**

Uncollectible expense for the Registrants is primarily comprised of the current period provision for allowance for doubtful accounts and is summarized as follows:

	Year Ended December 31,		
	2023	2022	2021
	(In millions)		
DTE Energy	**$ 55**	$ 55	$ 55
DTE Electric	**$ 38**	$ 35	$ 36

There are no material amounts of past due financing receivables for the Registrants as of December 31, 2023.

Inventories

Inventory related to utility and non-utility operations is valued at the lower of cost or net realizable value, where cost is generally valued using average cost. Inventory primarily includes fuel, gas, materials, and supplies. Other inventories include RECs, emission allowances, and other environmental products in the Energy Trading segment.

DTE Gas' natural gas inventory of $73 million and $44 million as of December 31, 2023 and 2022, respectively, is determined using the last-in, first-out (LIFO) method. The replacement cost of gas in inventory exceeded the LIFO cost by $50 million and $152 million at December 31, 2023 and 2022, respectively.

Property, Retirement and Maintenance, and Depreciation and Amortization

Property is stated at cost and includes construction-related labor, materials, overheads, and AFUDC for utility property. The cost of utility properties retired is charged to accumulated depreciation. Expenditures for maintenance and repairs are charged to expense when incurred.

Utility property at DTE Electric and DTE Gas is depreciated over its estimated useful life using straight-line rates approved by the MPSC. DTE Energy's non-utility property is depreciated over its estimated useful life using the straight-line method. Depreciation and amortization expense also includes the amortization of certain regulatory assets and liabilities for the Registrants.

The cost of nuclear fuel is capitalized. The amortization of nuclear fuel is included within Fuel, purchased power, and gas — utility in the DTE Energy Consolidated Statements of Operations, and Fuel and purchased power in the DTE Electric Consolidated Statements of Operations, and is recorded using the units-of-production method.

See Note 6 to the Consolidated Financial Statements, "Property, Plant, and Equipment."

Long-Lived Assets

Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. If the carrying amount of the asset exceeds the expected undiscounted future cash flows generated by the asset, an impairment loss is recognized resulting in the asset being written down to its estimated fair value. Assets to be disposed of are reported at the lower of the carrying amount or fair value, less costs to sell.

Goodwill

DTE Energy has goodwill resulting from business combinations. For each reporting unit with goodwill, DTE Energy performs an impairment test annually or whenever events or circumstances indicate that the value of goodwill may be impaired. For the years ended December 31, 2023 and 2022, there were no impairments resulting from these tests and there were no other changes in the carrying amount of goodwill.

Intangible Assets

The Registrants have certain Intangible assets as shown below:

		December 31, 2023			December 31, 2022		
	Useful Lives	Gross Carrying Value	Accumulated Amortization	Net Carrying Value	Gross Carrying Value	Accumulated Amortization	Net Carrying Value
				(In millions)			
Intangible assets subject to amortization							
Contract intangibles	12 to 26 years	**$ 246**	**$ (103)**	**$ 143**	$ 246	$ (88)	$ 158
Carbon offsets		**10**	**—**	**10**	6	—	6
Renewable energy credits		**2**	**—**	**2**	2	—	2
Other		**1**	**—**	**1**	—	—	—
Intangible assets not subject to amortization(a)		**13**	**—**	**13**	8	—	8
DTE Energy Long-term intangible assets		**$ 259**	**$ (103)**	**$ 156**	$ 254	$ (88)	$ 166

(a) Amounts are charged to expense, using average cost, as they are consumed in the operation of the business. DTE Electric intangible assets include the Renewable energy credits above, which are included in Other Assets — Other on the DTE Electric Consolidated Statements of Financial Position.

The following table summarizes DTE Energy's estimated contract intangible amortization expense expected to be recognized during each year through 2028:

	2024	2025	2026	2027	2028
			(In millions)		
Estimated amortization expense	$ 16	$ 16	$ 14	$ 14	$ 14

DTE Energy amortizes contract intangible assets on a straight-line basis over the expected period of benefit. DTE Energy's Intangible assets amortization expense was $15 million in 2023 and $16 million in 2022 and 2021.

Cloud Computing Arrangements

The Registrants capitalize implementation costs incurred in a cloud computing arrangement that is a service contract consistent with capitalized implementation costs incurred to develop or obtain internal-use software. Capitalized costs are recorded in Other noncurrent assets on the Consolidated Statements of Financial Position and amortization of the costs is reflected in Operation and maintenance within the Consolidated Statements of Operations. Costs are amortized on a straight-line basis over the life of the contract. Contracts primarily involve the implementation or upgrade of cloud-based solutions for generation and distribution operations and customer service support.

The following balances for cloud computing costs relate to DTE Energy:

	Year Ended December 31,		
	2023	2022	2021
		(In millions)	
Amortization expense of capitalized cloud computing costs	**$ 10**	$ 4	$ 1
Gross value of capitalized cloud computing costs	**$ 56**	$ 42	
Accumulated amortization of capitalized cloud computing costs	**$ 15**	$ 5	

The following balances for cloud computing costs relate to DTE Electric:

	Year Ended December 31,		
	2023	2022	2021
		(In millions)	
Amortization expense of capitalized cloud computing costs	**$ 8**	$ 3	$ 1
Gross value of capitalized cloud computing costs	**$ 44**	$ 33	
Accumulated amortization of capitalized cloud computing costs	**$ 12**	$ 4	

Excise and Sales Taxes

The Registrants record the billing of excise and sales taxes as a receivable with an offsetting payable to the applicable taxing authority, with no net impact on the Registrants’ Consolidated Statements of Operations.

Deferred Debt Costs

The costs related to the issuance of long-term debt are deferred and amortized over the life of each debt issue. The deferred amounts are included as a direct deduction from the carrying amount of each debt issue in Mortgage bonds, notes, and other and Securitization bonds on the Registrants' Consolidated Statements of Financial Position and in Junior subordinated debentures on DTE Energy's Consolidated Statements of Financial Position. In accordance with MPSC regulations applicable to DTE Energy’s electric and gas utilities, the unamortized discount, premium, and expense related to utility debt redeemed with a refinancing are amortized over the life of the replacement issue. Discounts, premiums, and expense on early redemptions of debt associated with DTE Energy's non-utility operations are charged to earnings.

Investments in Debt and Equity Securities

The Registrants generally record investments in debt and equity securities at market value with unrealized gains or losses included in earnings. Changes in the fair value of Fermi 2 nuclear decommissioning investments are recorded as adjustments to Regulatory assets or liabilities, due to a recovery mechanism from customers. The Registrants' equity investments are reviewed for impairment each reporting period. If the assessment indicates that an impairment exists, a loss is recognized resulting in the equity investment being written down to its estimated fair value. See Note 12 of the Consolidated Financial Statements, "Fair Value."

DTE Energy Foundation

DTE Energy made a charitable contribution to the DTE Energy Foundation of $25 million for the year ended December 31, 2021. There were no contributions for the years ended December 31, 2023 and 2022. The DTE Energy Foundation is a non-consolidated not-for-profit private foundation, the purpose of which is to contribute to and assist charitable organizations.

Other Accounting Policies

See the following notes for other accounting policies impacting the Registrants' Consolidated Financial Statements:

Note	Title
5	Revenue
6	Property, Plant, and Equipment
8	Asset Retirement Obligations
9	Regulatory Matters
10	Income Taxes
12	Fair Value
13	Financial and Other Derivative Instruments
17	Leases
20	Retirement Benefits and Trusteed Assets
21	Stock-Based Compensation
22	Segment and Related Information
23	Related Party Transactions

NOTE 3 — NEW ACCOUNTING PRONOUNCEMENTS

Recently Adopted Pronouncements

In March 2022, the FASB issued ASU No. 2022-02, *Financial Instruments – Credit Losses (Topic 326): Troubled Debt Restructurings and Vintage Disclosures.* The amendments in this update eliminate the accounting guidance for troubled debt restructurings by creditors that have adopted the Current Expected Credit Loss ("CECL") model under ASC 326 and enhance the disclosure requirements for loan refinancings and restructurings made with borrowers experiencing financial difficulty. Additionally, the amendments require the disclosure of current period gross write-offs for financing receivables and net investment in leases by year of origination in the vintage disclosures. The Registrants adopted the ASU effective January 1, 2023 using the prospective approach, with no impact on the Registrants' financial position or results of operations. Gross write-offs, if any, will be disclosed in the Financing Receivables section of Note 2 to the Consolidated Financial Statements, "Significant Accounting Policies."

Recently Issued Pronouncements

In November 2023, the FASB issued ASU No. 2023-07, *Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures*. The amendments in this update require disclosure of incremental segment information and the title and position of the chief operating decision maker ("CODM"). Registrants will be required to disclose significant segment expenses that are regularly provided to the CODM, as well as additional information on segment profit and loss measures and how such information is used by the CODM to assess segment performance and allocate resources. The ASU is effective for the Registrants for fiscal years beginning after December 15, 2023, and interim periods for fiscal years beginning after December 15, 2024, on a retrospective basis. Early adoption is permitted. The Registrants will apply the guidance upon the effective date.

In December 2023, the FASB issued ASU No. 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures*. The amendments in this update require enhanced income tax disclosures, particularly related to a reporting entity's effective tax rate reconciliation and income taxes paid. For the rate reconciliation table, the update requires additional categories of information about federal, state, and foreign taxes and details about significant reconciling items, subject to a quantitative threshold. Income taxes paid must be similarly disaggregated by federal, state, and foreign based on a quantitative threshold. The ASU is effective for the Registrants for annual periods beginning after December 15, 2024. The guidance shall be applied on a prospective basis with the option to apply retrospectively. Early adoption is permitted. The Registrants will apply the guidance upon the effective date.

NOTE 4 — DISCONTINUED OPERATIONS

Separation of DT Midstream

On July 1, 2021, DTE Energy completed the separation of DT Midstream, its former natural gas pipeline, storage, and gathering non-utility business. The table below reflects the financial results of DT Midstream that are included in discontinued operations within the Consolidated Statements of Operations. These results include the impact of tax-related adjustments and all transaction costs related to the separation. General corporate overhead costs have been excluded and no portion of corporate interest costs were allocated to discontinued operations.

	Year Ended December 31, 2021
Operating Revenues — Non-utility operations	$ 405
Operating Expenses	
Cost of gas and other — non-utility	15
Operation and maintenance[(a)]	123
Depreciation and amortization	82
Taxes other than income	13
Asset (gains) losses and impairments, net	17
	250
Operating Income	155
Other (Income) and Deductions	
Interest expense	50
Interest income	(4)
Other income	(62)
	(16)
Income from Discontinued Operations Before Income Taxes	171
Income Tax Expense	54
Net Income from Discontinued Operations, Net of Taxes	117
Less: Net Income Attributable to Noncontrolling Interests	6
Net Income from Discontinued Operations	$ 111

(a) Includes separation transaction costs of $59 million for various legal, accounting and other professional services fees.

The following table is a summary of significant non-cash items, capital expenditures, and significant financing activities of discontinued operations included in DTE Energy's Consolidated Statements of Cash Flows:

	Year Ended December 31, 2021
	(In millions)
Operating Activities	
Depreciation and amortization	$ 82
Deferred income taxes	53
Equity earnings of equity method investees	(59)
Asset (gains) losses and impairments, net	19
Investing Activities	
Plant and equipment expenditures — non-utility	(60)

NOTE 5 — REVENUE

Significant Accounting Policy

Revenue is measured based upon the consideration specified in a contract with a customer at the time when performance obligations are satisfied. A performance obligation is a promise in a contract to transfer a distinct good or service or a series of distinct goods or services to the customer. The Registrants recognize revenue when performance obligations are satisfied by transferring control over a product or service to a customer. The Registrants have determined control to be transferred when the product is delivered, or the service is provided to the customer.

Rates for DTE Electric and DTE Gas include provisions to adjust billings for fluctuations in fuel and purchased power costs, cost of natural gas, and certain other costs. Revenues are adjusted for differences between actual costs subject to reconciliation and the amounts billed in current rates. Under or over recovered revenues related to these cost recovery mechanisms are included in Regulatory assets or liabilities on the Registrants' Consolidated Statements of Financial Position and are recovered or returned to customers through adjustments to the billing factors.

For discussion of derivative contracts, see Note 13 to the Consolidated Financial Statements, "Financial and Other Derivative Instruments."

Disaggregation of Revenue

The following is a summary of revenues disaggregated by segment for DTE Energy:

	2023	2022	2021
		(In millions)	
Electric[(a)]			
Residential	**$ 2,847**	$ 2,911	$ 2,926
Commercial	**2,114**	1,958	1,908
Industrial	**732**	659	628
Other[(b)]	**125**	884	359
Total Electric operating revenues	**$ 5,818**	$ 6,412	$ 5,821
Gas			
Gas sales	**$ 1,324**	$ 1,442	$ 1,058
End User Transportation	**250**	264	233
Intermediate Transportation	**85**	81	82
Other[(b)]	**89**	137	180
Total Gas operating revenues	**$ 1,748**	$ 1,924	$ 1,553
Other segment operating revenues			
DTE Vantage	**$ 809**	$ 848	$ 1,482
Energy Trading	**$ 4,612**	$ 10,308	$ 6,831

(a) Revenues generally represent those of DTE Electric, except $14 million, $15 million, and $12 million of Other revenues related to DTE Sustainable Generation for the years ended December 31, 2023, 2022, and 2021, respectively.
(b) Includes revenue adjustments related to various regulatory mechanisms, including the PSCR at the Electric segment and GCR at the Gas segment. Revenues related to these mechanisms may vary based on changes in the cost of fuel, purchased power, and gas.

Revenues included the following which were outside the scope of Topic 606:

	2023	2022	2021
		(In millions)	
Electric — Alternative Revenue Programs	**$ 36**	$ 35	$ 36
Electric — Other revenues	**$ 22**	$ 19	$ 19
Gas — Alternative Revenue Programs	**$ 16**	$ 9	$ 10
Gas — Other revenues	**$ 8**	$ 7	$ 6
DTE Vantage — Leases	**$ 59**	$ 82	$ 103
Energy Trading — Derivatives	**$ 3,436**	$ 8,489	$ 5,603

Nature of Goods and Services

The following is a description of principal activities, separated by reportable segments, from which DTE Energy generates revenue. For more detailed information about reportable segments, see Note 22 to the Consolidated Financial Statements, “Segment and Related Information.”

The Registrants have contracts with customers which may contain more than one performance obligation. When more than one performance obligation exists in a contract, the consideration under the contract is allocated to the performance obligations based on the relative standalone selling price. DTE Energy generally determines standalone selling prices based on the prices charged to customers or the use of the adjusted market assessment approach. The adjusted market assessment approach involves the evaluation of the market in which DTE Energy sells goods or services and estimating the price that a customer in that market would be willing to pay.

Under Topic 606, when a customer simultaneously receives and consumes the product or service provided, revenue is considered to be recognized over time. Alternatively, if it is determined that the criteria for recognition of revenue over time is not met, the revenue is considered to be recognized at a point in time.

Electric

Electric consists principally of DTE Electric. Electric revenues are primarily comprised of the supply and delivery of electricity, related capacity, and RECs. Revenues are primarily associated with cancellable contracts, with the exception of certain long-term contracts with commercial and industrial customers. Revenues, including estimated unbilled amounts, are generally recognized over time based upon volumes delivered or through the passage of time ratably based upon providing a stand-ready service. The Registrants have determined that the above methods represent a faithful depiction of the transfer of control to the customer. Unbilled revenues are typically determined utilizing approved tariff rates and estimated meter volumes. Estimated unbilled amounts recognized in revenue are subject to adjustment in the following reporting period as actual volumes by customer class are known. Revenues are typically subject to tariff rates based upon customer class and type of service and are billed and received monthly. Tariff rates are determined by the MPSC on a per unit or monthly basis.

Gas

Gas consists principally of DTE Gas. Gas revenues are primarily comprised of the supply and delivery of natural gas, and other services including storage, transportation, and appliance maintenance. Revenues are primarily associated with cancellable contracts with the exception of certain long-term contracts with commercial and industrial customers. Revenues, including estimated unbilled amounts, are generally recognized over time based upon volumes delivered or through the passage of time ratably based upon providing a stand-ready service. DTE Energy has determined that the above methods represent a faithful depiction of the transfer of control to the customer. Unbilled revenues are typically determined using both estimated meter volumes and estimated usage based upon the number of unbilled days and historical temperatures. Estimated unbilled amounts recognized in revenue are subject to adjustment in the following reporting period as actual volumes by customer class and service type are known. Revenues are typically subject to tariff rates or other rates subject to regulatory oversight and are billed and received monthly. Tariff rates are determined by the MPSC on a per unit or monthly basis.

DTE Vantage

DTE Vantage revenues include contracts accounted for as leases which are outside of the scope of Topic 606. For performance obligations within the scope of Topic 606, the timing of revenue recognition is dependent upon when control over the associated product or service is transferred.

Revenues at DTE Vantage, within the scope of Topic 606, generally consist of sales of blast furnace coke, renewable natural gas and related credits, electricity, equipment maintenance services, and other energy related products and services. Revenues for the sale of blast furnace coke, including estimated unbilled amounts, are recognized at a point in time when the product is delivered, which represents the transfer of control to the customer. Other revenues are generally recognized over time based upon volumes delivered or services provided, or through the passage of time ratably based upon providing a stand-ready service. DTE Energy has determined that the above methods represent a faithful depiction of the transfer of control to the customer. Market based pricing structures exist in such contracts including adjustments for consumer price or other indices. Consideration may consist of both fixed and variable components. Generally, uncertainties in the variable consideration components are resolved, and revenues are known at the time of recognition. Billing terms vary and are generally monthly with payment terms typically within 30 days following billing.

Energy Trading

Energy Trading revenues consist primarily of derivative contracts outside of the scope of Topic 606. For performance obligations within the scope of Topic 606, the timing of revenue recognition is dependent upon when control over the associated product or service is transferred.

Revenues, including estimated unbilled amounts, within the scope of Topic 606 arising from the sale of natural gas, electricity, power capacity, and other energy related products are generally recognized over time based upon volumes delivered or through the passage of time ratably based upon providing a stand-ready service. DTE Energy has determined that the above methods represent a faithful depiction of the transfer of control to the customer. Revenues are known at the time of recognition. Payment for the aforementioned revenues is generally due from customers in the month following delivery.

Revenues associated with RECs and other environmental products are recognized at a point in time when control is transferred to the customer which is deemed to be when these products are entered for transfer to the customer in the applicable tracking system. Revenues associated with RECs under a wholesale full requirements power contract are deferred until control has been transferred. The deferred revenues represent a contract liability for which payment has been received and the amounts have been estimated using the adjusted market assessment approach. With the exception of RECs, generally all other performance obligations associated with wholesale full requirements power contracts are satisfied over time in conjunction with the delivery of power. At the time power is delivered, DTE Energy may not have control over the RECs as the RECs are not self-generated and may not yet have been procured resulting in deferred revenues.

Deferred Revenue

The following is a summary of deferred revenue activity for DTE Energy:

	2023	2022
	(In millions)	
Beginning Balance, January 1	**$ 94**	$ 78
Increases due to cash received or receivable, excluding amounts recognized as revenue during the period	**103**	91
Revenue recognized that was included in the deferred revenue balance at the beginning of the period	**(91)**	(75)
Ending Balance, December 31	**$ 106**	$ 94

The deferred revenues at DTE Energy generally represent amounts paid by or receivables from customers for which the associated performance obligation has not yet been satisfied. Deferred revenues include amounts associated with REC performance obligations under certain wholesale full requirements power contracts. Deferred revenues associated with RECs are recognized as revenue when control of the RECs has transferred. Other performance obligations associated with deferred revenues include providing products and services related to customer prepayments. Deferred revenues associated with these products and services are recognized when control has transferred to the customer.

The following table represents deferred revenue amounts for DTE Energy that are expected to be recognized as revenue in future periods:

	DTE Energy
	(In millions)
2024	$ 103
2025	1
2026	1
2027	1
2028	—
2029 and thereafter	—
	$ 106

Transaction Price Allocated to the Remaining Performance Obligations

In accordance with optional exemptions available under Topic 606, the Registrants did not disclose the value of unsatisfied performance obligations for (1) contracts with an original expected length of one year or less, (2) with the exception of fixed consideration, contracts for which revenue is recognized at the amount to which the Registrants have the right to invoice for goods provided and services performed, and (3) contracts for which variable consideration relates entirely to an unsatisfied performance obligation.

Such contracts consist of varying types of performance obligations across the segments, including the supply and delivery of energy related products and services. Contracts with variable volumes and/or variable pricing, including those with pricing provisions tied to a consumer price or other index, have also been excluded as the related consideration under the contract is variable at inception of the contract. Contract lengths vary from cancellable to multi-year.

The Registrants expect to recognize revenue for the following amounts related to fixed consideration associated with remaining performance obligations in each of the future periods noted:

	DTE Energy	DTE Electric
	(In millions)	
2024	$ 245	$ 7
2025	191	—
2026	109	—
2027	76	—
2028	58	—
2029 and thereafter	320	1
	$ 999	**$ 8**

NOTE 6 — PROPERTY, PLANT, AND EQUIPMENT

The following is a summary of Property, plant, and equipment by classification as of December 31:

	2023	2022
Property, plant, and equipment	(In millions)	
DTE Electric		
Zero carbon generation		
Nuclear	**$ 3,812**	$ 3,684
Renewables	**3,074**	2,567
Fossil and other generation	**4,157**	8,789
Distribution	**13,673**	12,502
Other	**3,220**	3,049
Total DTE Electric	**27,936**	30,591
DTE Gas		
Distribution	**5,838**	5,376
Storage	**578**	607
Transmission and other	**1,613**	1,534
Total DTE Gas	**8,029**	7,517
DTE Vantage	**1,075**	1,059
Other	**234**	179
Total DTE Energy	**$ 37,274**	$ 39,346
Accumulated depreciation and amortization		
DTE Electric		
Zero carbon generation		
Nuclear	**$ (479)**	$ (428)
Renewables	**(524)**	(426)
Fossil and other generation	**(1,393)**	(3,352)
Distribution	**(3,205)**	(3,040)
Other	**(969)**	(849)
Total DTE Electric	**(6,570)**	(8,095)
DTE Gas		
Distribution	**(1,365)**	(1,330)
Storage	**(132)**	(163)
Transmission and other	**(493)**	(461)
Total DTE Gas	**(1,990)**	(1,954)
DTE Vantage	**(479)**	(469)
Other	**(66)**	(61)
Total DTE Energy	**$ (9,105)**	$ (10,579)
Net DTE Energy Property, plant, and equipment	**$ 28,169**	$ 28,767
Net DTE Electric Property, plant, and equipment	**$ 21,366**	$ 22,496

AFUDC and Capitalized Interest

AFUDC represents the cost of financing construction projects for regulated businesses, including the estimated cost of debt and authorized return on equity. The debt component is recorded as a reduction to Interest expense and the equity component is recorded as Other income on the Registrants' Consolidated Statements of Operations. Non-regulated businesses record capitalized interest as a reduction to Interest expense.

The AFUDC and capitalized interest rates were as follows for the years ended December 31:

	2023	2022	2021
DTE Electric AFUDC	**5.53 %**	5.46 %	5.46 %
DTE Gas AFUDC	**5.41 %**	5.41 %	5.55 %
Non-regulated businesses capitalized interest	**3.00 %**	3.00 %	3.30 %

The following is a summary of AFUDC and interest capitalized for the years ended December 31:

	2023	2022	2021
DTE Energy		(In millions)	
Allowance for debt funds used during construction and interest capitalized	**$ 20**	$ 13	$ 12
Allowance for equity funds used during construction	**42**	29	27
Total	**$ 62**	$ 42	$ 39

	2023	2022	2021
DTE Electric		(In millions)	
Allowance for debt funds used during construction	**$ 15**	$ 11	$ 11
Allowance for equity funds used during construction	**40**	26	25
Total	**$ 55**	$ 37	$ 36

Depreciation and Amortization

The composite depreciation rate for DTE Electric was approximately 4.4% in 2023 and 4.2% in 2022 and 2021. The composite depreciation rate for DTE Gas was 2.9% in 2023, 2022 and 2021. The average estimated useful life for each major class of utility Property, plant, and equipment as of December 31, 2023 follows:

	Estimated Useful Lives in Years		
Utility	**Generation**	**Distribution**	**Storage**
DTE Electric	34	38	N/A
DTE Gas	N/A	49	58

The estimated useful lives for DTE Electric's Other utility assets range from 3 to 80 years, while the estimated useful lives for DTE Gas' Transmission and other utility assets range from 3 to 80 years. The estimated useful lives for major classes of DTE Energy's non-utility assets and facilities range from 3 to 50 years.

The following is a summary of Depreciation and amortization expense for DTE Energy:

	2023	2022	2021
		(In millions)	
Property, plant, and equipment	**$ 1,239**	$ 1,148	$ 1,095
Regulatory assets and liabilities	**344**	297	259
Intangible assets	**15**	16	16
Other	**8**	7	7
	$ 1,606	$ 1,468	$ 1,377

The following is a summary of Depreciation and amortization expense for DTE Electric:

	2023	2022	2021
	(In millions)		
Property, plant, and equipment	**$ 1,029**	$ 951	$ 890
Regulatory assets and liabilities	**292**	248	214
Other	**5**	5	5
	$ 1,326	$ 1,204	$ 1,109

Capitalized Software

Capitalized software costs are classified as Property, plant, and equipment and the related amortization is included in Accumulated depreciation and amortization on the Registrants' Consolidated Statements of Financial Position. The Registrants capitalize the costs associated with computer software developed or obtained for use in their businesses. The Registrants amortize capitalized software costs on a straight-line basis over the expected period of benefit, ranging from 3 to 15 years for both DTE Energy and DTE Electric.

The following balances for capitalized software relate to DTE Energy:

	Year Ended December 31,		
	2023	2022	2021
	(In millions)		
Amortization expense of capitalized software	**$ 189**	$ 159	$ 145
Gross carrying value of capitalized software	**$ 940**	$ 796	
Accumulated amortization of capitalized software	**$ 427**	$ 406	

The following balances for capitalized software relate to DTE Electric:

	Year Ended December 31,		
	2023	2022	2021
	(In millions)		
Amortization expense of capitalized software	**$ 172**	$ 146	$ 132
Gross carrying value of capitalized software	**$ 849**	$ 692	
Accumulated amortization of capitalized software	**$ 369**	$ 343	

NOTE 7 — JOINTLY-OWNED UTILITY PLANT

DTE Electric has joint ownership interest in two power plants, Belle River and Ludington Hydroelectric Pumped Storage. DTE Electric’s share of direct expenses of the jointly-owned plants are included in Fuel, purchased power, and gas — utility and Operation and maintenance expenses in the DTE Energy Consolidated Statements of Operations and Fuel and purchased power— utility and Operation and maintenance expenses in the DTE Electric Consolidated Statements of Operations.

DTE Electric's ownership information of the two utility plants as of December 31, 2023 was as follows:

	Belle River	Ludington Hydroelectric Pumped Storage
In-service date	1984-1985	1973
Total plant capacity	1,270 MW	2,290 MW
Ownership interest	81%	49%
Investment in Property, plant, and equipment (in millions)	$ 2,000	$ 652
Accumulated depreciation (in millions)	$ 1,091	$ 149

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Belle River

The Michigan Public Power Agency (MPPA) has ownership interests in Belle River Unit No. 1 and other related facilities. The MPPA is entitled to 19% of the total capacity and energy of the plant and is responsible for the same percentage of the plant's operation, maintenance, and capital improvement costs.

Ludington Hydroelectric Pumped Storage

Consumers Energy Company has an ownership interest in the Ludington Hydroelectric Pumped Storage Plant. Consumers Energy is entitled to 51% of the total capacity and energy of the plant and is responsible for the same percentage of the plant's operation, maintenance, and capital improvement costs.

For discussion of the ongoing contract dispute related to the Ludington Plant, see Note 18 to the Consolidated Financial Statements, "Commitments and Contingencies."

NOTE 8 — ASSET RETIREMENT OBLIGATIONS

DTE Electric has a legal retirement obligation for the decommissioning costs for its Fermi 1 and Fermi 2 nuclear plants, dismantlement of facilities located on leased property, and various other operations. DTE Electric has conditional retirement obligations for asbestos and PCB removal at certain of its power plants and various distribution equipment. DTE Gas has conditional retirement obligations for gas pipelines, certain service centers, and compressor and gate stations. The Registrants recognize such obligations as liabilities at fair market value when they are incurred, which generally is at the time the associated assets are placed in service. Fair value is measured using expected future cash outflows discounted at the Registrants' credit-adjusted risk-free rate. For its utility operations, the Registrants recognize in the Consolidated Statements of Operations removal costs in accordance with regulatory treatment. Any differences between costs recognized related to asset retirement and those reflected in rates are recognized as either a Regulatory asset or liability on the Consolidated Statements of Financial Position.

If a reasonable estimate of fair value cannot be made in the period in which the retirement obligation is incurred, such as for assets with indeterminate lives, the liability is recognized when a reasonable estimate of fair value can be made. Natural gas storage system and certain other distribution assets for DTE Gas and substations, manholes, and certain other distribution assets for DTE Electric have an indeterminate life. Therefore, no liability has been recorded for these assets.

Changes to Asset retirement obligations for 2023, 2022, and 2021 were as follows:

	2023	2022	2021
DTE Energy		(In millions)	
Asset retirement obligations at January 1	**$ 3,460**	$ 3,162	$ 2,829
Accretion	**198**	184	167
Liabilities incurred	**7**	24	28
Liabilities settled	**(96)**	(7)	(30)
Revision in estimated cash flows	**(13)**	97	168
Asset retirement obligations at December 31	**$ 3,556**	$ 3,460	$ 3,162

	2023	2022	2021
DTE Electric		(In millions)	
Asset retirement obligations at January 1	**$ 3,221**	$ 2,932	$ 2,607
Accretion	**185**	172	155
Liabilities incurred	**4**	22	29
Liabilities settled	**(81)**	(2)	(27)
Revision in estimated cash flows	**(3)**	97	168
Asset retirement obligations at December 31	**$ 3,326**	$ 3,221	$ 2,932

Approximately $2.7 billion of the Asset retirement obligations represent nuclear decommissioning liabilities that are funded through a surcharge to electric customers over the life of the Fermi 2 nuclear plant. The NRC has jurisdiction over the decommissioning of nuclear power plants and requires minimum decommissioning funding based upon a formula. The MPSC and FERC regulate the recovery of costs of decommissioning nuclear power plants and both require the use of external trust funds to finance the decommissioning of Fermi 2. Rates approved by the MPSC provide for the recovery of decommissioning costs of Fermi 2 and the disposal of low-level radioactive waste. DTE Electric believes the MPSC collections will be adequate to fund the estimated cost of decommissioning. The decommissioning assets, anticipated earnings thereon, and future revenues from decommissioning collections will be used to decommission Fermi 2. DTE Electric expects the liabilities to be reduced to zero at the conclusion of the decommissioning activities. If amounts remain in the trust funds for Fermi 2 following the completion of the decommissioning activities, those amounts will be disbursed based on rulings by the MPSC and FERC.

A portion of the funds recovered through the Fermi 2 decommissioning surcharge and deposited in external trust accounts is designated for the removal of non-radioactive assets and returning the site to greenfield. This removal and greenfielding is not considered a legal liability. Therefore, it is not included in the asset retirement obligation, but is reflected as the Nuclear decommissioning liability. The decommissioning of Fermi 1 is funded by DTE Electric. Contributions to the Fermi 1 trust are discretionary. For additional discussion of Nuclear decommissioning trust fund assets, see Note 12 to the Consolidated Financial Statements, "Fair Value."

NOTE 9 — REGULATORY MATTERS

Regulation

DTE Electric and DTE Gas are subject to the regulatory jurisdiction of the MPSC, which issues orders pertaining to rates, recovery of certain costs, including the costs of generating facilities and regulatory assets, conditions of service, accounting, and operating-related matters. The MPSC has authorized a return on equity of 9.9% for both DTE Electric and DTE Gas, subject to changes from any pending or future rate case filings. DTE Electric is also regulated by the FERC with respect to financing authorization, wholesale electric market activities, certain affiliate transactions, the acquisition and disposition of certain generation and other facilities, and, in conjunction with the NERC, compliance with mandatory reliability standards. Regulation results in differences in the application of generally accepted accounting principles between regulated and non-regulated businesses.

The Registrants are unable to predict the outcome of any unresolved regulatory matters discussed herein. Resolution of these matters is dependent upon future MPSC and FERC orders and appeals, which may materially impact the Consolidated Financial Statements of the Registrants.

Regulatory Assets and Liabilities

DTE Electric and DTE Gas are required to record Regulatory assets and liabilities for certain transactions that would have been treated as revenue or expense in non-regulated businesses. Continued applicability of regulatory accounting treatment requires that rates be designed to recover specific costs of providing regulated services and be charged to and collected from customers. Future regulatory changes could result in the discontinuance of this accounting treatment for Regulatory assets and liabilities for some or all of the Registrants' businesses and may require the write-off of the portion of any Regulatory asset or liability that was no longer probable of recovery through regulated rates. Management believes that currently available facts support the continued use of Regulatory assets and liabilities and that all Regulatory assets and liabilities are recoverable or refundable in the current regulatory environment.

The following are balances and a brief description of the Registrants' Regulatory assets and liabilities at December 31:

	DTE Energy		DTE Electric	
	2023	2022	2023	2022
Assets	(In millions)			
Recoverable undepreciated costs on retiring plants	**$ 2,736**	$ 594	**$ 2,736**	$ 594
Recoverable pension and other postretirement costs				
Pension	**1,421**	1,362	**1,045**	997
Other postretirement costs	**163**	172	**67**	60
Fermi 2 asset retirement obligation	**952**	972	**952**	972
Removal costs asset	**223**	19	**223**	19
Enhanced tree trimming program deferred costs	**157**	90	**157**	90
Recoverable Michigan income taxes	**133**	148	**110**	121
Energy Waste Reduction incentive	**90**	88	**72**	71
Recoverable income taxes related to AFUDC equity	**89**	76	**80**	68
Accrued PSCR/GCR revenue	**55**	450	**55**	421
Deferred environmental costs	**46**	46	**—**	—
Unamortized loss on reacquired debt	**41**	45	**31**	34
Customer360 deferred costs	**38**	42	**38**	42
Advanced distribution management system costs	**18**	14	**18**	14
Deferred pension costs	**16**	63	**10**	41
Nuclear performance evaluation and review committee tracker	**6**	26	**6**	26
Other	**133**	129	**95**	70
	6,317	4,336	**5,695**	3,640
Less amount included in Current Assets	**(108)**	(450)	**(99)**	(421)
	$ 6,209	$ 3,886	**$ 5,596**	$ 3,219
Securitized regulatory assets	**$ 758**	$ 206	**$ 758**	$ 206

	DTE Energy		DTE Electric	
	2023	2022	2023	2022
Liabilities	(In millions)			
Refundable federal income taxes	**$ 1,823**	$ 1,908	**$ 1,463**	$ 1,534
Removal costs liability	**342**	371	**—**	—
Negative other postretirement offset	**210**	191	**142**	128
Non-service pension and other postretirement costs	**199**	154	**84**	73
Accrued GCR refund	**21**	—	**—**	—
Renewable energy	**7**	21	**7**	21
Other	**72**	62	**63**	55
	2,674	2,707	**1,759**	1,811
Less amount included in Current Liabilities	**(71)**	(34)	**(49)**	(33)
	$ 2,603	$ 2,673	**$ 1,710**	$ 1,778

As noted below, certain Regulatory assets for which costs have been incurred have been included (or are expected to be included, for costs incurred subsequent to the most recently approved rate case) in DTE Electric's or DTE Gas' rate base, thereby providing a return on invested costs (except as noted). Certain other Regulatory assets are not included in rate base but accrue recoverable carrying charges until surcharges to collect the assets are billed. Certain Regulatory assets do not result from cash expenditures and therefore do not represent investments included in rate base or have offsetting liabilities that reduce rate base.

ASSETS

- *Recoverable undepreciated costs on retiring plants* — Current year balance reflects undepreciated costs at the Belle River and Monroe power plants that will be retired in future periods. These costs were approved for recovery as a result of DTE Electric's Integrated Resource Plan settlement agreement in 2023. Refer to the "Integrated Resource Plan" section below for additional details. The prior year balance reflects the undepreciated costs of the St. Clair and Trenton Channel power plants, which were approved for securitization and recovery by the MPSC and reclassified to 'Securitized regulatory assets' in 2023. Refer to the "2023 Securitization Filing" section below for additional information.

- *Recoverable pension and other postretirement costs* — Accounting standards for pension and other postretirement benefit costs require, among other things, the recognition in Other comprehensive income of the actuarial gains or losses and the prior service costs that arise during the period but are not immediately recognized as components of net periodic benefit costs. DTE Electric and DTE Gas record the impact of actuarial gains or losses and prior service costs as Regulatory assets since the traditional rate setting process allows for the recovery of pension and other postretirement costs. The asset will reverse as the deferred items are amortized and recognized as components of net periodic benefit costs. Refer to Note 20 to the Consolidated Financial Statements, "Retirement Benefits and Trusteed Assets," for additional information regarding the changes in pension and other postretirement costs for the period and the impact on Regulatory assets.[a]

- *Fermi 2 asset retirement obligation* — Obligation for Fermi 2 decommissioning costs. The asset captures the timing differences between expense recognition and current recovery in rates and will reverse over the remaining life of the related plant.[a]

- *Removal costs asset* — Receivable for the recovery of asset removal expenditures in excess of amounts collected from customers.[a]

- *Enhanced tree trimming program deferred costs* — The MPSC approved the deferral of costs for a tree trimming surge through 2025, aimed at reducing the number and duration of customer interruptions.

- *Recoverable Michigan income taxes* — The State of Michigan enacted a corporate income tax resulting in the establishment of state deferred tax liabilities for DTE Energy's utilities. Offsetting Regulatory assets were also recorded as the impacts of the deferred tax liabilities will be reflected in rates as the related taxable temporary differences reverse and flow through current income tax expense.

- *Energy Waste Reduction incentive* — DTE Electric and DTE Gas operate MPSC approved energy waste reduction programs designed to reduce overall energy usage by their customers. The utilities are eligible to earn an incentive by exceeding statutory savings targets. The utilities have consistently exceeded the savings targets and recognize the incentive as a Regulatory asset in the period earned.[a]

- *Recoverable income taxes related to AFUDC equity* — Accounting standards for income taxes require recognition of a deferred tax liability for the equity component of AFUDC. A Regulatory asset is required for the future increase in taxes payable related to the equity component of AFUDC that will be recovered from customers through future rates over the remaining life of the related plant.

- *Accrued PSCR/GCR revenue* — Receivable for the temporary under-recovery of and carrying costs on fuel and purchased power costs incurred by DTE Electric which are recoverable through the PSCR mechanism and temporary under-recovery of and carrying costs on gas costs incurred by DTE Gas which are recoverable through the GCR mechanism.

- *Deferred environmental costs* — The MPSC approved the deferral of investigation and remediation costs associated with DTE Gas' former MGP sites. Amortization of deferred costs is over a ten-year period beginning in the year after costs were incurred, with recovery (net of any insurance proceeds) through base rate filings.[a]

- *Unamortized loss on reacquired debt* — The unamortized discount, premium, and expense related to debt redeemed with a refinancing are deferred, amortized, and recovered over the life of the replacement issue.

- *Customer360 deferred costs* — The MPSC approved the deferral and amortization of certain costs associated with implementing Customer360, an integrated software application that enables improved interface among customer service, billing, meter reading, credit and collections, device management, account management, and retail access. Amortization of deferred costs over a 15-year amortization period began after the billing system was put into operation during the second quarter of 2017. The deferred costs are recorded as Regulatory Assets at DTE Electric and DTE Gas receives an intercompany charge for their proportionate share of amortization expense.
- *Advanced distribution management system* — Program comprised of new hardware and software designed to improve the monitoring and safe operation of the electrical system, including emergency response. The program includes various upgrades for which costs are being separately deferred and amortized over respective 15-year periods, with recovery through base filings.
- *Deferred pension costs* — Effective upon the DTE Gas rate case settlement approved in August 2020 and DTE Electric rate order in November 2022, net pension costs previously recognized in earnings are no longer included as an addition to authorized rates and are being deferred as Regulatory assets. The Regulatory assets will reverse to the extent net pension costs are negative in future years and the net deferred amounts will be reviewed in future rate cases. Refer to Note 20 to the Consolidated Financial Statements, "Retirement Benefits and Trusteed Assets," for additional information regarding net pension costs.
- *Nuclear performance evaluation and review committee tracker* — Deferral and amortization of certain costs associated with oversight and review of DTE Electric's nuclear power generation program, including safety and regulatory compliance, nuclear leadership, nuclear facilities, and operational and financial performance, pursuant to MPSC authorization. Deferrals are amortized over a five-year period with recovery through base rate filings.
- *Securitized regulatory assets* — Costs approved for securitization and recovery by the MPSC. For both periods presented, amounts include the undepreciated cost of the River Rouge power plant and tree trim surge costs. Securitization bond surcharges began in 2022 to recover the tree trimming costs over a period not to exceed 5 years and River Rouge costs over a period not to exceed 14 years. For the current year, amounts also include the undepreciated costs of the St. Clair and Trenton Channel power plants. Securitization bond surcharges began in 2023 to recover costs over a period not to exceed 15 years. Refer to the "2023 Securitization Filing" section below for additional information.

(a) Regulatory assets not earning a return or accruing carrying charges.

LIABILITIES

- *Refundable federal income taxes* — In December 2017, the TCJA was enacted and reduced the corporate income tax rate, effective January 1, 2018. DTE Electric and DTE Gas remeasured deferred taxes, resulting in a reduction to deferred tax liabilities, to reflect the impact of the TCJA on the cumulative temporary differences expected to reverse after the effective date. Regulatory liabilities were also recorded to offset the impact of the deferred tax remeasurement reflected in rates.
- *Removal costs liability* — The amounts collected from customers to fund future asset removal activities in excess of removal costs incurred.
- *Negative other postretirement offset* — DTE Electric and DTE Gas' negative other postretirement costs have historically not been included as a reduction to their authorized rates; therefore, DTE Electric and DTE Gas have accrued a Regulatory liability to eliminate the impact on earnings of the negative other postretirement expense accrual. The Regulatory liabilities may reverse to the extent DTE Electric and DTE Gas' other postretirement expense is positive in future years. As a result of the MPSC order in December 2023, DTE Electric may continue to defer negative expense for 2023 and future periods; however, the Regulatory liability as of December 31, 2022 will begin to be amortized over a 7-year period. Refer to the "2023 Electric Rate Case Filing" section below for additional information.
- *Non-service pension and other postretirement costs* — Upon adoption of ASU 2017-07 on January 1, 2018, certain non-service pension and other postretirement cost activity is no longer credited to Property, plant, and equipment. Such costs may be recorded to Regulatory liabilities for ratemaking purposes and refunded through credits to amortization expense based on the composite depreciation rate for plant-in-service.

- *Accrued GCR refund* — Liability for the temporary over-recovery of and a return on gas costs primarily incurred by DTE Gas which are recoverable through the GCR mechanism.
- *Renewable energy* — Amounts collected in excess of renewable energy expenditures, including subscription revenue related to MIGreenPower, DTE Electric's voluntary renewable program providing customers the option to source their energy usage from renewables.

Ludington Accounting Application

During April 2022, DTE Electric and Consumers Energy Company (“Consumers”) filed a complaint against Toshiba America Energy Systems (“TAES”) and its parent corporation for defective and non-conforming work relating to the overhaul and upgrade of the Ludington Hydroelectric Pumped Storage Plant (“Ludington”). Refer to the *Ludington Plant Contract Dispute* section of Note 18 to the Consolidated Financial Statements, “Commitments and Contingencies,” for additional information regarding the complaint and ongoing legal proceedings.

DTE Electric and Consumers, joint owners of Ludington, believe that certain costs must be incurred in the near term for repairing and/or replacing defective work performed by TAES in order to ensure the continued safe and reliable operation of the plant. In November 2022, DTE Electric and Consumers filed an accounting application with the MPSC for authority to defer these costs as a regulatory asset. DTE Electric and Consumers requested the regulatory asset for their respective 49% and 51% shares of these costs, to be offset by any potential litigation proceeds. The parties also requested that appropriate recovery and ratemaking treatment be granted in a future rate case or other proceeding. In May 2023, the MPSC approved the accounting application as requested. Costs incurred and deferred as regulatory assets will be reviewed in future rate proceedings for cost recovery.

2023 Electric Rate Case Filing

DTE Electric filed a rate case with the MPSC on February 10, 2023 requesting an increase in base rates of $622 million based on a projected twelve-month period ending November 30, 2024, and an increase in return on equity from 9.9% to 10.25%. The requested increase in base rates was primarily due to increased investments in plant involving generation and the electric distribution system, as well as related increases to depreciation and property tax expenses, in order to support DTE Energy's goals to reduce carbon emissions and improve power reliability. The requested increase in base rates was also due to a projected sales decline from the level included in current rates and inflationary impacts on operating and interest costs.

On December 1, 2023, the MPSC issued an order approving an annual revenue increase of $368 million for services rendered on or after December 15, 2023 and a return on equity of 9.9%. The order also approved an Infrastructure Recovery Mechanism (IRM) surcharge to recover the cost of distribution investments incremental to those requested in base rates. The surcharge will be applied for a two-year period resulting in anticipated annual revenue increases of approximately $4 million and $25 million for the years ending December 31, 2024 and 2025, respectively.

Further, the MPSC order approved the continued deferral of negative other post-employment benefit (OPEB) expense as a regulatory liability for 2023 and future periods. As of December 31, 2022, DTE Electric had a Regulatory liability of $128 million for such OPEB deferrals, reflected as "Negative other postretirement offset" in the table of Regulatory assets and liabilities above. The MPSC order requires DTE Electric to amortize this balance over a 7-year period beginning December 15, 2023, which will reduce annual Operation and maintenance expense by approximately $18 million for each future period.

The MPSC order also disallowed $25 million of capital expenditures previously recorded, primarily related to various IT projects. The disallowance was included in Asset (gains) losses and impairments, net on the Consolidated Statements of Operations for the year ended December 31, 2023.

2023 Securitization Filing

On April 3, 2023, DTE Electric filed an application with the MPSC requesting a financing order to approve the securitization of $496 million of qualified costs related to the net book value of the St. Clair and Trenton Channel generation plants. The filing requested recovery of these qualifying costs from DTE Electric's customers.

The MPSC issued a financing order on June 22, 2023 authorizing DTE Electric to proceed with the issuance of Securitization bonds for qualified costs up to $602 million, increased for the inclusion of deferred income taxes. These costs include up to $594 million for the net book value of the St. Clair and Trenton Channel plants and up to $8 million for other qualified costs. The financing order further authorized customer charges for the timely recovery of debt service costs on the Securitization bonds and other ongoing qualified costs.

On November 1, 2023, DTE Electric closed on the issuance of Securitization bonds of $602 million, including two separate tranches of $301 million. Refer to Note 14 to the Consolidated Financial Statements, "Long-Term Debt," for additional information regarding the terms of the bonds and use of proceeds. Upon closing the transaction, DTE Electric recognized Securitized regulatory assets of $594 million, which were reclassified from existing Regulatory assets for the net book value of the St. Clair and Trenton Channel plants. Debt service costs for the first tranche will be recovered over a period not to exceed 10 years and costs for the second tranche will be recovered over a period not to exceed 15 years.

Integrated Resource Plan

In November 2022, DTE Electric filed an Integrated Resource Plan (IRP) with the MPSC, a comprehensive plan to meet the electricity needs of customers over the next 20 years. The IRP included details on planned coal plant retirements and replacement generation, including investments in renewables and battery storage, with a focus on providing increasingly clean, reliable, and affordable electricity to customers.

On July 12, 2023, DTE Energy announced that DTE Electric reached a settlement agreement with the various stakeholders involved in the IRP. The MPSC issued an order approving the settlement agreement on July 26, 2023. The agreement confirmed DTE Electric's plans to convert its Belle River facility from a coal-fired power plant to a natural gas peaking resource in 2025-2026, and to retire the Monroe power plant generation units 3 and 4 in 2028. DTE Electric also accelerated its planned retirement of Monroe generation units 1 and 2 from 2035 to 2032.

The settlement agreement approved the recovery of undepreciated plant costs that will be retired at Belle River and Monroe. As a result, approximately $2.7 billion of net Property, plant, and equipment was reclassified to a long-term regulatory asset during the third quarter 2023. Future capital expenditures will also be recovered, and the regulatory asset will be remeasured each reporting period for changes in expenditures, retirements, and depreciation.

DTE Electric will securitize $1.05 billion of the plant costs, including approximately $200 million for the estimated net book value of Belle River coal handling assets to be retired in 2025-2026. The remaining $845 million reflects the net book value of Monroe assets to be securitized upon the full retirement of the plant in 2032. Securitization will include the issuance of bonds for the respective plant costs and customer charges for the timely recovery of debt service costs. DTE Electric plans to reclassify amounts to Securitized regulatory assets upon completing the respective securitization financings. Terms of the securitization bonds and recovery periods for the debt service costs will also be determined at that time.

For the remaining net book value of Monroe plant assets, approximately $1.6 billion will be recovered through a regulatory asset with a return on equity of 9.0% and will be amortized over a 15-year period. Amortization will begin upon the issuance of an order in DTE Electric's next rate case. Until then, amounts will continue to be depreciated.

Pursuant to the IRP settlement agreement, DTE Electric has also committed to donate a total of $38 million, including $2 million each year from 2024 to 2027 to organizations providing various energy support to low-income customers. The remaining $30 million of donations will be made to organizations providing customers with bill assistance. The $30 million of donations may be made in varying annual amounts over the 15-year period of the Monroe regulatory asset discussed above, with a minimum amount of $1 million each year beginning in 2028. Organizations receiving donations will be determined at a later date in consultation with Michigan's Attorney General and MPSC staff, among others. Donations will not be recovered in rates and will be recorded as Other Expenses on the Consolidated Statements of Operations in future periods as the donations occur.

2024 Gas Rate Case Filing

DTE Gas filed a rate case with the MPSC on January 8, 2024 requesting an increase in base rates of $266 million based on a projected twelve-month period ending September 30, 2025, and an increase in return on equity from 9.9% to 10.25%. The request reflects a net increase to customer rates of only $160 million, as an existing IRM surcharge of $106 million would be rolled into the new base rates. The requested increase is primarily due to increased investments in plant related to system reliability and pipeline safety and inflationary impacts on operating costs, partially offset by higher sales. A final MPSC order in this case is expected in November 2024.

NOTE 10 — INCOME TAXES

Income Tax Summary

DTE Energy files a consolidated federal income tax return. DTE Electric is a part of the consolidated federal income tax return of DTE Energy. DTE Energy and its subsidiaries file consolidated and/or separate company income tax returns in various states and localities, including a consolidated return in the State of Michigan. DTE Electric is part of the Michigan consolidated income tax return of DTE Energy. The federal, state and local income tax expense for DTE Electric is determined on an individual company basis with no allocation of tax expenses or benefits from other affiliates of DTE Energy. DTE Electric had income tax receivables with DTE Energy of $7 million at December 31, 2023, primarily related to federal taxes, and $1 million at December 31, 2022, primarily related to state taxes. Income tax receivables with DTE Energy are included in Accounts Receivable - Affiliates on the DTE Electric Consolidated Statements of Financial Position. .

The Registrants' total Income Tax Expense varied from the statutory federal income tax rate for the following reasons:

	2023	2022	2021
DTE Energy		(In millions)	
Income Before Income Taxes	**$ 1,566**	$ 1,112	$ 656
Income tax expense at 21% statutory rate	**$ 329**	$ 234	$ 138
Production tax credits	**(91)**	(91)	(138)
TCJA regulatory liability amortization	**(63)**	(155)	(103)
Investment tax credits	**(44)**	(1)	(3)
Enactment of state income tax legislation, net of federal benefit	**(1)**	—	8
State deferred tax remeasurement due to separation of DT Midstream, net of federal benefit	**—**	—	(85)
Valuation allowance on charitable contribution carryforwards	**—**	9	18
State and local income taxes, excluding items above, net of federal benefit	**59**	42	30
Other, net	**(20)**	(9)	5
Income Tax Expense (Benefit)	**$ 169**	$ 29	$ (130)
Effective income tax rate	**10.8 %**	2.6 %	(19.9)%

	2023	2022	2021
DTE Electric		(In millions)	
Income Before Income Taxes	**$ 850**	$ 981	$ 970
Income tax expense at 21% statutory rate	**$ 179**	$ 206	$ 204
Production tax credits	**(79)**	(83)	(70)
TCJA regulatory liability amortization	**(53)**	(145)	(73)
State and local income taxes, excluding items above, net of federal benefit	**45**	56	54
Other, net	**(14)**	(8)	(11)
Income Tax Expense	**$ 78**	$ 26	$ 104
Effective income tax rate	**9.2 %**	2.7 %	10.7 %

Components of the Registrants' Income Tax Expense were as follows:

	2023	2022	2021
DTE Energy		(In millions)	
Current income tax benefit			
Federal	**$ (10)**	$ (13)	$ (33)
State and other income tax	**(2)**	(2)	(12)
Total current income taxes	**(12)**	(15)	(45)
Deferred income tax expense (benefit)			
Federal	**103**	(13)	(42)
State and other income tax	**78**	57	(43)
Total deferred income taxes	**181**	44	(85)
	$ 169	$ 29	$ (130)

DTE Electric	2023	2022	2021
		(In millions)	
Current income tax expense (benefit)			
Federal	$ 1	$ 1	$ (11)
State and other income tax	(5)	—	(7)
Total current income taxes	(4)	1	(18)
Deferred income tax expense (benefit)			
Federal	19	(46)	47
State and other income tax	63	71	75
Total deferred income taxes	82	25	122
	$ 78	$ 26	$ 104

Deferred tax assets and liabilities are recognized for the estimated future tax effect of temporary differences between the tax basis of assets or liabilities and the reported amounts in the Registrants' Consolidated Financial Statements.

The Registrants' deferred tax assets (liabilities) were comprised of the following at December 31:

	DTE Energy		DTE Electric	
	2023	2022	2023	2022
		(In millions)		
Property, plant, and equipment	$ (3,423)	$ (3,897)	$ (2,693)	$ (3,188)
Regulatory assets and liabilities	(1,158)	(493)	(1,314)	(589)
Tax credit carryforwards	1,519	1,378	572	487
Pension and benefits	77	111	69	103
Federal net operating loss carryforward	202	266	71	58
State and local net operating loss carryforwards	76	97	49	38
Investments in equity method investees	(33)	65	—	—
Other	130	137	137	145
	(2,610)	(2,336)	(3,109)	(2,946)
Less: Valuation allowance	(39)	(58)	—	—
Long-term deferred income tax liabilities	$ (2,649)	$ (2,394)	$ (3,109)	$ (2,946)
Deferred income tax assets	$ 2,415	$ 2,317	$ 1,202	$ 1,081
Deferred income tax liabilities	(5,064)	(4,711)	(4,311)	(4,027)
	$ (2,649)	$ (2,394)	$ (3,109)	$ (2,946)

Tax credit carryforwards for DTE Energy include $1.5 billion of general business credits that expire from 2032 through 2043. No valuation allowance is required for the tax credit carryforwards deferred tax asset.

DTE Energy has a pre-tax federal net operating loss carryforward of $964 million as of December 31, 2023 which can be carried forward indefinitely. No valuation allowance is required for the federal net operating loss deferred tax asset.

DTE Energy has state and local deferred tax assets related to net operating loss carryforwards of $76 million and $97 million at December 31, 2023 and 2022, respectively. Most of the state and local net operating loss carryforwards expire from 2024 through 2042 with the remainder being carried forward indefinitely.

DTE Energy has recorded valuation allowances of $39 million and $58 million at December 31, 2023 and 2022, respectively, including $19 million and $31 million for the respective periods related to the state net operating loss carryforwards noted above. The remaining valuation allowances are related to charitable contribution carryforwards.

In assessing the realizability of deferred tax assets, DTE Energy considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible.

Tax credit carryforwards for DTE Electric include $572 million of general business credits that expire from 2036 through 2043. No valuation allowance is required for the tax credit carryforwards deferred tax asset.

DTE Electric has a pre-tax federal net operating loss carryforward of $338 million as of December 31, 2023 which can be carried forward indefinitely. No valuation allowance is required for the federal net operating loss deferred tax asset.

DTE Electric has $49 million and $38 million in state and local deferred tax assets related to net operating loss carryforwards at December 31, 2023 and 2022, respectively, which will expire from 2030 through 2042. No valuation allowance is required for the state and local net operating loss deferred tax assets.

The above tables exclude unamortized investment tax credits that are shown separately on the Registrants' Consolidated Statements of Financial Position. DTE Energy's policy election is to follow the flow-through method of accounting for investment tax credits earned from its non-utility businesses and the deferral method of accounting for its regulated utilities due to different economic profiles of the various entities. The flow-through method used by the non-utility businesses recognizes investment tax credits in earnings when the related assets are placed in service. The investment tax credits generated by the regulated utilities are deferred and amortized to earnings over the average life of the related property.

Uncertain Tax Positions

A reconciliation of the beginning and ending amount of unrecognized tax benefits for the Registrants is as follows:

	2023	2022	2021
DTE Energy		(In millions)	
Balance at January 1	**$ 13**	$ 10	$ 10
Additions for tax positions of prior years	**2**	5	—
Reductions for tax positions of prior years	**(5)**	(2)	—
Settlements	**(10)**	—	—
Balance at December 31	**$ —**	$ 13	$ 10

	2023	2022	2021
DTE Electric		(In millions)	
Balance at January 1	**$ 13**	$ 13	$ 13
Settlements	**(13)**	—	—
Balance at December 31	**$ —**	$ 13	$ 13

During 2023, DTE Energy's unrecognized tax benefits decreased by $10 million as a result of an audit settlement related to state exposures and $5 million due to recognition of a federal tax claim. For DTE Electric, unrecognized tax benefits decreased by $13 million due to the audit settlement related to state exposures. Recognition of these tax benefits, net of any federal benefit, resulted in a reduction of $13 million and $10 million to Income Tax Expense on the respective DTE Energy and DTE Electric Consolidated Statements of Operations for the year ended December 31, 2023.

The Registrants recognize interest and penalties pertaining to income taxes in Interest expense and Other expenses, respectively, on the Consolidated Statements of Operations. DTE Energy recognized a nominal amount of interest expense related to income taxes in 2023, 2022, and 2021. DTE Electric recognized a nominal amount of interest expense in 2023 and $1 million in both 2022 and 2021.

Accrued interest pertaining to income taxes at December 31, 2022 was $5 million and $8 million for DTE Energy and DTE Electric, respectively. As a result of the state tax audit settlement noted above, there is no remaining accrued interest pertaining to income taxes as of December 31, 2023. DTE Energy and DTE Electric have not accrued any penalties pertaining to income taxes.

In 2023, DTE Energy, including DTE Electric, settled a federal tax audit for the 2021 tax year. DTE Energy's federal income tax returns for 2022 and subsequent years remain subject to examination by the IRS. DTE Energy's Michigan Corporate Income Tax returns for the year 2019 and subsequent years remain subject to examination by the State of Michigan. DTE Energy also files tax returns in numerous state and local jurisdictions with varying statutes of limitation.

NOTE 11 — EARNINGS PER SHARE

Basic earnings per share is calculated by dividing net income, adjusted for income allocated to participating securities, by the weighted average number of common shares outstanding during the period. Diluted earnings per share reflect the dilution that would occur if any potentially dilutive instruments were exercised or converted into common shares. DTE Energy's participating securities are restricted shares under the stock incentive program that contain rights to receive non-forfeitable dividends. Equity units and performance shares do not receive cash dividends; as such, these awards are not considered participating securities. For additional information regarding performance shares, see Note 21 to the Consolidated Financial Statements, "Stock-Based Compensation."

The following is a reconciliation of DTE Energy's basic and diluted income per share calculation for the years ended December 31:

	2023	2022	2021
	(In millions, except per share amounts)		
Basic Earnings per Share			
Net Income Attributable to DTE Energy Company — continuing operations	**$ 1,397**	$ 1,083	$ 796
Less: Allocation of earnings to net restricted stock awards	**3**	3	2
	$ 1,394	$ 1,080	$ 794
Net Income Attributable to DTE Energy Company — discontinued operations	**—**	—	111
Net income available to common shareholders — basic	**$ 1,394**	$ 1,080	$ 905
Average number of common shares outstanding — basic	**206**	195	193
Income from continuing operations	**$ 6.77**	$ 5.53	$ 4.11
Income from discontinued operations	**—**	—	0.57
Basic Earnings per Common Share	**$ 6.77**	$ 5.53	$ 4.68
Diluted Earnings per Share			
Net Income Attributable to DTE Energy Company — continuing operations	**$ 1,397**	$ 1,083	$ 796
Less: Allocation of earnings to net restricted stock awards	**3**	3	2
	$ 1,394	$ 1,080	$ 794
Net Income Attributable to DTE Energy Company — discontinued operations	**—**	—	111
Net income available to common shareholders — diluted	**$ 1,394**	$ 1,080	$ 905
Average number of common shares outstanding — basic	**206**	195	193
Average performance share awards	**—**	1	1
Average number of common shares outstanding — diluted	**206**	196	194
Income from continuing operations	**$ 6.76**	$ 5.52	$ 4.10
Income from discontinued operations	**—**	—	0.57
Diluted Earnings per Common Share[(a)]	**$ 6.76**	$ 5.52	$ 4.67

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(a) Equity units excluded from the calculation of diluted EPS were approximately 11.5 million for the year ended December 31, 2021, as the dilutive stock price threshold was not met. These equity units were settled in November 2022 resulting in the issuance of common stock.

NOTE 12 — FAIR VALUE

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date in a principal or most advantageous market. Fair value is a market-based measurement that is determined based on inputs, which refer broadly to assumptions that market participants use in pricing assets or liabilities. These inputs can be readily observable, market corroborated, or generally unobservable inputs. The Registrants make certain assumptions they believe that market participants would use in pricing assets or liabilities, including assumptions about risk, and the risks inherent in the inputs to valuation techniques. Credit risk of the Registrants and their counterparties is incorporated in the valuation of assets and liabilities through the use of credit reserves, the impact of which was immaterial at December 31, 2023 and 2022. The Registrants believe they use valuation techniques that maximize the use of observable market-based inputs and minimize the use of unobservable inputs.

A fair value hierarchy has been established that prioritizes the inputs to valuation techniques used to measure fair value in three broad levels. The fair value hierarchy gives the highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). In some cases, the inputs used to measure fair value might fall in different levels of the fair value hierarchy. All assets and liabilities are required to be classified in their entirety based on the lowest level of input that is significant to the fair value measurement in its entirety. Assessing the significance of a particular input may require judgment considering factors specific to the asset or liability and may affect the valuation of the asset or liability and its placement within the fair value hierarchy. The Registrants classify fair value balances based on the fair value hierarchy defined as follows:

- *Level 1* — Consists of unadjusted quoted prices in active markets for identical assets or liabilities that the Registrants have the ability to access as of the reporting date.
- *Level 2* — Consists of inputs other than quoted prices included within Level 1 that are directly observable for the asset or liability or indirectly observable through corroboration with observable market data.
- *Level 3* — Consists of unobservable inputs for assets or liabilities whose fair value is estimated based on internally developed models or methodologies using inputs that are generally less readily observable and supported by little, if any, market activity at the measurement date. Unobservable inputs are developed based on the best available information and subject to cost-benefit constraints.

The following table presents assets and liabilities for DTE Energy measured and recorded at fair value on a recurring basis:

	December 31, 2023						December 31, 2022					
	Level 1	Level 2	Level 3	Other[(a)]	Netting[(b)]	Net Balance	Level 1	Level 2	Level 3	Other[(a)]	Netting[(b)]	Net Balance
	(In millions)											
Assets												
Cash equivalents[(c)]	$ 13	$ —	$ —	$ —	$ —	$ 13	$ 10	$ —	$ —	$ —	$ —	$ 10
Nuclear decommissioning trusts												
Equity securities	776	—	—	145	—	921	701	—	—	138	—	839
Fixed income securities	127	371	—	92	—	590	115	359	—	89	—	563
Private equity and other	—	—	—	312	—	312	—	—	—	262	—	262
Hedge funds and similar investments	119	65	—	—	—	184	78	41	—	—	—	119
Cash equivalents	34	—	—	—	—	34	42	—	—	—	—	42
Other investments[(d)]												
Equity securities	58	—	—	—	—	58	56	—	—	—	—	56
Fixed income securities	7	—	—	—	—	7	7	—	—	—	—	7
Cash equivalents	37	—	—	—	—	37	72	—	—	—	—	72
Derivative assets												
Commodity contracts[(e)]												
Natural gas	241	217	179	—	(416)	221	426	183	135	—	(649)	95
Electricity	—	258	163	—	(243)	178	—	720	243	—	(643)	320
Environmental & Other	—	131	8	—	(132)	7	—	201	12	—	(196)	17
Other contracts	—	—	—	—	—	—	—	2	—	—	(1)	1
Total derivative assets	241	606	350	—	(791)	406	426	1,106	390	—	(1,489)	433
Total	$ 1,412	$ 1,042	$ 350	$ 549	$ (791)	$ 2,562	$ 1,507	$ 1,506	$ 390	$ 489	$ (1,489)	$ 2,403
Liabilities												
Derivative liabilities												
Commodity contracts[(e)]												
Natural gas	$ (291)	$ (167)	$ (157)	$ —	$ 429	$ (186)	$ (297)	$ (331)	$ (390)	$ —	$ 645	$ (373)
Electricity	—	(272)	(116)	—	297	(91)	—	(659)	(276)	—	665	(270)
Environmental & Other	—	(148)	(2)	—	137	(13)	—	(213)	(1)	—	201	(13)
Other contracts	—	(19)	—	—	—	(19)	—	(2)	—	—	1	(1)
Total	$ (291)	$ (606)	$ (275)	$ —	$ 863	$ (309)	$ (297)	$ (1,205)	$ (667)	$ —	$ 1,512	$ (657)
Net Assets (Liabilities) at end of period	$ 1,121	$ 436	$ 75	$ 549	$ 72	$ 2,253	$ 1,210	$ 301	$ (277)	$ 489	$ 23	$ 1,746
Assets												
Current	$ 215	$ 461	$ 247	$ —	$ (613)	$ 310	$ 360	$ 881	$ 286	$ —	$ (1,189)	$ 338
Noncurrent	1,197	581	103	549	(178)	2,252	1,147	625	104	489	(300)	2,065
Total Assets	$ 1,412	$ 1,042	$ 350	$ 549	$ (791)	$ 2,562	$ 1,507	$ 1,506	$ 390	$ 489	$ (1,489)	$ 2,403
Liabilities												
Current	$ (240)	$ (462)	$ (145)	$ —	$ 670	$ (177)	$ (273)	$ (876)	$ (386)	$ —	$ 1,193	$ (342)
Noncurrent	(51)	(144)	(130)	—	193	(132)	(24)	(329)	(281)	—	319	(315)
Total Liabilities	$ (291)	$ (606)	$ (275)	$ —	$ 863	$ (309)	$ (297)	$ (1,205)	$ (667)	$ —	$ 1,512	$ (657)
Net Assets (Liabilities) at end of period	$ 1,121	$ 436	$ 75	$ 549	$ 72	$ 2,253	$ 1,210	$ 301	$ (277)	$ 489	$ 23	$ 1,746

(a) Amounts represent assets valued at NAV as a practical expedient for fair value.
(b) Amounts represent the impact of master netting agreements that allow DTE Energy to net gain and loss positions and cash collateral held or placed with the same counterparties.
(c) Amounts include $11 million and $10 million of cash equivalents recorded in Restricted cash on DTE Energy's Consolidated Statements of Financial Position at December 31, 2023 and December 31, 2022, respectively. All other amounts are included in Cash and cash equivalents on DTE Energy's Consolidated Statements of Financial Position.
(d) Excludes cash surrender value of life insurance investments and certain securities classified as held-to-maturity that are recorded at amortized cost and not material to the consolidated financial statements.
(e) For contracts with a clearing agent, DTE Energy nets all activity across commodities. This can result in some individual commodities having a contra balance.

The following table presents assets for DTE Electric measured and recorded at fair value on a recurring basis as of:

	December 31, 2023					December 31, 2022				
	Level 1	Level 2	Level 3	Other[(a)]	Net Balance	Level 1	Level 2	Level 3	Other[(a)]	Net Balance
	(In millions)									
Assets										
Cash equivalents[(b)]	**$ 11**	**$ —**	**$ —**	**$ —**	**$ 11**	$ 9	$ —	$ —	$ —	$ 9
Nuclear decommissioning trusts										
Equity securities	**776**	**—**	**—**	**145**	**921**	701	—	—	138	839
Fixed income securities	**127**	**371**	**—**	**92**	**590**	115	359	—	89	563
Private equity and other	**—**	**—**	**—**	**312**	**312**	—	—	—	262	262
Hedge funds and similar investments	**119**	**65**	**—**	**—**	**184**	78	41	—	—	119
Cash equivalents	**34**	**—**	**—**	**—**	**34**	42	—	—	—	42
Other investments										
Equity securities	**21**	**—**	**—**	**—**	**21**	16	—	—	—	16
Cash equivalents	**11**	**—**	**—**	**—**	**11**	11	—	—	—	11
Derivative assets — FTRs	**—**	**—**	**7**	**—**	**7**	—	—	11	—	11
Total	**$ 1,099**	**$ 436**	**$ 7**	**$ 549**	**$ 2,091**	$ 972	$ 400	$ 11	$ 489	$ 1,872
Assets										
Current	**$ 11**	**$ —**	**$ 7**	**$ —**	**$ 18**	$ 9	$ —	$ 11	$ —	$ 20
Noncurrent	**1,088**	**436**	**—**	**549**	**2,073**	963	400	—	489	1,852
Total Assets	**$ 1,099**	**$ 436**	**$ 7**	**$ 549**	**$ 2,091**	$ 972	$ 400	$ 11	$ 489	$ 1,872

(a) Amounts represent assets valued at NAV as a practical expedient for fair value.
(b) Cash equivalents of $11 million and $9 million are included in Restricted cash on DTE Electric's Consolidated Statements of Financial Position at December 31, 2023 and December 31, 2022, respectively.

Cash Equivalents

Cash equivalents include investments with maturities of three months or less when purchased. The cash equivalents shown in the fair value table are comprised of short-term investments and money market funds.

Nuclear Decommissioning Trusts and Other Investments

The nuclear decommissioning trusts and other investments hold debt and equity securities directly and indirectly through commingled funds. Exchange-traded debt and equity securities held directly, as well as publicly traded commingled funds, are valued using quoted market prices in actively traded markets. Non-exchange traded fixed income securities are valued based upon quotations available from brokers or pricing services.

Non-publicly traded commingled funds holding exchange-traded equity or debt securities are valued based on stated NAVs. There are no significant restrictions for these funds and investments may be redeemed with 7 to 65 days notice depending on the fund. There is no intention to sell the investment in these commingled funds.

Private equity and other assets include a diversified group of funds that are classified as NAV assets. These funds primarily invest in limited partnerships, including private equity, private real estate and private credit. Distributions are received through the liquidation of the underlying fund assets over the life of the funds. There are generally no redemption rights. The limited partner must hold the fund for its life or find a third-party buyer, which may need to be approved by the general partner. The funds are established with varied contractual durations generally in the range of 7 years to 12 years. The fund life can often be extended by several years by the general partner, and further extended with the approval of the limited partners. Unfunded commitments related to these investments totaled $157 million and $177 million as of December 31, 2023 and 2022, respectively.

Hedge funds and similar investments utilize a diversified group of strategies that attempt to capture uncorrelated sources of return. These investments include publicly traded mutual funds that are valued using quoted prices in actively traded markets, as well as insurance-linked and asset-backed securities and that are valued using quotations from broker or pricing services.

For pricing the nuclear decommissioning trusts and other investments, a primary price source is identified by asset type, class, or issue for each security. The trustee monitors prices supplied by pricing services and may use a supplemental price source or change the primary source of a given security if the trustee determines that another price source is considered preferable. The Registrants have obtained an understanding of how these prices are derived, including the nature and observability of the inputs used in deriving such prices.

Derivative Assets and Liabilities

Derivative assets and liabilities are comprised of physical and financial derivative contracts, including futures, forwards, options, and swaps that are both exchange-traded and over-the-counter traded contracts. Various inputs are used to value derivatives depending on the type of contract and availability of market data. Exchange-traded derivative contracts are valued using quoted prices in active markets. The Registrants consider the following criteria in determining whether a market is considered active: frequency in which pricing information is updated, variability in pricing between sources or over time, and the availability of public information. Other derivative contracts are valued based upon a variety of inputs including commodity market prices, broker quotes, interest rates, credit ratings, default rates, market-based seasonality, and basis differential factors. The Registrants monitor the prices that are supplied by brokers and pricing services and may use a supplemental price source or change the primary price source of an index if prices become unavailable or another price source is determined to be more representative of fair value. The Registrants have obtained an understanding of how these prices are derived. Additionally, the Registrants selectively corroborate the fair value of their transactions by comparison of market-based price sources. Mathematical valuation models are used for derivatives for which external market data is not readily observable, such as contracts which extend beyond the actively traded reporting period. The Registrants have established a Risk Management Committee whose responsibilities include directly or indirectly ensuring all valuation methods are applied in accordance with predefined policies. The development and maintenance of the Registrants' forward price curves has been assigned to DTE Energy's Risk Management Department, which is separate and distinct from the trading functions within DTE Energy.

The following table presents the fair value reconciliation of Level 3 assets and liabilities measured at fair value on a recurring basis for DTE Energy:

	Year Ended December 31, 2023				Year Ended December 31, 2022			
	Natural Gas	Electricity	Other	Total	Natural Gas	Electricity	Other	Total
	(In millions)							
Net Assets (Liabilities) as of January 1	$ (255)	$ (33)	$ 11	$ (277)	$ (179)	$ (45)	$ 9	$ (215)
Transfers from Level 3 into Level 2	17	—	—	17	5	1	—	6
Total gains (losses)								
Included in earnings[(a)]	182	198	(1)	379	(410)	97	2	(311)
Recorded in Regulatory liabilities	—	—	9	9	—	—	21	21
Purchases, issuances, and settlements:								
Settlements	78	(118)	(13)	(53)	329	(86)	(21)	222
Net Assets (Liabilities) as of December 31	$ 22	$ 47	$ 6	$ 75	$ (255)	$ (33)	$ 11	$ (277)
Total gains (losses) included in Net Income attributed to the change in unrealized gains (losses) related to assets and liabilities held at December 31[(a)]	$ 85	$ 151	$ (122)	$ 114	$ (215)	$ 50	$ (111)	$ (276)
Total gains (losses) included in Regulatory liabilities attributed to the change in unrealized gains (losses) related to assets and liabilities held at December 31	$ —	$ —	$ 7	$ 7	$ —	$ —	$ 11	$ 11

(a) Amounts are reflected in Operating Revenues — Non-utility operations and Fuel, purchased power, gas, and other — non-utility in DTE Energy's Consolidated Statements of Operations.

The following table presents the fair value reconciliation of Level 3 assets and liabilities measured at fair value on a recurring basis for DTE Electric:

	Year Ended December 31,	
	2023	2022
	(In millions)	
Net Assets as of January 1	$ 11	$ 9
Total gains recorded in Regulatory liabilities	9	21
Purchases, issuances, and settlements:		
Settlements	(13)	(19)
Net Assets as of December 31	$ 7	$ 11
Total gains (losses) included in Regulatory liabilities attributed to the change in unrealized gains (losses) related to assets and liabilities held at December 31	$ 7	$ 11

Derivatives are transferred between levels primarily due to changes in the source data used to construct price curves as a result of changes in market liquidity. Transfers in and transfers out are reflected as if they had occurred at the beginning of the period. There were no transfers from or into Level 3 for DTE Electric during the years ended December 31, 2023 and 2022.

The following tables present the unobservable inputs related to DTE Energy's Level 3 assets and liabilities:

	December 31, 2023					
Commodity Contracts	Derivative Assets	Derivative Liabilities	Valuation Techniques	Unobservable Input	Range	Weighted Average
	(In millions)					
Natural Gas	$ 179	$ (157)	**Discounted Cash Flow**	**Forward basis price (per MMBtu)**	**$ (1.57) — $ 6.27 /MMBtu**	**$ (0.08)/MMBtu**
Electricity	$ 163	$ (116)	**Discounted Cash Flow**	**Forward basis price (per MWh)**	**$ (18.49) — $ 15.47 /MWh**	**$ (3.99) /MWh**

	December 31, 2022					
Commodity Contracts	Derivative Assets	Derivative Liabilities	Valuation Techniques	Unobservable Input	Range	Weighted Average
	(In millions)					
Natural Gas	$ 135	$ (390)	Discounted Cash Flow	Forward basis price (per MMBtu)	$ (1.91) — $ 39.94 /MMBtu	$ 0.18 /MMBtu
Electricity	$ 243	$ (276)	Discounted Cash Flow	Forward basis price (per MWh)	$ (29.41) — $ 15.00 /MWh	$ (3.04) /MWh

The unobservable inputs used in the fair value measurement of the electricity and natural gas commodity types consist of inputs that are less observable due in part to lack of available broker quotes, supported by little, if any, market activity at the measurement date or are based on internally developed models. Certain basis prices (i.e., the difference in pricing between two locations) included in the valuation of natural gas and electricity contracts were deemed unobservable. The weighted average price for unobservable inputs was calculated using the average of forward price curves for natural gas and electricity and the absolute value of monthly volumes.

The inputs listed above would have had a direct impact on the fair values of the above security types if they were adjusted. A significant increase (decrease) in the basis price would have resulted in a higher (lower) fair value for long positions, with offsetting impacts to short positions.

Fair Value of Financial Instruments

The following table presents the carrying amount and fair value of financial instruments for DTE Energy:

	December 31, 2023				December 31, 2022			
	Carrying	Fair Value			Carrying	Fair Value		
	Amount	Level 1	Level 2	Level 3	Amount	Level 1	Level 2	Level 3
	(In millions)							
Notes receivable[a], excluding lessor finance leases	**$ 175**	**$ —**	**$ —**	**$ 181**	$ 80	$ —	$ —	$ 82
Short-term borrowings	**$ 1,283**	**$ —**	**$ 1,283**	**$ —**	$ 1,162	$ —	$ 1,162	$ —
Notes payable[b]	**$ 34**	**$ —**	**$ —**	**$ 34**	$ 18	$ —	$ —	$ 18
Long-term debt[c]	**$ 19,546**	**$ 807**	**$ 16,178**	**$ 1,202**	$ 17,978	$ 710	$ 14,084	$ 1,199

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(a) Current portion included in Current Assets — Other on DTE Energy's Consolidated Statements of Financial Position.
(b) Included in Current Liabilities — Other and Other Liabilities — Other on DTE Energy's Consolidated Statements of Financial Position.
(c) Includes debt due within one year and excludes finance lease obligations. Carrying value also includes unamortized debt discounts and issuance costs.

The following table presents the carrying amount and fair value of financial instruments for DTE Electric:

	December 31, 2023				December 31, 2022			
	Carrying	Fair Value			Carrying	Fair Value		
	Amount	Level 1	Level 2	Level 3	Amount	Level 1	Level 2	Level 3
	(In millions)							
Notes receivable — Other[a]	**$ 19**	**$ —**	**$ —**	**$ 19**	$ 17	$ —	$ —	$ 17
Short-term borrowings — affiliates	**$ —**	**$ —**	**$ —**	**$ —**	$ 27	$ —	$ —	$ 27
Short-term borrowings — other	**$ 385**	**$ —**	**$ 385**	**$ —**	$ 568	$ —	$ 568	$ —
Notes payable[b]	**$ 33**	**$ —**	**$ —**	**$ 33**	$ 17	$ —	$ —	$ 17
Long-term debt[c]	**$ 11,043**	**$ —**	**$ 9,999**	**$ 126**	$ 9,696	$ —	$ 8,289	$ 128

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(a) Included in Current Assets — Other and Other Assets — Other on DTE Electric's Consolidated Statements of Financial Position.
(b) Included in Current Liabilities — Other and Other Liabilities — Other on DTE Electric's Consolidated Statements of Financial Position.
(c) Includes debt due within one year and excludes finance lease obligations. Carrying value also includes unamortized debt discounts and issuance costs.

For further fair value information on financial and derivative instruments, see Note 13 to the Consolidated Financial Statements, "Financial and Other Derivative Instruments."

Nuclear Decommissioning Trust Funds

DTE Electric has a legal obligation to decommission its nuclear power plants following the expiration of its operating licenses. This obligation is reflected as an Asset retirement obligation on DTE Electric's Consolidated Statements of Financial Position. Rates approved by the MPSC provide for the recovery of decommissioning costs of Fermi 2 and the disposal of low-level radioactive waste. See Note 8 to the Consolidated Financial Statements, "Asset Retirement Obligations."

The following table summarizes DTE Electric's fair value of the nuclear decommissioning trust fund assets:

	December 31,	
	2023	2022
	(In millions)	
Fermi 2	**$ 2,026**	$ 1,807
Fermi 1	**3**	3
Low-level radioactive waste	**12**	15
	$ 2,041	$ 1,825

The costs of securities sold are determined on the basis of specific identification. The following table sets forth DTE Electric's gains and losses and proceeds from the sale of securities by the nuclear decommissioning trust funds:

	Year Ended December 31,		
	2023	2022	2021
	(In millions)		
Realized gains	**$ 36**	$ 71	$ 95
Realized losses	**$ (42)**	$ (53)	$ (12)
Proceeds from sale of securities	**$ 681**	$ 879	$ 1,047

Realized gains and losses from the sale of securities and unrealized gains and losses incurred by the Fermi 2 trust are recorded to Regulatory assets and the Nuclear decommissioning liability. Realized gains and losses from the sale of securities and unrealized gains and losses on the low-level radioactive waste funds are recorded to the Nuclear decommissioning liability.

The following table sets forth DTE Electric's fair value and unrealized gains and losses for the nuclear decommissioning trust funds:

	December 31, 2023			December 31, 2022		
	Fair Value	Unrealized Gains	Unrealized Losses	Fair Value	Unrealized Gains	Unrealized Losses
	(In millions)					
Equity securities	**$ 921**	**$ 459**	**$ (11)**	$ 839	$ 342	$ (23)
Fixed income securities	**590**	**8**	**(30)**	563	1	(56)
Private equity and other	**312**	**74**	**(8)**	262	63	(5)
Hedge funds and similar investments	**184**	**4**	**(9)**	119	—	(18)
Cash equivalents	**34**	**—**	**—**	42	—	—
	$ 2,041	**$ 545**	**$ (58)**	$ 1,825	$ 406	$ (102)

The following table summarizes the fair value of the fixed income securities held in nuclear decommissioning trust funds by contractual maturity:

	December 31, 2023
	(In millions)
Due within one year	$ 12
Due after one through five years	118
Due after five through ten years	95
Due after ten years	273
	$ 498

Fixed income securities held in nuclear decommissioning trust funds include $92 million of non-publicly traded commingled funds that do not have a contractual maturity date.

Other Securities

At December 31, 2023 and 2022, DTE Energy's securities included in Other investments on the Consolidated Statements of Financial Position were comprised primarily of investments within DTE Energy's rabbi trust. The rabbi trust is comprised primarily of trading securities recorded at fair value, as well as debt securities classified as held-to-maturity and recorded at amortized cost. The trust was established to fund certain non-qualified pension benefits, and therefore changes in market value of the trading securities and interest on the held-to-maturity securities are recognized in earnings. Gains and losses are allocated from DTE Energy to DTE Electric and are included in Other Income or Other Expense, respectively, in the Registrants' Consolidated Statements of Operations. Gains (losses) related to the trading securities were immaterial for the years ended December 31, 2023, 2022, and 2021, respectively.

NOTE 13 — FINANCIAL AND OTHER DERIVATIVE INSTRUMENTS

The Registrants recognize all derivatives at their fair value as Derivative assets or liabilities on their respective Consolidated Statements of Financial Position unless they qualify for certain scope exceptions, including the normal purchases and normal sales exception. Further, derivatives that qualify and are designated for hedge accounting are classified as either hedges of a forecasted transaction or the variability of cash flows to be received or paid related to a recognized asset or liability (cash flow hedge); or as hedges of the fair value of a recognized asset or liability or of an unrecognized firm commitment (fair value hedge). For cash flow hedges, the derivative gain or loss is deferred in Accumulated other comprehensive income (loss) and later reclassified into earnings when the underlying transaction occurs. For fair value hedges, changes in fair values for the derivative and hedged item are recognized in earnings each period. For derivatives that do not qualify or are not designated for hedge accounting, changes in fair value are recognized in earnings each period.

The Registrants' primary market risk exposure is associated with commodity prices, credit, and interest rates. The Registrants have risk management policies to monitor and manage market risks. The Registrants use derivative instruments to manage some of the exposure. DTE Energy uses derivative instruments for trading purposes in its Energy Trading segment. Contracts classified as derivative instruments include electricity, natural gas, oil, certain environmental contracts, forwards, futures, options, swaps, and foreign currency exchange contracts. Items not classified as derivatives include natural gas and environmental inventory, pipeline transportation contracts, some environmental contracts, and natural gas storage assets.

DTE Electric — DTE Electric generates, purchases, distributes, and sells electricity. DTE Electric uses forward contracts to manage changes in the price of electricity and fuel. Substantially all of these contracts meet the normal purchases and normal sales exception and are therefore accounted for under the accrual method. Other derivative contracts are MTM and recoverable through the PSCR mechanism when settled. This results in the deferral of unrealized gains and losses as Regulatory assets or liabilities until realized.

DTE Gas — DTE Gas purchases, stores, transports, distributes, and sells natural gas, and buys and sells transportation and storage capacity. DTE Gas has fixed-priced contracts for portions of its expected natural gas supply requirements through March 2026. Substantially all of these contracts meet the normal purchases and normal sales exception and are therefore accounted for under the accrual method. Forward transportation and storage contracts are generally not derivatives and are therefore accounted for under the accrual method.

DTE Vantage — This segment manages and operates renewable gas recovery projects, power generation assets, and other customer specific energy solutions. Long-term contracts and hedging instruments are used in the marketing and management of the segment assets. These contracts and hedging instruments are generally not derivatives and are therefore accounted for under the accrual method.

Energy Trading — Commodity Price Risk — Energy Trading markets and trades electricity, natural gas physical products, and energy financial instruments, and provides energy and asset management services utilizing energy commodity derivative instruments. Forwards, futures, options, and swap agreements are used to manage exposure to the risk of market price and volume fluctuations in its operations. These derivatives are accounted for by recording changes in fair value to earnings unless hedge accounting criteria are met.

Energy Trading — Foreign Currency Exchange Risk — Energy Trading has foreign currency exchange forward contracts to economically hedge fixed Canadian dollar commitments existing under natural gas and power purchase and sale contracts and natural gas transportation contracts. Energy Trading enters into these contracts to mitigate price volatility with respect to fluctuations of the Canadian dollar relative to the U.S. dollar. These derivatives are accounted for by recording changes in fair value to earnings unless hedge accounting criteria are met.

Corporate and Other — Interest Rate Risk — DTE Energy may use interest rate swaps, treasury locks, and other derivatives to hedge the risk associated with interest rate market volatility.

Credit Risk — DTE Energy maintains credit policies that significantly minimize overall credit risk. These policies include an evaluation of potential customers' and counterparties' financial condition, including the viability of underlying productive assets, credit rating, collateral requirements, or other credit enhancements such as letters of credit or guarantees. DTE Energy generally uses standardized agreements that allow the netting of positive and negative transactions associated with a single counterparty. DTE Energy maintains a provision for credit losses based on factors surrounding the credit risk of its customers, historical trends, and other information. Based on DTE Energy's credit policies and its December 31, 2023 provision for credit losses, DTE Energy's exposure to counterparty nonperformance is not expected to have a material adverse effect on DTE Energy's Consolidated Financial Statements.

Derivative Activities

DTE Energy manages its MTM risk on a portfolio basis based upon the delivery period of its contracts and the individual components of the risks within each contract. Accordingly, it records and manages the energy purchase and sale obligations under its contracts in separate components based on the commodity (e.g. electricity or natural gas), the product (e.g. electricity for delivery during peak or off-peak hours), the delivery location (e.g. by region), the risk profile (e.g. forward or option), and the delivery period (e.g. by month and year). The following describes the categories of activities represented by their operating characteristics and key risks:

- *Asset Optimization* — Represents derivative activity associated with assets owned and contracted by DTE Energy, including forward natural gas purchases and sales, natural gas transportation, and storage capacity. Changes in the value of derivatives in this category typically economically offset changes in the value of underlying non-derivative positions, which do not qualify for fair value accounting. The difference in accounting treatment of derivatives in this category and the underlying non-derivative positions can result in significant earnings volatility.
- *Marketing and Origination* — Represents derivative activity transacted by originating substantially hedged positions with wholesale energy marketers, producers, end-users, utilities, retail aggregators, and alternative energy suppliers.
- *Fundamentals Based Trading* — Represents derivative activity transacted with the intent of taking a view, capturing market price changes, or putting capital at risk. This activity is speculative in nature as opposed to hedging an existing exposure.
- *Other* — Includes derivative activity at DTE Electric related to FTRs. Changes in the value of derivative contracts at DTE Electric are recorded as Derivative assets or liabilities, with an offset to Regulatory assets or liabilities as the settlement value of these contracts will be included in the PSCR mechanism when realized.

The following table presents the fair value of derivative instruments for DTE Energy:

	December 31, 2023		December 31, 2022	
	Derivative Assets	Derivative Liabilities	Derivative Assets	Derivative Liabilities
	(In millions)			
Derivatives designated as hedging instruments				
Interest rate contracts	$ —	$ (16)	$ 1	$ —
Foreign currency exchange contracts	—	(2)	—	(2)
Total derivatives designated as hedging instruments	$ —	$ (18)	$ 1	$ (2)
Derivatives not designated as hedging instruments				
Commodity contracts				
Natural gas	$ 637	$ (615)	$ 744	$ (1,018)
Electricity	421	(388)	963	(935)
Environmental & Other	139	(150)	213	(214)
Foreign currency exchange contracts	—	(1)	1	—
Total derivatives not designated as hedging instruments	$ 1,197	$ (1,154)	$ 1,921	$ (2,167)
Current	$ 910	$ (847)	$ 1,517	$ (1,535)
Noncurrent	287	(325)	405	(634)
Total derivatives	$ 1,197	$ (1,172)	$ 1,922	$ (2,169)

The fair value of derivative instruments at DTE Electric was $7 million and $11 million at December 31, 2023 and 2022, respectively, comprised of FTRs recorded to Current Assets — Other on the Consolidated Statements of Financial Position and not designated as hedging instruments.

Certain of DTE Energy's derivative positions are subject to netting arrangements which provide for offsetting of asset and liability positions as well as related cash collateral. Such netting arrangements generally do not have restrictions. Under such netting arrangements, DTE Energy offsets the fair value of derivative instruments with cash collateral received or paid for those contracts executed with the same counterparty, which reduces DTE Energy's Total Assets and Liabilities. Cash collateral is allocated between the fair value of derivative instruments and customer accounts receivable and payable with the same counterparty on a pro-rata basis to the extent there is exposure. Any cash collateral remaining, after the exposure is netted to zero, is reflected in Accounts receivable and Accounts payable as collateral paid or received, respectively.

DTE Energy also provides and receives collateral in the form of letters of credit which can be offset against net Derivative assets and liabilities as well as Accounts receivable and payable. DTE Energy had letters of credit of $3 million issued and outstanding at December 31, 2023 and $81 million at December 31, 2022, which could be used to offset net Derivative liabilities. Letters of credit received from third parties which could be used to offset net Derivative assets were $10 million and $82 million at December 31, 2023 and 2022, respectively. Such balances of letters of credit are excluded from the tables below and are not netted with the recognized assets and liabilities in DTE Energy's Consolidated Statements of Financial Position.

For contracts with certain clearing agents, the fair value of derivative instruments is netted against realized positions with the net balance reflected as either 1) a Derivative asset or liability or 2) an Account receivable or payable. Other than certain clearing agents, Accounts receivable and Accounts payable that are subject to netting arrangements have not been offset against the fair value of Derivative assets and liabilities.

The following table presents net cash collateral offsetting arrangements for DTE Energy:

	December 31,	
	2023	**2022**
	(In millions)	
Cash collateral netted against Derivative assets	**$ —**	$ (90)
Cash collateral netted against Derivative liabilities	**72**	113
Cash collateral recorded in Accounts receivable[(a)]	**57**	77
Cash collateral recorded in Accounts payable[(a)]	**(3)**	(27)
Total net cash collateral posted (received)	**$ 126**	$ 73

(a) Amounts are recorded net by counterparty.

The following table presents the netting offsets of Derivative assets and liabilities for DTE Energy:

	December 31, 2023			December 31, 2022		
	Gross Amounts of Recognized Assets (Liabilities)	Gross Amounts Offset in the Consolidated Statements of Financial Position	Net Amounts of Assets (Liabilities) Presented in the Consolidated Statements of Financial Position	Gross Amounts of Recognized Assets (Liabilities)	Gross Amounts Offset in the Consolidated Statements of Financial Position	Net Amounts of Assets (Liabilities) Presented in the Consolidated Statements of Financial Position
	(In millions)					
Derivative assets						
Commodity contracts						
Natural gas	$ 637	$ (416)	$ 221	$ 744	$ (649)	$ 95
Electricity	421	(243)	178	963	(643)	320
Environmental & Other	139	(132)	7	213	(196)	17
Interest rate contracts	—	—	—	1	—	1
Foreign currency exchange contracts	—	—	—	1	(1)	—
Total derivative assets	$ 1,197	$ (791)	$ 406	$ 1,922	$ (1,489)	$ 433
Derivative liabilities						
Commodity contracts						
Natural gas	$ (615)	$ 429	$ (186)	$ (1,018)	$ 645	$ (373)
Electricity	(388)	297	(91)	(935)	665	(270)
Environmental & Other	(150)	137	(13)	(214)	201	(13)
Interest rate contracts	(16)	—	(16)	—	—	—
Foreign currency exchange contracts	(3)	—	(3)	(2)	1	(1)
Total derivative liabilities	$ (1,172)	$ 863	$ (309)	$ (2,169)	$ 1,512	$ (657)

The following table presents the netting offsets of Derivative assets and liabilities showing the reconciliation of derivative instruments to DTE Energy's Consolidated Statements of Financial Position:

	December 31, 2023				December 31, 2022			
	Derivative Assets		Derivative Liabilities		Derivative Assets		Derivative Liabilities	
	Current	Noncurrent	Current	Noncurrent	Current	Noncurrent	Current	Noncurrent
	(In millions)							
Total fair value of derivatives	$ 910	$ 287	$ (847)	$ (325)	$ 1,517	$ 405	$ (1,535)	$ (634)
Counterparty netting	(613)	(178)	613	178	(1,127)	(272)	1,127	272
Collateral adjustment	—	—	57	15	(62)	(28)	66	47
Total derivatives as reported	$ 297	$ 109	$ (177)	$ (132)	$ 328	$ 105	$ (342)	$ (315)

The effect of derivatives not designated as hedging instruments on DTE Energy's Consolidated Statements of Operations is as follows:

	Location of Gain (Loss) Recognized in Income on Derivatives	Gain (Loss) Recognized in Income on Derivatives for Years Ended December 31,		
		2023	2022	2021
		(In millions)		
Commodity contracts				
Natural gas	Operating Revenues — Non-utility operations	$ 153	$ (235)	$ (224)
Natural gas	Fuel, purchased power, gas, and other — non-utility	122	(108)	(89)
Electricity	Operating Revenues — Non-utility operations	105	221	169
Environmental & Other	Operating Revenues — Non-utility operations	5	13	(40)
Foreign currency exchange contracts	Operating Revenues — Non-utility operations	(2)	3	—
Total		$ 383	$ (106)	$ (184)

Revenues and energy costs related to trading contracts are presented on a net basis in DTE Energy's Consolidated Statements of Operations. Commodity derivatives used for trading purposes, and financial non-trading commodity derivatives, are accounted for using the MTM method with unrealized and realized gains and losses recorded in Operating Revenues — Non-utility operations. Non-trading physical commodity sale and purchase derivative contracts are generally accounted for using the MTM method with unrealized and realized gains and losses for sales recorded in Operating Revenues — Non-utility operations and purchases recorded in Fuel, purchased power, gas, and other — non-utility.

The following represents the cumulative gross volume of DTE Energy's derivative contracts outstanding as of December 31, 2023:

Commodity	Number of Units
Natural gas (MMBtu)	2,201,557,616
Electricity (MWh)	40,542,536
Oil (Gallons)	4,272,000
Foreign currency exchange ($ CAD)	127,326,648
FTR (MWh)	66,064
Renewable Energy Certificates (MWh)	10,242,908
Carbon emissions (Metric Ton)	746,400
Interest rate contracts ($ USD)	1,200,000,000
Treasury Lock ($ USD)	500,000,000

Various subsidiaries and equity investees of DTE Energy have entered into derivative and non-derivative contracts which contain ratings triggers and are guaranteed by DTE Energy. These contracts contain provisions which allow the counterparties to require that DTE Energy post cash or letters of credit as collateral in the event that DTE Energy’s credit rating is downgraded below investment grade. Certain of these provisions (known as "hard triggers") state specific circumstances under which DTE Energy can be required to post collateral upon the occurrence of a credit downgrade, while other provisions (known as "soft triggers") are not as specific. For contracts with soft triggers, it is difficult to estimate the amount of collateral which may be requested by counterparties and/or which DTE Energy may ultimately be required to post. The amount of such collateral which could be requested fluctuates based on commodity prices (primarily natural gas, power, and environmental) and the provisions and maturities of the underlying transactions. As of December 31, 2023, DTE Energy's contractual obligation to post collateral in the form of cash or letters of credit in the event of a downgrade to below investment grade, under both hard trigger and soft trigger provisions, was $463 million.

As of December 31, 2023, DTE Energy had $967 million of derivatives in net liability positions, for which hard triggers exist. There is $42 million of collateral that has been posted against such liabilities, including cash and letters of credit. Associated derivative net asset positions for which contractual offset exists were $772 million. The net remaining amount of $153 million is derived from the $463 million noted above.

NOTE 14 — LONG-TERM DEBT

Long-Term Debt

DTE Energy's long-term debt outstanding and interest rates of debt outstanding at December 31 were:

	Interest Rate[(a)]	Maturity Date	2023	2022
			(In millions)	
Mortgage bonds, notes, and other				
DTE Energy debt, unsecured	3.3%	2024 — 2030	**$ 5,105**	$ 5,105
DTE Electric debt, principally secured	3.8%	2024 — 2053	**10,370**	9,572
DTE Gas debt, principally secured	4.2%	2025 — 2052	**2,545**	2,325
			18,020	17,002
Unamortized debt discount			**(26)**	(26)
Unamortized debt issuance costs			**(100)**	(92)
Long-term debt due within one year			**(2,075)**	(1,077)
			$ 15,819	$ 15,807
Securitization bonds[(b)]				
DTE Electric securitization bonds	5.3%	2027 — 2038	**$ 777**	$ 215
Unamortized debt issuance costs			**(8)**	(4)
Long-term debt due within one year			**(64)**	(39)
			$ 705	$ 172
Junior Subordinated Debentures				
Subordinated debentures	4.8%	2077 — 2081	**$ 910**	$ 910
Unamortized debt issuance costs			**(27)**	(27)
			$ 883	$ 883

(a) Weighted average interest rate as of December 31, 2023.
(b) Bonds are held by DTE Securitization I and DTE Securitization II, special purpose entities consolidated by DTE Electric. Refer to Note 1 to the Consolidated Financial Statements, "Organization and Basis of Presentation," for additional information regarding these entities and restrictions related to the bonds.

DTE Electric's long-term debt outstanding and interest rates of debt outstanding at December 31 were:

	Interest Rate[(a)]	Maturity Date	2023	2022
			(In millions)	
Mortgage bonds, notes, and other				
Long-term debt, principally secured	3.8%	2024 — 2053	**$ 10,370**	$ 9,572
Unamortized debt discount			**(23)**	(22)
Unamortized debt issuance costs			**(73)**	(65)
Long-term debt due within one year			**(100)**	(203)
			$ 10,174	$ 9,282
Securitization bonds[(b)]				
DTE Electric securitization bonds	5.3%	2027 — 2038	**$ 777**	$ 215
Unamortized debt issuance costs			**(8)**	(4)
Long-term debt due within one year			**(64)**	(39)
			$ 705	$ 172

(a) Weighted average interest rate as of December 31, 2023.
(b) Bonds are held by DTE Securitization I and DTE Securitization II, special purpose entities consolidated by DTE Electric. Refer to Note 1 to the Consolidated Financial Statements, "Organization and Basis of Presentation," for additional information regarding these entities and restrictions related to the bonds.

Debt Issuances

Refer to the table below for debt issued in 2023:

Company	Month	Type	Interest Rate	Maturity Date	Amount
					(In millions)
DTE Electric	March	Mortgage bonds[(a)]	5.20%	2033	$ 600
DTE Electric	March	Mortgage bonds[(a)]	5.40%	2053	600
DTE Energy	March	Term loan facility draw[(b)]	Variable	2023	200
DTE Energy	May	Senior notes[(c)]	4.875%	2028	800
DTE Electric	June	Tax-exempt revenue bonds[(d)]	3.875%	2053	100
DTE Gas	October	Mortgage bonds[(a)]	5.57%	2030	150
DTE Gas	October	Mortgage bonds[(a)]	5.73%	2035	145
DTE Electric	November	Securitization bonds[(e)]	5.97%	2033[(f)]	301
DTE Electric	November	Securitization bonds[(e)]	6.09%	2038[(g)]	301
					$ 3,197

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(a) Proceeds used for the repayment of short-term borrowings, for capital expenditures, and for other general corporate purposes.
(b) Proceeds used for general corporate purposes.
(c) Proceeds used for the repayment of amounts outstanding under the term loan facility.
(d) Tax-exempt revenue bonds are issued by a public body that loans the proceeds to DTE Electric with terms substantially mirroring the revenue bonds. Proceeds were used to finance costs relating to solid waste disposal facilities at the Monroe and St. Clair power plants. The bonds will be subject to mandatory tender in June 2030.
(e) Bonds were issued in alignment with Green Bond principles to support the closure and recovery of St. Clair and Trenton Channel generation plants and DTE Electric's transition to cleaner energy. Proceeds were used to reimburse DTE Electric for qualified costs incurred or the net book value of the St. Clair and Trenton Channel plants and other qualified costs. The securitization financing order from the MPSC required that the net proceeds be subsequently applied by DTE Electric to retire existing debt or equity. Accordingly, DTE Electric used net proceeds of $297 million towards the partial retirement of the 2013 Series B Mortgage bonds noted in the Debt Redemptions table below and issued a special dividend of $297 million to DTE Energy. Refer to Note 9 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.
(f) Principal payments on the bonds will be made semi-annually beginning September 2024, with the final payment scheduled for March 2032.
(g) Principal payments on the bonds will be made semi-annually beginning March 2032, with the final payment scheduled for September 2037.

In June 2022, DTE Energy entered into a $1.125 billion unsecured term loan with a maturity date of December 2023. Any borrowings on the loan were determined to be long-term debt, as the term of the facility exceeded one year. Through the first quarter of 2023, DTE Energy had drawn $1.0 billion on the term loan, bearing interest at SOFR plus 0.90% per annum. These borrowings were repaid in May and June 2023, as noted in the debt redemptions table below. Unused term loan capacity of $125 million terminated in June 2023 per the terms of the credit agreement.

Debt Redemptions

Refer to the table below for debt redeemed in 2023:

Company	Month	Type	Interest Rate	Maturity Date	Amount
					(In millions)
DTE Gas	April	Senior notes	6.44%	2023	$ 25
DTE Energy	May	Term loan facility	Variable	2023	800
DTE Electric	June	Securitization bonds	2.64%	2023	19
DTE Energy	June	Term loan facility	Variable	2023	200
DTE Electric	September	Mortgage bonds	4.31%	2023	102
DTE Electric	October	Senior notes	5.19%	2023	100
DTE Electric	December	Securitization bonds	2.64%	2023	20
DTE Gas	December	Mortgage bonds	3.64%	2023	50
DTE Electric	December	Mortgage bonds[(a)]	3.65%	2024	300
					$ 1,616

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(a) Represents a partial redemption with $100 million remaining principal to be redeemed in 2024.

Debt Maturities

The following table shows the Registrants' scheduled debt maturities, excluding any unamortized discount on debt:

	2024	2025	2026	2027	2028	2029 and Thereafter	Total
				(In millions)			
DTE Energy[(a)(b)]	$ 2,139	$ 1,292	$ 851	$ 230	$ 1,737	$ 13,458	**$ 19,707**
DTE Electric[(b)]	$ 164	$ 422	$ 251	$ 39	$ 617	$ 9,654	**$ 11,147**

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(a) Amounts include DTE Electric's scheduled debt maturities.
(b) Amounts include DTE Securitization I and DTE Securitization II scheduled debt maturities.

The following table shows scheduled interest payments related to the Registrants' long-term debt:

	2024	2025	2026	2027	2028	2029 and Thereafter	Total
				(In millions)			
DTE Energy[(a)(b)]	$ 749	$ 668	$ 651	$ 623	$ 589	$ 8,412	**$ 11,692**
DTE Electric[(b)]	$ 432	$ 427	$ 416	$ 408	$ 400	$ 5,150	**$ 7,233**

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(a) Amounts include DTE Electric's scheduled interest payments.
(b) Amounts include DTE Securitization I and DTE Securitization II scheduled interest payments.

Junior Subordinated Debentures

DTE Energy has the right to defer interest payments on the Junior Subordinated Debentures. Should DTE Energy exercise this right, it cannot declare or pay dividends on, or redeem, purchase or acquire, any of its capital stock during the deferral period. Any deferred interest payments will bear additional interest at the rate associated with the related debt issue. As of December 31, 2023, no interest payments have been deferred on the Junior Subordinated Debentures.

Cross Default Provisions

Substantially all of the net utility properties of DTE Electric and DTE Gas are subject to the lien of mortgages. Should DTE Electric or DTE Gas fail to timely pay their indebtedness under these mortgages, such failure may create cross defaults in the indebtedness of DTE Energy.

NOTE 15 — PREFERRED AND PREFERENCE SECURITIES

As of December 31, 2023, the amount of authorized and unissued stock is as follows:

Company	Type of Stock	Par Value	Shares Authorized
DTE Energy	Preferred	$ —	5,000,000
DTE Electric	Preferred	$ 100	6,747,484
DTE Electric	Preference	$ 1	30,000,000
DTE Gas	Preferred	$ 1	7,000,000
DTE Gas	Preference	$ 1	4,000,000

NOTE 16 — SHORT-TERM CREDIT ARRANGEMENTS AND BORROWINGS

DTE Energy, DTE Electric, and DTE Gas have unsecured revolving credit agreements that can be used for general corporate borrowings, but are intended to provide liquidity support for each of the companies' commercial paper programs. Borrowings under the revolvers are available at prevailing short-term interest rates. Letters of credit of up to $500 million may also be issued under the DTE Energy revolver. DTE Energy and DTE Electric also have other facilities to support letter of credit issuance and increase liquidity.

The unsecured revolving credit agreements require a total funded debt to capitalization ratio of no more than 0.70 to 1 for DTE Energy and 0.65 to 1 for DTE Electric and DTE Gas. In the agreements, "total funded debt" means all indebtedness of each respective company and their consolidated subsidiaries, including finance lease obligations, hedge agreements, and guarantees of third parties' debt, but excluding contingent obligations, nonrecourse and junior subordinated debt, and certain equity-linked securities and, except for calculations at the end of the second quarter, certain DTE Gas short-term debt. "Capitalization" means the sum of (a) total funded debt plus (b) "consolidated net worth," which is equal to consolidated total equity of each respective company and their consolidated subsidiaries (excluding pension effects under certain FASB statements), as determined in accordance with accounting principles generally accepted in the United States of America. At December 31, 2023, the total funded debt to total capitalization ratios for DTE Energy, DTE Electric, and DTE Gas were 0.63 to 1, 0.51 to 1, and 0.48 to 1, respectively, and were in compliance with this financial covenant.

The availability under the facilities in place at December 31, 2023 is shown in the following table:

	DTE Energy	DTE Electric	DTE Gas	Total
		(In millions)		
Unsecured revolving credit facility, expiring October 2028	$ 1,500	$ 800	$ 300	$ 2,600
Unsecured letter of credit facility, expiring June 2024	175	—	—	175
Unsecured letter of credit facility, expiring February 2025	150	—	—	150
Unsecured letter of credit facilities[(a)]	150	—	—	150
Unsecured letter of credit facility[(b)]	—	100	—	100
	1,975	900	300	3,175
Amounts outstanding at December 31, 2023				
Commercial paper issuances	821	385	77	1,283
Letters of credit	115	44	—	159
	936	429	77	1,442
Net availability at December 31, 2023	**$ 1,039**	**$ 471**	**$ 223**	**$ 1,733**

(a) Uncommitted letter of credit facilities with automatic renewal provision and therefore no expiration.
(b) Uncommitted letter of credit facility with automatic renewal provision and therefore no expiration. DTE Energy may also utilize availability under this facility.

For both DTE Energy and DTE Electric, the weighted average interest rate for short-term borrowings was 5.6% and 4.6% at December 31, 2023 and 2022, respectively. For information related to affiliate short-term borrowings, refer to Note 23 of the Consolidated Financial Statements, "Related Party Transactions."

In conjunction with maintaining certain exchange-traded risk management positions, DTE Energy may be required to post collateral with a clearing agent. DTE Energy has a demand financing agreement with its clearing agent which allows the right of setoff with posted collateral. At December 31, 2023, the capacity under the facility was $200 million. The amounts outstanding under demand financing agreements were $152 million and $166 million at December 31, 2023 and 2022, respectively, and were fully offset by posted collateral.

Dividend Restrictions

Certain of DTE Energy's credit facilities contain a provision requiring DTE Energy to maintain a total funded debt to capitalization ratio, as defined in the agreements, of no more than 0.70 to 1, which has the effect of limiting the amount of dividends DTE Energy can pay in order to maintain compliance with this provision. At December 31, 2023, the effect of this provision was a restriction on dividend payments to no more than $2.9 billion of DTE Energy's Retained earnings of $4.4 billion. There are no other effective limitations with respect to DTE Energy's ability to pay dividends.

NOTE 17 — LEASES

Lessee

Leases at DTE Energy are primarily comprised of various forms of equipment, computer hardware, coal railcars, production facilities, buildings, and certain easement leases with terms ranging from approximately 2 to 40 years. Leases at DTE Electric are primarily comprised of various forms of equipment, computer hardware, coal railcars, and certain easement leases with terms ranging from approximately 2 to 40 years.

A lease is deemed to exist when the Registrants have the right to control the use of identified property, plant or equipment, as conveyed through a contract, for a certain period of time and consideration paid. The right to control is deemed to occur when the Registrants have the right to obtain substantially all of the economic benefits of the identified assets and the right to direct the use of such assets.

Lease liabilities are determined utilizing a discount rate to determine the present values of lease payments. Topic 842 requires the use of the rate implicit in the lease when it is readily determinable. When the rate implicit in the lease is not readily determinable, the incremental borrowing rate is used. The Registrants have determined their respective incremental borrowing rates based upon the rate of interest that would have been paid on a collateralized basis over similar tenors to that of the leases. The incremental borrowing rates for DTE Electric and DTE Gas have been determined utilizing respective secured borrowing rates for first mortgage bonds with like tenors of remaining lease terms. Incremental borrowing rates for non-utility entities have been determined utilizing an implied secured borrowing rate based upon an unsecured rate for a similar tenor of remaining lease terms, which is then adjusted for the estimated impact of collateral.

Certain leases of the Registrants contain escalation clauses whereby the payments are adjusted for consumer price or labor indices. The Registrants have leases with non-index based escalation clauses for fixed dollar or percentage increases. DTE Energy also has leases with variable payments based upon usage of, or revenues associated with, the leased assets. DTE Electric also has leases with variable payments based upon the usage of the leased assets.

Certain leases of easements and coal railcars contain provisions whereby the Registrants have the option to terminate the lease agreement by giving notice of such termination during the time frames specified in the respective lease. The Registrants have considered such provisions in the determination of the lease term when it is reasonably certain that the lease would be terminated.

The Registrants have certain leases which contain purchase options. Based upon the nature of the leased property and terms of the purchase options, the Registrants have determined it is not reasonably certain that such purchase options will be utilized. Thus, the impact of the purchase options has not been included in the determination of right-of-use assets and lease liabilities for the subject leases.

The Registrants have certain leases which contain renewal options. Where the renewal options were deemed reasonably certain to occur, the impacts of such options were included in the determination of the right of use assets and lease liabilities.

The Registrants have agreements with lease and non-lease components, which are generally accounted for separately. Consideration in a lease is allocated between lease and non-lease components based upon the estimated relative standalone prices. The Registrants have certain coal railcar leases for which non-lease and lease components are accounted for as a single lease component, as permitted under Topic 842.

The following is a summary of the components of lease cost for the years ended December 31:

	DTE Energy			DTE Electric		
	2023	2022	2021	2023	2022	2021
	(In millions)					
Operating lease cost	**$ 22**	$ 18	$ 19	**$ 17**	$ 12	$ 14
Finance lease cost:						
Amortization of right-of-use assets	**7**	7	7	**6**	6	6
Interest of lease liabilities	**—**	1	1	**—**	—	—
Total finance lease cost	**7**	8	8	**6**	6	6
Variable lease cost	**13**	9	9	**—**	—	—
Short-term lease cost	**12**	19	14	**4**	10	6
	$ 54	$ 54	$ 50	**$ 27**	$ 28	$ 26

The Registrants have elected not to apply the recognition requirements of Topic 842 to leases with a term of 12 months or less. DTE Energy and DTE Electric record operating, variable, and short-term lease costs as Operating Expenses on the Consolidated Statements of Operations, except for certain amounts that may be capitalized to Other Assets.

The following is a summary of other information related to leases for the years ended December 31:

	DTE Energy			DTE Electric		
	2023	2022	2021	2023	2022	2021
	(In millions)					
Supplemental Cash Flows Information						
Cash paid for amounts included in the measurement of these liabilities:						
Operating cash flows for finance leases	**$ 9**	$ 8	$ 8	**$ 7**	$ 7	$ 7
Operating cash flows for operating leases	**$ 19**	$ 17	$ 19	**$ 15**	$ 12	$ 14
Right-of-use assets obtained in exchange for lease obligations:						
Operating leases	**$ 61**	$ 5	$ 5	**$ 61**	$ 2	$ 1
Finance leases	**$ 5**	$ 3	$ 3	**$ 5**	$ 1	$ 1
Weighted Average Remaining Lease Term (Years)						
Operating leases	**18.7**	12.8	12.7	**19.8**	11.1	10.3
Finance leases	**8.9**	8.2	7.8	**4.5**	1.1	2.1
Weighted Average Discount Rate						
Operating leases	**4.4 %**	3.7 %	3.6 %	**4.5 %**	3.4 %	3.4 %
Finance leases	**4.0 %**	2.4 %	2.2 %	**5.4 %**	1.0 %	1.0 %

The Registrants' future minimum lease payments under leases for remaining periods as of December 31, 2023 are as follows:

	DTE Energy		DTE Electric	
	Operating Leases	Finance Leases	Operating Leases	Finance Leases
	(In millions)			
2024	$ 20	$ 3	$ 16	$ 2
2025	15	3	12	1
2026	14	2	10	1
2027	12	2	10	1
2028	10	2	8	1
2029 and thereafter	134	6	110	—
Total future minimum lease payments	205	18	166	6
Imputed interest	(80)	(2)	(70)	—
Lease liabilities	**$ 125**	**$ 16**	**$ 96**	**$ 6**

Finance leases reported on the Consolidated Statements of Financial Position are as follows for the years ended December 31:

	DTE Energy		DTE Electric	
	2023	2022	2023	2022
	(In millions)			
Right-of-use assets, within Property, plant, and equipment, net	**$ 18**	$ 19	**$ 6**	$ 6
Current lease liabilities, within Current portion of long-term debt	**$ 3**	$ 8	**$ 2**	$ 6
Long-term lease liabilities	**$ 13**	$ 11	**$ 4**	$ 1

Lessor

DTE Energy leases a portion of its pipeline system through a finance lease contract that has been renewed through 2025, with additional renewal options reasonably certain to be exercised through 2040. DTE Energy also leases certain energy infrastructure assets for large industrial customers under separate long-term agreements through 2040 and 2042, respectively. For the agreement ending in 2040, the assets will transfer to the customer at the end of the term. For the agreement scheduled to end in 2042, the customer will have the option to extend the term in 5 year increments and may purchase the assets during the extension period. DTE Energy has accounted for a portion of these agreements as finance lease arrangements.

DTE Energy also leases various assets under operating leases for a pipeline, energy facilities and related equipment. Such leases are comprised of both fixed payments and variable payments which are contingent on volumes, with terms ranging from 2 to 24 years. Generally, the operating leases do not have renewal provisions or options to purchase the assets at the end of the lease. The operating leases generally do not have termination for convenience provisions. Termination may be allowed under specific circumstances stated in the lease contract, such as under an event of default.

Certain of the finance and operating leases have lease terms that extend to the end of the estimated economic life of the leased assets, thereby resulting in no residual value. Any remaining residual values under the finance and operating leases are expected to be recovered through rates, renewals or new lease contracts. Residual values have been determined using the estimated economic life of the leased assets. The finance and operating leases do not contain residual value guarantees.

Certain of the operating leases have both lease and non-lease components. The lease and non-lease components are allocated based upon estimated relative standalone selling prices.

A lease is deemed to exist when the Registrants have provided other parties with the right to control the use of identified property, plant or equipment, as conveyed through a contract, for a certain period of time and consideration received. The right to control is deemed to occur when the Registrants have provided other parties with the right to obtain substantially all of the economic benefits of the identified assets and the right to direct the use of such assets.

DTE Energy’s lease income associated with operating leases, including the line items in which it was included on the Consolidated Statements of Operations, was as follows:

	2023	2022	2021
		(In millions)	
Fixed payments	**$ 15**	$ 15	$ 67
Variable payments	**44**	67	131
	$ 59	$ 82	$ 198
Operating revenues	**$ 59**	$ 82	$ 103
Other income[(a)]	**—**	—	95
	$ 59	$ 82	$ 198

(a) Decrease in 2022 is due to the closure of the REF business.

DTE Energy’s minimum future rental revenues under operating leases for remaining periods as of December 31, 2023 are as follows:

	DTE Energy
	(In millions)
2024	$ 15
2025	15
2026	11
2027	10
2028	6
2029 and thereafter	36
	$ 93

Depreciation expense associated with DTE Energy's property under operating leases was $8 million, $11 million, and $22 million for the years ended December 31, 2023, 2022, and 2021 respectively.

The following is a summary of property under operating leases for DTE Energy as of December 31:

	2023	2022
	(In millions)	
Gross property under operating leases	**$ 228**	$ 282
Accumulated amortization of property under operating leases	**$ 118**	$ 128

The components of DTE Energy's net investment in finance leases for remaining periods as of December 31, 2023 are as follows:

	DTE Energy
	(In millions)
2024	$ 34
2025	34
2026	34
2027	34
2028	34
2029 and thereafter	389
Total minimum future lease receipts	559
Residual value of leased pipeline	17
Less unearned income	289
Net investment in finance lease	287
Less current portion	8
	$ 279

Interest income recognized under finance leases was $27 million, $24 million, and $17 million for the years ended December 31, 2023, 2022, and 2021, respectively.

NOTE 18 — COMMITMENTS AND CONTINGENCIES

Environmental

DTE Electric

Air — DTE Electric is subject to the EPA ozone and fine particulate transport and acid rain regulations that limit power plant emissions of SO_2 and NO_X. The EPA and the State of Michigan have also issued emission reduction regulations relating to ozone, fine particulate, regional haze, mercury, and other air pollution. These rules have led to controls on fossil-fueled power plants to reduce SO_2, NO_X, mercury, and other emissions. Additional rule making may occur over the next few years which could require additional controls for SO_2, NO_X, and other hazardous air pollutants.

In 2015, the EPA finalized National Ambient Air Quality Standards ("NAAQS") for ground level ozone. In August 2018, the EPA designated southeast Michigan as "marginal non-attainment" with the 2015 ozone NAAQS. In January 2022, after collecting several years of data, the State submitted a request to the EPA for redesignation of the southeast Michigan ozone non-attainment area to attainment, and to accept their maintenance plan and emission inventories as a revision to the Michigan State Implementation Plan (SIP). On May 19, 2023, the EPA posted in the Federal Register the redesignation of attainment of the ozone standard for the seven-county Southeast Michigan region. DTE Electric does not expect a significant financial impact related to the ozone NAAQS at this time, pending finalization of the state rules and implementation plans.

In May 2023, the EPA proposed new rules to address emissions of GHGs from existing, new, modified, or reconstructed sources in the power sector. DTE Electric provided individual comments on the proposal and also worked with industry partners on a broader set of comments. The financial impact cannot be estimated until a final rule is issued, which is currently expected in early 2024.

Pending or future legislation or other regulatory actions could have a material impact on DTE Electric's operations and financial position and the rates charged to its customers. Potential impacts include expenditures for environmental equipment beyond what is currently planned, financing costs related to additional capital expenditures, the purchase of emission credits from market sources, higher costs of purchased power, and the retirement of facilities where control equipment is not economical. DTE Electric would seek to recover these incremental costs through increased rates charged to its utility customers, as authorized by the MPSC.

To comply with air pollution requirements, DTE Electric has spent approximately $2.4 billion. DTE Electric does not anticipate additional capital expenditures for air pollution requirements, subject to the results of future rulemakings.

Water — In response to EPA regulations and in accordance with the Clean Water Act section 316(b), DTE Electric was required to examine alternatives for reducing the environmental impacts of the cooling water intake structures at several of its facilities. A final rule became effective in October 2014 which required studies to be completed and submitted as part of the NPDES permit application process to determine the type of technology needed to reduce impacts to fish. DTE Electric has completed the required studies and submitted reports for most of its generation plants, and a final study is in-process for Monroe power plant. Final compliance for the installation of any required technology to reduce the impacts of water intake structures will be determined by the state on a case by case, site specific basis. DTE Electric is currently evaluating the compliance options and working with the State of Michigan on determining whether any controls are needed. These evaluations/studies may require modifications to some existing intake structures. It is not possible to quantify the impact of this rule making at this time.

As part of the Monroe power plant NPDES permit, EGLE has added requirements to evaluate the thermal discharge of the facility as it relates to Clean Water Act section 316(a) regulations. DTE Electric has submitted to EGLE a biological demonstration study plan to evaluate the thermal discharge impacts to an aquatic community. After approval of the plan by EGLE and completion of field sampling, data will be processed and compiled into a comprehensive report. At the present time, DTE Electric cannot predict the outcome of this evaluation or financial impact.

Contaminated and Other Sites — Prior to the construction of major interstate natural gas pipelines, gas for heating and other uses was manufactured locally from processes involving coal, coke, or oil. The facilities, which produced gas, have been designated as MGP sites. DTE Electric conducted remedial investigations at contaminated sites, including three former MGP sites. Cleanup of one of the MGP sites is complete, and that site is closed. The investigations have revealed contamination related to the by-products of gas manufacturing at each MGP site. In addition to the MGP sites, DTE Electric is also in the process of cleaning up other contaminated sites, including the area surrounding an ash landfill, electrical distribution substations, electric generating power plants, and underground and above ground storage tank locations. The findings of these investigations indicated that the estimated cost to remediate these sites is expected to be incurred over the next several years. At December 31, 2023 and 2022, DTE Electric had $9 million and $10 million, respectively, accrued for remediation. These costs are not discounted to their present value. Any change in assumptions, such as remediation techniques, nature and extent of contamination, and regulatory requirements, could impact the estimate of remedial action costs for the sites and affect DTE Electric’s financial position and cash flows. DTE Electric believes the likelihood of a material change to the accrued amount is remote based on current knowledge of the conditions at each site.

Coal Combustion Residuals and Effluent Limitations Guidelines — A final EPA rule for the disposal of coal combustion residuals, commonly known as coal ash, became effective in October 2015 and has continued to be updated in subsequent years. The rule is based on the continued listing of coal ash as a non-hazardous waste and relies on various self-implementation design and performance standards. DTE Electric owns and operates three permitted engineered coal ash storage facilities to dispose of coal ash from coal-fired power plants and operates a number of smaller impoundments at its power plants subject to certain provisions in the CCR rule. At certain facilities, the rule required ongoing sampling and testing of monitoring wells, compliance with groundwater standards, and the closure of basins at the end of the useful life of the associated power plant.

On August 28, 2020, Part A of the CCR rule was published in the Federal Register and required all unlined impoundments to initiate closure as soon as technically feasible, but no later than April 11, 2021. Additionally, the rule amends certain reporting requirements and CCR website requirements. On November 12, 2020, Part B of the CCR Rule was published in the Federal Register and provided a process to determine if certain unlined impoundments with an alternative liner system may be sufficiently protective and therefore may continue to operate.

DTE Electric submitted applications to the EPA that support continued use of all impoundments through their active lives. The forced closure date of April 11, 2021 was effectively delayed, pending the EPA completing review of the applications. On September 1, 2022, DTE Electric ceased receipt of CCR and non-CCR waste streams at the St. Clair power plant bottom ash basins and initiated closure. Therefore, DTE Electric withdrew the Part A rule demonstration for St. Clair, as it was no longer necessary for the EPA to issue an extension of the April 11, 2021 deadline to cease receipt of waste.

On January 25, 2023, DTE Electric received notice of the EPA's proposed denial of Part B applications. DTE Electric provided comments on April 10, 2023, in response to the proposed decision. DTE Electric has since implemented projects at the Belle River power plant to cease receipt of waste within any unlined CCR surface impoundments. Therefore, on September 21, 2023, DTE Electric withdrew the Part B applications for the Belle River power plant, leaving only the Part B application for the Monroe power plant fly ash basin pending final review by the EPA. If the EPA's final decision remains unchanged, DTE Electric does not expect the denied application to have a significant operational or financial impact; however, DTE Electric is continuing to review and analyze potential outcomes of this matter.

On May 18, 2023, the EPA posted in the Federal Register a proposed rule to regulate legacy CCR surface impoundments and CCR management units. The rule proposes to expand the reach of the CCR rule to inactive electric generation sites and previously unregulated locations of CCR at a regulated facility. DTE Electric is currently evaluating the proposed rule. The financial impact of the proposed rule cannot be estimated until a final rule is issued, which is currently expected in mid-2024.

At the State level, legislation was signed in December 2018 and provides for further regulation of the CCR program in Michigan. Additionally, the statutory revision provides the basis of a CCR program that EGLE has submitted to the EPA for approval to fully regulate the CCR program in Michigan in lieu of a Federal permit program. The EPA is currently working with EGLE in reviewing the submitted State program, and DTE Electric will work with EGLE to implement the State program that may be approved in the future.

On October 13, 2020, the EPA finalized the ELG Reconsideration Rule which revised the regulations from the 2015 ELG rule for FGD wastewater and bottom ash transport water only. The Reconsideration Rule re-established the technology-based effluent limitations guidelines and standards applicable to FGD wastewater and bottom ash transport water. The EPA set the applicability dates for bottom ash transport water "as soon as possible" beginning October 13, 2021 and no later than December 31, 2025. FGD wastewater retrofits must be completed "as soon as possible" beginning October 13, 2021 and no later than December 31, 2025 or December 31, 2028 if a permittee decides to pursue the Voluntary Incentives Program (VIP) subcategory for FGD wastewater. If a facility applies for the VIP, they must meet more stringent standards, but are allowed an extended time period to meet the compliance requirements.

The Reconsideration Rule also provides additional compliance opportunities by finalizing low utilization and cessation of coal burning subcategories. The Reconsideration Rule provides new opportunities for DTE Electric to evaluate existing ELG compliance strategies and make any necessary adjustments to ensure full compliance with the ELGs in a cost-effective manner.

Compliance schedules for individual facilities and individual waste streams are determined through issuance of new NPDES permits by the State of Michigan. The State of Michigan has issued an NPDES permit for the Belle River power plant establishing compliance deadlines based on the 2020 Reconsideration Rule. On October 11, 2021, in consideration of the deadlines above, DTE Electric submitted a Notice of Planned Participation ("NOPP") to the State of Michigan that formally announced the intent to pursue compliance subcategories as ELG compliance options: the cessation of coal at the Belle River power plant no later than December 31, 2028 and the VIP for FGD wastewater at Monroe power plant by December 31, 2028.

On March 29, 2023, the EPA published two draft proposals to revise existing ELG rules. The first draft proposal reopened the cessation of coal compliance subcategory from the 2020 ELG rule and allows for compliance by committing to such cessation no later than December 31, 2028. This proposal was finalized by the EPA on May 30, 2023. The second draft proposal is a broader update to the ELG rules that includes revised compliance standards for FGD wastewater, bottom ash transport water, and other wastewater streams with a compliance date no later than December 31, 2029. DTE Electric's compliance strategy includes the conversion of the two generating units at the Belle River power plant to a natural gas peaking resource in 2025-2026, which was included in the NOPP filed in 2021. DTE Electric also submitted a new NOPP to apply for the cessation of coal compliance subcategory for generating units 3 and 4 at the Monroe power plant. DTE Electric plans to retire Monroe's generating units 1 and 2 in 2032.

DTE Electric continues to evaluate compliance strategies, technologies, and system designs to achieve compliance with the EPA rules at the Monroe power plant.

DTE Electric currently estimates the impact of the CCR and ELG rules to be $427 million of capital expenditures, including $417 million for 2024 through 2028. This estimate may change in future periods as DTE Electric evaluates the CCR and ELG rules discussed above that are expected to be finalized in mid-2024.

DTE Gas

Contaminated and Other Sites — DTE Gas owns or previously owned 14 former MGP sites. Investigations have revealed contamination related to the by-products of gas manufacturing at each site. Cleanup of eight MGP sites is complete and those sites are closed. DTE Gas has also completed partial closure of four additional sites. Cleanup activities associated with the remaining sites will continue over the next several years. The MPSC has established a cost deferral and rate recovery mechanism for investigation and remediation costs incurred at former MGP sites. In addition to the MGP sites, DTE Gas is also in the process of cleaning up other contaminated sites, including gate stations, gas pipeline releases, and underground storage tank locations. As of December 31, 2023 and 2022, DTE Gas had $26 million and $23 million, respectively, accrued for remediation. These costs are not discounted to their present value. Any change in assumptions, such as remediation techniques, nature and extent of contamination, and regulatory requirements, could impact the estimate of remedial action costs for the sites and affect DTE Gas' financial position and cash flows. DTE Gas anticipates the cost amortization methodology approved by the MPSC, which allows for amortization of the MGP costs over a ten-year period beginning with the year subsequent to the year the MGP costs were incurred, will prevent the associated investigation and remediation costs from having a material adverse impact on DTE Gas' results of operations.

Air — The EPA recently finalized its Good Neighbor Rule, which includes provisions for compressor engines operated for the transportation of natural gas. DTE Gas is assessing the applicability of the rule on its engines and what impacts that could have on operations. DTE Gas has not determined whether there will be a financial impact at this time.

Non-utility

DTE Energy's non-utility businesses are subject to a number of environmental laws and regulations dealing with the protection of the environment from various pollutants.

In March 2019, the EPA issued an FOV to EES Coke Battery, LLC ("EES Coke"), the Michigan coke battery facility that is a wholly-owned subsidiary of DTE Energy, alleging that the 2008 and 2014 permits issued by EGLE did not comply with the Clean Air Act. In September 2020, the EPA issued another FOV alleging EES Coke's 2018 and 2019 SO2 emissions exceeded projections and hence violated non-attainment new source review permitting requirements. EES Coke evaluated the EPA's alleged violations and believes that the permits approved by EGLE complied with the Clean Air Act. EES Coke responded to the EPA's September 2020 allegations demonstrating its actual emissions are compliant with non-attainment new source review requirements. On June 1, 2022, the U.S. Department of Justice, on behalf of the EPA, filed a complaint against EES Coke in the U.S. District Court for the Eastern District of Michigan alleging that EES Coke failed to comply with non-attainment new source review requirements under the Clean Air Act when it applied for the 2014 permit. In November 2022, the Sierra Club and City of River Rouge were granted intervention. The case is currently in the discovery phase. At the present time, DTE Energy cannot predict the outcome or financial impact of this matter.

Separately, in December 2021, EGLE issued a Notice of Violation to EES Coke alleging excess visible emissions from pushing operations. In January 2022, EES Coke provided EGLE a response describing the corrective actions taken to prevent future recurrences. At the present time, EES Coke cannot predict the outcome or financial impact of this matter.

Other

In 2010, the EPA finalized a new one-hour SO_2 ambient air quality standard that requires states to submit plans and associated timelines for non-attainment areas that demonstrate attainment with the new SO_2 standard in phases. Phase 1 addresses non-attainment areas designated based on ambient monitoring data. Phase 2 addresses non-attainment areas with large sources of SO_2 and modeled concentrations exceeding the National Ambient Air Quality Standards for SO_2. Phase 3 addresses smaller sources of SO_2 with modeled or monitored exceedances of the new SO_2 standard.

Michigan's Phase 1 non-attainment area includes DTE Energy facilities. However, the EPA published a Federal Implementation Plan (FIP) for the area in June 2022 that did not impact any DTE Energy facilities. It is also not expected that Phase 3 will have any impact on DTE Energy.

Michigan's Phase 2 non-attainment area includes DTE Electric facilities in St. Clair County. The EPA approved a clean data determination request submitted by EGLE. This determination suspends certain planning requirements and sanctions for the non-attainment area for as long as the area continues to attain the 2010 SO2 air quality standards, but this does not automatically redesignate the area to attainment. Until the area is officially redesignated as attainment, DTE Energy is unable to determine the impacts.

REF Guarantees

DTE Energy provided certain guarantees and indemnities in conjunction with the sales of interests in or lease of its previously operated REF facilities. The guarantees cover potential commercial, environmental, and tax-related obligations that will survive until 90 days after expiration of all applicable statutes of limitations. DTE Energy estimates that its maximum potential liability under these guarantees at December 31, 2023 was $414 million. Payments under these guarantees are considered remote.

Other Guarantees

In certain limited circumstances, the Registrants enter into contractual guarantees. The Registrants may guarantee another entity's obligation in the event it fails to perform and may provide guarantees in certain indemnification agreements. The Registrants may also provide indirect guarantees for the indebtedness of others. DTE Energy's guarantees are not individually material with maximum potential payments totaling $44 million at December 31, 2023. Payments under these guarantees are considered remote.

The Registrants are periodically required to obtain performance surety bonds in support of obligations to various governmental entities and other companies in connection with its operations. As of December 31, 2023, DTE Energy had $334 million of performance bonds outstanding, including $159 million for DTE Electric. Performance bonds are not individually material, except for $130 million of bonds supporting Energy Trading operations. These bonds are meant to provide counterparties with additional assurance that Energy Trading will meet its contractual obligations for various commercial transactions. The terms of the bonds align with those of the underlying Energy Trading contracts and are estimated to be outstanding approximately 1 to 3 years. In the event that any performance bonds are called for nonperformance, the Registrants would be obligated to reimburse the issuer of the performance bond. The Registrants are released from the performance bonds as the contractual performance is completed and does not believe that a material amount of any currently outstanding performance bonds will be called.

Labor Contracts

There are several bargaining units for DTE Energy subsidiaries' approximately 4,900 represented employees, including DTE Electric's approximately 2,550 represented employees. This represents 49% and 57% of DTE Energy's and DTE Electric's total employees, respectively. Of these represented employees, less than 1% have contracts expiring within one year for DTE Energy. None of the represented employees have contracts expiring within one year for DTE Electric.

Purchase Commitments

As of December 31, 2023, the Registrants were party to numerous long-term purchase commitments relating to a variety of goods and services required for their businesses. These agreements primarily consist of fuel supply commitments and renewable energy contracts for the Registrants, as well as energy trading contracts for DTE Energy. The Registrants estimate the following commitments from 2024 through 2051, as detailed in the following tables:

	2024	2025	2026	2027	2028	2029 and Thereafter	Total
DTE Energy				(In millions)			
Long-term power purchase agreements[(a)]	$ 92	$ 92	$ 92	$ 92	$ 92	$ 568	$ 1,028
Other purchase commitments[(b)]	3,349	1,689	1,115	565	338	824	7,880
Total commitments	**$ 3,441**	**$ 1,781**	**$ 1,207**	**$ 657**	**$ 430**	**$ 1,392**	**$ 8,908**

	2024	2025	2026	2027	2028	2029 and Thereafter	Total
DTE Electric				(In millions)			
Long-term power purchase agreements[(a)]	$ 98	$ 97	$ 97	$ 97	$ 97	$ 578	$ 1,064
Other purchase commitments[(b)]	829	393	184	83	74	138	1,701
Total commitments	**$ 927**	**$ 490**	**$ 281**	**$ 180**	**$ 171**	**$ 716**	**$ 2,765**

(a) The agreements represent the minimum obligations with suppliers for renewable energy and renewable energy credits under existing contract terms which expire from 2030 through 2047. DTE Electric's share of plant output ranges from 28% to 100%. Purchase commitments for DTE Electric include affiliate agreements with DTE Sustainable Generation that are eliminated in consolidation for DTE Energy.
(b) Excludes amounts associated with full requirements contracts where no stated minimum purchase volume is required.

Utility capital expenditures and expenditures for non-utility businesses will be approximately $4.7 billion and $3.4 billion in 2024 for DTE Energy and DTE Electric, respectively. The Registrants have made certain commitments in connection with the estimated 2024 annual capital expenditures.

Ludington Plant Contract Dispute

DTE Electric and Consumers Energy Company ("Consumers"), joint owners of the Ludington Hydroelectric Pumped Storage plant ("Ludington"), are parties to a 2010 engineering, procurement, and construction agreement with Toshiba America Energy Systems ("TAES"), under which TAES contracted to perform a major overhaul and upgrade of Ludington. The overhauled Ludington units are operational, but TAES' work has been defective and non-conforming. DTE Electric and Consumers have demanded that TAES provide a comprehensive plan to resolve those matters, including adherence to its warranty commitments and other contractual obligations. DTE Electric and Consumers have taken extensive efforts to resolve these issues with TAES, including a formal demand to TAES' parent, Toshiba Corporation, under a parent guaranty it provided. TAES has not provided a comprehensive plan or otherwise met its performance obligations. In order to enforce the contract, DTE Electric and Consumers filed a complaint against TAES and Toshiba Corporation in the U.S. District Court for the Eastern District of Michigan in April 2022.

In June 2022, TAES and Toshiba Corporation filed a motion to dismiss the complaint, along with counterclaims seeking approximately $15 million in damages related to payments allegedly owed under the parties' contract. During September 2022, the motion to dismiss the complaint was denied. DTE Electric believes the outstanding counterclaims are without merit, but would be liable for 49% of the damages if approved. In October 2022, the combined parties submitted a joint discovery plan to proceed with the litigation process and a potential trial during the second half of 2024. DTE Electric cannot predict the financial impact or outcome of this matter.

Refer to the *Ludington Accounting Application* section within Note 9 to the Consolidated Financial Statements, "Regulatory Matters," for additional information regarding costs to address TAES defective work and regulatory accounting treatment.

Other Contingencies

The Registrants are involved in certain other legal, regulatory, administrative, and environmental proceedings before various courts, arbitration panels, and governmental agencies concerning claims arising in the ordinary course of business. These proceedings include certain contract disputes, additional environmental reviews and investigations, audits, inquiries from various regulators, and pending judicial matters. The Registrants cannot predict the final disposition of such proceedings. The Registrants regularly review legal matters and record provisions for claims that they can estimate and are considered probable of loss. The resolution of these pending proceedings is not expected to have a material effect on the Registrants' Consolidated Financial Statements in the periods they are resolved.

For a discussion of contingencies related to regulatory matters and derivatives, see Notes 9 and 13 to the Consolidated Financial Statements, "Regulatory Matters" and "Financial and Other Derivative Instruments," respectively.

NOTE 19 — NUCLEAR OPERATIONS

Property Insurance

DTE Electric maintains property insurance policies specifically for the Fermi 2 plant. These policies cover such items as replacement power and property damage. NEIL is the primary supplier of the insurance policies.

DTE Electric maintains a policy for extra expenses, including replacement power costs necessitated by Fermi 2’s unavailability due to an insured event. This policy has a 12-week waiting period and provides an aggregate $490 million of coverage over a three-year period.

DTE Electric has $1.5 billion in primary coverage and $1.25 billion of excess coverage for stabilization, decontamination, debris removal, repair and/or replacement of property, and decommissioning. The combined coverage limit for total property damage is $2.75 billion. The total limit for property damage for non-nuclear events is $1.8 billion and an aggregate of $328 million of coverage for extra expenses over a two-year period.

On December 20, 2019, the Terrorism Risk Insurance Program Reauthorization Act of 2019 was signed, extending TRIA through December 31, 2027. For multiple terrorism losses caused by acts of terrorism not covered under the TRIA occurring within one year after the first loss from terrorism, the NEIL policies would make available to all insured entities up to $3.2 billion, plus any amounts recovered from reinsurance, government indemnity, or other sources to cover losses.

Under NEIL policies, DTE Electric could be liable for maximum assessments of up to $38 million per event if the loss associated with any one event at any nuclear plant should exceed the accumulated funds available to NEIL.

Public Liability Insurance

As required by federal law, DTE Electric maintains $450 million of public liability insurance for a nuclear incident. Further, under the Price-Anderson Amendments Act of 2005, deferred premium charges up to $166 million could be levied against each licensed nuclear facility, but not more than $25 million per year per facility. Thus, deferred premium charges could be levied against all owners of licensed nuclear facilities in the event of a nuclear incident at any of these facilities.

Nuclear Fuel Disposal Costs

In accordance with the Federal Nuclear Waste Policy Act of 1982, DTE Electric has a contract with the DOE for the future storage and disposal of spent nuclear fuel from Fermi 2 that required DTE Electric to pay the DOE a fee of 1 mill per kWh of Fermi 2 electricity generated and sold. The fee was a component of nuclear fuel expense. The 1 mill per kWh DOE fee was reduced to zero effective May 16, 2014.

The DOE's Yucca Mountain Nuclear Waste Repository program for the acceptance and disposal of spent nuclear fuel was terminated in 2011. DTE Electric is a party in the litigation against the DOE for both past and future costs associated with the DOE's failure to accept spent nuclear fuel under the timetable set forth in the Federal Nuclear Waste Policy Act of 1982. In July 2012, DTE Electric executed a settlement agreement with the federal government for costs associated with the DOE's delay in acceptance of spent nuclear fuel from Fermi 2 for permanent storage. The settlement agreement, including extensions, has provided for a claims process and payment of delay-related costs experienced by DTE Electric through 2025. DTE Electric's claims are being settled and paid on a timely basis. The settlement proceeds reduce the cost of the dry cask storage facility assets and provide reimbursement for related operating expenses.

DTE Electric currently employs a spent nuclear fuel storage strategy utilizing a fuel pool and a dry cask storage facility. The spent nuclear fuel storage strategy is expected to provide sufficient spent fuel storage capability for the life of the plant as defined by DTE Electric's operating license agreement.

The federal government continues to maintain its legal obligation to accept spent nuclear fuel from Fermi 2 for permanent storage. Issues relating to long-term waste disposal policy and to the disposition of funds contributed by DTE Electric ratepayers to the federal waste fund await future governmental action.

NOTE 20 — RETIREMENT BENEFITS AND TRUSTEED ASSETS

DTE Energy's subsidiary, DTE Energy Corporate Services, LLC, sponsors defined benefit pension plans and other postretirement benefit plans covering certain employees of the Registrants. Plan participants of all plans are solely DTE Energy and affiliate participants.

The table below represents the pension and other postretirement benefit plans of each Registrant at December 31, 2023:

	Registrants	
	DTE Energy	DTE Electric
Qualified Pension Plans		
DTE Energy Company Retirement Plan	X	X
DTE Gas Company Retirement Plan for Employees Covered by Collective Bargaining Agreements	X	
Shenango Inc. Pension Plan[(a)]	X	
Non-qualified Pension Plans		
DTE Energy Company Supplemental Retirement Plan[(b)]	X	X
DTE Energy Company Executive Supplemental Retirement Plan[(b)]	X	X
DTE Energy Company Supplemental Severance Benefit Plan	X	
Other Postretirement Benefit Plans		
The DTE Energy Company Comprehensive Non-Health Welfare Plan	X	X
The DTE Energy Company Comprehensive Retiree Group Health Care Plan	X	X
DTE Supplemental Retiree Benefit Plan	X	X
DTE Energy Company Retiree Reimbursement Arrangement Plan	X	X

(a) Sponsored by Shenango, LLC
(b) Sponsored by DTE Energy Company

DTE Electric participates in various plans that provide pension and other postretirement benefits for DTE Energy and its affiliates. The plans are primarily sponsored by the LLC. DTE Electric accounts for its participation in DTE Energy's qualified and non-qualified pension plans by applying multiemployer accounting. DTE Electric accounts for its participation in other postretirement benefit plans by applying multiple-employer accounting. Within multiemployer and multiple-employer plans, participants pool plan assets for investment purposes and to reduce the cost of plan administration. The primary difference between plan types is that assets contributed in multiemployer plans can be used to provide benefits for all participating employers, while assets contributed within a multiple-employer plan are restricted for use by the contributing employer.

As a result of multiemployer accounting treatment, capitalized costs associated with these plans are reflected in Property, plant, and equipment in DTE Electric's Consolidated Statements of Financial Position. The same capitalized costs are reflected as Regulatory assets and liabilities in DTE Energy's Consolidated Statements of Financial Position. For service costs recognized in earnings, these costs have historically been presented in Operation and maintenance in the Registrants' Consolidated Statements of Operations. For non-service costs recognized in earnings, these costs have historically been presented in Other (Income) and Deductions — Non-operating retirement benefits, net in DTE Energy's Consolidated Statements of Operations and Operation and maintenance in the DTE Electric Consolidated Statements of Operations.

In November 2022, DTE Electric received a rate order from the MPSC approving the deferral of qualified pension plan service and non-service costs that were previously being recognized in earnings. Therefore, the Registrants are recording these costs as Regulatory assets beginning in December 2022.

Pension Plan Benefits

DTE Energy has qualified defined benefit retirement plans for eligible represented and non-represented employees. The plans are noncontributory and provide traditional retirement benefits based on the employee's years of benefit service, average final compensation, and age at retirement. In addition, certain represented and non-represented employees are covered under cash balance provisions that determine benefits on annual employer contributions and interest credits. DTE Energy also maintains supplemental non-qualified, noncontributory, retirement benefit plans for certain management employees. These plans provide for benefits that supplement those provided by DTE Energy’s other retirement plans.

Net pension cost for DTE Energy includes the following components:

	2023	2022	2021
		(In millions)	
Service cost	**$ 57**	$ 95	$ 108
Interest cost	**214**	166	158
Expected return on plan assets	**(352)**	(346)	(339)
Amortization of:			
Net actuarial loss	**7**	115	196
Prior service credit	**(2)**	(1)	—
Settlements	**7**	94	16
Net pension cost (credit)	**$ (69)**	$ 123	$ 139

	2023	2022
	(In millions)	
Other changes in plan assets and benefit obligations recognized in Regulatory assets and Other comprehensive income (loss)		
Net actuarial loss	**$ 62**	$ 156
Amortization of net actuarial loss and settlements	**(14)**	(209)
Amortization of prior service credit	**2**	1
Total recognized in Regulatory assets and Other comprehensive income (loss)	**$ 50**	$ (52)
Total recognized in net periodic pension cost, Regulatory assets, and Other comprehensive income (loss)	**$ (19)**	$ 71

The following table reconciles the obligations, assets, and funded status of the plans as well as the amounts recognized as prepaid pension cost or pension liability in DTE Energy's Consolidated Statements of Financial Position at December 31:

	DTE Energy	
	2023	2022
	(In millions)	
Accumulated benefit obligation, end of year	**$ 4,089**	$ 4,078
Change in projected benefit obligation		
Projected benefit obligation, beginning of year	**$ 4,309**	$ 5,857
Service cost	**57**	95
Interest cost	**214**	166
Actuarial (gain) loss	**74**	(1,252)
Benefits paid	**(329)**	(278)
Settlements	**(7)**	(279)
Projected benefit obligation, end of year	**$ 4,318**	$ 4,309
Change in plan assets		
Plan assets at fair value, beginning of year	**$ 3,897**	$ 5,507
Actual return on plan assets	**363**	(1,062)
Company contributions	**36**	9
Benefits paid	**(329)**	(278)
Settlements	**(7)**	(279)
Plan assets at fair value, end of year	**$ 3,960**	$ 3,897
Funded status	**$ (358)**	$ (412)
Amount recorded as:		
Current liabilities	**$ (8)**	$ (34)
Noncurrent liabilities	**(350)**	(378)
	$ (358)	$ (412)
Amounts recognized in Accumulated other comprehensive income (loss), pre-tax		
Net actuarial loss	**$ 76**	$ 85
	$ 76	$ 85
Amounts recognized in Regulatory assets[(a)]		
Net actuarial loss	**$ 1,426**	$ 1,369
Prior service credit	**(5)**	(7)
	$ 1,421	$ 1,362

(a) See Note 9 to the Consolidated Financial Statements, "Regulatory Matters."

The increase in DTE Energy's pension benefit obligation for the year ended December 31, 2023 was primarily due to an actuarial loss driven by a decrease in discount rates. The decrease in the pension benefit obligation in 2022 was primarily due to an actuarial gain driven by an increase in discount rates, as well as settlements arising from higher lump-sum payments to retirees during the year.

The Registrants' policy is to fund pension costs by contributing amounts consistent with the provisions of the Pension Protection Act of 2006, and additional amounts when it deems appropriate. In 2023 and 2022, DTE Gas transferred $50 million of qualified pension plan funds to DTE Electric in exchange for cash consideration. There were no other transfers or contributions made to the qualified pension plans in 2023, 2022, or 2021. DTE Energy does not anticipate making any contributions to the qualified pension plans in 2024, subject to management discretion and any changes in financial market conditions.

DTE Energy's subsidiaries are responsible for their share of qualified and non-qualified pension benefit costs. DTE Electric's allocated portion of pension benefit costs included in regulatory assets and liabilities, operation and maintenance expense, other income and deductions, and capital expenditures was a credit of $39 million for the year ended December 31, 2023, and a cost of $101 million and $107 million for the years ended December 31, 2022 and 2021, respectively. These amounts may include recognized contractual termination benefit charges, curtailment gains, and settlement charges.

At December 31, 2023, the benefits related to DTE Energy's qualified and non-qualified pension plans expected to be paid in each of the next five years and in the aggregate for the five fiscal years thereafter are as follows:

	(In millions)
2024	$ 319
2025	328
2026	322
2027	321
2028	324
2029-2033	1,605
Total	**$ 3,219**

Assumptions used in determining the projected benefit obligation and net pension costs of DTE Energy are:

	2023	2022	2021
Projected benefit obligation			
Discount rate	**5.00%**	5.19%	2.91%
Rate of compensation increase	**3.80%**	3.80%	3.80%
Cash balance interest crediting rate	**3.60%**	3.40%	2.40%
Net pension costs			
Discount rate	**5.19%**	2.91%	2.57%
Rate of compensation increase	**3.80%**	3.80%	3.80%
Expected long-term rate of return on plan assets	**7.60%**	6.80%	7.00%
Cash balance interest crediting rate	**3.40%**	2.40%	2.00%

DTE Energy employs a formal process in determining the long-term rate of return for various asset classes. Management reviews historic financial market risks and returns and long-term historic relationships between the asset classes of equities, fixed income, and other assets, consistent with the widely accepted capital market principle that asset classes with higher volatility generate a greater return over the long-term. Current market factors such as inflation, interest rates, asset class risks, and asset class returns are evaluated and considered before long-term capital market assumptions are determined. The long-term portfolio return is also established employing a consistent formal process, with due consideration of diversification, active investment management, and rebalancing. Peer data is reviewed to check for reasonableness. As a result of this process, the Registrants have a long-term rate of return assumption for the pension plans of 8.00% for 2024. The Registrants believe this rate is a reasonable assumption for the long-term rate of return on plan assets given the current investment strategy.

The DTE Energy Company Affiliates Employee Benefit Plans Master Trust employs a liability driven investment program whereby the characteristics of plan liabilities are considered when determining investment policy. Risk tolerance is established through consideration of future plan cash flows, plan funded status, and corporate financial considerations. The investment portfolio contains a diversified blend of equity, fixed income, and other investments. Furthermore, equity investments are diversified across U.S. and non-U.S. stocks and large and small market capitalizations. Fixed income investments generally include U.S. Treasuries, other governmental debt, diversified corporate bonds, bank loans, and mortgage-backed securities. Other investments are used to enhance long-term returns while improving portfolio diversification. Derivatives may be utilized in a risk controlled manner, to potentially increase the portfolio beyond the market value of invested assets and/or reduce portfolio investment risk. Investment risk is measured and monitored on an ongoing basis through annual liability measurements, periodic asset/liability studies, and quarterly investment portfolio reviews.

Target allocations for DTE Energy's pension plan assets as of December 31, 2023 are listed below:

U.S. Large Capitalization (Cap) Equity Securities	12 %
U.S. Small Cap and Mid Cap Equity Securities	2
Non-U.S. Equity Securities	11
Fixed Income Securities	48
Hedge Funds and Similar Investments	8
Private Equity and Other	19
	100 %

The following table provides the fair value measurement amounts for DTE Energy's pension plan assets at December 31, 2023 and 2022[(a)]:

	December 31, 2023				December 31, 2022			
	Level 1	Level 2	Other[(b)]	Total	Level 1	Level 2	Other[(b)]	Total
DTE Energy asset category:	(In millions)							
Short-term Investments[(c)]	**$ 100**	**$ —**	**$ —**	**$ 100**	$ 77	$ —	$ —	$ 77
Equity Securities								
Domestic[(d)]	**—**	**—**	**550**	**550**	—	—	483	483
International[(e)]	**55**	**—**	**309**	**364**	65	—	416	481
Fixed Income Securities								
Governmental[(f)]	**531**	**78**	**—**	**609**	506	77	—	583
Corporate[(g)]	**—**	**1,323**	**—**	**1,323**	—	1,203	—	1,203
Hedge Funds and Similar Investments[(h)]	**104**	**68**	**110**	**282**	86	50	185	321
Private Equity and Other[(i)]	**—**	**—**	**732**	**732**	—	—	749	749
DTE Energy Total	**$ 790**	**$ 1,469**	**$ 1,701**	**$ 3,960**	$ 734	$ 1,330	$ 1,833	$ 3,897

(a) For a description of levels within the fair value hierarchy, see Note 12 to the Consolidated Financial Statements, "Fair Value."
(b) Amounts represent assets valued at NAV as a practical expedient for fair value.
(c) This category predominantly represents certain short-term fixed income securities and money market investments that are managed in separate accounts or commingled funds. Pricing for investments in this category is obtained from quoted prices in actively traded markets.
(d) This category represents portfolios of large, medium and small capitalization domestic equities. Investments in this category include exchange-traded securities held in a commingled fund classified as NAV assets.
(e) This category primarily consists of portfolios of non-U.S. developed and emerging market equities. Investments in this category include exchange-traded securities for which unadjusted quoted prices can be obtained and exchange-traded securities held in a commingled fund classified as NAV assets.
(f) This category includes U.S. Treasuries, bonds, and other governmental debt. Pricing for investments in this category is obtained from quoted prices in actively traded markets and quotations from broker or pricing services.
(g) This category primarily consists of corporate bonds from diversified industries, bank loans, and mortgage backed securities. Pricing for investments in this category is obtained from quotations from broker or pricing services.
(h) This category utilizes a diversified group of strategies that attempt to capture uncorrelated sources of return and includes publicly traded mutual funds, insurance-linked and asset-backed securities, commingled funds and limited partnership funds. Pricing for mutual funds in this category is obtained from quoted prices in actively traded markets. Pricing for insurance-linked and asset-backed securities is obtained from quotations from broker or pricing services. Commingled funds and limited partnership funds are classified as NAV assets.
(i) This category includes a diversified group of funds and strategies that primarily invests in private equity partnerships. This category also includes investments in private real estate and private debt. All investments in this category are classified as NAV assets.

The pension trust holds debt and equity securities directly and indirectly through commingled funds. Exchange-traded debt and equity securities held directly, as well as publicly traded commingled funds, are valued using quoted market prices in actively traded markets. Non-publicly traded commingled funds hold exchange-traded equity or debt securities and are valued based on stated NAVs. Non-exchange traded fixed income securities are valued by the trustee based upon quotations available from brokers or pricing services. A primary price source is identified by asset type, class, or issue for each security. The trustee monitors prices supplied by pricing services and may use a supplemental price source or change the primary price source of a given security if the trustee challenges an assigned price and determines that another price source is considered preferable. DTE Energy has obtained an understanding of how these prices are derived, including the nature and observability of the inputs used in deriving such prices.

Other Postretirement Benefits

The Registrants participate in defined benefit plans sponsored by the LLC that provide certain other postretirement health care and life insurance benefits for employees who are eligible for these benefits. The Registrants' policy is to fund certain trusts to meet its other postretirement benefit obligations. DTE Energy did not make any contributions to these trusts during 2023 and does not anticipate making any contributions to the trusts in 2024.

DTE Energy and DTE Electric offer a defined contribution VEBA for eligible represented and non-represented employees, in lieu of defined benefit post-employment health care benefits. The Registrants allocate a fixed amount per year to an account in a defined contribution VEBA for each employee. These accounts are managed either by the Registrant (for non-represented and certain represented groups) or by the Utility Workers of America for Local 223 employees. The following table provides contributions to the VEBA in:

	2023	2022	2021
		(In millions)	
DTE Energy	**$ 16**	$ 16	$ 18
DTE Electric	**$ 7**	$ 7	$ 8

The Registrants also contribute a fixed amount to a Retiree Reimbursement Account for certain non-represented and represented retirees, spouses, and surviving spouses when the youngest of the retiree's covered household becomes eligible for Medicare Part A based on age. The amount of the annual allocation to each participant is determined by the employee's retirement date and increases each year for each eligible participant at the lower of the rate of medical inflation or 2%.

Net other postretirement credit for DTE Energy includes the following components:

	2023	2022	2021
		(In millions)	
Service cost	**$ 17**	$ 27	$ 30
Interest cost	**65**	48	46
Expected return on plan assets	**(111)**	(126)	(129)
Amortization of:			
Net actuarial loss	**10**	4	13
Prior service credit	**(19)**	(19)	(19)
Net other postretirement credit	**$ (38)**	$ (66)	$ (59)

	2023	2022
	(In millions)	
Other changes in plan assets and accumulated postretirement benefit obligation recognized in Regulatory assets and Other comprehensive income (loss)		
Net actuarial (gain) loss	**$ (17)**	$ 90
Amortization of net actuarial loss	**(10)**	(4)
Prior service cost	**—**	1
Amortization of prior service credit	**19**	19
Total recognized in Regulatory assets and Other comprehensive income (loss)	**$ (8)**	$ 106
Total recognized in net periodic benefit cost, Regulatory assets, and Other comprehensive income (loss)	**$ (46)**	$ 40

Net other postretirement credit for DTE Electric includes the following components:

	2023	2022	2021
		(In millions)	
Service cost	**$ 13**	$ 20	$ 23
Interest cost	**49**	37	35
Expected return on plan assets	**(73)**	(85)	(86)
Amortization of:			
Net actuarial loss	**1**	5	11
Prior service credit	**(14)**	(14)	(14)
Net other postretirement credit	**$ (24)**	$ (37)	$ (31)

	2023	2022
	(In millions)	
Other changes in plan assets and accumulated postretirement benefit obligation recognized in Regulatory assets		
Net actuarial (gain) loss	**$ (6)**	$ 24
Amortization of net actuarial loss	**(1)**	(5)
Amortization of prior service credit	**14**	14
Total recognized in Regulatory assets	**$ 7**	$ 33
Total recognized in net periodic benefit cost and Regulatory assets	**$ (17)**	$ (4)

The following table reconciles the obligations, assets, and funded status of the plans including amounts recorded as Accrued postretirement liability in the Registrants' Consolidated Statements of Financial Position at December 31:

	DTE Energy		DTE Electric	
	2023	2022	2023	2022
	(In millions)			
Change in accumulated postretirement benefit obligation				
Accumulated postretirement benefit obligation, beginning of year	**$ 1,293**	$ 1,702	**$ 982**	$ 1,293
Service cost	**17**	27	**13**	20
Interest cost	**65**	48	**49**	37
Actuarial (gain) loss	**(5)**	(395)	**2**	(301)
Benefits paid	**(87)**	(89)	**(64)**	(67)
Accumulated postretirement benefit obligation, end of year	**$ 1,283**	$ 1,293	**$ 982**	$ 982
Change in plan assets				
Plan assets at fair value, beginning of year	**$ 1,577**	$ 2,021	**$ 1,052**	$ 1,355
Actual return on plan assets	**124**	(359)	**81**	(239)
Benefits paid	**(87)**	(85)	**(63)**	(64)
Plan assets at fair value, end of year	**$ 1,614**	$ 1,577	**$ 1,070**	$ 1,052
Funded status	**$ 331**	$ 284	**$ 88**	$ 70
Amount recorded as:				
Noncurrent assets	**$ 633**	$ 571	**$ 378**	$ 345
Current liabilities	**(1)**	—	**—**	—
Noncurrent liabilities	**(301)**	(287)	**(290)**	(275)
	$ 331	$ 284	**$ 88**	$ 70
Amounts recognized in Accumulated other comprehensive income (loss), pre-tax				
Net actuarial gain	**$ (13)**	$ (14)	**$ —**	$ —
Amounts recognized in Regulatory assets[(a)]				
Net actuarial loss	**$ 173**	$ 201	**$ 73**	$ 80
Prior service credit	**(10)**	(29)	**(6)**	(20)
	$ 163	$ 172	**$ 67**	$ 60

(a) See Note 9 to the Consolidated Financial Statements, "Regulatory Matters."

The Registrants' postretirement benefit obligations did not change significantly for the year ended December 31, 2023. The Registrants' postretirement benefit obligations decreased in 2022 primarily due to actuarial gains driven by increases in discount rates.

The following table reflects other postretirement benefit plans with accumulated postretirement benefit obligations in excess of plan assets as of December 31:

	DTE Energy		DTE Electric	
	2023	2022	2023	2022
	(In millions)			
Accumulated postretirement benefit obligation	**$ 628**	$ 625	**$ 592**	$ 591
Fair value of plan assets	**326**	338	**302**	316
Accumulated postretirement benefit obligation in excess of plan assets	**$ 302**	$ 287	**$ 290**	$ 275

At December 31, 2023, the benefits expected to be paid, including prescription drug benefits, in each of the next five years and in the aggregate for the five fiscal years thereafter for the Registrants are as follows:

	DTE Energy	DTE Electric
	(In millions)	
2024	$ 84	$ 64
2025	88	67
2026	89	68
2027	91	70
2028	92	71
2029-2033	482	369
Total	**$ 926**	**$ 709**

Assumptions used in determining the accumulated postretirement benefit obligation and net other postretirement benefit costs of the Registrants are:

	2023	2022	2021
Accumulated postretirement benefit obligation			
Discount rate	**5.00%**	5.19%	2.91%
Health care trend rate pre- and post- 65	**7.75 / 8.25%**	6.75 / 7.25%	6.75 / 7.25%
Ultimate health care trend rate	**4.50%**	4.50%	4.50%
Year in which ultimate reached pre- and post- 65	**2035**	2035	2034
Other postretirement benefit costs			
Discount rate	**5.19%**	2.91%	2.58%
Expected long-term rate of return on plan assets	**7.20%**	6.40%	6.70%
Health care trend rate pre- and post- 65	**6.75 / 7.25%**	6.75 / 7.25%	6.75 / 7.25%
Ultimate health care trend rate	**4.50%**	4.50%	4.50%
Year in which ultimate reached pre- and post- 65	**2035**	2034	2033

The process used in determining the long-term rate of return on assets for the other postretirement benefit plans is similar to that previously described for the pension plans. As a result of this process, the Registrants have a long-term rate of return assumption for the other postretirement benefit plans of 7.60% for 2024. The Registrants believe this rate is a reasonable assumption for the long-term rate of return on plan assets given the current investment strategy.

The DTE Energy Company Master VEBA Trust employs a liability driven investment program whereby the characteristics of plan liabilities are considered when determining investment policy. Risk tolerance is established through consideration of future plan cash flows, plan funded status, and corporate financial considerations. The investment portfolio contains a diversified blend of equity, fixed income, and other investments. Furthermore, equity investments are diversified across U.S. and non-U.S. stocks and large and small market capitalizations. Fixed income investments generally include U.S. Treasuries, other governmental debt, diversified corporate bonds, bank loans, and mortgage-backed securities. Other investments are used to enhance long-term returns while improving portfolio diversification. Derivatives may be utilized in a risk controlled manner to potentially increase the portfolio beyond the market value of invested assets and/or reduce portfolio investment risk. Investment risk is measured and monitored on an ongoing basis through annual liability measurements, periodic asset/liability studies, and quarterly investment portfolio reviews.

Target allocations for the Registrants' other postretirement benefit plan assets as of December 31, 2023 are listed below:

U.S. Large Cap Equity Securities	5 %
Non-U.S. Equity Securities	4
Fixed Income Securities	61
Hedge Funds and Similar Investments	9
Private Equity and Other	21
	100 %

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The following tables provide the fair value measurement amounts for the Registrants' other postretirement benefit plan assets at December 31, 2023 and 2022[(a)]:

	December 31, 2023				December 31, 2022			
	Level 1	Level 2	Other[(b)]	Total	Level 1	Level 2	Other[(b)]	Total
	(In millions)							
DTE Energy asset category:								
Short-term Investments[(c)]	**$ 41**	**$ —**	**$ —**	**$ 41**	$ 35	$ —	$ —	$ 35
Equity Securities								
Domestic[(d)]	**—**	**—**	**76**	**76**	—	—	78	78
International[(e)]	**7**	**—**	**43**	**50**	9	—	61	70
Fixed Income Securities								
Governmental[(f)]	**242**	**31**	**—**	**273**	264	32	—	296
Corporate[(g)]	**—**	**459**	**212**	**671**	—	396	194	590
Hedge Funds and Similar Investments[(h)]	**18**	**21**	**86**	**125**	31	22	94	147
Private Equity and Other[(i)]	**—**	**—**	**378**	**378**	—	—	361	361
DTE Energy Total	**$ 308**	**$ 511**	**$ 795**	**$ 1,614**	$ 339	$ 450	$ 788	$ 1,577
DTE Electric asset category:								
Short-term Investments[(c)]	**$ 27**	**$ —**	**$ —**	**$ 27**	$ 23	$ —	$ —	$ 23
Equity Securities								
Domestic[(d)]	**—**	**—**	**48**	**48**	—	—	50	50
International[(e)]	**4**	**—**	**27**	**31**	5	—	39	44
Fixed Income Securities								
Governmental[(f)]	**161**	**21**	**—**	**182**	178	21	—	199
Corporate[(g)]	**—**	**302**	**145**	**447**	—	262	134	396
Hedge Funds and Similar Investments[(h)]	**11**	**14**	**58**	**83**	20	15	63	98
Private Equity and Other[(i)]	**—**	**—**	**252**	**252**	—	—	242	242
DTE Electric Total	**$ 203**	**$ 337**	**$ 530**	**$ 1,070**	$ 226	$ 298	$ 528	$ 1,052

(a) For a description of levels within the fair value hierarchy see Note 12 to the Consolidated Financial Statements, "Fair Value."
(b) Amounts represent assets valued at NAV as a practical expedient for fair value.
(c) This category predominantly represents certain short-term fixed income securities and money market investments that are managed in separate accounts or commingled funds. Pricing for investments in this category is obtained from quoted prices in actively traded markets.
(d) This category represents portfolios of large, medium and small capitalization domestic equities. Investments in this category include exchange-traded securities held in a commingled fund classified as NAV assets.
(e) This category primarily consists of portfolios of non-U.S. developed and emerging market equities. Investments in this category include exchange-traded securities for which unadjusted quoted prices can be obtained and exchange-traded securities held in a commingled fund classified as NAV assets.
(f) This category includes U.S. Treasuries, bonds and other governmental debt. Pricing for investments in this category is obtained from quoted prices in actively traded markets and quotations from broker or pricing services.
(g) This category primarily consists of corporate bonds from diversified industries, bank loans, and mortgage backed securities. Pricing for investments in this category is obtained from quotations from broker or pricing services. Non-exchange traded securities and exchange-traded securities held in commingled funds are classified as NAV assets.
(h) This category utilizes a diversified group of strategies that attempt to capture uncorrelated sources of return and includes publicly traded mutual funds, insurance-linked and asset-backed securities, commingled funds and limited partnership funds. Pricing for mutual funds in this category is obtained from quoted prices in actively traded markets. Pricing for insurance-linked and asset-backed securities is obtained from quotations from broker or pricing services. Commingled funds and limited partnership funds are classified as NAV assets.
(i) This category includes a diversified group of funds and strategies that primarily invests in private equity partnerships. This category also includes investments in private real estate and private debt. All investments in this category are classified as NAV assets.

The DTE Energy Company Master VEBA Trust holds debt and equity securities directly and indirectly through commingled funds. Exchange-traded debt and equity securities held directly, as well as publicly traded commingled funds, are valued using quoted market prices in actively traded markets. Non-publicly traded commingled funds hold exchange-traded equity or debt securities and are valued based on NAVs. Non-exchange traded fixed income securities are valued by the trustee based upon quotations available from brokers or pricing services. A primary price source is identified by asset type, class, or issue for each security. The trustee monitors prices supplied by pricing services and may use a supplemental price source or change the primary price source of a given security if the trustee challenges an assigned price and determines that another price source is considered preferable. The Registrants have obtained an understanding of how these prices are derived, including the nature and observability of the inputs used in deriving such prices.

Defined Contribution Plans

The Registrants also sponsor defined contribution retirement savings plans. Participation in one of these plans is available to substantially all represented and non-represented employees. For substantially all employees, the Registrants match employee contributions up to certain predefined limits based upon eligible compensation and the employee's contribution rate. Additionally, for eligible represented and non-represented employees who do not participate in the Pension Plans, the Registrants contribute amounts equivalent to 4% (8% for certain DTE Gas represented employees) of an employee's eligible compensation to the employee's defined contribution retirement savings plan. For DTE Energy, the cost of these plans was $75 million, $73 million, and $70 million for the years ended December 31, 2023, 2022, and 2021, respectively. For DTE Electric, the cost of these plans was $35 million for the years ended December 31, 2023 and 2022 and $34 million for the year ended December 31, 2021.

NOTE 21 — STOCK-BASED COMPENSATION

DTE Energy's stock incentive program permits the grant of incentive stock options, non-qualifying stock options, stock awards, performance shares, and performance units to employees and members of its Board of Directors. As a result of a stock award, a settlement of an award of performance shares, or by exercise of a participant's stock option, DTE Energy may deliver common stock from its authorized but unissued common stock and/or from outstanding common stock acquired by or on behalf of DTE Energy in the name of the participant. Key provisions of the stock incentive program are:

- Authorized limit is 20,162,716 shares of common stock;
- Prohibits the grant of a stock option with an exercise price that is less than the fair market value of DTE Energy's stock on the date of the grant; and
- Imposes the following award limits to a single participant in a single calendar year, (1) options for more than 500,000 shares of common stock; (2) stock awards for more than 150,000 shares of common stock; (3) performance share awards for more than 300,000 shares of common stock (based on the maximum payout under the award); or (4) more than 1,000,000 performance units, which have a face amount of $1.00 each.

DTE Energy records compensation expense at fair value over the vesting period for all awards it grants.

The following table summarizes the components of stock-based compensation for DTE Energy:

	2023	2022	2021
		(In millions)	
Stock-based compensation expense	**$ 48**	$ 62	$ 71
Tax benefit	**$ 9**	$ 11	$ 13

Restricted Stock Awards

Stock awards granted under the plan are restricted for varying periods, generally for three years. Participants have all rights of a shareholder with respect to a stock award, including the right to receive dividends and vote the shares. Prior to vesting in stock awards, the participant: (i) may not sell, transfer, pledge, exchange, or otherwise dispose of shares; (ii) shall not retain custody of the share certificates; and (iii) will deliver to DTE Energy a stock power with respect to each stock award upon request.

The stock awards are recorded at cost that approximates fair value on the date of grant. The cost is amortized to compensation expense over the vesting period.

The fair value of awards vested were not material for the years ended December 31, 2023, 2022, and 2021. Compensation cost charged against income was $14 million, $15 million, and $14 million for the years ended December 31, 2023, 2022, and 2021, respectively.

Performance Share Awards

Performance shares awarded under the plan are for a specified number of shares of DTE Energy common stock that entitle the holder to receive a cash payment, shares of DTE Energy common stock, or a combination thereof. The final value of the award is determined by the achievement of certain performance objectives and market conditions. The awards vest at the end of a specified period, usually three years. Awards granted in 2023, 2022, and 2021 were primarily deemed to be equity awards. The DTE Energy stock price and number of probable shares attributable to market conditions for such equity awards are fair valued only at the grant date. DTE Energy accounts for performance share awards by accruing compensation expense over the vesting period based on: (i) the number of shares expected to be paid which is based on the probable achievement of performance objectives; and (ii) the closing stock price market value. The settlement of the award is based on the closing price at the settlement date.

DTE Energy recorded activity relating to performance share awards as follows:

	2023	2022	2021
	(In millions, except per share amounts)		
Weighted average grant date fair value of awards granted (per share)	**$ 112.73**	$ 120.25	$ 118.43
Awards settled in cash[(a)]	**$ 9**	$ 10	$ 12
Awards settled in stock[(a)]	**$ 59**	$ 72	$ 74
Compensation expense	**$ 34**	$ 47	$ 58

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(a) Sum of awards settled in cash and stock approximates the intrinsic value of the awards.

During the vesting period, the recipient of a performance share award has no shareholder rights. During the period beginning on the date the performance shares are awarded and ending on the certification date of the performance objectives, the number of performance shares awarded will be increased, assuming full dividend reinvestment at the fair market value on the dividend payment date. The cumulative number of performance shares will be adjusted to determine the final payment based on the performance objectives achieved. Performance share awards are nontransferable and are subject to risk of forfeiture.

The following table summarizes DTE Energy's performance share activity for the period ended December 31, 2023:

	Performance Shares	Weighted Average Grant Date Fair Value
Balance at December 31, 2022	1,018,057	$ 120.91
Grants	347,242	$ 112.73
Forfeitures	(65,632)	$ 112.51
Payouts	(309,174)	$ 112.30
Balance at December 31, 2023	**990,493**	$ 121.29

Unrecognized Compensation Costs

As of December 31, 2023, DTE Energy's total unrecognized compensation cost related to non-vested stock incentive plan arrangements and the weighted average recognition period was as follows:

	Unrecognized Compensation Cost	Weighted Average to be Recognized
	(In millions)	(In years)
Stock awards	$ 20	1.39
Performance shares	40	1.08
	$ 60	1.18

Allocated Stock-Based Compensation

DTE Electric received an allocation of costs from DTE Energy associated with stock-based compensation. DTE Electric's allocation for 2023, 2022, and 2021 for stock-based compensation expense was $31 million, $40 million, and $45 million, respectively.

NOTE 22 — SEGMENT AND RELATED INFORMATION

DTE Energy sets strategic goals, allocates resources, and evaluates performance based on the following structure:

Electric segment consists principally of DTE Electric, which is engaged in the generation, purchase, distribution, and sale of electricity to approximately 2.3 million residential, commercial, and industrial customers in southeastern Michigan.

Gas segment consists principally of DTE Gas, which is engaged in the purchase, storage, transportation, distribution, and sale of natural gas to approximately 1.3 million residential, commercial, and industrial customers throughout Michigan and the sale of storage and transportation capacity.

DTE Vantage is comprised primarily of renewable energy projects that sell electricity and pipeline-quality gas and projects that deliver custom energy solutions to industrial, commercial, and institutional customers. DTE Vantage formerly included projects that produced reduced emissions fuel; however, these projects were closed as planned in 2022 upon REF facilities exhausting their eligibility for generating production tax credits.

Energy Trading consists of energy marketing and trading operations.

Corporate and Other includes various holding company activities, holds certain non-utility debt, and holds certain investments, including funds supporting regional development and economic growth.

On July 1, 2021, DTE Energy completed the separation of DT Midstream, which was comprised of the former Gas Storage and Pipelines segment and also certain holding company activity within the Corporate and Other segment. Amounts relating to DT Midstream have been classified as discontinued operations, and Gas Storage and Pipelines is no longer a reportable segment of DTE Energy. Refer to Note 4 to the Consolidated Financial Statements, “Discontinued Operations,” for additional information.

Inter-segment billing for goods and services exchanged between segments is based upon tariffed or market-based prices of the provider. Such billing primarily consists of power sales, sale and transportation of natural gas, and renewable natural gas sales in the segments below, as well as charges from Electric to other segments for use of the shared capital assets of DTE Electric. For 2021, inter-segment billing also included the sale of reduced emissions fuel at DTE Vantage.

	Year Ended December 31,		
	2023	2022	2021
	(In millions)		
Electric[(a)]	**$ 72**	$ 71	$ 64
Gas	**17**	13	14
DTE Vantage	**68**	78	575
Energy Trading	**85**	102	56
Corporate and Other	**—**	—	2
	$ 242	$ 264	$ 711

(a) Inter-segment billing for the Electric segment includes $3 million, $6 million, and $4 million relating to Non-utility operations for the years ended December 31, 2023, 2022, and 2021, respectively.

All inter-segment transactions and balances are eliminated in consolidation for DTE Energy. Centrally incurred costs such as labor and overheads are assigned directly to DTE Energy's business segments or allocated based on various cost drivers, depending on the nature of service provided.

The federal income tax provisions or benefits of DTE Energy's subsidiaries are determined on an individual company basis and recognize the tax benefit of tax credits and net operating losses, if applicable. The state and local income tax provisions of the utility subsidiaries are also determined on an individual company basis and recognize the tax benefit of various tax credits and net operating losses, if applicable. The subsidiaries record federal, state, and local income taxes payable to or receivable from DTE Energy based on the federal, state, and local tax provisions of each company.

The Reclassifications and Eliminations group below also includes the reclassification of deferred tax assets and prepaid pension assets, which are netted against deferred tax liabilities and accrued pension liabilities, respectively, for presentation on the DTE Energy Consolidated Statements of Financial Position. Refer to Note 10 to the Consolidated Financial Statements, "Income Taxes," for additional information regarding the Registrants' deferred taxes and to Note 20, "Retirement Benefits and Trusteed Assets," for additional information regarding pension plans.

Financial data of DTE Energy's business segments follows:

	Electric	Gas	DTE Vantage	Energy Trading	Corporate and Other	Reclassifications and Eliminations	Total
				(In millions)			
2023							
Operating Revenues — Utility operations	$ 5,804	1,748	—	—	—	(86)	**$ 7,466**
Operating Revenues — Non-utility operations	$ 14	—	809	4,612	—	(156)	**$ 5,279**
Depreciation and amortization	$ 1,340	209	53	4	—	—	**$ 1,606**
Interest expense	$ 432	102	15	18	270	(46)	**$ 791**
Interest income	$ (20)	(9)	(32)	(9)	(33)	46	**$ (57)**
Equity earnings (losses) of equity method investees	$ —	1	7	—	(5)	—	**$ 3**
Income Tax Expense (Benefit)	$ 78	93	(22)	112	(92)	—	**$ 169**
Net Income (Loss) Attributable to DTE Energy Company	$ 772	294	153	336	(158)	—	**$ 1,397**
Investment in equity method investees	$ 5	16	118	—	27	—	**$ 166**
Capital expenditures and acquisitions	$ 3,128	746	57	3	—	—	**$ 3,934**
Goodwill	$ 1,208	743	25	17	—	—	**$ 1,993**
Total Assets	$ 32,292	7,722	1,122	1,166	4,150	(1,697)	**$ 44,755**

	Electric	Gas	DTE Vantage	Energy Trading	Corporate and Other	Reclassifications and Eliminations	Total
				(In millions)			
2022							
Operating Revenues — Utility operations	$ 6,397	1,924	—	—	—	(78)	$ 8,243
Operating Revenues — Non-utility operations	$ 15	—	848	10,308	—	(186)	$ 10,985
Depreciation and amortization	$ 1,218	192	52	5	1	—	$ 1,468
Interest expense	$ 372	91	15	17	210	(30)	$ 675
Interest income	$ (8)	(8)	(28)	(6)	(26)	30	$ (46)
Equity earnings of equity method investees	$ —	2	—	—	(16)	—	$ (14)
Income Tax Expense (Benefit)	$ 25	88	18	(31)	(71)	—	$ 29
Net Income (Loss) Attributable to DTE Energy Company	$ 956	272	92	(92)	(145)	—	$ 1,083
Investment in equity method investees	$ 6	15	111	—	33	—	$ 165
Capital expenditures and acquisitions	$ 2,620	693	62	3	—	—	$ 3,378
Goodwill	$ 1,208	743	25	17	—	—	$ 1,993
Total Assets	$ 30,342	7,321	1,077	1,385	4,409	(1,851)	$ 42,683

	Electric	Gas	DTE Vantage	Energy Trading	Corporate and Other[(a)]	Reclassifications and Eliminations	Total from Continuing Operations	Discontinued Operations	Total
					(In millions)				
2021									
Operating Revenues — Utility operations	$ 5,809	1,553	—	—	—	(74)	$ 7,288		
Operating Revenues — Non-utility operations	$ 12	—	1,482	6,831	2	(651)	$ 7,676		
Depreciation and amortization	$ 1,122	177	71	6	1	—	$ 1,377		
Interest expense	$ 338	81	28	5	270	(92)	$ 630		
Interest income	$ —	(6)	(23)	(1)	(84)	92	$ (22)		
Equity earnings of equity method investees	$ —	1	8	—	29	—	$ 38		
Income Tax Expense (Benefit)	$ 104	38	(31)	(27)	(214)	—	$ (130)		
Net Income (Loss) Attributable to DTE Energy Company	$ 864	214	168	(83)	(367)	—	$ 796	111	$ 907
Investment in equity method investees	$ 6	13	118	—	50	—	$ 187		
Capital expenditures and acquisitions	$ 3,016	621	69	6	—	—	$ 3,712	60	$ 3,772
Goodwill	$ 1,208	743	25	17	—	—	$ 1,993		
Total Assets	$ 28,524	6,729	983	1,174	4,281	(1,972)	$ 39,719	—	$ 39,719

(a) Corporate and Other results include significant one-time items resulting from the separation of DT Midstream, including a loss on debt extinguishment of $376 million following the settlement of intercompany borrowings with DT Midstream and optional redemption of DTE Energy long-term debt. DTE Energy also recognized a tax benefit of $85 million for the remeasurement of state deferred tax liabilities following the separation of DT Midstream.

Reclassifications and Eliminations include $14 million of Operating Revenues — Non-utility operations for the year ended December 31, 2021 for eliminations related to DTE Energy's prior Gas Storage and Pipelines segment that remain in continuing operations. Eliminations for these revenues are offset by related cost eliminations and have no impact on DTE Energy net income.

NOTE 23 — RELATED PARTY TRANSACTIONS

DTE Electric has agreements with affiliated companies to buy and sell power, and for the purchase and transportation of fuel for use at its natural gas-fired combined cycle plant and other generation facilities. DTE Electric also has agreements with certain DTE Energy affiliates where it charges the affiliates for their use of the shared capital assets of DTE Electric. Various other corporate support expenses are accumulated by a shared services company and charged to various subsidiaries of DTE Energy, including DTE Electric.

The following is a summary of DTE Electric's transactions with affiliated companies:

	2023	2022	2021
		(In millions)	
Revenues and Other Income			
Energy sales	**$ 11**	$ 8	$ 9
Other services and interest	**$ 3**	$ —	$ 2
Shared capital assets	**$ 58**	$ 57	$ 49
Costs			
Fuel and purchased power	**$ 50**	$ 58	$ 13
Other services and interest	**$ 2**	$ 1	$ —
Corporate expenses	**$ 299**	$ 379	$ 391
Other			
Dividends declared	**$ 1,002**	$ 763	$ 588
Dividends paid	**$ 1,002**	$ 763	$ 588
Capital contribution from DTE Energy	**$ 759**	$ 600	$ 555

DTE Electric's Accounts receivable and Accounts payable related to Affiliates are payable upon demand and are generally settled in cash within a monthly business cycle. Notes receivable and Short-term borrowings related to affiliates are subject to a credit agreement with DTE Energy whereby short-term excess cash or cash shortfalls are remitted to or funded by DTE Energy. This credit arrangement involves the charge and payment of interest based on monthly commercial paper rates. The weighted average interest rate for DTE Electric's affiliate borrowings was 5.6% and 4.4% at December 31, 2023 and 2022, respectively. Refer to DTE Electric's Consolidated Statements of Financial Position for affiliate balances at December 31, 2023 and 2022.

DTE Electric made charitable contributions to the DTE Energy Foundation of $2 million for the year ended December 31, 2021. There were no contributions for the years ended December 31, 2023 and 2022. The DTE Energy Foundation is a non-consolidated not-for-profit private foundation, the purpose of which is to contribute to and assist charitable organizations.

DTE Electric records federal, state, and local income taxes payable to or receivable from DTE Energy based on its federal, state, and local tax provisions. Refer to Note 10 to the Consolidated Financial Statements, "Income Taxes," for additional information. For a discussion of other related party transactions impacting DTE Electric, see Notes 20 and 21 to the Consolidated Financial Statements, "Retirement Benefits and Trusteed Assets" and "Stock-Based Compensation," respectively.

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

None.

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

See Item 8. Financial Statements and Supplementary Data for management's evaluation of the Registrants' disclosure controls and procedures, their report on internal control over financial reporting, and their conclusion on changes in internal control over financial reporting.

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

Insider Trading Arrangements and Policies

During the quarter ended December 31, 2023, no DTE Energy directors or officers have adopted or terminated any Rule 10b5-1 trading arrangements or non-Rule 10b5-1 trading arrangements.

Other Information

None.

Item 9C. D*isclosure Regarding Foreign Jurisdictions that Prevent Inspections*

Not applicable

Part III

Information required of DTE Energy by Part III (Items 10, 11, 12, 13, and 14) of this Form 10-K is incorporated by reference from DTE Energy's definitive Proxy Statement for its 2024 Annual Meeting of Shareholders to be held May 2, 2024. The Proxy Statement will be filed with the SEC, pursuant to Regulation 14A, not later than 120 days after the end of DTE Energy's fiscal year covered by this report on Form 10-K, all of which information is hereby incorporated by reference in, and made part of, this Form 10-K.

Information required of DTE Electric by Part III (Items 10, 11, 12, and 13) of this Form 10-K is omitted per General Instruction I(2)(c) of Form 10-K for wholly-owned subsidiaries (reduced disclosure format).

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

Item 11. *Executive Compensation*

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

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

Item 14. *Principal Accountant Fees and Services*

DTE Electric

The following table presents fees for professional services rendered by PricewaterhouseCoopers LLP (PwC) for the audit of DTE Electric's consolidated annual financial statements for the years ended December 31, 2023 and 2022 and fees billed for other services rendered by PwC during those periods.

	2023	2022
Audit fees[(a)]	**$ 1,531,000**	$ 1,535,000
Audit-related fees[(b)]	**237,000**	267,000
Total	**$ 1,768,000**	$ 1,802,000

(a) Represents the aggregate fees for the audits of DTE Electric's consolidated financial statements included in the Annual Reports on Form 10-K, reviews of the consolidated financial statements included in the Quarterly Reports on Form 10-Q, and audit services provided in connection with certain regulatory filings and debt issuances. Audit fees are presented on an Audit Year basis in accordance with SEC guidelines and include an estimate of fees incurred for the most recent Audit Year.
(b) Represents the aggregate fees billed for audit-related services and various attest services.

The above listed fees were pre-approved by the DTE Energy Audit Committee. Prior to engagement, the DTE Energy Audit Committee pre-approves these services by category of service. The DTE Energy Audit Committee may delegate to the chair of the Audit Committee, or to one or more other designated members of the Audit Committee, the authority to grant pre-approvals of all permitted services or classes of these permitted services to be provided by the independent auditor. The decision of the designated member to pre-approve a permitted service will be reported to the DTE Energy Audit Committee at the next scheduled meeting.

Part IV

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

A. The following documents are filed as part of this Annual Report on Form 10-K.

(a) Consolidated Financial Statements. See "Item 8 — Financial Statements and Supplementary Data."

(b) Financial statement schedules are omitted because they are either not required or because the required information is included in the Consolidated Financial Statements and related notes.

(c) Exhibits.

Exhibit Number	Description	DTE Energy	DTE Electric
	(i) Exhibits filed herewith:		
10.1	DTE Energy Company Long-Term Incentive Plan Amended and Restated Effective May 20, 2021, as further amended effective October 25, 2023	X	
21.1	Subsidiaries of DTE Energy	X	
23.1	Consent of PricewaterhouseCoopers LLP	X	
23.2	Consent of PricewaterhouseCoopers LLP		X
31.1	Chief Executive Officer Section 302 Form 10-K Certification of Periodic Report	X	
31.2	Chief Financial Officer Section 302 Form 10-K Certification of Periodic Report	X	
31.3	Chief Executive Officer Section 302 Form 10-K Certification of Periodic Report		X
31.4	Chief Financial Officer Section 302 Form 10-K Certification of Periodic Report		X
97.1	Clawback Policy of DTE Energy Company	X	
101.INS	XBRL Instance Document	X	X
101.SCH	XBRL Taxonomy Extension Schema	X	X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase	X	X
101.DEF	XBRL Taxonomy Extension Definition Database	X	X
101.LAB	XBRL Taxonomy Extension Label Linkbase	X	X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase	X	X
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)	X	X
	(ii) Exhibits furnished herewith:		
32.1	Chief Executive Officer Section 906 Form 10-K Certification of Periodic Report	X	
32.2	Chief Financial Officer Section 906 Form 10-K Certification of Periodic Report	X	
32.3	Chief Executive Officer Section 906 Form 10-K Certification of Periodic Report		X
32.4	Chief Financial Officer Section 906 Form 10-K Certification of Periodic Report		X
	(iii) Exhibits incorporated by reference:		
Certain exhibits listed below refer to "The Detroit Edison Company" and "Michigan Consolidated Gas Company" and were effective prior to the change to DTE Electric Company and DTE Gas Company, respectively, effective January 1, 2013.			
3(a)	Amended Bylaws of DTE Energy Company, as amended through December 6, 2023 (Exhibit 3.1 to DTE Energy's Form 8-K filed December 8, 2023).	X	

Exhibit Number	Description	DTE Energy	DTE Electric
3(b)	Amended and Restated Articles of Incorporation of DTE Energy Company, dated December 13, 1995 and as amended from time to time (Exhibit 3-1 to DTE Energy's Form 8-K dated May 6, 2010).	X	
3(c)	Articles of Incorporation of DTE Electric Company, as amended effective January 1, 2013. (Exhibit 3-1 to DTE Electric's Form 8-K filed January 2, 2013).		X
3(d)	Bylaws of The Detroit Edison Company, as amended through September 22, 1999. (Exhibit 3-14 to DTE Electric's Form 10-Q for the quarter ended September 30, 1999).		X
4(a)	Amended and Restated Indenture, dated as of April 9, 2001, between DTE Energy Company and The Bank of New York, as trustee (Exhibit 4.1 to Registration Statement on Form S-3 (File No. 333-58834)) and indentures supplemental thereto, dated as of dates indicated below, and filed as exhibits to the filings set forth below:	X	
	Supplemental Indenture, dated as of September 1, 2016, to the Amended and Restated Indenture, dated as of April 9, 2001, by and between DTE Energy Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4.1 to DTE Energy's Form 8-K dated October 5, 2016). (2016 Series C)	X	
	Supplemental Indenture, dated as of October 1, 2016, to the Amended and Restated Indenture, dated as of April 9, 2001, by and between DTE Energy Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4.2 to DTE Energy's Form 8-K dated October 5, 2016). (2016 Series E)	X	
	Supplemental Indenture, dated as of March 1, 2017 to the Amended and Restated Indenture, dated as of April 9, 2001, by and between DTE Energy Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4-298 to DTE Energy's Form 10-Q for the quarter ended March 31, 2017). (2017 Series A)	X	
	Supplemental Indenture, dated as of November 1, 2017, to the Amended and Restated Indenture, dated as of April 9, 2001, by and between DTE Energy Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4.1 to DTE Energy's Form 8-K dated November 17, 2017). (2017 Series E)	X	
	Supplemental Indenture dated as of June 1, 2019, to the Amended and Restated Indenture, dated as of April 9, 2001, between DTE Energy Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4-306 to DTE Energy's Form 10-Q for the quarter ended June 30, 2019). (2019 Series C)	X	
	Supplemental Indenture, dated as of November 1, 2019, to the Amended and Restated Indenture, dated as of April 9, 2001, by and between DTE Energy Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee creating the Remarketable Notes (Exhibit 4.1 to DTE Energy's Form 8-K dated November 1, 2019). (2019 Series F)	X	
	Supplemental Indenture dated as of August 1, 2022, to the Amended and Restated Indenture dated as of April 9, 2001 and amending the Series F Supplemental Indenture dated as of November 1, 2019, by and between DTE Energy Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4.1 to DTE Energy's Form 10-Q for the quarter ended September 30, 2022) (2019 Series F)	X	
	Supplemental Indenture dated as of November 1, 2019, to the Amended and Restated Indenture, dated as of April 9, 2001, between DTE Energy Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4-310 to DTE Energy's Form 10-K for the year ended December 31, 2019). (2019 Series H)	X	
	Supplemental Indenture dated as of August 1, 2020, to the Amended and Restated Indenture, dated as of April 9, 2001, between DTE Energy Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4-318 to DTE Energy's Form 10-Q for the quarter ended September 30, 2020). (2020 Series F)	X	
	Supplemental Indenture, dated as of September 1, 2020, to the Amended and Restated Indenture, dated as of April 9, 2001, by and between DTE Energy Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4.1 to DTE Energy's Form 8-K dated October 1, 2020). (2020 Series G)	X	

Exhibit Number	Description	DTE Energy	DTE Electric
	Supplemental Indenture, dated as of November 1, 2021, to the Amended and Restated Indenture, dated as of April 9, 2001, by and between DTE Energy Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4.1 to DTE Energy's Form 8-K dated November 24, 2021). (2021 Series E)	X	
	Supplemental Indenture dated as of May 1, 2023, to the Amended and Restated Indenture, dated as of April 9, 2001, by and between DTE Energy Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee. (Exhibit 4.1 to DTE Energy's Form 10-Q for the quarter ended June 30, 2023). (2023 Series C)	X	
	Description of the Company's Common Stock (Exhibit 4-311 to DTE Energy's Form 10-K for the year ended December 31, 2019)	X	
	Description of the Company's 2017 Series E 5.25% Junior Subordinated Debentures due 2077 (Exhibit 4.1 to DTE Energy's Form 10-K for the year ended December 31, 2021)	X	
	Description of the Company's 2020 Series G 4.375% Junior Subordinated Debentures due 2080 (Exhibit 4.321 to DTE Energy's Form 10-K for the year ended December 31, 2020)	X	
	Description of the Company's 2021 Series E 4.375% Junior Subordinated Debentures due 2081 (Exhibit 4.2 to DTE Energy's Form 10-K for the year ended December 31, 2022)	X	
4(b)	Mortgage and Deed of Trust, dated as of October 1, 1924, between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit B-1 to Detroit Edison's Registration Statement on Form A-2 (File No. 2-1630)) and indentures supplemental thereto, dated as of dates indicated below, and filed as exhibits to the filings set forth below:	X	X
	Supplemental Indenture, dated as of December 1, 1940, to the Mortgage and Deed of Trust, dated as of October 1, 1924, between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit B-14 to Detroit Edison's Registration Statement on Form A-2 (File No. 2-4609)). (amendment)	X	X
	Supplemental Indenture, dated as of September 1, 1947, to the Mortgage and Deed of Trust, dated as of October 1, 1924, between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit B-20 to Detroit Edison's Registration Statement on Form S-1 (File No. 2-7136)). (amendment)	X	X
	Supplemental Indenture, dated as of March 1, 1950, to the Mortgage and Deed of Trust, dated as of October 1, 1924, between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit B-22 to Detroit Edison's Registration Statement on Form S-1 (File No. 2-8290)). (amendment)	X	X
	Supplemental Indenture, dated as of November 15, 1951, to the Mortgage and Deed of Trust, dated as of October 1, 1924, between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit B-23 to Detroit Edison's Registration Statement on Form S-1 (File No. 2-9226)). (amendment)	X	X
	Supplemental Indenture, dated as of August 15, 1957, to the Mortgage and Deed of Trust, dated as of October 1, 1924, between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 3-B-30 to Detroit Edison's Form 8-K dated September 11, 1957). (amendment)	X	X
	Supplemental Indenture, dated as of December 1, 1966, to the Mortgage and Deed of Trust, dated as of October 1, 1924, between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 2-B-32 to Detroit Edison's Registration Statement on Form S-9 (File No. 2-25664)). (amendment)	X	X
	Supplemental Indenture, dated as of April 26, 1993, to the Mortgage and Deed of Trust, dated as of October 1, 1924, between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4-215 to Detroit Edison's Form 10-K for the year ended December 31, 2000). (amendment)	X	X

Exhibit Number	Description	DTE Energy	DTE Electric
	Supplemental Indenture, dated as of September 17, 2002, to the Mortgage and Deed of Trust, dated as of October 1, 1924, between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4.1 to Detroit Edison's Registration Statement on Form S-3 (File No. 333-100000)). (amendment and successor trustee)	X	X
	Supplemental Indenture, dated as of October 15, 2002, to the Mortgage and Deed of Trust, dated as of October 1, 1924, between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4-230 to Detroit Edison's Form 10-Q for the quarter ended September 30, 2002). (2002 Series B)	X	X
	Supplemental Indenture, dated as of April 1, 2005, to the Mortgage and Deed of Trust, dated as of October 1, 1924, between Detroit Edison and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4.3 to Detroit Edison's Registration Statement on Form S-4 (File No. 333-123926)). (2005 Series BR)	X	X
	Supplemental Indenture, dated as of September 30, 2005, to the Mortgage and Deed of Trust, dated as of October 1, 1924, between Detroit Edison and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4-248 to Detroit Edison's Form 10-Q for the quarter ended September 30, 2005). (2005 Series E)	X	X
	Supplemental Indenture, dated as of May 15, 2006, to the Mortgage and Deed of Trust, dated as of October 1, 1924, between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4-250 to Detroit Edison's Form 10-Q for the quarter ended June 30, 2006). (2006 Series A)	X	X
	Supplemental Indenture, dated as of December 1, 2007, to the Mortgage and Deed of Trust, dated as of October 1, 1924, between The Detroit Edison Company and J.P. Morgan Trust Company, National Association, as successor trustee (Exhibit 4.2 to Detroit Edison's Form 8-K dated December 18, 2007). (2007 Series A)	X	X
	Supplemental Indenture, dated as of May 1, 2008 to Mortgage and Deed of Trust, dated as of October 1, 1924 between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4-253 to Detroit Edison's Form 10-Q for the quarter ended June 30, 2008). (2008 Series ET)	X	X
	Supplemental Indenture, dated as of August 15, 2011, to the Mortgage and Deed of Trust, dated as of October 1, 1924, between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A. as successor trustee (Exhibit 4-277 to Detroit Edison's Form 10-Q for the quarter ended September 30, 2011). (2011 Series E and F)	X	X
	Supplemental Indenture, dated as of September 1, 2011, to the Mortgage and Deed of Trust, dated as of October 1, 1924, between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A. as successor trustee (Exhibit 4-278 to Detroit Edison's Form 10-Q for the quarter ended September 30, 2011). (2011 Series H)	X	X
	Supplemental Indenture dated as of June 20, 2012, to the Mortgage and Deed of Trust, dated as of October 1, 1924, between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4-279 to Detroit Edison's Form 10-Q for the quarter ended June 30, 2012). (2012 Series B)	X	X
	Supplemental Indenture, dated as of March 15, 2013, to the Mortgage and Deed of Trust dated as of October 1, 1924, between DTE Electric Company and The Bank of New York Mellon, N.A., as successor trustee (Exhibit 4-280 to DTE Electric Form 10-Q for the quarter ended March 31, 2013). (2013 Series A)	X	X
	Supplemental Indenture, dated as of August 1, 2013, to the Mortgage and Deed of Trust, dated as of October 1, 1924, between DTE Electric Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4-281 to DTE Electric’s Form 10-Q for the quarter ended September 30, 2013). (2013 Series B)	X	X
	Supplemental Indenture, dated as of June 1, 2014, to the Mortgage and Deed of Trust dated as of October 1, 1924, between DTE Electric Company and The Bank of New York Mellon, N.A., as successor trustee (Exhibit 4-282 to DTE Electric's Form 10-Q for the quarter ended June 30, 2014). (2014 Series A and B)	X	X

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Exhibit Number	Description	DTE Energy	DTE Electric
	Supplemental Indenture, dated as of July 1, 2014, to the Mortgage and Deed of Trust dated as of October 1, 1924, between DTE Electric Company and The Bank of New York Mellon, N.A., as successor trustee (Exhibit 4-283 to DTE Electric's Form 10-Q for the quarter ended June 30, 2014). (2014 Series D and E)	X	X
	Supplemental Indenture, dated as of March 1, 2015, to the Mortgage and Deed of Trust dated as of October 1, 1924, between DTE Electric Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee. (Exhibit 4-289 to DTE Electric's Form 10-Q for the quarter ended March 31, 2015). (2015 Series A)	X	X
	Supplemental Indenture, dated as of May 1, 2016, to the Mortgage and Deed of Trust dated as of October 1, 1924, between DTE Electric Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee. (Exhibit 4-293 to DTE Electric's Form 10-Q for the quarter ended June 30, 2016). (2016 Series A)	X	X
	Supplemental Indenture, dated as of August 1, 2017, to the Mortgage and Deed of Trust dated as of October 1, 1924, between DTE Electric Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee. (Exhibit 10-107 to DTE Electric's Form 10-Q for the quarter ended September 30, 2017). (2017 Series B)	X	X
	Supplemental Indenture dated as of May 1, 2018, to the Mortgage and Deed of Trust, dated as of October 1, 1924, between DTE Electric Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4-299 to DTE Energy's Form 10-Q for the quarter ended June 30, 2018). (2018 Series A)	X	X
	Supplemental Indenture dated as of February 1, 2019, to the Mortgage and Deed of Trust, dated as of October 1, 1924, between DTE Electric Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4-70 to DTE Energy's Form S-3 filed on April 1, 2019). (2019 Series A)	X	X
	Supplemental Indenture dated as of February 1, 2020, to the Mortgage and Deed of Trust dated as of October 1, 1924, between DTE Electric Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4-314 to DTE Energy's Form 10-Q for the quarter ended March 31, 2020). (2020 Series A and B)	X	X
	Supplemental Indenture dated as of April 1, 2020, to the Mortgage and Deed of Trust dated as of October 1, 1924, between DTE Electric Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4-315 to DTE Energy's Form 10-Q for the quarter ended March 31, 2020). (2020 Series C)	X	X
	Supplemental Indenture dated as of March 1, 2021, to the Mortgage and Deed of Trust dated as of October 1, 1924, between DTE Electric Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4-323 to DTE Energy's Form 10-Q for the quarter ended March 31, 2021). (2021 Green Series A and B)	X	X
	Supplemental Indenture dated as of February 1, 2022, to the Mortgage and Deed of Trust dated as of October 1, 1924, between DTE Electric Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4.1 to DTE Energy's and DTE Electric's Form S-3 filed April 8, 2022) (2022 Series A and Green Series B)	X	X
	Supplemental Indenture dated as of March 1, 2023, to the Mortgage and Deed of Trust dated as of October 1, 1924, between DTE Electric Company and The Bank of New York Mellon Trust Company, N.A., as trustee (Exhibit 4.1 to DTE Energy's Form 10-Q for the quarter ended March 31, 2023). (2023 Series A and B)	X	X
	Supplemental Indenture dated as of May 1, 2023 to Mortgage and Deed of Trust dated as of October 1, 1924, between DTE Electric Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4.2 to DTE Energy's Form 10-Q for the quarter ended June 30, 2023). (2023 Series DT)	X	X
4(c)	Collateral Trust Indenture, dated as of June 30, 1993, between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4-152 to Detroit Edison's Registration Statement (File No. 33-50325)) and indentures supplemental thereto, dated as of dates indicated below, and filed as exhibits to the filings set forth below:	X	X

Exhibit Number	Description	DTE Energy	DTE Electric
	Tenth Supplemental Indenture, dated as of October 23, 2002, to the Collateral Trust Indenture, dated as of June 30, 1993, between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4-231 to Detroit Edison's Form 10-Q for the quarter ended September 30, 2002). (6.35% Senior Notes due 2032)	X	X
	Sixteenth Supplemental Indenture, dated as of April 1, 2005, to the Collateral Trust Indenture, dated as of June 30, 1993, between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4.1 to Detroit Edison's Registration Statement on Form S-4 (File No. 333-123926)). (2005 Series BR 5.45% Senior Notes due 2035)	X	X
	Nineteenth Supplemental Indenture, dated as of September 30, 2005, to the Collateral Trust Indenture, dated as of June 30, 1993, between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4-247 to Detroit Edison's Form 10-Q for the quarter ended September 30, 2005). (2005 Series E 5.70% Senior Notes due 2037)	X	X
	Twentieth Supplemental Indenture, dated as of May 15, 2006, to the Collateral Trust Indenture dated as of June 30, 1993, between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4-249 to Detroit Edison's Form 10-Q for the quarter ended June 30, 2006). (2006 Series A Senior Notes due 2036)	X	X
	Twenty-second Supplemental Indenture, dated as of December 1, 2007, to the Collateral Trust Indenture, dated as of June 30, 1993, between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A., as successor trustee (Exhibit 4.1 to Detroit Edison's Form 8-K dated December 18, 2007). (2007 Series A Senior Notes due 2038)	X	X
	Twenty-fourth Supplemental Indenture, dated as of May 1, 2008 to the Collateral Trust Indenture, dated as of June 30, 1993 between The Detroit Edison Company and The Bank of New York Mellon Trust Company, N.A. as successor trustee (Exhibit 4-254 to Detroit Edison's Form 10-Q for the quarter ended June 30, 2008). (2008 Series ET Variable Rate Senior Notes due 2029)	X	X
4(d)	Indenture dated as of June 1, 1998 between Michigan Consolidated Gas Company and Citibank, N.A., as trustee, related to Senior Debt Securities (Exhibit 4-1 to Michigan Consolidated Gas Company Registration Statement on Form S-3 (File No. 333-63370)) and indentures supplemental thereto, dated as of dates indicated below, and filed as exhibits to the filings set forth below:	X	
	Fourth Supplemental Indenture dated as of February 15, 2003, to the Indenture dated as of June 1, 1998 between Michigan Consolidated Gas Company and Citibank, N.A., trustee (Exhibit 4-3 to Michigan Consolidated Gas Company Form 10-Q for the quarter ended March 31, 2003). (5.70% Senior Notes, 2003 Series A due 2033)	X	
	Seventh Supplemental Indenture, dated as of June 1, 2008 to Indenture dated as of June 1, 1998 between Michigan Consolidated Gas Company and Citibank, N.A., trustee (Exhibit 4-243 to DTE Energy's Form 10-Q for the quarter ended June 30, 2008). (6.78% Senior Notes, 2008 Series F due 2028)	X	
4(e)	Indenture of Mortgage and Deed of Trust dated as of March 1, 1944 (Exhibit 7-D to Michigan Consolidated Gas Company Registration Statement No. 2-5252) and indentures supplemental thereto, dated as of dates indicated below, and filed as exhibits to the filings set forth below:	X	
	Thirty-seventh Supplemental Indenture dated as of February 15, 2003 to Indenture of Mortgage and Deed of Trust dated as of March 1, 1944 between Michigan Consolidated Gas Company and Citibank, N.A., trustee (Exhibit 4-4 to Michigan Consolidated Gas Company Form 10-Q for the quarter ended March 31, 2003). (5.70% collateral bonds due 2033)	X	
	Fortieth Supplemental Indenture, dated as of June 1, 2008 to Indenture of Mortgage and Deed of Trust dated as of March 1, 1944 between Michigan Consolidated Gas Company and Citibank, N.A., trustee (Exhibit 4-242 to DTE Energy's Form 10-Q for the quarter ended June 30, 2008). (2008 Series F Collateral Bonds)	X	

Exhibit Number	Description	DTE Energy	DTE Electric
	Forty-third Supplemental Indenture, dated as of December 1, 2012 to Indenture of Mortgage and Deed of Trust dated as of March 1, 1944 between Michigan Consolidated Gas Company and Citibank, N.A., trustee (Exhibit 4-279 to DTE Energy's Form 10-K for the year ended December 31, 2012). (2012 First Mortgage Bonds Series D)	X	
	Forty-fourth Supplemental Indenture, dated as of December 1, 2013 to Indenture of Mortgage and Deed of Trust dated March 1, 1944 between DTE Gas Company and Citibank, N.A., (Exhibit 4-283 to DTE Energy's Form 10-K for the year ended December 31, 2013). (2013 First Mortgage Bonds Series D and E)	X	
	Forty-fifth Supplemental Indenture, dated as of December 1, 2014 to Indenture of Mortgage and Deed of Trust dated as of March 1, 1944 between DTE Gas Company and Citibank, N.A. (Exhibit 4-288 to DTE Energy's Form 10-K for the year ended December 31, 2014). (2014 First Mortgage Bonds Series F)	X	
	Forty-sixth Supplemental Indenture, dated as of August 1, 2015 to Indenture of Mortgage and Deed of Trust dated as of March 1, 1944 between DTE Gas Company and Citibank, N.A. (Exhibit 4-292 to DTE Energy's Form 10-Q for the quarter ended September 30, 2015). (2015 First Mortgage Bonds Series C and D)	X	
	Forty-seventh Supplemental Indenture, dated as of December 1, 2016 to Indenture of Mortgage and Deed of Trust dated as of March 1, 1944 between DTE Gas Company and Citibank, N.A. (Exhibit 4-297 to DTE Energy's Form 10-K for the year ended December 31, 2016). (2016 First Mortgage Bonds Series G)	X	
	Forty-eighth Supplemental Indenture, dated as of September 1, 2017 to Indenture of Mortgage and Deed of Trust dated as of March 1, 1944 between DTE Gas Company and Citibank, N.A. (Exhibit 10-108 to DTE Energy's Form 10-Q for the quarter ended September 30, 2017). (2017 First Mortgage Bonds Series C and D)	X	
	Forty-ninth Supplemental Indenture dated as of August 1, 2018, to Indenture of Mortgage and Deed of Trust, dated as of March 1, 1944, between DTE Gas Company and Citibank, N.A., trustee (Exhibit 4-300 to DTE Energy's Form 10-Q for the quarter ended September 30, 2018). (2018 Series B and C)	X	
	Fiftieth Supplemental Indenture dated as of October 1, 2019, to Indenture of Mortgage and Deed of Trust, dated as of March 1, 1944, between DTE Gas Company and Citibank, N.A., trustee (Exhibit 4-307 to DTE Energy's Form 10-Q for the quarter ended September 30, 2019). (2019 Series D and E)	X	
	Fifty-first Supplemental Indenture dated as of August 1, 2020, to Indenture of Mortgage and Deed of Trust, dated as of March 1, 1944, between DTE Gas Company and Citibank, N.A., trustee (Exhibit 4-317 to DTE Energy's Form 10-Q for the quarter ended September 30, 2020). (2020 Series D and E)	X	
	Fifty-second Supplemental Indenture dated as of November 1, 2021, to Indenture of Mortgage and Deed of Trust, dated as of March 1, 1944, between DTE Gas Company and Citibank, N.A., trustee. (Exhibit 4.3 to DTE Energy's Form 10-K for the year ended December 31, 2022) (2021 Series C and D)	X	
	Fifty-third Supplemental Indenture dated as of September 1, 2022, to Indenture of Mortgage and Deed of Trust, dated as of March 1, 1944, between DTE Gas Company and Citibank, N.A., trustee (Exhibit 4.2 to DTE Energy's Form 10-Q for the quarter ended September 30, 2022). (2022 Series C and D)	X	
	Fifty-fourth Supplemental Indenture dated as of October 1, 2023, to Indenture of Mortgage and Deed of Trust, dated as of March 1, 1944, between DTE Gas Company and Citibank N.A., trustee (Exhibit 4.1 to DTE Energy's Form 10-Q for the quarter ended September 30, 2023). (2023 Series E and F)	X	
10(a)	Form of Indemnification Agreement between DTE Energy Company and each Executive Officer and non-employee Director (Exhibit 10-1 to DTE Energy's Form 8-K dated December 6, 2007)	X	
10(b)	DTE Energy Company Annual Incentive Plan Restated Effective July 1, 2022 (Exhibit 10.5 to DTE Energy's 10-Q for the quarter ended June 30, 2022)	X	
10(c)	[Reserved]		

Exhibit Number	Description	DTE Energy	DTE Electric
10(d)	DTE Energy Affiliates Nonqualified Plans Master Trust, effective as of August 15, 2013 (Exhibit 10-87 to DTE Energy's Form 10-Q for the quarter ended September 30, 2013)	X	
	First Amendment to DTE Energy Affiliates Nonqualified Plans Master Trust, effective as of March 31, 2015 (Exhibit 10-94 to DTE Energy's Form 10-Q for the quarter ended March 31, 2015)	X	
10(e)	DTE Energy Company Executive Supplemental Retirement Plan as Amended and Restated, effective as of January 1, 2005 (Exhibit 10.75 to DTE Energy's Form 10-K for the year ended December 31, 2008)	X	
	First Amendment to the DTE Energy Company Executive Supplemental Retirement Plan (Amended and Restated Effective January 1, 2005) dated as of December 2, 2009 (Exhibit 10.1 to DTE Energy's Form 8-K dated December 8, 2009)	X	
	Second Amendment to the DTE Energy Company Executive Supplemental Retirement Plan (Amended and Restated Effective January 1, 2005) dated as of May 5, 2011 (Exhibit 10.80 to DTE Energy's Form 10-Q for the quarter ended March 31, 2012)	X	
	Third Amendment to the DTE Energy Company Executive Supplemental Retirement Plan (Amended and Restated Effective January 1, 2005) dated as of February 3, 2016 (Exhibit 10.96 to DTE Energy's Form 10-K for the year ended December 31, 2015)	X	
	Fourth Amendment to the DTE Energy Company Executive Supplemental Retirement Plan (Amended and Restated Effective January 1, 2005) dated as of March 23, 2020 (Exhibit 10.109 to DTE Energy's Form 10-Q for the quarter ended March 31, 2020)	X	
	Fifth Amendment to the DTE Energy Company Executive Supplemental Retirement Plan (Amended and Restated Effective January 1, 2005) dated as of May 5, 2021 (Exhibit 10.119 to DTE Energy's Form 10-Q for the quarter ended June 30, 2021)	X	
10(f)	DTE Energy Company Supplemental Retirement Plan as Amended and Restated, effective as of January 1, 2005 (Exhibit 10.76 to DTE Energy's Form 10-K for the year ended December 31, 2008)	X	
	First Amendment to the DTE Energy Company Supplemental Retirement Plan (Amended and Restated, effective as of January 1, 2005) dated as of March 19, 2013 (Exhibit 10.92 to Form DTE Energy's 10-K for the year ended December 31, 2014)	X	
	Second Amendment to the DTE Energy Company Supplemental Retirement Plan (Amended and Restated, effective as of January 1, 2005) dated as of November 11, 2014 (Exhibit 10.93 to DTE Energy's Form 10-K for the year ended December 31, 2014)	X	
	Third Amendment to the DTE Energy Company Supplemental Retirement Plan (Amended and Restated Effective January 1, 2005) dated as of February 23, 2018 (Exhibit 10.7 to DTE Energy's Form 10-K for the year ended December 31, 2021)	X	
	Fourth Amendment to the DTE Energy Company Supplemental Retirement Plan (Amended and Restated Effective January 1, 2005) dated as of November 16, 2021 (Exhibit 10.8 to DTE Energy's Form 10-K for the year ended December 31, 2021)	X	
10(g)	DTE Energy Company Supplemental Savings Plan as Amended and Restated, effective as of January 1, 2005 (Exhibit 10.77 to DTE Energy's Form 10-K for the year ended December 31, 2008)	X	
	First Amendment to the DTE Energy Supplemental Savings Plan dated as of November 13, 2012 (Exhibit 10.81 to DTE Energy's Form 10-K for the year ended December 31, 2012)	X	
10(h)	DTE Energy Company Executive Deferred Compensation Plan as Amended and Restated, effective as of January 1, 2005 (Exhibit 10.78 to DTE Energy's Form 10-K for the year ended December 31, 2008)	X	
	First Amendment to DTE Energy Company Executive Deferred Compensation Plan as Amended and Restated, effective as of January 1, 2005, dated as of February 4, 2016 (Exhibit 10.98 to DTE Energy's Form 10-K for the year ended December 31, 2015)	X	

Exhibit Number	Description	DTE Energy	DTE Electric
10(i)	DTE Energy Company Deferred Stock Compensation Plan for Non-Employee Directors dated as of December 8, 2021 (Exhibit 10.6 to DTE Energy's Form 10-K for the year ended December 31, 2021)	X	
10(j)	DTE Energy Company Plan for Deferring the Payment of Directors' Fees as Amended and Restated, effective as of January 1, 2005 (Exhibit 10.79 to DTE Energy's Form 10-K for the year ended December 31, 2008)	X	
	First Amendment, dated as of June 25, 2015, to the DTE Energy Company Plan for Deferring the Payment of Directors' Fees (as Amended and Restated effective as of January 1, 2005) (Exhibit 10.95 to DTE Energy's Form 10-Q for the quarter ended June 30, 2015)	X	
10(k)	Fifth Amended and Restated Five-Year Credit Agreement, dated as of October 25, 2022, by and among DTE Energy Company, the lenders party thereto, and Citibank, N.A., as Administrative Agent (Exhibit 10.1 to DTE Energy Company's Form 10-Q for the quarter ended September 30, 2022)	X	
	Form of Amendment No. 1, dated as of October 25, 2023, to the Fifth Amended and Restated Five-Year Credit Agreement, dated as of October 25, 2022, by and among DTE Energy Company, the lenders party thereto, and Citibank, N.A., as Administrative Agent (Exhibit 10.1 to DTE Energy Company's Form 10-Q for the quarter ended September 30, 2023)	X	
10(l)	Fifth Amended and Restated Five-Year Credit Agreement, dated as of October 25, 2022, by and among DTE Gas Company, the lenders party thereto, and Citibank, N.A., as Administrative Agent (Exhibit 10.3 to DTE Energy Company's Form 10-Q for the quarter ended September 30, 2022)	X	
10(m)	Fifth Amended and Restated Five-Year Credit Agreement, dated as of October 25, 2022, by and among DTE Electric Company, the lenders party thereto, and Citibank, N.A., as Administrative Agent (Exhibit 10.2 to DTE Energy Company's and DTE Electric Company's Form 10-Q for the quarter ended September 30, 2022)	X	X
10(n)	Form of Change-in-Control Severance Agreement, dated as of March 3, 2014, between DTE Energy Company and each of JoAnn Chavez, Joi Harris, Trevor F. Lauer, Gerardo Norcia, Matthew Paul, Robert Richard, David Ruud and Mark Stiers (Exhibit 10.1 to DTE Energy Company's Form 8-K filed on March 3, 2014)	X	
	Form of Change-In-Control Severance Agreement dated as of July 1, 2014, between DTE Energy Company and Lisa A. Muschong, (Exhibit 10-91 to DTE Energy's Form 10-Q for the quarter ended June 30, 2014)	X	
	Form of Change-In-Control Severance Agreement dated as of July 1, 2014, between DTE Energy Company and Tracy J. Myrick (Exhibit 10-90 to DTE Energy's Form 10-Q for the quarter ended June 30, 2014)	X	
10(o)	DTE Energy Company Executive Severance Allowance Plan, effective July 1, 2022 (Exhibit 10.1 to DTE Energy's Form 8-K filed on June 27, 2022)	X	
10(p)	Certain arrangements pertaining to the employment of Gerardo Norcia, dated July 1, 2019 (Exhibit 10.107 to DTE Energy's Form 10-K for the year ended December 31, 2019)	X	

Item 16. ***Form 10-K Summary***

None.

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, DTE Energy Company has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

DTE ENERGY COMPANY
(Registrant)

By: /S/ GERARDO NORCIA
Gerardo Norcia
Chairman and Chief Executive Officer

Date: February 8, 2024

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of DTE Energy Company and in the capacities and on the date indicated.

By:	/S/ GERARDO NORCIA Gerardo Norcia Chairman, Chief Executive Officer, and Director (Principal Executive Officer)	By:	/S/ DAVID RUUD David Ruud Executive Vice President and Chief Financial Officer (Principal Financial Officer)
By:	/S/ TRACY J. MYRICK Tracy J. Myrick Chief Accounting Officer (Principal Accounting Officer)		
By:	/S/ NICHOLAS K. AKINS Nicholas K. Akins, Director	By:	/S/ ROBERT C. SKAGGS, JR. Robert C. Skaggs, Jr., Director
By:	/S/ DAVID A. BRANDON David A Brandon, Director	By:	/S/ DAVID A. THOMAS David A. Thomas, Director
By:	/S/ DEBORAH L. BYERS Deborah L. Byers, Director	By:	/S/ GARY TORGOW Gary Torgow, Director
By:	/S/ CHARLES G. MCCLURE JR. Charles G. McClure Jr., Director	By:	/S/ JAMES H. VANDENBERGHE James H. Vandenberghe, Director
By:	/S/ GAIL J. MCGOVERN Gail J. McGovern, Director	By:	/S/ VALERIE M. WILLIAMS Valerie M. Williams, Director
By:	/S/ MARK A. MURRAY Mark A. Murray, Director		

Date: February 8, 2024

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, DTE Electric Company has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

DTE ELECTRIC COMPANY
(Registrant)

By: /S/ GERARDO NORCIA
Gerardo Norcia
Chief Executive Officer

Date: February 8, 2024

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of DTE Electric Company and in the capacities and on the date indicated.

By:	/S/ GERARDO NORCIA Gerardo Norcia Chief Executive Officer and Director (Principal Executive Officer)	By:	/S/ DAVID RUUD David Ruud Executive Vice President, Chief Financial Officer, and Director (Principal Financial Officer)
By:	/S/ TRACY J. MYRICK Tracy J. Myrick Chief Accounting Officer (Principal Accounting Officer)	By:	/S/ JOANN CHAVEZ JoAnn Chavez, Director
By:	/S/ LISA A. MUSCHONG Lisa A. Muschong, Director		

Date: February 8, 2024

Supplemental Information to be Furnished with Reports Filed Pursuant to Section 15(d) of the Securities Exchange Act of 1934 by Registrants Which Have Not Registered Securities Pursuant to Section 12 of the Securities Exchange Act of 1934.

No annual report, proxy statement, form of proxy, or other proxy soliciting material has been sent to security holders of DTE Electric Company during the period covered by this Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

EXHIBIT 10.1

DTE ENERGY COMPANY

LONG-TERM INCENTIVE PLAN

AMENDED AND RESTATED EFFECTIVE MAY 20, 2021

as further amended effective October 25, 2023

ARTICLE I

Purposes

1.01 ***General Purposes***
The DTE Energy Company Long-Term Incentive Plan is intended to:

(a) assist the Company and its Subsidiaries in recruiting and retaining individuals with ability and initiative by enabling such persons to participate in the future success of the Company and its Subsidiaries and to associate their interests with those of the Company and its shareholders; and

(b) permit the grant of Options qualifying as Incentive Stock Options and Options not so qualifying, the grant of Stock Awards, Performance Shares and Performance Units.

1.02 ***Use of Proceeds***
The proceeds received by the Company from the sale of shares of Common Stock pursuant to this Plan shall be used for general corporate purposes.

ARTICLE II

Definitions

2.01 ***Accounting Firm***
Accounting Firm means the public accounting firm retained as the Company’s independent auditor as of the date immediately prior to the Change in Control, unless another firm is designated by the Committee.

2.02 ***Administrator***
Administrator means:

(a) the Board, with respect to awards made under this Plan to members of the Board who are not employees of the Company or a Subsidiary; and

(b) the Committee or the Chief Executive Officer of the Company to the extent responsibilities are delegated to him by the Committee under Article III with respect to awards made under this Plan to all other persons.

2.03 ***Agreement***
Agreement means a written agreement (including any amendment or supplement) between the Company and a Participant specifying the terms and conditions of a Stock Award, an award of Performance Shares, an award of Performance Units or an Option granted to the Participant.

2.04 ***Board***
Board means the Board of Directors of the Company.

2.05 ***Capped Parachute Payments***
Capped Parachute Payments means the largest amount of Parachute Payments that may be paid to a Participant without liability for any excise tax under Code Section 4999.

2.06 ***Change in Control***
Change in Control means the occurrence of any of the following events:

(a) The consummation of a transaction in which the Company is merged, consolidated or reorganized into or with another corporation or other legal person (the "Surviving Entity"), and as a result of the transaction less than 55% of the combined voting power of the then-outstanding Voting Stock of the Surviving Entity immediately after the transaction is held in the aggregate by the holders of Voting Stock of the Company immediately prior to the transaction;

(b) The consummation of a sale or transfer in which the Company sells or otherwise transfers all or substantially all of its assets to another corporation or other legal person (the "Acquiring Entity"), and as a result of the sale or transfer less than 55% of the combined voting power of the then-outstanding Voting Stock of the Acquiring Entity immediately after the sale or transfer is held in the aggregate (directly or through ownership of Voting Stock of the Company or a Subsidiary) by the holders of Voting Stock of the Company immediately prior to the sale or transfer; or

(c) The approval by the shareholders of the Company of a complete liquidation or dissolution of the Company.

2.07 ***Code***
Code means the Internal Revenue Code of 1986, as amended.

2.08 ***Committee***
Committee means the Organization and Compensation Committee, or any other Board committee designated from time to time by the Board, provided that the Committee is composed solely of individuals who are "Non-Employee Directors," as the term is used in Rule 16b-3 under the Exchange Act.

2.09 ***Common Stock***
Common Stock means common stock of the Company.

2.10 ***Company***
Company means DTE Energy Company, a Michigan corporation, or any successor corporation.

2.11 ***Control Change Date***
Control Change Date means the date on which a Change in Control occurs. If a Change in Control results from a series of transactions, the Control Change Date is the date of the last transaction.

2.12 ***Exchange Act***
Exchange Act means the Securities Exchange Act of 1934, as amended.

2.13 ***Fair Market Value***
Fair Market Value means, on the specified date, the closing price of Common Stock on the New York Stock Exchange, as reported by a source selected by the Committee. If, on the specified date, no share of

Common Stock is traded, then Fair Market Value is determined as of the next preceding day that Common Stock was traded.

2.14 *Incentive Stock Option*
Incentive Stock Option means an Option that satisfies the requirements of Code Section 422 and is intended by the Administrator to be an Incentive Stock Option.

2.15 *Net After Tax Amount*
Net After Tax Amount means the amount of any Parachute Payments or Capped Parachute Payments, as applicable, net of taxes imposed under Code Sections 1, 3101(b) and 4999 and any state or local income taxes applicable to a Participant with respect to the payments as in effect for the year for which the determination is made. The determination of the Net After Tax Amount is made using the highest combined marginal rate imposed by the foregoing taxes on income of the same character as the Parachute Payments or Capped Parachute Payments, as applicable, in effect for the year for which the determination is made.

2.16 *Option*
Option means a stock option that entitles the holder to purchase from the Company a stated number of shares of Common Stock at the price set forth in an Agreement.

2.17 *Parachute Payment*
Parachute Payment means a payment described in Code Section 280G(b)(2) (without regard to whether the aggregate present value of such payments exceeds the limit prescribed by Code Section 280G(b)(2)(A)(ii)). The amount of any Parachute Payment is determined under Code Section 280G and the related Treasury Regulations, or, in the absence of final regulations, the proposed Treasury Regulations under Code Section 280G.

2.18 *Participant*
Participant means an employee of the Company or a Subsidiary, and any member of the Board, whether or not the Board member is an employee of the Company or a Subsidiary, who satisfies the requirements of Article IV and is selected by the Administrator to receive an award of Performance Shares, a Stock Award, an Option, or an award of Performance Units, in any combination.

2.19 *Performance Objectives*
Performance Objectives means objectives stated with respect to:

(a) shareholder value growth based on stock price and dividends;
(b) customer price;
(c) customer satisfaction;
(d) growth based on increasing sales or profitability of one or more business units;
(e) performance against the companies in the Dow Jones Electric Utility Industry Group index, the companies in the S&P 500 Electric Utility Industry index, a peer group, or similar benchmark selected by the Committee;
(f) earnings per share growth;
(g) employee satisfaction;
(h) nuclear plant performance achievement;
(i) return on equity;
(j) economic value added;
(k) cash flow;
(l) earnings growth;
(m) diversity;

(n) safety;
(o) production cost; or
(p) any other performance measures selected by the Administrator.

Each Performance Objective may be stated with respect to the performance of the Company, a Subsidiary, or a division of the Company or a Subsidiary.

2.20 ***Performance Shares***
Performance Shares means an award stated with reference to a specified number of shares of Common Stock determined by the Administrator that, in accordance with the terms of an Agreement, entitles the Participant to receive a cash payment, or shares of Common Stock, or a combination of cash and shares.

2.21 ***Performance Units***
Performance Units means an award of a specified number of units, determined by the Administrator, with a face amount of $1.00 per unit that, in accordance with the terms of an Agreement, entitles the Participant to receive a cash payment, shares of Common Stock, or a combination of cash and shares.

2.22 ***Plan***
Plan means the DTE Energy Company Long-Term Incentive Plan.

2.23 ***Rule 16b-3***
Rule 16b-3 means Rule 16b-3 under the Exchange Act.

2.24 ***Stock Awards***
Stock Award means Common Stock awarded to a Participant under Article VII.

2.25 ***Subsidiary***
Subsidiary means a corporation, partnership, joint venture, limited liability company, unincorporated association, or other entity in which the Company has a direct or indirect ownership or other equity interest.

2.26 ***Voting Stock***
Voting Stock means securities entitled to vote generally in the election of directors.

ARTICLE III

Administration

3.01 ***Administrator; Terms of Awards***
The Plan is administered by the Administrator. To the extent of its delegated authority, the Administrator has authority to grant Stock Awards, Performance Shares, Performance Units, and Options on terms that the Administrator considers appropriate and that are not inconsistent with the provisions of this Plan. The terms may include conditions in addition to the conditions in this Plan on the Participant’s ability to exercise all or any part of an Option or on the transferability or forfeitability of Stock Awards, or an award of Performance Shares or Performance Units. Any Agreement specifying the terms of a grant of a Stock Award, Performance Shares, Performance Units, or Options must provide that any Options not exercised, any Stock Awards not vested, or any Performance Shares or Performance Units not paid at the time the Participant violates any confidentiality, non-competition, or non-solicitation covenants imposed on the Participant under a separate agreement between the Participant and the Company or a Subsidiary (as determined under the terms of the separate agreement) are immediately forfeited. The Administrator may,

in its discretion, supersede the terms of any Agreement and accelerate the time at which any Option may be exercised, Stock Awards may become transferable or non-forfeitable, or an award of Performance Shares or Performance Units may be settled, when determined by the Administrator to be equitably required. The Administrator may, in its discretion, suspend or waive the forfeiture of any award made under this Plan.

3.02 ***Authority of Administrator***
The Administrator has complete authority to:

(a) interpret all provisions of this Plan;

(b) adopt, amend, and rescind rules and regulations pertaining to the administration of the Plan;

(c) correct any defect or supply any omission or reconcile any inconsistency in the Plan or in any award in the manner and to the extent the Administrator deems desirable;

(d) authorize any one of its number or any officer of the Company to execute and deliver documents on its behalf; and

(e) make all other determinations necessary or advisable for the administration of this Plan.

The express grant in the Plan of any specific power to the Administrator does not limit any power or authority of the Administrator. Any decision made or action taken by the Administrator in connection with the administration of this Plan is final and conclusive. The Administrator, any member of the Board or Committee, or the Chief Executive Officer or the President of the Company is not liable for any act done in good faith with respect to this Plan or any Agreement, Option, or Stock Award, Performance Shares, or Performance Units. All expenses of administering this Plan are borne by the Company.

3.03 ***Delegation***
The Committee, in its discretion, may delegate to the Chief Executive Officer or the President of the Company all or part of the Committee's authority and duties with respect to grants and awards to individuals who are not subject to the reporting and other provisions of Section 16 of the Exchange Act. The Committee may revoke or amend the terms of a delegation at any time. However, any revocation or amendment of a delegation does not invalidate any prior actions of the Committee's delegate or delegates that were consistent with the terms of the Plan.

ARTICLE IV

Eligibility

4.01 ***General Eligibility***
Except as limited by Section 4.02, any employee of the Company or a Subsidiary (including an entity that becomes a Subsidiary after the adoption of this Plan) or any member of the Board, whether or not the Board member is employed by the Company or a Subsidiary, is eligible to participate in this Plan if the Administrator, in its sole discretion, determines that the person has contributed significantly or can be expected to contribute significantly to the profits or growth of the Company or a Subsidiary.

4.02 ***Limited Eligibility for Incentive Stock Options***
Incentive Stock Options may be granted only to persons who are employees of the Company or a "subsidiary," as defined in Code Section 424(f), on the date of grant.

ARTICLE V

Common Stock Subject to Plan

5.01 ***Common Stock Issued or Delivered***
Common Stock to be delivered by the Company under a Stock Award, in settlement of an award of Performance Shares or Performance Units, or by exercise of an Option to a Participant (or the Participant's successor in interest or personal representative or, if the Participant so directs, broker) will be:

(a) from the Company's authorized but unissued Common Stock; or

(b) outstanding Common Stock acquired by or on behalf of the Company in the name of a Participant (or the Participant's successor in interest, personal representative or broker); or

(c) a combination of (a) and (b).

5.02 ***Maximum Shares Available***
(a) Aggregate Limit
No more than 19,500,000 shares of Common Stock may be issued or acquired and delivered under this Plan through the exercise of Options, the grant of Stock Awards, and the settlement of Performance Shares and Performance Units. This maximum aggregate number of shares of Common Stock that may be issued or delivered under the Plan is subject to adjustment under Article X. The actual number of shares of Common Stock issued or acquired and delivered under the Plan is determined under Section 5.03.

(b) Limit on Awards to Non-Employee Directors
The total number of shares of Common Stock issued or acquired and delivered under the Plan to members of the Board who are not employees of the Company or a Subsidiary cannot exceed 100,000 shares.

5.03 ***Reallocation of Shares***
(a) Termination of Award
If an Option is terminated, in whole or in part, for any reason other than its exercise, the number of shares allocated to the terminated Option or terminated portion may be reallocated to other Options, Performance Shares, Performance Units and Stock Awards to be granted under this Plan, subject to the limits in Section 5.02.

If a Stock Award is forfeited, in whole or in part, for any reason, the number of shares of Common Stock allocated to the terminated Stock Award or terminated portion may be reallocated to other Options, Performance Shares, Performance Units and Stock Awards to be granted under this Plan, subject to the limits in Section 5.02.

If an award of Performance Shares is terminated, in whole or in part, for any reason other than its settlement with cash, shares of Common Stock, or a combination of cash and shares, the number of shares allocated to the terminated Performance Share award or termination portion may be reallocated to other Options, Performance Shares, Performance Units, and Stock Awards to be granted under this Plan, subject to the limits in Section 5.02.

If an award of Performance Units is terminated, in whole or in part, for any reason other than its settlement with shares of Common Stock, the number of shares allocated to the Performance Unit award or portion thereof may be reallocated to other Options, Performance Shares, Performance Units, and Stock Awards to be granted under this Plan, subject to the limits in Section 5.02.

(b) Reallocation Prohibited

Shares of Common Stock that would otherwise be issued or delivered under the Plan but are not issued or delivered because the shares are:

(i) Tendered in full or partial payment of any Option price;

(ii) Tendered or withheld by the Company in satisfaction of tax withholding obligations; or

(iii) Repurchased by the Company with Option proceeds

may not be reallocated to other Options, Performance Shares, Performance Units, or Stock Awards to be granted under the Plan. Any shares of Common Stock not issued or delivered under (i), (ii), or (iii) are treated as shares of Common Stock issued or delivered under the Plan for purposes of the limits in Section 5.02.

ARTICLE VI

Options

6.01 ***Terms of Award***

The Administrator will designate each individual to whom an Option is to be granted. The Agreement for the Option will specify:

(a) the number of shares of Common Stock covered by the award, subject to Section 6.02;

(b) the exercise price of the Option, subject to Section 6.03;

(c) the earliest date when the Option can be exercised, subject to Section 6.04;

(d) the maximum exercise period of the Option, subject to Section 6.05;

(e) whether the Option is transferable as permitted under Section 6.07;

(f) any specific terms regarding exercise of the Option permitted under Section 6.09; and

(g) any specific terms regarding payment permitted under Section 6.10.

6.02 ***Maximum Number of Shares***

No Participant may be granted Options in any calendar year covering more than 500,000 shares of Common Stock.

6.03 ***Option Price***

The price per share for shares of Common Stock purchased on the exercise of an Option will be determined by the Administrator on the date of grant and cannot be less than the Fair Market Value on the date the Option is granted.

6.04 ***Earliest Exercise Date***
The earliest date on which the Participant may exercise an Option will be determined by the Administrator on the date of grant. However, the Administrator may not permit a Participant to exercise any Options covered by the Agreement earlier than as follows:

(a) before one year after the date the Options were granted, no Options may be exercised;

(b) at least one year after and before two years after the date the Options were granted, Options for 1/3 of the shares covered by the Agreement may be exercised;

(c) at least two years after and before three years after the date the Options were granted, Options for 2/3 of the shares covered by the Agreement may be exercised; and

(d) at least three years after the date the Options were granted, Options for all of the shares covered by the Agreement may be exercised.

6.05 ***Maximum Option Period***
The maximum period in which an Option may be exercised will be determined by the Administrator on the date of grant. However, no Option is exercisable more than 10 years after the date the Option was granted.

6.06 ***Non-transferability***
Except as provided in Section 6.07, each Option granted under this Plan is non-transferable except by will or by the laws of descent and distribution. Except as provided in Section 6.07, during the lifetime of the Participant to whom the Option is granted, the Option may be exercised only by the Participant. No right or interest of a Participant in any Option is liable for, or subject to, any lien, obligation, or liability of the Participant.

6.07 ***Transferable Options***
If the Agreement provides, an Option that is not an Incentive Stock Option may be transferred by a Participant to persons or entities permitted under Rule 16b-3 on terms and conditions permitted under Rule 16b-3. The holder of an Option transferred under this Section is bound by the same terms and conditions that governed the Option during the period that it was held by the Participant, except this Section 6.07. The transferee may not transfer the Option except by will or the laws of descent and distribution.

6.08 ***Status as Employee or Director***
For purposes of determining the applicability of Code Section 422 (relating to Incentive Stock Options), or if the terms of any Option provide that it may be exercised only during employment or within a specified period of time after termination of employment or Board service, the Administrator may decide to what extent leaves of absence for governmental or military service, illness, temporary disability, or other reasons will not be deemed interruptions of continuous employment or Board service.

6.09 ***Exercise***
Subject to the provisions of this Plan and the applicable Agreement, an Option may be exercised in whole at any time or in part from time to time at times and in compliance with requirements as the Administrator determines. However, Incentive Stock Options (granted under the Plan and all plans of the Company and its subsidiary corporations, as those terms are defined in Code Section 424) may not be first exercisable in a calendar year for shares of Common Stock having a Fair Market Value (determined as of the date an Option is granted) exceeding $100,000. An Option granted under this Plan may be exercised with respect to any number of whole shares less than the full number for which the Option could be exercised. A partial

exercise of an Option does not affect the right to exercise the Option from time to time in accordance with this Plan and the applicable Agreement with respect to the remaining shares subject to the Option.

6.10 ***Payment of Option Price***
Subject to rules established by the Administrator and unless otherwise provided in an Agreement, payment of all or part of the Option price may be made in:

(a) cash or a cash equivalent acceptable to the Administrator; or

(b) unrestricted shares of Common Stock previously acquired by the Participant and, if those shares were acquired from the Company, that have been held by the Participant for at least six months.

If shares of Common Stock are used to pay all or part of the Option price, the sum of the cash and cash equivalents and the Fair Market Value (determined as of the date of exercise) of the shares surrendered must not be less than the Option price of the shares for which the Option is being exercised. Payment in "cash" or "cash equivalents" includes delivery of cash or cash equivalents by a broker under a "cashless exercise" arrangement at the time of exercise or following the sale of shares to which the exercise relates. Any shares of Common Stock used to pay any part of the Option price will not be reallocated to other Options, Performance Shares, Performance Units, and Stock Awards to be granted under this Plan and will not otherwise be made available to be issued under this Plan.

6.11 ***Shareholder Rights***
No Participant has any rights as a shareholder with respect to shares subject to the Participant's Option until the date the Option is exercised.

6.12 ***Disposition of Shares***
A Participant will notify the Company of any sale or other disposition of shares acquired under an Option that was an Incentive Stock Option if the sale or disposition occurs:

(a) within two years of the grant of the Option; or

(b) within one year of the issuance of shares to the Participant.

The notice must be in writing and directed to the Corporate Secretary of the Company.

6.13 ***Restriction on Repricing and Purchasing Options***
Without prior shareholder approval:

(a) the Administrator is not permitted to authorize the amendment of any outstanding Option to reduce the Option price;

(b) an Option cannot be cancelled and replaced with new awards having a lower Option price, where the economic effect would be the same as reducing the Option price of the Option; and

(c) at any time when the Option price of a previously granted Option is above the Fair Market Value of one share of Common Stock, the Administrator is not permitted to offer to purchase the previously granted Option for a cash payment in substitution for or upon the cancellation of the Option.

6.14 ***Incentive Stock Options***
No Option that is intended to be an Incentive Stock Option is invalid for failure to qualify as an Incentive Stock Option.

ARTICLE VII

Stock Awards

7.01 ***Award***
The Administrator will designate each individual to whom a Stock Award is to be made. The Agreement for the Stock Award will specify:

(a) the number of shares of Common Stock covered by the award, subject to Section 7.02;

(b) when the Stock Award vests, subject to Section 7.03; and

(c) any Performance Objectives to which the Stock Award is subject, as described in Section 7.04.

7.02 ***Maximum Number of Shares***
No Participant may receive Stock Awards in any calendar year for more than 150,000 shares of Common Stock.

7.03 ***Vesting***
The Administrator, on the date of the award, may prescribe that a Participant's rights in a Stock Award will be forfeitable or otherwise restricted for a period of time. The Administrator generally may not provide that the Participant's right to a Stock Award becomes non-forfeitable or unrestricted earlier than three years after the date of the award. In special situations, such as awards to newly hired Participants or Participants reasonably expected to retire in less than three years, the Administrator may provide that the Participant's right to a Stock Award becomes non-forfeitable or unrestricted earlier than three years after the date of the award. In no event, however, may the Administrator provide that a Participant's right to a Stock Award becomes non-forfeitable or unrestricted earlier than one year after the date of the award.

7.04 ***Performance Objectives***
In addition to any vesting of a Stock Award imposed under Section 7.03, the Administrator may prescribe that Stock Awards will become vested or transferable or both based on Performance Objectives. In cases where a Stock Award will become non-forfeitable and transferable only upon the attainment of Performance Objectives, then the shares subject to the Stock Award will become non-forfeitable and transferable only to the extent that the Committee certifies that the Performance Objectives have been attained.

7.05 ***Status as Employee or Director***
If the terms of any Stock Award provide that shares become transferable and non-forfeitable only after completion of a specified period of employment or Board service, the Administrator may decide in each case to what extent leaves of absence for governmental or military service, illness, temporary disability, or other reasons will not be deemed interruptions of continuous employment or Board service.

7.06 ***Shareholder Rights***
Prior to their forfeiture (in accordance with the applicable Agreement and while the shares of Common Stock granted under the Stock Award may be forfeited or are non-transferable), a Participant will have all rights of a shareholder with respect to a Stock Award, including the right to receive dividends and vote the shares. However, during that period:

(a) a Participant may not sell, transfer, pledge, exchange or otherwise dispose of shares granted under a Stock Award;

(b) the Company will retain custody of the certificates evidencing shares granted under a Stock Award; and

(c) if requested by the Administrator, the Participant will deliver to the Company a stock power, endorsed in blank, with respect to each Stock Award.

After the shares granted under the Stock Award are transferable and no longer forfeitable, the above limitations will not apply. The Company will deliver to the Participant certificates evidencing shares of Common Stock subject to the award as soon thereafter as possible.

ARTICLE VIII

Performance Share Awards

8.01 ***Award***
The Administrator will designate each individual to whom an award of Performance Shares is to be made. The Agreement for the award of Performance Shares will specify:

(a) the number of shares of Common Stock covered by the award, subject to Section 8.02;

(b) when the Performance Shares vest, subject to Section 8.03;

(c) any Performance Objectives to which the Performance Shares are subject, as described in Section 8.04;

(d) any shareholder rights granted to the Participant under Section 8.06; and

(e) whether the Performance Shares are transferable under Section 8.08.

8.02 ***Maximum Number of Shares***
No Participant may receive awards of Performance Shares in any calendar year for more than 300,000 shares of Common Stock (based on the maximum possible payout under the awards).

8.03 ***Vesting***
The Administrator, on the date of the grant, may prescribe that a Participant's rights in Performance Shares will be forfeitable for a period of time. However, the Administrator may not provide that the Participant's rights in Performance Shares become non-forfeitable earlier than one year after the date of the award.

8.04 ***Performance Objectives***
The Administrator, on the date of the grant of an award, may prescribe that all or a portion of the Performance Shares will be earned, and the Participant will be entitled to receive a payment under the award of Performance Shares, only upon the satisfaction of Performance Objectives during a performance measurement period of at least one year, or other criteria prescribed by the Administrator. With respect to Performance Shares that will be earned only upon satisfaction of Performance Objectives, a payment will be made under the Performance Shares only if, and to the extent that, the Committee certifies that the Performance Objectives have been attained.

8.05 ***Payment***
In the discretion of the Administrator, the amount payable when an award of Performance Shares is earned may be settled in cash, by the issuance of shares of Common Stock, or any combination of cash and

Common Stock. A fractional share of Common Stock is not deliverable when an award of Performance Shares is earned; a cash payment will be made in lieu of the fractional share. The Administrator will also determine when an award of Performance Shares that has been earned will be settled.

8.06 ***Shareholder Rights***
No Participant, as a result of receiving an award of Performance Shares, has any rights as a shareholder until and to the extent that the award of Performance Shares is earned and settled in shares of Common Stock. After an award of Performance Shares is earned and settled in shares, a Participant will have all the rights of a shareholder as described in Section 7.06. However, all Agreements awarding Performance Shares after December 31, 2009 must provide that dividend equivalents with respect to the award will not be paid before the Performance Shares are earned and vested. During the period beginning on the date the Performance Shares are awarded and ending on the certification date of the Performance Objectives, the number of Performance Shares awarded will be increased, assuming full dividend reinvestment at the Fair Market Value on the dividend payment date. The cumulative number of Performance Shares will be adjusted to determine the final payment based on the Performance Objectives as certified by the Committee. The final adjusted number of Performance Shares will be paid as provided under Section 8.05.

8.07 ***Non-Transferability***
Except as provided in Section 8.08, Performance Shares granted under this Plan are non-transferable except by will or by the laws of descent and distribution. No right or interest of a Participant in any Performance Shares is liable for, or subject to, any lien, obligation, or liability of such Participant.

8.08 ***Transferable Performance Shares***
If the Agreement provides, an award of Performance Shares may be transferred by a Participant to persons or entities permitted under Rule 16b-3 on terms and conditions permitted under Rule 16b-3. The holder of Performance Shares transferred pursuant to this Section is bound by the same terms and conditions that governed the Performance Shares during the period that they were held by the Participant, except this Section 8.08. The transferee may not transfer Performance Shares except by will or the laws of descent and distribution.

8.09 ***Status as Employee or Director***
If the terms of any Performance Share award provide that no payment will be made unless the Participant completes a stated period of employment or Board service, the Administrator may decide to what extent leaves of absence for government or military service, illness, temporary disability, or other reasons will not be deemed interruptions of continuous employment or Board service.

ARTICLE IX

<u>Performance Units</u>

9.01 ***Award***
The Administrator will designate each individual to whom an award of Performance Units is to be made. The Agreement for the award of Performance Units will specify:

(a) the number of Performance Units covered by the award, subject to Section 9.02;

(b) when the Performance Units vest, subject to Section 9.03;

(c) the Performance Objectives to which the Performance Units are subject, as described in Section 9.04; and

(d) whether the Performance Units are transferable under Section 9.07.

9.02 ***Maximum Number of Units***
No Participant may receive an award of more than 1,000,000 Performance Units in any calendar year.

9.03 ***Vesting***
The Administrator, on the date of the award, may prescribe that a Participant's rights in Performance Units will be forfeitable for a period of time. However, the Administrator may not provide that the Participant's rights in Performance Units become non-forfeitable earlier than one year after the date of the award.

9.04 ***Performance Objectives***
The Administrator, on the date of grant of an award, will prescribe that all or a portion of the Performance Units will be earned and the Participant will be entitled to receive a payment under the award of Performance Units, only upon the satisfaction of Performance Objectives and other criteria prescribed by the Administrator during a performance measurement period of at least one year. With respect to Performance Units that will be earned only upon satisfaction of Performance Objectives, a payment will be made under the Performance Units only if, and to the extent that, the Committee certifies that the Performance Objectives have been attained.

9.05 ***Payment***
In the discretion of the Administrator, the amount payable when an award of Performance Units is earned may be settled in cash, by the issuance of shares of Common Stock, or any combination of cash and Common Stock. A fractional share of Common Stock is not deliverable when an award of Performance Units is earned; a cash payment will be made in lieu of the fractional share. The Administrator will also determine when an award of Performance Units that has been earned will be settled.

9.06 ***Non-Transferability***
Except as provided in Section 9.07, Performance Units granted under this Plan are non-transferable except by will or by the laws of descent and distribution. No right or interest of a Participant in an award of Performance Units is liable for, or subject to, any lien, obligation, or liability of such Participant.

9.07 ***Transferable Performance Units***
If provided in an Agreement, an award of Performance Units may be transferred by a Participant to persons or entities permitted under Rule 16b-3 on terms and conditions as may be permitted under Rule 16b-3. The holder of Performance Units transferred under this Section is bound by the same terms and conditions that governed the Performance Units during the period that it was held by the Participant, except this Section 9.07. The transferee may not transfer the Performance Units except by will or the laws of descent and distribution.

9.08 ***Status as Employee or Director***
If the terms of an award of Performance Units provide that a payment will be made only if the Participant completes a stated period of employment or Board service, the Administrator may decide to what extent leaves of absence for governmental or military service, illness, temporary disability or other reasons will not be deemed interruptions of continuous employment or Board service.

9.09 ***Shareholder Rights***
No Participant, as a result of receiving an award of Performance Units, has any rights as a shareholder of the Company or any Subsidiary on account of the award.

ARTICLE X

Adjustment Upon Change in Common Stock

10.01 ***Equitable Adjustments***

(a) Events Resulting in Adjustments

If any of the following events occurs, the Committee will make the adjustments described in Section 10.01(b):

(i) the Company effects one or more stock dividends, stock split-ups, subdivisions or consolidations of shares;

(ii) the Company engages in any transaction to which Section 424 of the Code applies; or

(iii) there occurs any other event that, in the judgment of the Committee, necessitates adjustments.

(b) Adjustments

To the extent the Committee determines adjustment is equitably required, the Committee will adjust the following:

(i) the maximum number and kind of shares as to which Options, Stock Awards, Performance Shares, and Performance Units may be granted;

(ii) the terms of outstanding Stock Awards, Options, Performance Shares, Performance Units; and

(iii) the per individual limitations on the number of shares of Common Stock for which Options, Performance Shares, Performance Units and Stock Awards may be granted.

(c) Replacement of Awards

The Committee may provide for the replacement of any outstanding awards under the Plan (or any portion of any award) with alternative consideration (including, without limitation, cash) as the Committee in good faith determines to be equitable under the circumstances. The Committee may require, in connection with any replacement, the surrender of all awards so replaced.

(d) Authority of Committee

Any determination, adjustment, or replacement made by the Committee under this Section 10.01 is final and conclusive.

10.02 ***Affect of Issuance of Stock***

No adjustments described in Section 10.01(b) will be made as a result of the issuance by the Company of stock of any class or securities convertible into stock of any class, for cash or property, or for labor or services, either upon direct sale or upon the exercise of rights or warrants to subscribe for the stock or securities, or upon conversion of stock or obligations of the Company convertible into stock or other securities.

10.03 ***Substitution of Awards***

The Committee may make Stock Awards and may grant Options, Performance Shares, and Performance Units in substitution for performance shares, phantom shares, stock awards, stock options, or similar awards held by an individual who becomes an employee or director of the Company or a Subsidiary in connection with a transaction described in Section 10.01(a). Subject to the requirements of Section 5.02, the terms of the substituted Stock Awards, Options, Performance Shares or Performance Units will be as the Committee, in its discretion, determines appropriate.

ARTICLE XI

Compliance With Law and Approval of Regulatory Bodies

11.01 ***Required Compliance***
No Option will be exercisable, no shares of Common Stock will be issued, no certificates for shares of Common Stock will be delivered, and no payment will be made under this Plan except in compliance with:

(a) all applicable Federal and state laws and regulations (including, without limitation, withholding tax requirements);

(b) any listing agreement to which the Company is a party; and

(c) the rules of all domestic stock exchanges on which the Company's shares may be listed.

The Company has the right to rely on an opinion of its counsel as to compliance with the above.

11.02 ***Legends on Stock Certificates***
Any stock certificate issued to evidence shares of Common Stock:

(a) when a Stock Award is granted;

(b) when a Performance Share or Performance Unit is settled; or

(c) for which an Option is exercised

may bear legends and statements the Administrator deems advisable to assure compliance with Federal and state laws and regulations.

11.03 ***Prior Regulatory Approval***
Until the Company has obtained any consent or approval deemed advisable by the Administrator from regulatory bodies having jurisdiction over the Plan:

(a) no Option will be exercisable;

(b) no Stock Award, Performance Shares or Performance Units will be granted;

(c) no shares of Common Stock will be issued;

(d) no certificate for shares of Common Stock will be delivered; and

(e) no payment will be made under this Plan.

ARTICLE XII

Change in Control Provisions

12.01 *Effect on Awards*

(a) Subject to Section 13.09, the following provisions govern the treatment of an outstanding award under this Plan upon a Change in Control if the award is not continued under Section 12.02(a) and is not substituted under Section 12.02(b):

(i) Options
Each outstanding Option is fully exercisable (in whole or in part at the discretion of the holder) on and after a Control Change Date.

(ii) Stock Awards
Each outstanding Stock Award is transferable and non-forfeitable on and after a Control Change Date without regard to whether any Performance Objectives or other conditions to which the award is subject have been met.

(iii) Performance Shares
Each outstanding Performance Share award is earned as of a Control Change Date and will be settled as soon thereafter as practicable.

(iv) Performance Units
All outstanding Performance Units are earned as of a Control Change Date and will be settled as soon thereafter as possible.

(b) Subject to Section 13.09, the following provisions govern the treatment of an outstanding award under this Plan upon a Change in Control if the award is continued under Section 12.02(a) or substituted under Section 12.02(b):

(i) Options
Each outstanding Option is fully exercisable (in whole or in part at the discretion of the holder) on and after the earlier of:

(A) The date specified in the Award Agreement; or

(B) The Participant's Change in Control Termination.

(ii) Stock Awards
Each outstanding Stock Award is transferable and non-forfeitable on and after the earlier of:

(A) The date specified in the Award Agreement; or

(B) The Participant's Change in Control Termination without regard to whether any Performance Objectives or other conditions to which the award is subject have been met.

(iii) Performance Shares
Each outstanding Performance Share award is earned as of the earlier of:

(A) The date specified in the Award Agreement; or

(B) The Participant's Change in Control Termination, and will be settled as soon thereafter as practicable.

(iv) Performance Units
Each outstanding Performance Unit Award is earned as of the earlier of:

(A) The date specified in the Award Agreement; or

(B) The Participant's Change in Control Termination, and will be settled as soon thereafter as practicable.

(c) Definitions
For purposes of this Article XII:

(i) Change in Control Termination. A Participant has a Change in Control Termination if:

(A) The Participant's employment is terminated by the Company or a Subsidiary during the Severance Period other than:

(I) because of the Participant's death;

(II) because the Participant became permanently disabled within the meaning of, and began receiving disability benefits under, the Company or Subsidiary sponsored long-term disability plan in effect for, or applicable to, the Participant immediately prior to the Change in Control;

(III) under any mandatory retirement policy of the Company or a Subsidiary; or

(IV) for Cause;

or

(B) The Participant terminates his or her employment during the Severance Period for Good Reason, regardless of whether any other reason, other than Cause, for the Participant's termination exists or has occurred, including other employment.

(ii) Severance Period. A Severance Period resulting from a Change in Control is the period beginning on the date the Change in Control occurs and ending on the earliest of:

(A) The second anniversary of the Change in Control;

(B) The Participant's 65th birthday, if the Participant is subject to the DTE Energy Mandatory Retirement Policy; or

(C) The Participant's death.

(iii) Good Reason. A Participant terminates employment for Good Reason if the Participant terminates his or her employment during the Severance Period following the occurrence of any of the following events during the Severance Period:

(A) Failure to elect or reelect to the office, or otherwise maintain the Participant in a position within the same or higher Executive Grouping Level (as in existence prior to the Change in Control) with the Company and/or a Subsidiary, as applicable, which the Participant held immediately prior to the Change in Control, or the removal of the Participant as Chairman of the Company (or any successor to the Company) if the Participant was Chairman of the Company immediately prior to the Change in Control;

(B) A significant adverse change in the nature or scope of the authorities, powers, functions, responsibilities or duties attached to the position with the Company and its Subsidiaries as compared to other executives in the same Executive Grouping Level within the Company or the Subsidiary which the Participant held immediately prior to the Change in Control;

(C) A reduction in the Participant’s Base Pay or the opportunity to earn Incentive Pay from the Company, its Subsidiaries or the failure to pay the Participant Base Pay or Incentive Pay earned when due;

(D) The termination or denial of the Participant’s rights to Employee Benefits or a material reduction in the aggregate scope or value of Employee Benefits (unless, in the case of Welfare Benefits or Pension Benefits the termination, denial or reduction applies to all similarly situated employees of the Company and its Subsidiaries), any of which is not remedied by the Company within 10 calendar days after the Company receives written notice from the Participant of the change, reduction or termination;

(E) Without the Participant’s prior written consent, the Company:

(I) Requires the Participant to change the Participant’s principal location of work to any location that is in excess of 300 miles from the location immediately prior to the Change in Control; or

(II) Requires the Participant to travel away from the Participant’s office in the course of discharging the Participant’s responsibilities or duties at least 40% more (in terms of aggregate days in any calendar year or in any calendar quarter when annualized for purposes of comparison to any prior year) than the average number of travel days per calendar year that was required of the Participant in the three full calendar years immediately prior to the Change in Control;

(iv) Cause. The Participant’s employment will be considered terminated for Cause if prior to termination of the Participant’s employment, the Board reasonably determines, based on a preponderance of the evidence reasonably available to the Board as of the date the Board adopts the resolution described below, that the Participant committed or engaged in:

(A) an intentional act of fraud, embezzlement or theft at a level that constitutes a felony in connection with the Participant’s duties or in the course of the Participant’s employment with the Company or a Subsidiary, whether or not the Participant is convicted or pleads guilty or nolo contender (no contest) to any related criminal charges;

(B) Intentional wrongful damage to property of the Company or a Subsidiary;

(C) Intentional wrongful disclosure of secret processes or confidential information of the Company or a Subsidiary;

(D) Intentional wrongful engagement in any Competitive Activity;

(E) Willful and continued failure by the Participant to substantially perform the Participant's duties with the Company that is not cured within 30 days after the Board delivers to the Participant a written demand for substantial performance specifically identifying the Participant's failure to perform; or

(F) Other intentional activity, including but not limited to a breach of the Participant's fiduciary duties with respect to the Company, a Subsidiary, or any welfare plan or pension plan sponsored by the Company or a Subsidiary;

which, in the reasonable judgment of the Board and based on a preponderance of the evidence available to the Board is significantly detrimental to the reputation, goodwill or business of the Company or significantly disrupts the workplace environment or operation of the Company's business or administrative activities.

For purposes of this Article XII, no act or failure to act on the part of a Participant will be deemed "intentional" if it was due primarily to an error in the Participant's judgment or the Participant's negligence. An act will be deemed "intentional" only if done or omitted to be done by the Participant not in good faith and without reasonable belief that the Participant's action or omission was in the best interest of the Company.

For purposes of this Article XII, the Participant has not been terminated for Cause unless and until:

(G) A meeting of the Board is called and held for the purpose of determining if the Participant is to be terminated for Cause; and

(H) The Participant is given reasonable notice of the meeting and an opportunity to be heard before the Board, with Participant's counsel if the Participant so chooses; and

(I) At that meeting the Board finds, in the good faith opinion of the Board, that the Participant has committed an act entitling the Board to terminate the Participant's employment for Cause; and

(J) The Participant has been provided a copy of the resolution duly adopted at that meeting by the affirmative vote of not less than three-quarters of the Board then in office and specifying in detail the particulars of the Board's finding.

The Participant and the Participant's beneficiaries retain the right to contest the validity or propriety of the Board's determination that the Participant's employment was terminated for Cause.

(v) <u>Competitive Activity</u>. Competitive Activity is a Participant's direct employment, without the written consent of the Board (or any Committee of the Board to which the Board delegates its authority in writing), in any business or enterprise (including the Participant's own business or enterprise) if:

(A) The business or enterprise engages in substantial and direct competition with the Company or any of its Subsidiaries in any state in which the Company or Subsidiary was engaged in business or actively negotiating to enter business as of the Participant's Change in Control Termination; and

(B) The business's or enterprise's sales of any product or service competitive with any product or service of the Company or any of its Subsidiaries amounted to 10% of the business's or enterprise's net sales for its most recently completed fiscal year; and

(C) the Company's or Subsidiary's net sales of the competitive product or service amounted to 10% of the Company's or Subsidiary's net sales for its most recently completed fiscal year; and

(D) The Board determines the Participant's employment in the business or enterprise is detrimental to the Company or any of its Subsidiaries.

"Competitive Activity" does not include the mere ownership of not more than 10% of the total combined voting power or aggregate value of all classes of stock or other securities in the enterprise and the Participant's exercise of rights resulting from ownership of the stock.

The Board (or its delegate) has sole discretion and authority to determine if a Participant is engaging in Competitive Activity for purposes of this Article XII. It is the Participant's responsibility to provide information sufficient for the Board (or its delegate) to make these determinations.

(vi) Incentive Pay. Incentive Pay is the aggregate annual payments of cash or equity compensation (determined without regard to any deferral election) and annual vesting of equity compensation, in addition to Base Pay, under any bonus, incentive, profit-sharing, performance, discretionary pay or similar agreement, policy, plan, program or arrangement (whether or not funded) of the Company or a Subsidiary, or any successor, providing economic value on an aggregate basis at least as favorable to the Participant, in terms of the amount of benefits, levels of coverage and performance measures and levels of required performance, as the benefits payable prior to the Change in Control.

(vii) Base Pay. Base Pay is the Participant's annual base salary (prior to any pre-tax deferrals made under any employee benefit plans of the Company) in effect immediately prior to the Change in Control or immediately prior to the Participant's Change in Control Termination, if higher.

12.02 ***Conversion of Outstanding Awards***

(a) Continuation of Plan

If the Change in Control is described in Section 2.06(a) or (b) and the Surviving Entity or Acquiring Entity is a corporation with common stock publicly traded on an established U.S. stock exchange, the Board may enter into an agreement with the Surviving Entity or Acquiring Entity for the Surviving Entity or Acquiring Entity to adopt and maintain the Plan and to adopt and maintain all outstanding Award Agreements under the existing terms of the Agreement. Equitable adjustments will be made to all outstanding Award Agreements to reflect the Fair Market Value of the Common Stock as of the day before the Control Change Date and to substitute Common Stock subject to Agreements with comparable common stock of the Surviving Entity or Acquiring Entity.

(b) Substitution of Plan

If the Change in Control is described in Section 2.06(a) or (b) and the Surviving Entity or Acquiring Entity is a corporation with common stock publicly traded on an established U.S. stock exchange, the Board may enter into an agreement with the Surviving Entity or Acquiring Entity for the Surviving Entity or Acquiring Entity to adopt a comparable equity compensation plan and grant new Awards under that plan in substitution for outstanding Awards under this Plan. The fair market value of the common stock of the Surviving Entity or Acquiring Entity subject to the substituted Awards will not be less than the Fair Market Value of the Common Stock subject to outstanding Awards under this Plan as of the day before the Control Change Date.

12.03 ***Settlement of Awards***

(a) Options

(i) If outstanding Options under this Plan are not continued under Section 12.02(a) and are not substituted under Section 12.02(b) and the Options become exercisable under Section 12.01(a)(i), each Participant with an outstanding Option will be paid, for each share of Common Stock for which the Participant holds an outstanding Option, the excess, if any, of the Fair Market Value of the Common Stock as of the day before the Control Change Date over the exercise price of the Option.

(ii) If outstanding Options under this Plan are continued under Section 12.02(a) or substituted under Section 12.02(b), and the Options become exercisable under Section 12.01(b)(i)(B), the Participant will be paid, for each share of substituted common stock for which the Participant holds an outstanding Option, the excess, if any, of the Fair Market Value of the substituted common stock as of the day before the Participant’s Change in Control Termination over the exercise price of the Option.

(b) Stock Awards

(i) If outstanding Stock Awards under this Plan are not continued under Section 12.02(a) and are not substituted under Section 12.02(b) and the Stock Awards become transferable and non-forfeitable under Section 12.01(a)(ii), each Participant with a Stock Award will be paid, for each share of Common Stock subject to an outstanding Stock Award, the Fair Market Value of the Common Stock as of the day before the Control Change Date.

(ii) If outstanding Stock Awards under this Plan are continued under Section 12.02(a) or substituted under Section 12.02(b), and the Stock Awards become transferable and non-forfeitable under Section 12.01(b)(ii)(B), the Participant will be paid, for each share of substituted common stock subject to an outstanding Stock Award, the Fair Market Value of the substituted common stock as of the day before the Participant’s Change in Control Termination.

(c) Performance Shares

(i) If outstanding Performance Share Awards under this Plan are not continued under Section 12.02(a) and are not substituted under Section 12.02(b) and the Performance Share Awards become earned under Section 12.01(a)(iii), an award is based only on criteria other than Performance Objectives (such as continued service) is earned in full. The amount of a Performance Share Award based on Performance Objectives earned is the greater of the amount that would have been payable on attainment of:

(A) target levels of performance; or

(B) actual levels of performance,

using performance through the Control Change Date for purposes of determining actual levels of performance. Performance Shares will be settled in cash based on the Fair Market Value of the Common Stock as of the day before the Control Change Date.

(ii) If outstanding Performance Share Awards under this Plan are continued under Section 12.02(a) or substituted under Section 12.02(b) and the Performance Share Awards become earned under Section 12.01(b)(iii)(B), an award is based only on criteria other than Performance Objectives (such as continued service) is earned in full. The amount of a Performance Share Award based on Performance Objectives earned is the greater of the amount that would have been payable on attainment of:

(A) target levels of performance; or

(B) actual levels of performance,

using performance through the date of the Participant's Change in Control Termination for purposes of determining actual levels of performance. Performance Shares will be settled in cash based on the Fair Market Value of the substituted common stock as of the day before the Participant's Change in Control Termination.

(d) <u>Performance Units</u>

(i) If outstanding Performance Unit Awards under this Plan are not continued under Section 12.02(a) and are not substituted under Section 12.02(b) and the Performance Unit Awards become earned under Section 12.01(a)(iv), the amount earned with respect to each award of Performance Units is the greater of the amount that would have been payable on attainment of:

(A) target levels of performance; or

(B) actual levels of performance,

using performance through the Control Change Date for purposes of determining actual levels of performance. Performance Units will be settled in cash based on the Fair Market Value of the Common Stock as of the day before the Control Change Date.

(ii) If outstanding Performance Unit Awards under this Plan are continued under Section 12.02(a) or substituted under Section 12.02(b) and the Performance Unit Awards become earned under Section 12.01(b)(iv)(B), the amount earned with respect to each award of Performance Units is the greater of the amount that would have been payable on attainment of:

(A) target levels of performance; or

(B) actual levels of performance,

using performance through the date of the Participant's Change in Control Termination for purposes of determining actual levels of performance. Performance Units will be settled in cash based on the Fair Market Value of the substituted common stock as of the day before the Participant's Change in Control Termination.

12.04 ***Qualified Termination Before Qualified Change-in-Control***

(a) <u>Status as of Change in Control</u>

If an Eligible Executive experiences a Qualified Termination, the Eligible Executive will be treated as if a Change in Control occurred the day before the date of the Eligible Executive's Qualified Termination.

(b) Eligible Executive

For purposes of this Section 12.04, an "Eligible Executive" is a Participant who has an effective Change in Control Severance Agreement with the Company at the time of the Participant's Qualified Termination.

(c) Qualified Termination

For purposes of this Section 12.04, a Qualified Termination is the Eligible Executive's involuntary termination that entitles the Eligible Executive to benefits under the Eligible Executive's Change in Control Severance Agreement, but only if:

(i) the Executive's involuntary termination occurs during a Severance Period (as defined in the Eligible Executive's Change in Control Severance Agreement) resulting from a change in control event under the Change in Control Severance Agreement that precedes and is anticipatory of a second change in control event under the Change in Control Severance Agreement (the "Qualified Severance Period"); and

(ii) the Executive's involuntary termination occurs before a Qualified Change-in-Control occurs under this Plan.

(d) Qualified Change-in-Control

For purposes of this Section 12.04, a Qualified Change-in-Control under this Plan is a Change in Control that:

(i) occurs after the Eligible Executive's Qualified Termination; and

(ii) occurs before the end of the Qualified Severance Period; and

(iii) is the consummation of the anticipatory event that resulted in the Eligible Executive's Qualified Severance Period.

(e) Computation

The outstanding Options held by the Eligible Executive as of the day before the date of the Eligible Executive's Qualified Termination, reduced by Options exercised by the Eligible Executive after the Eligible Executive's Qualified Termination, will be converted under Section 12.02 or settled under Section 12.03, as applicable.

The outstanding Stock Awards held by the Eligible Executive as of the day before the date of the Eligible Executive's Qualified Termination, reduced by Stock Awards that became transferable and non-forfeitable because of the Eligible Executive's Qualified Termination, will be converted under Section 12.02 or settled under Section 12.03, as applicable.

The outstanding Performance Shares held by the Eligible Executive as of the day before the date of the Eligible Executive's Qualified Termination will be settled under Section 12.03. The settlement amount paid to the Eligible Executive will be reduced by any amount paid to the Eligible Executive after the Eligible Executive's Qualified Termination with respect to the same Performance Shares.

The outstanding Performance Units held by the Eligible Executive as of the day before the date of the Eligible Executive's Qualified Termination will be settled under Section 12.03. The settlement amount paid to the Eligible Executive will be reduced by any amount paid to the Eligible Executive after the Eligible Executive's Qualified Termination with respect to the same Performance Units.

ARTICLE XIII

General Provisions

13.01 ***Effect on Employment and Service***

The adoption of this Plan, the operation of this Plan, or any document describing or referring to this Plan (or any part of this Plan) does not:

(a) confer on any individual the right to continue in the employ or service of the Company or a Subsidiary; or

(b) in any way affect any right and power of the Company or a Subsidiary to terminate the employment or service of any individual at any time with or without a reason.

13.02 ***Unfunded Plan***

The Plan is unfunded. The Company is not required to segregate any assets that may at any time be represented by grants under this Plan. Any liability of the Company to any person with respect to any grant under this Plan is based solely on contractual obligations created under this Plan. No obligation of the Company under this Plan is secured by any pledge of, or other encumbrance on, any property of the Company.

13.03 ***Rules of Construction***

Headings are given to the articles and sections of this Plan solely as a convenience. The reference to any statute, regulation, or other provision of law refers to any amendment to or successor of the provision.

13.04 ***Restrictions on Transfer of Shares Issued or Delivered***

(a) Company's Right of First Refusal

An Agreement may provide that the Company has reserved a right of first refusal to purchase the Common Stock acquired on exercise of Options or under a Stock Award or award of Performance Shares or Performance Units at a price equal to the Fair Market Value per share repurchased determined as of the day preceding the day the Company notifies the Participant of its intention to repurchase the shares. If the Company reserves this right, the Participant must comply with the terms of the Agreement and any procedures established by the Administrator prior to any disposition of Common Stock acquired under the Agreement. The Company will have a maximum of five days following the date on which Participant is required to notify the Company of the Participant's intent to dispose of the Common Stock to advise the Participant whether the Company will purchase the Common Stock.

(b) Additional Restrictions

An Agreement may provide that the shares of Common Stock to be issued or delivered on exercise of an Option or in settlement of an award of Performance Shares or Performance Units or the shares of Common Stock subject to a Stock Award that are no longer subject to the substantial risk of forfeiture and restrictions on transfer referred to in Article VII are subject to additional restrictions on transfer.

13.05 ***Effect of Acceptance of Award***
By accepting an award under the Plan, a Participant and the Participant's successor in interest or personal representative is conclusively deemed to have indicated acceptance or ratification of, and consent to, any action taken under the Plan by the Company or the Administrator.

13.06 ***Governing Law***
The provisions of this Plan will be interpreted and construed in accordance with the laws of the State of Michigan, other than its choice-of-law provisions.

13.07 ***Coordination with Other Plans***
Participation in the Plan does not affect an employee's eligibility to participate in any other benefit or incentive plan of the Company or any Subsidiary. Treatment of any income realized as a result of the exercise, vesting, or settlement of awards under the Plan for purposes of any Company-sponsored or Subsidiary-sponsored employee pension benefit plan, insurance or other employee benefit programs will be governed by the terms of the other plans or programs.

13.08 ***Tax Withholding***
If required by law, the Company will withhold or cause to be withheld Federal, state and/or local income and employment taxes in connection with the exercise, vesting or settlement of an award under the Plan. Unless otherwise provided in the applicable Agreement, each Participant may satisfy any required tax withholding by any of the following means in any combination:

(a) a cash payment;

(b) delivery to the Company of a number of shares of Common Stock previously acquired by the Participant having a Fair Market Value, on the date the tax liability first arises, equal to the tax liability being paid and, if the shares were acquired from the Company, that have been held by the Participant for at least six months; or

(c) by authorizing the Company to withhold from the shares of Common Stock otherwise issuable to the Participant under the exercise, vesting or settlement of an award either:

(i) the number of shares of Common Stock having a Fair Market Value, on the date the tax liability first arises, equal to the minimum statutory withholding required for the Participant based on applicable law; or

(ii) if permitted by the Company, a specified number of shares of Common Stock having a Fair Market Value of not less than the minimum statutory withholding required for the Participant based on applicable law and not more than tax withholding calculated using the maximum statutory tax rates in the applicable jurisdiction.

Any Common Stock delivered to the Company by the Participant or withheld from Common Stock otherwise issuable to the Participant to satisfy any required tax withholding will not be reallocated to other Options, Performance Shares, Performance Units, and Stock Awards to be granted under this Plan and will not otherwise be made available to be issued under this Plan.

If the amount required is not paid, the Company may refuse to issue or deliver shares or cash under the award.

13.09 ***Limitation on Benefits***

(a) Purpose of Benefit Limitation

Benefits, payments, accelerated vesting and other rights under this Plan may constitute Parachute Payments subject to the “golden parachute” rules of Code Section 280G and the excise tax under Code Section 4999. It is the Company’s intention to reduce any Parachute Payments if, and only to the extent that, a reduction will allow the affected Participant to receive a greater Net After Tax Amount than the Participant would receive absent a reduction. This Section 13.09 describes how the Company’s intent will be effected.

(b) Determination of Parachute Payment Amount

The Accounting Firm will first determine the amount of any Parachute Payments payable to a Participant. The Accounting Firm will also determine the Net After Tax Amount attributable to the Participant’s total Parachute Payments. The Accounting Firm will next determine the amount of the Participant’s Capped Parachute Payments. Finally, the Accounting Firm will determine the Net After Tax Amount attributable to the Participant’s Capped Parachute Payments.

(c) Amount Paid to Participant

That Participant will receive the total Parachute Payments unless the Accounting Firm determines that the Capped Parachute Payments will yield a higher Net After Tax Amount. In that case that Participant will receive the Capped Parachute Payments. If a Participant receives Capped Parachute Payments, the Participant’s benefits, payments, accelerated vesting or other rights under this Plan will be adjusted, if at all, as determined in the sole discretion of the Committee. The Accounting Firm will notify the Participant and the Company if it determines that the Parachute Payments must be reduced to the Capped Parachute Payments and will send the Participant and the Company a copy of its detailed calculations supporting that determination.

(d) Adjustment of Amount Paid

As a result of any uncertainty in the application of Code Sections 280G and 4999 at the time that the Accounting Firm makes its determination under this Section 13.09, it is possible that amounts will have been paid, vested, earned or distributed that should not have been paid, vested, earned or distributed under this Section 13.09 (“Overpayments”), or that additional amounts should be paid, vested, earned, or distributed under this Section 13.09 (“Underpayments”).

(i) *Overpayment*

If the Accounting Firm determines, based on either controlling precedent, substantial authority, or the assertion of a deficiency by the Internal Revenue Service against a Participant or the Company which the Accounting Firm believes has a high probability of success, that an Overpayment has been made, then the Participant is required to:

(A) pay the Company upon demand the sum of the Overpayment plus interest on the Overpayment at the prime rate provided in Code Section 7872(f)(2) from the date of the Participant’s receipt of the Overpayment until the date of repayment; or

(B) agree to other arrangements that the Committee determines to be equitable in the circumstances.

The Participant will be required to make the repayment or agree to other arrangements, if, and only to the extent, that the repayment or other arrangement would either reduce the amount on which the Participant is subject to tax under Code Section 4999 or generate a refund of tax imposed under Code Section 4999.

(ii) *Underpayment*

If the Accounting Firm determines, based upon controlling precedent or substantial authority, that an Underpayment has occurred, the Accounting Firm will notify the Participant and the Company of that determination. The Company will:

(A) pay the Participant the sum of the Underpayment plus interest on the Underpayment at the prime rate provided in Code Section 7872(f)(2) from the date the Underpayment should have been paid until actual payment; or

(B) take other action the Committee determines to be equitable in the circumstances.

(e) <u>Determinations by Accounting Firm</u>

All determinations made by the Accounting Firm under this Section 13.09 are binding on the Participant and the Company. The determinations must be made as soon as practicable but no later than 30 days after a Control Change Date.

(f) <u>Exclusion from Benefit Limitation</u>

This Section 13.09 does not apply to any Participant entitled to an indemnification of excise taxes incurred under Code Section 4999, by a Change in Control Severance Agreement or other arrangement or agreement with the Company, with respect to Parachute Payments otherwise subject to limitation under this Section 13.09.

13.10 *Clawback*

(a) <u>Definitions</u>

For purposes of this Section 13.10:

(i) *incentive-based compensation* means any compensation that is granted, earned, or vested based wholly or in part upon the attainment of any financial reporting measure; and

(ii) *financial reporting measures* means measures that are determined and presented in accordance with the accounting principles used in preparing the Company's financial statements, and any measures that are derived wholly or in part from such measures. Stock price and total shareholder return are also financial reporting measures.

(b) <u>Conditions Required for Clawback of Incentive-Based Compensation</u>

Clawback of incentive-based compensation from a Participant may occur when all three of the following conditions exist:

(i) The incentive-based compensation payment or award (or vesting of the award) was based on the achievement of financial results reported on Form 10-Q, Form 10-K, or other report filed with the Securities and Exchange Commission and the financial results were the subject of a subsequent accounting restatement because of the Company’s material noncompliance with any financial reporting requirement under federal securities laws (other than a restatement as a result of a change in applicable accounting principles) including any required accounting restatement to correct an error in previously issued financial statements that is material to the previously issued financial statements, or that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period; and

(ii) A lower incentive-based compensation payment or award would have been made to the Participant (or lesser or no vesting of the award would have occurred) based on the restated financial results; and

(iii) The incentive-based compensation payment or award or the vesting of the award occurred during the three-year period preceding the date on which the Company was required to prepare the accounting restatement.

(c) Clawback of Incentive-Based Compensation

If the Committee determines that the requirements of Section 13.10(b) have been satisfied, the Company may seek to recover from a Participant, in accordance with applicable law and regulations and employing the recovery mechanisms in any Clawback Policy adopted by the Company, the portion of any incentive-based compensation paid to or received by the Participant for or during the three-year period described in Section 13.10(b)(iii) that is greater than the amount that would have been paid to or received by the Participant if the incentive-based compensation had been determined based on the restated financial results.

(d) Adjustment of Outstanding Awards

If the Committee determines that the requirements of Section 13.10(b) have been satisfied, the Committee may cancel, in whole or in part, any outstanding incentive-based compensation award if the Administrator took the Company's financial results into account in granting the award and those financial results were reduced in the subsequent restatement.

(e) Acceptance by Participant

By accepting an award of incentive-based compensation under the Plan, a Participant (and the Participant's successor in interest or personal representative) is conclusively deemed to have accepted the requirements of this Section 13.10 and agreed to comply with any clawback of incentive-based compensation required by this Section 13.10.

ARTICLE XIV

Amendment

14.01 *Authority to Amend*

The Board may amend this Plan from time to time or terminate it at any time. However, no material amendment to the Plan may become effective until shareholder approval is obtained. A material amendment to the Plan is any amendment that would:

(a) materially increase the aggregate number of shares of Common Stock that may be issued or delivered under the Plan or that may be issued to a Participant;

(b) permit the exercise of an Option at an Option price less than the Fair Market Value on the date of grant of the Option or otherwise reduce the price at which an Option is exercisable, either by amendment of an Agreement or substitution with a new Award with a reduced price;

(c) change the types of awards that may be granted under the Plan;

(d) expand the classes of persons eligible to receive awards or otherwise participate in the Plan; or

(e) require approval of the shareholders of the Company to comply with applicable law or the rules of the New York Stock Exchange.

14.02 *Participants' Rights*

No amendment or termination may, without a Participant's consent, adversely affect the rights of the Participant under any Option, any Stock Award, or any award of Performance Shares or Performance Units outstanding at the time the amendment is made or the termination occurs.

ARTICLE XV

Duration of Plan

No Option, Stock Award, Performance Shares, or Performance Units may be granted under this Plan more than 10 years after the earlier of the adoption of this amendment and restatement of the Plan by the Board in 2021 or the approval of this amendment and restatement of the Plan by the Company's shareholders in 2021. Options, Stock Awards, Performance Shares, and Performance Units granted before that date remain valid in accordance with the terms of their Agreements.

ARTICLE XVI

Effective Date of Plan

Options, Performance Shares and Performance Units may be granted under this amendment and restatement of the Plan upon its adoption by the Board in 2021. However, Options granted under this Plan may not be exercised, Performance Shares and Performance Units granted under this Plan cannot be settled in Common Stock or Cash, and Stock Awards cannot be issued under this Plan until this amendment and restatement of the Plan is approved by the Company's shareholders at the Company's 2021 annual meeting of shareholders.

Exhibit 21.1

SUBSIDIARIES OF DTE ENERGY COMPANY

DTE Energy Company’s principal subsidiaries as of December 31, 2023 are listed below. All other subsidiaries, if considered in the aggregate as a single subsidiary, would not constitute a significant subsidiary.

Subsidiary		State of Incorporation
1.	DTE Electric Company	Michigan
2.	DTE Electric Holdings, LLC	Michigan
3.	DTE Energy Trading, Inc.	Michigan
4.	DTE Enterprises, Inc.	Michigan
5.	DTE Gas Company	Michigan
6.	DTE Gas Holdings, Inc.	Michigan

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-157769 and 333-264196) and Form S-8 (No. 333-202343, 333-199746, 333-225917, 333-261804 and 333-276230) of DTE Energy Company of our report dated February 8, 2024 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Detroit, Michigan
February 8, 2024

Exhibit 23.2

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-3 (No. 333-264196-01) of DTE Electric Company of our report dated February 8, 2024 relating to the financial statements, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Detroit, Michigan
February 8, 2024

Exhibit 31.1

FORM 10-K CERTIFICATION

I, Gerardo Norcia, certify that:

1. I have reviewed this Annual Report on Form 10-K of DTE Energy Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/S/ GERARDO NORCIA — Date: February 8, 2024

Gerardo Norcia
Chairman and Chief Executive Officer of DTE Energy Company

Exhibit 31.2

FORM 10-K CERTIFICATION

I, David Ruud, certify that:

1. I have reviewed this Annual Report on Form 10-K of DTE Energy Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/S/ DAVID RUUD

David Ruud
Executive Vice President and
Chief Financial Officer of DTE Energy Company

Date: February 8, 2024

Exhibit 31.3

FORM 10-K CERTIFICATION

I, Gerardo Norcia, certify that:

1. I have reviewed this Annual Report on Form 10-K of DTE Electric Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/S/ GERARDO NORCIA

Date: February 8, 2024

Gerardo Norcia
Chief Executive Officer of DTE Electric Company

Exhibit 31.4

FORM 10-K CERTIFICATION

I, David Ruud, certify that:

1. I have reviewed this Annual Report on Form 10-K of DTE Electric Company;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/S/ DAVID RUUD

David Ruud
Executive Vice President and
Chief Financial Officer of DTE Electric Company

Date: February 8, 2024

Exhibit 32.1

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K of DTE Energy Company for the year ended December 31, 2023, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Gerardo Norcia, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge and belief:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of DTE Energy Company.

Date: February 8, 2024

/S/ GERARDO NORCIA
Gerardo Norcia
Chairman and Chief Executive Officer
of DTE Energy Company

A signed original of this written statement required by Section 906 has been provided to DTE Energy Company and will be retained by DTE Energy Company and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of DTE Energy Company for the year ended December 31, 2023, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, David Ruud, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge and belief:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of DTE Energy Company.

Date: February 8, 2024

/S/ DAVID RUUD

David Ruud
Executive Vice President and
Chief Financial Officer of DTE Energy Company

A signed original of this written statement required by Section 906 has been provided to DTE Energy Company and will be retained by DTE Energy Company and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.3

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of DTE Electric Company for the year ended December 31, 2023, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Gerardo Norcia, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge and belief:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of DTE Electric Company.

Date: February 8, 2024	/S/ GERARDO NORCIA
	Gerardo Norcia Chief Executive Officer of DTE Electric Company

A signed original of this written statement required by Section 906 has been provided to DTE Electric Company and will be retained by DTE Electric Company and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.4

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of DTE Electric Company for the year ended December 31, 2023, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, David Ruud, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge and belief:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of DTE Electric Company.

Date:	February 8, 2024	/S/ DAVID RUUD
		David Ruud Executive Vice President and Chief Financial Officer of DTE Electric Company

A signed original of this written statement required by Section 906 has been provided to DTE Electric Company and will be retained by DTE Electric Company and furnished to the Securities and Exchange Commission or its staff upon request.

CLAWBACK POLICY OF DTE ENERGY COMPANY

1. This policy sets forth the conditions under which DTE Energy Company (the "Company") will seek reimbursement with respect to incentive-based compensation (including stock options awarded as compensation) paid or awarded to current or former executive officers of the Company.

2. Definitions.

(a) The term "executive officers" shall mean current or former executive officers designated by the Board of Directors of the Company as officers for purposes of Section 16 of the Securities Exchange Act of 1934, as amended, as well as business unit presidents of the Company and its subsidiaries.

(b) The term "incentive-based compensation" shall mean any compensation that is granted, earned, or vested based wholly or in part upon the attainment of any financial reporting measure.

(c) The term "financial reporting measures" shall mean measures that are determined and presented in accordance with the accounting principles used in preparing the Company's financial statements, and any measures that are derived wholly or in part from such measures. Stock price and total shareholder return are also financial reporting measures.

3. Clawback of Incentive Compensation.

In each instance where all three of the following factors exist:

(a) the incentive-based compensation payment or award (or the vesting of such award) was based upon the achievement of financial results, as reported in a Form 10-Q, Form 10-K or other report filed with the Securities and Exchange Commission ("SEC"), that were subsequently the subject of an accounting restatement due to material noncompliance of the Company with any financial reporting requirement under the federal securities laws (other than as a result of a change in applicable accounting principles), including any required accounting restatement to correct an error in previously issued financial statements that is material to the previously issued financial statements, or that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period;

(b) a lower payment or award would have been made to such officer (or lesser or no vesting would have occurred with respect to such award) based upon the restated financial results; and

(c) the incentive-based compensation payment or award or the vesting of such award occurred during the three-year period preceding the date on which the Company was required to prepare an accounting restatement;

based on a determination of the Organization and Compensation Committee of the Board of Directors, the Company shall seek to recover from each executive officer of the Company, in accordance with applicable law and regulations, the portion of any cash or equity-based incentive-based compensation paid to or received by such officer for or during such three-year period that is greater than the amount that would have been paid or received had the financial results been properly reported, without regard to taxes paid.

4. General Provisions.

(a) The Company may seek direct repayment from the affected executive officers or, to the extent permitted by law, enforce an executive officer's repayment obligation under this policy by reducing any amounts that may be owing from time-to-time by the Company or any of its subsidiaries to such executive officer, whether as future payments of incentive-based compensation, wages, severance, vacation pay or in the form of any other benefit or for any other reason, or by rescinding or canceling unvested stock. In the case of equity awards that vested based on the achievement of financial results that were subsequently reduced, the Company may also seek to recover gains from the sale or disposition of vested shares (including shares purchased upon the exercise of options that vested based on the achievement of financial results). In addition, the Organization and Compensation Committee of the Board of Directors may cancel, in whole or in part, outstanding equity awards where the Organization and Compensation Committee took into account the financial performance of the Company in granting such awards and the financial results were subsequently reduced due to such a Restatement.

(b) The Organization and Compensation Committee of the Board of Directors may determine that recovery of incentive-based compensation is impracticable, and may refrain from pursuing such recovery, only if (1) the direct expense paid to a third party to assist in enforcing the policy would exceed the amount to be recovered, provided that the Company must make a reasonable attempt to recover such incentive-based compensation, document such reasonable attempt to recover, and provide that documentation to the New York Stock Exchange; or (2) recovery of incentive-based compensation would likely cause an otherwise tax-qualified retirement plan, under which benefits are broadly available to employees, to fail to meet the requirements of Sections 402(a)(13) or 411(a) of the Internal Revenue Code and regulations thereunder.

(c) The repayment of incentive-based compensation under this policy is in addition to any other right or remedy available to the Company, including termination of employment or institution of civil or criminal proceedings.

5. Authority and Binding Effect of Determinations.

The Organization and Compensation Committee of the Board of Directors (based on the recommendation of the Audit Committee) shall have full and final authority to make all determinations under this policy. Any determination made by the Organization and Compensation Committee under this policy shall be final, binding, and conclusive on all parties.

6. Compliance with Section 409A.

Any set-offs of deferred benefits to recoup the amounts to be repaid by executive officers under this policy shall be made in a manner that complies with the requirements of Section 409A of the Internal Revenue Code of 1986, as amended, and regulations promulgated thereunder.

7. Severability.

If any provision of this policy or the application of any provision in this policy to an executive officer shall be adjudicated to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this policy, and the invalid, illegal or unenforceable provisions shall be deemed amended to the minimum extent necessary to render any such provision or application enforceable.

Adopted by the Board of Directors: October 25, 2023