UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

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

For the Quarterly Period ended September 30, 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

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 Company (DTE Energy)	**Yes**	☒	**No**	☐	**DTE Electric Company (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 is a shell company (as defined in Rule 12b-2 of the Exchange Act).

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

Number of shares of Common Stock outstanding at September 30, 2023:

Registrant	**Description**	**Shares**
DTE Energy	Common Stock, without par value	206,258,727
DTE Electric	Common Stock, $10 par value, indirectly-owned by DTE Energy	138,632,324

This combined Form 10-Q 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 H(1)(a) and (b) of Form 10-Q and is therefore filing this form with the reduced disclosure format specified in General Instructions H(2) of Form 10-Q.

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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
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	DTE Electric Securitization Funding I, LLC, a special purpose entity wholly-owned by DTE Electric. The entity was created to issue securitization bonds for certain qualified costs authorized by the MPSC 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
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
GHGs	Greenhouse gases
Interconnection sales	Sales of power by DTE Electric into the energy market through MISO (Midcontinent Independent System Operation, Inc.), generally resulting from excess generation compared to customer demand
MGP	Manufactured Gas Plant
MPSC	Michigan Public Service Commission
MTM	Mark-to-market

DEFINITIONS

NAV	Net Asset Value
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
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
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
VIE	Variable Interest Entity

Units of Measurement

Bcf	Billion cubic feet of natural gas
BTU	British thermal unit, heat value (energy content) of fuel
MMBtu	One million BTU
MWh	Megawatt-hour of electricity

FILING FORMAT

This combined Form 10-Q is separately filed by DTE Energy and DTE Electric. Information in this combined Form 10-Q 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 in respect to debt securities of DTE Energy. This combined Form 10-Q should be read in its entirety. No one section of this combined Form 10-Q deals with all aspects of the subject matter of this combined Form 10-Q. This combined Form 10-Q should be read in conjunction with the Consolidated Financial Statements and Combined Notes to Consolidated Financial Statements and with Management's Discussion and Analysis included in the combined DTE Energy and DTE Electric 2022 Annual Report on 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 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 trust 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 plant 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 net zero emissions goals; 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 — Financial Information

Item 1. *Financial Statements*

DTE Energy Company

Consolidated Statements of Operations (Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In millions, except per share amounts)			
Operating Revenues				
Utility operations	**$ 1,827**	$ 2,053	**$ 5,504**	$ 6,196
Non-utility operations	**1,061**	3,198	**3,847**	8,556
	2,888	5,251	**9,351**	14,752
Operating Expenses				
Fuel, purchased power, and gas — utility	**435**	594	**1,364**	1,901
Fuel, purchased power, gas, and other — non-utility	**864**	3,023	**3,226**	8,324
Operation and maintenance	**545**	608	**1,650**	1,803
Depreciation and amortization	**404**	369	**1,185**	1,093
Taxes other than income	**114**	111	**350**	349
Asset (gains) losses and impairments, net	**(12)**	1	**(11)**	(4)
	2,350	4,706	**7,764**	13,466
Operating Income	**538**	545	**1,587**	1,286
Other (Income) and Deductions				
Interest expense	**200**	171	**583**	486
Interest income	**(15)**	(10)	**(45)**	(26)
Non-operating retirement benefits, net	**1**	(5)	**9**	(13)
Other income	**(13)**	(16)	**(70)**	(35)
Other expenses	**11**	12	**26**	56
	184	152	**503**	468
Income Before Income Taxes	**354**	393	**1,084**	818
Income Tax Expense	**22**	6	**106**	—
Net Income Attributable to DTE Energy Company	**$ 332**	$ 387	**$ 978**	$ 818
Basic Earnings per Common Share				
Net Income Attributable to DTE Energy Company	**$ 1.61**	$ 2.00	$ 4.74	$ 4.22
Diluted Earnings per Common Share				
Net Income Attributable to DTE Energy Company	**$ 1.61**	$ 1.99	$ 4.74	$ 4.21
Weighted Average Common Shares Outstanding				
Basic	**206**	193	**206**	193
Diluted	**206**	194	**206**	194

See Combined Notes to Consolidated Financial Statements (Unaudited)

DTE Energy Company

Consolidated Statements of Comprehensive Income (Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In millions)			
Net Income	**$ 332**	$ 387	**$ 978**	$ 818
Other comprehensive income (loss), net of tax:				
Benefit obligations, net of taxes of $—, $—, $1, and $2, respectively	**1**	2	**2**	7
Net unrealized gains on derivatives, net of taxes of $4, $1, $5, and $2, respectively	**15**	4	**17**	7
Foreign currency translation	**(3)**	—	**(1)**	—
Other comprehensive income	**13**	6	**18**	14
Comprehensive Income Attributable to DTE Energy Company	**$ 345**	$ 393	**$ 996**	$ 832

See Combined Notes to Consolidated Financial Statements (Unaudited)

DTE Energy Company

Consolidated Statements of Financial Position (Unaudited)

	September 30, 2023	December 31, 2022
	(In millions)	
ASSETS		
Current Assets		
Cash and cash equivalents	**$ 36**	$ 33
Restricted cash	**30**	10
Accounts receivable (less allowance for doubtful accounts of $76 and $79, respectively)		
Customer	**1,393**	2,038
Other	**173**	144
Inventories		
Fuel and gas	**463**	433
Materials, supplies, and other	**647**	509
Derivative assets	**228**	328
Regulatory assets	**135**	450
Prepaid property tax	**180**	76
Other	**135**	159
	3,420	4,180
Investments		
Nuclear decommissioning trust funds	**1,913**	1,825
Investments in equity method investees	**180**	165
Other	**157**	165
	2,250	2,155
Property		
Property, plant, and equipment	**36,397**	39,346
Accumulated depreciation and amortization	**(8,869)**	(10,579)
	27,528	28,767
Other Assets		
Goodwill	**1,993**	1,993
Regulatory assets	**6,715**	3,886
Securitized regulatory assets	**178**	206
Intangible assets	**159**	166
Notes receivable	**400**	331
Derivative assets	**81**	105
Prepaid postretirement costs	**616**	571
Operating lease right-of-use assets	**137**	89
Other	**253**	234
	10,532	7,581
Total Assets	**$ 43,730**	$ 42,683

See Combined Notes to Consolidated Financial Statements (Unaudited)

DTE Energy Company

Consolidated Statements of Financial Position (Unaudited) — (Continued)

	September 30, 2023	December 31, 2022
	(In millions, except shares)	
LIABILITIES AND EQUITY		
Current Liabilities		
Accounts payable	**$ 1,135**	$ 1,604
Accrued interest	**213**	154
Dividends payable	**196**	196
Short-term borrowings	**1,217**	1,162
Current portion long-term debt, including securitization bonds and finance leases	**594**	1,124
Derivative liabilities	**145**	342
Regulatory liabilities	**52**	34
Operating lease liabilities	**18**	13
Other	**475**	544
	4,045	5,173
Long-Term Debt (net of current portion)		
Mortgage bonds, notes, and other	**17,497**	15,807
Securitization bonds	**153**	172
Junior subordinated debentures	**883**	883
Finance lease liabilities	**9**	11
	18,542	16,873
Other Liabilities		
Deferred income taxes	**2,575**	2,394
Regulatory liabilities	**2,597**	2,673
Asset retirement obligations	**3,589**	3,460
Unamortized investment tax credit	**180**	182
Derivative liabilities	**154**	315
Accrued pension liability	**319**	378
Accrued postretirement liability	**288**	287
Nuclear decommissioning	**299**	282
Operating lease liabilities	**112**	68
Other	**176**	197
	10,289	10,236
Commitments and Contingencies (Notes 5 and 12)		
Equity		
Common stock (No par value, 400,000,000 shares authorized, and 206,258,727 and 205,632,393 shares issued and outstanding at September 30, 2023 and December 31, 2022, respectively)	**6,697**	6,651
Retained earnings	**4,197**	3,808
Accumulated other comprehensive loss	**(44)**	(62)
Total DTE Energy Company Equity	**10,850**	10,397
Noncontrolling interests	**4**	4
Total Equity	**10,854**	10,401
Total Liabilities and Equity	**$ 43,730**	$ 42,683

See Combined Notes to Consolidated Financial Statements (Unaudited)

DTE Energy Company

Consolidated Statements of Cash Flows (Unaudited)

	Nine Months Ended September 30,	
	2023	2022
	(In millions)	
Operating Activities		
Net Income	$ 978	$ 818
Adjustments to reconcile Net Income to Net cash from operating activities:		
Depreciation and amortization	1,185	1,093
Nuclear fuel amortization	43	26
Allowance for equity funds used during construction	(26)	(20)
Deferred income taxes	119	15
Equity (earnings) losses of equity method investees	(7)	15
Dividends from equity method investees	3	4
Asset (gains) losses and impairments, net	(11)	(4)
Changes in assets and liabilities:		
Accounts receivable, net	614	(150)
Inventories	(170)	(204)
Prepaid postretirement benefit costs	(45)	(60)
Accounts payable	(438)	228
Accrued pension liability	(59)	(71)
Accrued postretirement liability	1	(8)
Derivative assets and liabilities	(234)	77
Regulatory assets and liabilities	509	(552)
Other current and noncurrent assets and liabilities	(87)	205
Net cash from operating activities	2,375	1,412
Investing Activities		
Plant and equipment expenditures — utility	(2,772)	(2,342)
Plant and equipment expenditures — non-utility	(41)	(55)
Proceeds from sale of nuclear decommissioning trust fund assets	527	707
Investment in nuclear decommissioning trust funds	(524)	(710)
Distributions from equity method investees	16	11
Contributions to equity method investees	(27)	(12)
Notes receivable	(56)	(13)
Other	(64)	(39)
Net cash used for investing activities	(2,941)	(2,453)
Financing Activities		
Issuance of long-term debt, net of discount and issuance costs	2,278	1,771
Redemption of long-term debt	(1,146)	(316)
Short-term borrowings, net	55	236
Repurchase of common stock	—	(55)
Dividends paid on common stock	(564)	(514)
Other	(34)	(65)
Net cash from financing activities	589	1,057
Net Increase in Cash, Cash Equivalents, and Restricted Cash	23	16
Cash, Cash Equivalents, and Restricted Cash at Beginning of Period	43	35
Cash, Cash Equivalents, and Restricted Cash at End of Period	$ 66	$ 51
Supplemental disclosure of non-cash investing and financing activities		
Plant and equipment expenditures in accounts payable	$ 401	$ 331

See Combined Notes to Consolidated Financial Statements (Unaudited)

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DTE Energy Company

Consolidated Statements of Changes in Equity (Unaudited)

	Common Stock		Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Noncontrolling Interests	Total
	Shares	Amount				
	(Dollars in millions, shares in thousands)					
Balance, December 31, 2022	205,632	$ 6,651	$ 3,808	$ (62)	$ 4	$ 10,401
Net Income	—	—	445	—	—	445
Dividends declared on common stock ($0.95 per Common Share)	—	—	(196)	—	—	(196)
Issuance of common stock	76	9	—	—	—	9
Other comprehensive loss, net of tax	—	—	—	(3)	—	(3)
Stock-based compensation and other	401	(8)	(2)	—	—	(10)
Balance, March 31, 2023	206,109	$ 6,652	$ 4,055	$ (65)	$ 4	$ 10,646
Net Income	—	—	201	—	—	201
Dividends declared on common stock ($1.91 per Common Share)	—	—	(393)	—	—	(393)
Issuance of common stock	76	8	—	—	—	8
Other comprehensive income, net of tax	—	—	—	8	—	8
Stock-based compensation and other	(9)	16	(1)	—	—	15
Balance, June 30, 2023	206,176	$ 6,676	$ 3,862	$ (57)	$ 4	$ 10,485
Net Income	—	—	332	—	—	332
Issuance of common stock	75	9	—	—	—	9
Other comprehensive income, net of tax	—	—	—	13	—	13
Stock-based compensation and other	8	12	3	—	—	15
Balance, September 30, 2023	**206,259**	**$ 6,697**	**$ 4,197**	**$ (44)**	**$ 4**	**$ 10,854**

	Common Stock		Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Noncontrolling Interests	Total
	Shares	Amount				
	(Dollars in millions, shares in thousands)					
Balance, December 31, 2021	193,748	$ 5,379	$ 3,438	$ (112)	$ 8	$ 8,713
Net Income	—	—	394	—	—	394
Dividends declared on common stock ($0.89 per Common Share)	—	—	(171)	—	—	(171)
Repurchase of common stock	(465)	(55)	—	—	—	(55)
Other comprehensive income, net of tax	—	—	—	3	—	3
Stock-based compensation, net distributions to noncontrolling interests, and other	456	(14)	1	—	(4)	(17)
Balance, March 31, 2022	193,739	$ 5,310	$ 3,662	$ (109)	$ 4	$ 8,867
Net Income	—	—	37	—	—	37
Dividends declared on common stock ($1.77 per Common Share)	—	—	(343)	—	—	(343)
Other comprehensive income, net of tax	—	—	—	5	—	5
Stock-based compensation, net distributions to noncontrolling interests, and other	(3)	13	(1)	—	1	13
Balance, June 30, 2022	193,736	$ 5,323	$ 3,355	$ (104)	$ 5	$ 8,579
Net Income	—	—	387	—	—	387
Other comprehensive income, net of tax	—	—	—	6	—	6
Stock-based compensation, net contributions from noncontrolling interests, and other	6	14	(1)	—	1	14
Balance, September 30, 2022	193,742	$ 5,337	$ 3,741	$ (98)	$ 6	$ 8,986

See Combined Notes to Consolidated Financial Statements (Unaudited)

DTE Electric Company

Consolidated Statements of Operations (Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In millions)			
Operating Revenues — Utility operations	**$ 1,623**	$ 1,844	**$ 4,324**	$ 4,896
Operating Expenses				
Fuel and purchased power — utility	**440**	595	**1,120**	1,551
Operation and maintenance	**371**	403	**1,099**	1,167
Depreciation and amortization	**334**	304	**979**	899
Taxes other than income	**87**	85	**255**	257
	1,232	1,387	**3,453**	3,874
Operating Income	**391**	457	**871**	1,022
Other (Income) and Deductions				
Interest expense	**114**	93	**319**	271
Interest income	**(3)**	—	**(14)**	—
Non-operating retirement benefits, net	**(1)**	(1)	**(3)**	(2)
Other income	**(16)**	(15)	**(56)**	(46)
Other expenses	**9**	11	**22**	37
	103	88	**268**	260
Income Before Income Taxes	**288**	369	**603**	762
Income Tax Expense	**19**	6	**55**	12
Net Income	**$ 269**	$ 363	**$ 548**	$ 750

See Combined Notes to Consolidated Financial Statements (Unaudited)

DTE Electric Company

Consolidated Statements of Comprehensive Income (Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In millions)			
Net Income	**$ 269**	$ 363	**$ 548**	$ 750
Other comprehensive income	**—**	—	**—**	—
Comprehensive Income	**$ 269**	$ 363	**$ 548**	$ 750

See Combined Notes to Consolidated Financial Statements (Unaudited)

DTE Electric Company

Consolidated Statements of Financial Position (Unaudited)

	September 30, 2023	December 31, 2022
	(In millions)	
ASSETS		
Current Assets		
Cash and cash equivalents	**$ 13**	$ 15
Restricted Cash	**24**	9
Accounts receivable (less allowance for doubtful accounts of $46 and $49, respectively)		
Customer	**794**	727
Affiliates	**9**	8
Other	**67**	75
Inventories		
Fuel	**199**	167
Materials and supplies	**388**	331
Regulatory assets	**132**	421
Prepaid property tax	**133**	54
Other	**31**	44
	1,790	1,851
Investments		
Nuclear decommissioning trust funds	**1,913**	1,825
Other	**49**	44
	1,962	1,869
Property		
Property, plant, and equipment	**27,268**	30,591
Accumulated depreciation and amortization	**(6,376)**	(8,095)
	20,892	22,496
Other Assets		
Regulatory assets	**6,102**	3,219
Securitized regulatory assets	**178**	206
Prepaid postretirement costs — affiliates	**371**	345
Operating lease right-of-use assets	**105**	56
Other	**218**	194
	6,974	4,020
Total Assets	**$ 31,618**	$ 30,236

See Combined Notes to Consolidated Financial Statements (Unaudited)

DTE Electric Company

Consolidated Statements of Financial Position (Unaudited) — (Continued)

	September 30, 2023	December 31, 2022
	(In millions, except shares)	
LIABILITIES AND SHAREHOLDER'S EQUITY		
Current Liabilities		
Accounts payable		
Affiliates	$ 44	$ 71
Other	591	637
Accrued interest	120	105
Current portion long-term debt, including securitization bonds and finance leases	542	248
Regulatory liabilities	49	33
Short-term borrowings		
Affiliates	—	27
Other	656	568
Operating lease liabilities	15	9
Other	165	204
	2,182	1,902
Long-Term Debt (net of current portion)		
Mortgage bonds, notes, and other	10,172	9,282
Securitization bonds	153	172
Finance lease liabilities	—	1
	10,325	9,455
Other Liabilities		
Deferred income taxes	3,056	2,946
Regulatory liabilities	1,729	1,778
Asset retirement obligations	3,356	3,221
Unamortized investment tax credit	180	182
Nuclear decommissioning	299	282
Accrued pension liability — affiliates	348	387
Accrued postretirement liability — affiliates	277	275
Operating lease liabilities	85	39
Other	69	74
	9,399	9,184
Commitments and Contingencies (Notes 5 and 12)		
Shareholder's Equity		
Common stock ($10 par value, 400,000,000 shares authorized, and 138,632,324 shares issued and outstanding for both periods)	6,602	6,602
Retained earnings	3,110	3,093
Total Shareholder's Equity	9,712	9,695
Total Liabilities and Shareholder's Equity	$ 31,618	$ 30,236

See Combined Notes to Consolidated Financial Statements (Unaudited)

DTE Electric Company

Consolidated Statements of Cash Flows (Unaudited)

	Nine Months Ended September 30,	
	2023	2022
	(In millions)	
Operating Activities		
Net Income	$ 548	$ 750
Adjustments to reconcile Net Income to Net cash from operating activities:		
Depreciation and amortization	979	899
Nuclear fuel amortization	43	26
Allowance for equity funds used during construction	(25)	(18)
Deferred income taxes	59	11
Changes in assets and liabilities:		
Accounts receivable, net	(57)	(77)
Inventories	(89)	(26)
Accounts payable	(33)	17
Prepaid postretirement benefit costs — affiliates	(26)	(37)
Accrued pension liability — affiliates	(39)	(40)
Accrued postretirement liability — affiliates	2	(6)
Regulatory assets and liabilities	402	(563)
Other current and noncurrent assets and liabilities	(183)	166
Net cash from operating activities	1,581	1,102
Investing Activities		
Plant and equipment expenditures	(2,215)	(1,853)
Proceeds from sale of nuclear decommissioning trust fund assets	527	707
Investment in nuclear decommissioning trust funds	(524)	(710)
Notes receivable and other	(30)	(38)
Net cash used for investing activities	(2,242)	(1,894)
Financing Activities		
Issuance of long-term debt, net of discount and issuance costs	1,284	1,118
Redemption of long-term debt	(121)	(316)
Capital contribution by parent company	—	296
Short-term borrowings, net — affiliates	(27)	25
Short-term borrowings, net — other	88	306
Dividends paid on common stock	(531)	(600)
Other	(19)	(15)
Net cash from financing activities	674	814
Net Increase in Cash, Cash Equivalents, and Restricted Cash	13	22
Cash, Cash Equivalents, and Restricted Cash at Beginning of Period	24	9
Cash, Cash Equivalents, and Restricted Cash at End of Period	$ 37	$ 31
Supplemental disclosure of non-cash investing and financing activities		
Plant and equipment expenditures in accounts payable	$ 295	$ 242

See Combined Notes to Consolidated Financial Statements (Unaudited)

DTE Electric Company

Consolidated Statements of Changes in Shareholder's Equity (Unaudited)

	Common Stock		Additional Paid-in		
	Shares	Amount	Capital	Retained Earnings	Total
	(Dollars in millions, shares in thousands)				
Balance, December 31, 2022	138,632	$ 1,386	$ 5,216	$ 3,093	$ 9,695
Net Income	—	—	—	100	100
Dividends declared on common stock	—	—	—	(182)	(182)
Balance, March 31, 2023	138,632	$ 1,386	$ 5,216	$ 3,011	$ 9,613
Net Income	—	—	—	179	179
Dividends declared on common stock	—	—	—	(174)	(174)
Balance, June 30, 2023	138,632	$ 1,386	$ 5,216	$ 3,016	$ 9,618
Net Income	—	—	—	269	269
Dividends declared on common stock	—	—	—	(175)	(175)
Balance, September 30, 2023	**138,632**	**$ 1,386**	**$ 5,216**	**$ 3,110**	**$ 9,712**

	Common Stock		Additional Paid-in		
	Shares	Amount	Capital	Retained Earnings	Total
	(Dollars in millions, shares in thousands)				
Balance, December 31, 2021	138,632	$ 1,386	$ 4,616	$ 2,901	$ 8,903
Net Income	—	—	—	201	201
Dividends declared on common stock	—	—	—	(277)	(277)
Balance, March 31, 2022	138,632	$ 1,386	$ 4,616	$ 2,825	$ 8,827
Net Income	—	—	—	186	186
Dividends declared on common stock	—	—	—	(162)	(162)
Balance, June 30, 2022	138,632	$ 1,386	$ 4,616	$ 2,849	$ 8,851
Net Income	—	—	—	363	363
Dividends declared on common stock	—	—	—	(161)	(161)
Capital contribution by parent company	—	—	296	—	296
Balance, September 30, 2022	138,632	$ 1,386	$ 4,912	$ 3,051	$ 9,349

See Combined Notes to Consolidated Financial Statements (Unaudited)

Index of Combined Notes to Consolidated Financial Statements (Unaudited)

The Combined Notes to Consolidated Financial Statements (Unaudited) 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

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
- 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 Consolidated Financial Statements should be read in conjunction with the Combined Notes to Consolidated Financial Statements included in the combined DTE Energy and DTE Electric 2022 Annual Report on Form 10-K.

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 Consolidated Financial Statements are unaudited but, in the Registrants' opinions, include all adjustments necessary to present a fair statement of the results for the interim periods. All adjustments are of a normal recurring nature, except as otherwise disclosed in these Consolidated Financial Statements and Combined Notes to Consolidated Financial Statements. Financial results for this interim period are not necessarily indicative of results that may be expected for any other interim period or for the fiscal year ending December 31, 2023.

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.

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 September 30, 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 September 30, 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. DTE Securitization is a VIE. DTE Electric has the power to direct the most significant activities of DTE Securitization, including performing servicing activities such as billing and collecting surcharge revenue. Accordingly, DTE Electric is the primary beneficiary and DTE Securitization is consolidated by the Registrants. Securitization bond holders have no recourse to the Registrants' assets, except for those held by DTE Securitization. Surcharges collected by DTE Electric to pay for bond servicing and other qualified costs reflect securitization property solely owned by DTE Securitization. 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 September 30, 2023 and December 31, 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 VIEs are presented in aggregate due to the similar nature of the entities, except for DTE Electric amounts that reflect DTE Securitization and are separately stated. 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 below.

During the third quarter 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:

	September 30, 2023		December 31, 2022	
	DTE Energy	DTE Electric[(a)]	DTE Energy	DTE Electric[(a)]
	(In millions)			
ASSETS				
Cash and cash equivalents	**$ 11**	**$ —**	$ 14	$ —
Restricted cash	**28**	**23**	9	9
Accounts receivable	**115**	**2**	6	3
Securitized regulatory assets	**178**	**178**	206	206
Notes receivable	**153**	**—**	81	—
Other current and long-term assets	**2**	**—**	8	—
	$ 487	**$ 203**	$ 324	$ 218
LIABILITIES				
Accounts payable	**$ 57**	**$ —**	$ 3	$ —
Short-term borrowings	**—**	**—**	81	—
Securitization bonds[(b)]	**193**	**193**	211	211
Other current and long-term liabilities	**18**	**10**	11	9
	$ 268	**$ 203**	$ 306	$ 220

(a) DTE Electric amounts reflect DTE Securitization.
(b) Includes $40 million and $39 million reported in Current portion of long-term debt on the Registrants' Consolidated Statements of Financial Position for the periods ended September 30, 2023 and December 31, 2022, respectively.

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

	September 30, 2023	December 31, 2022
	(In millions)	
Investments in equity method investees	**$ 125**	$ 137
Notes receivable	**$ 15**	$ 15
Future funding commitments	**$ 1**	$ 2

NOTE 2 — SIGNIFICANT ACCOUNTING POLICIES

Other Income

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In millions)			
Allowance for equity funds used during construction	**$ 8**	$ 6	**$ 26**	$ 20
Contract services	**5**	7	**18**	21
Investment income[(a)]	**—**	—	**9**	—
Equity earnings (losses) of equity method investees	**3**	—	**7**	(15)
Other	**(3)**	3	**10**	9
	$ 13	$ 16	**$ 70**	$ 35

(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:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In millions)			
Allowance for equity funds used during construction	**$ 8**	$ 6	**$ 25**	$ 18
Contract services	**6**	7	**18**	21
Investment income[(a)]	**—**	—	**6**	—
Other	**2**	2	**7**	7
	$ 16	$ 15	**$ 56**	$ 46

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

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 three and nine months ended September 30, 2023 and 2022, reclassifications out of Accumulated other comprehensive income (loss) were not material.

Income Taxes

Tax rates are affected by estimated annual permanent items, production and investment tax credits, regulatory adjustments, and discrete items that may occur in any given period, but are not consistent from period to period. The tables below summarize how the Registrants' effective income tax rates have varied from the statutory federal income tax rate:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	**2022**	**2023**	**2022**
DTE Energy				
Statutory federal income tax rate	**21.0 %**	21.0 %	**21.0 %**	21.0 %
Increase (decrease) due to:				
State and local income taxes, net of federal benefit	**4.8**	4.4	**4.5**	4.5
Production tax credits	**(7.8)**	(9.1)	**(6.4)**	(9.4)
TCJA amortization	**(4.9)**	(13.6)	**(4.2)**	(14.8)
Investment tax credits	**(3.8)**	—	**(2.6)**	(0.1)
Enactment of West Virginia income tax legislation, net of federal benefit	**—**	—	**(0.6)**	—
Other	**(3.0)**	(1.2)	**(1.9)**	(1.2)
Effective income tax rate	**6.3 %**	1.5 %	**9.8 %**	— %

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	**2022**	**2023**	**2022**
DTE Electric				
Statutory federal income tax rate	**21.0 %**	21.0 %	**21.0 %**	21.0 %
Increase (decrease) due to:				
State and local income taxes, net of federal benefit	**5.7**	5.7	**5.7**	5.7
Production tax credits	**(11.1)**	(9.5)	**(9.4)**	(9.2)
TCJA amortization	**(6.9)**	(14.6)	**(5.9)**	(15.0)
Other	**(1.9)**	(0.9)	**(2.2)**	(0.9)
Effective income tax rate	**6.8 %**	1.7 %	**9.2 %**	1.6 %

DTE Electric had income tax receivables with DTE Energy of $7 million at September 30, 2023, primarily related to federal taxes, and $1 million at December 31, 2022, primarily related to state taxes, which are included in Accounts Receivable — Affiliates on the DTE Electric Consolidated Statements of Financial Position.

During the second quarter 2023, DTE Energy and DTE Electric unrecognized tax benefits decreased by $10 million and $13 million, respectively, as a result of an audit settlement related to state exposures. Recognition of these state tax benefits, net of federal benefit, resulted in a reduction of $8 million and $10 million to Income Tax Expense on the respective DTE Energy and DTE Electric Consolidated Statements of Operations for the nine months ended September 30, 2023.

During the third quarter 2023, DTE Energy unrecognized tax benefits decreased by an additional $5 million due to recognition of a federal tax claim. Recognition of this federal tax benefit resulted in a $5 million reduction to Income Tax Expense on the DTE Energy Consolidated Statements of Operations for the three and nine months ended September 30, 2023. As of September 30, 2023, DTE Energy and DTE Electric have no remaining unrecognized tax benefits.

As of December 31, 2022, DTE Energy and DTE Electric had $5 million and $8 million of accrued interest pertaining to income taxes, respectively, included in Accrued Interest on the Consolidated Statements of Financial Position. As a result of the state tax audit settlement noted above, the Registrants have no remaining accrued interest pertaining to income taxes.

Unrecognized Compensation Costs

As of September 30, 2023, DTE Energy had $77 million of total unrecognized compensation cost related to non-vested stock incentive plan arrangements. That cost is expected to be recognized over a weighted-average period of 1.4 years.

Allocated Stock-Based Compensation

DTE Electric received an allocation of costs from DTE Energy associated with stock-based compensation of $7 million and $9 million for the three months ended September 30, 2023 and 2022, respectively, while such allocation was $27 million and $30 million for the nine months ended September 30, 2023 and 2022, respectively.

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 to pay for debt service and other qualified costs. 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.

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 September 30, 2023.

	DTE Energy				DTE Electric
	Year of Origination				
	2023	2022	2021 and Prior	Total	2023 and Prior
	(In millions)				
Notes receivable					
Internal grade 1	$ 14	$ —	$ 6	**$ 20**	**$ 16**
Internal grade 2	19	85	17	**121**	**—**
Total notes receivable[(a)]	$ 33	$ 85	$ 23	**$ 141**	**$ 16**
Net investment in leases					
Internal grade 1	$ —	$ —	$ 37	**$ 37**	**$ —**
Internal grade 2	—	65	185	**250**	**—**
Total net investment in leases[(a)]	$ —	$ 65	$ 222	**$ 287**	**$ —**

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(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)			
Beginning reserve balance, January 1, 2023	$ 78	$ 1	**$ 79**	**$ 49**
Current period provision	44	—	**44**	**28**
Write-offs charged against allowance	(78)	—	**(78)**	**(51)**
Recoveries of amounts previously written off	31	—	**31**	**20**
Ending reserve balance, September 30, 2023	**$ 75**	**$ 1**	**$ 76**	**$ 46**

	DTE Energy			DTE Electric
	Trade accounts receivable	Other receivables	Total	Trade and other accounts receivable
	(In millions)			
Beginning reserve balance, January 1, 2022	$ 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
Ending reserve balance, December 31, 2022	$ 78	$ 1	$ 79	$ 49

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In millions)			
DTE Energy	**$ 10**	$ 12	**$ 45**	$ 46
DTE Electric	**$ 11**	$ 12	**$ 28**	$ 28

There are no material amounts of past due financing receivables for the Registrants as of September 30, 2023.

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."

NOTE 4 — REVENUE

Disaggregation of Revenue

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In millions)			
Electric[(a)]				
Residential	**$ 861**	$ 882	**$ 2,173**	$ 2,273
Commercial	**585**	541	**1,604**	1,505
Industrial	**190**	167	**545**	498
Other[(b)]	**(10)**	257	**12**	631
Total Electric operating revenues	**$ 1,626**	$ 1,847	**$ 4,334**	$ 4,907
Gas				
Gas sales	**$ 119**	$ 128	**$ 936**	$ 955
End User Transportation	**44**	42	**184**	195
Intermediate Transportation	**16**	15	**63**	60
Other[(b)]	**48**	45	**62**	148
Total Gas operating revenues	**$ 227**	$ 230	**$ 1,245**	$ 1,358
Other segment operating revenues				
DTE Vantage	**$ 199**	$ 227	**$ 572**	$ 626
Energy Trading	**$ 893**	$ 3,024	**$ 3,365**	$ 8,059

(a) Revenues generally represent those of DTE Electric, except $3 million of Other revenues related to DTE Sustainable Generation for both the three months ended September 30, 2023 and 2022, and $10 million and $11 million for the nine months ended September 30, 2023 and 2022, 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:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In millions)			
Electric — Other revenues	**$ 8**	$ 7	**$ 18**	$ 15
Gas — Alternative Revenue Programs	**$ —**	$ —	**$ 4**	$ —
Gas — Other revenues	**$ 2**	$ 2	**$ 7**	$ 6
DTE Vantage — Leases	**$ 19**	$ 24	**$ 44**	$ 63
Energy Trading — Derivatives	**$ 670**	$ 2,531	**$ 2,527**	$ 6,691

Deferred Revenue

The following is a summary of deferred revenue activity:

	DTE Energy
	(In millions)
Beginning Balance, January 1, 2023	$ 94
Increases due to cash received or receivable, excluding amounts recognized as revenue during the period	113
Revenue recognized that was included in the deferred revenue balance at the beginning of the period	(42)
Ending Balance, September 30, 2023	**$ 165**

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)
2023	$ 95
2024	68
2025	1
2026	1
2027	—
2028 and thereafter	—
	$ 165

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)	
2023	$ 33	$ 2
2024	247	8
2025	184	—
2026	99	—
2027	67	—
2028 and thereafter	375	—
	$ 1,005	**$ 10**

NOTE 5 — REGULATORY MATTERS

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 12 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 is 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. These investments will support DTE Energy's goals to reduce carbon emissions and improve power reliability. The requested increase in base rates is also due to a projected sales decline from the level included in current rates and inflationary impacts on operating and interest costs. A final MPSC order in this case is expected in December 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 9 to the Consolidated Financial Statements, "Long-Term Debt," for additional information regarding the terms of the bonds and use of proceeds. For the fourth quarter, DTE Electric will reclassify $594 million of Regulatory assets to Securitized 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, which is currently expected in early 2025. 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.

NOTE 6 — 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.

The following is a reconciliation of DTE Energy's basic and diluted income per share calculation:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In millions, except per share amounts)			
Basic Earnings per Share				
Net Income Attributable to DTE Energy Company	**$ 332**	$ 387	**$ 978**	$ 818
Less: Allocation of earnings to net restricted stock awards	**—**	1	**2**	2
Net income available to common shareholders — basic	**$ 332**	$ 386	**$ 976**	$ 816
Average number of common shares outstanding — basic	**206**	193	**206**	193
Basic Earnings per Common Share	**$ 1.61**	$ 2.00	**$ 4.74**	$ 4.22
Diluted Earnings per Share				
Net Income Attributable to DTE Energy Company	**$ 332**	$ 387	**$ 978**	$ 818
Less: Allocation of earnings to net restricted stock awards	**—**	1	**2**	2
Net income available to common shareholders — diluted	**$ 332**	$ 386	**$ 976**	$ 816
Average number of common shares outstanding — basic	**206**	193	**206**	193
Average performance share awards	**—**	1	**—**	1
Average number of common shares outstanding — diluted	**206**	194	**206**	194
Diluted Earnings per Common Share[(a)]	**$ 1.61**	$ 1.99	**$ 4.74**	$ 4.21

(a) Equity units excluded from the calculation of diluted EPS were approximately 10.1 million and 10.2 million for the three and nine months ended September 30, 2022, respectively, as the dilutive stock price threshold was not met. The equity units were settled in November 2022 resulting in the issuance of common stock.

NOTE 7 — 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 September 30, 2023 and December 31, 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:

	September 30, 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)]	**$ 27**	**$ —**	**$ —**	**$ —**	**$ —**	**$ 27**	$ 10	$ —	$ —	$ —	$ —	$ 10
Nuclear decommissioning trusts												
Equity securities	**716**	**—**	**—**	**136**	**—**	**852**	701	—	—	138	—	839
Fixed income securities	**105**	**346**	**—**	**91**	**—**	**542**	115	359	—	89	—	563
Private equity and other	**—**	**—**	**—**	**308**	**—**	**308**	—	—	—	262	—	262
Hedge funds and similar investments	**106**	**66**	**—**	**—**	**—**	**172**	78	41	—	—	—	119
Cash equivalents	**39**	**—**	**—**	**—**	**—**	**39**	42	—	—	—	—	42
Other investments[(d)]												
Equity securities	**54**	**—**	**—**	**—**	**—**	**54**	56	—	—	—	—	56
Fixed income securities	**7**	**—**	**—**	**—**	**—**	**7**	7	—	—	—	—	7
Cash equivalents	**35**	**—**	**—**	**—**	**—**	**35**	72	—	—	—	—	72
Derivative assets												
Commodity contracts[(e)]												
Natural gas	**140**	**143**	**158**	**—**	**(299)**	**142**	426	183	135	—	(649)	95
Electricity	**—**	**223**	**110**	**—**	**(198)**	**135**	—	720	243	—	(643)	320
Environmental & Other	**—**	**154**	**17**	**—**	**(162)**	**9**	—	201	12	—	(196)	17
Other contracts	**—**	**23**	**—**	**—**	**—**	**23**	—	2	—	—	(1)	1
Total derivative assets	**140**	**543**	**285**	**—**	**(659)**	**309**	426	1,106	390	—	(1,489)	433
Total	**$ 1,229**	**$ 955**	**$ 285**	**$ 535**	**$ (659)**	**$ 2,345**	$ 1,507	$ 1,506	$ 390	$ 489	$ (1,489)	$ 2,403
Liabilities												
Derivative liabilities												
Commodity contracts[(e)]												
Natural gas	**$ (124)**	**$ (166)**	**$ (186)**	**$ —**	**$ 301**	**$ (175)**	$ (297)	$ (331)	$ (390)	$ —	$ 645	$ (373)
Electricity	**—**	**(212)**	**(106)**	**—**	**208**	**(110)**	—	(659)	(276)	—	665	(270)
Environmental & Other	**—**	**(169)**	**(6)**	**—**	**162**	**(13)**	—	(213)	(1)	—	201	(13)
Other contracts	**—**	**(1)**	**—**	**—**	**—**	**(1)**	—	(2)	—	—	1	(1)
Total	**$ (124)**	**$ (548)**	**$ (298)**	**$ —**	**$ 671**	**$ (299)**	$ (297)	$ (1,205)	$ (667)	$ —	$ 1,512	$ (657)
Net Assets (Liabilities) at end of period	**$ 1,105**	**$ 407**	**$ (13)**	**$ 535**	**$ 12**	**$ 2,046**	$ 1,210	$ 301	$ (277)	$ 489	$ 23	$ 1,746
Assets												
Current	**$ 137**	**$ 427**	**$ 196**	**$ —**	**$ (505)**	**$ 255**	$ 360	$ 881	$ 286	$ —	$ (1,189)	$ 338
Noncurrent	**1,092**	**528**	**89**	**535**	**(154)**	**2,090**	1,147	625	104	489	(300)	2,065
Total Assets	**$ 1,229**	**$ 955**	**$ 285**	**$ 535**	**$ (659)**	**$ 2,345**	$ 1,507	$ 1,506	$ 390	$ 489	$ (1,489)	$ 2,403
Liabilities												
Current	**$ (101)**	**$ (410)**	**$ (146)**	**$ —**	**$ 512**	**$ (145)**	$ (273)	$ (876)	$ (386)	$ —	$ 1,193	$ (342)
Noncurrent	**(23)**	**(138)**	**(152)**	**—**	**159**	**(154)**	(24)	(329)	(281)	—	319	(315)
Total Liabilities	**$ (124)**	**$ (548)**	**$ (298)**	**$ —**	**$ 671**	**$ (299)**	$ (297)	$ (1,205)	$ (667)	$ —	$ 1,512	$ (657)
Net Assets (Liabilities) at end of period	**$ 1,105**	**$ 407**	**$ (13)**	**$ 535**	**$ 12**	**$ 2,046**	$ 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 $25 million and $10 million of cash equivalents recorded in Restricted cash on DTE Energy's Consolidated Statements of Financial Position at September 30, 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:

	September 30, 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]	$ 23	$ —	$ —	$ —	$ 23	$ 9	$ —	$ —	$ —	$ 9
Nuclear decommissioning trusts										
Equity securities	716	—	—	136	852	701	—	—	138	839
Fixed income securities	105	346	—	91	542	115	359	—	89	563
Private equity and other	—	—	—	308	308	—	—	—	262	262
Hedge funds and similar investments	106	66	—	—	172	78	41	—	—	119
Cash equivalents	39	—	—	—	39	42	—	—	—	42
Other investments										
Equity securities	19	—	—	—	19	16	—	—	—	16
Cash equivalents	12	—	—	—	12	11	—	—	—	11
Derivative assets — FTRs	—	—	10	—	10	—	—	11	—	11
Total	$ 1,020	$ 412	$ 10	$ 535	$ 1,977	$ 972	$ 400	$ 11	$ 489	$ 1,872
Assets										
Current	$ 23	$ —	$ 10	$ —	$ 33	$ 9	$ —	$ 11	$ —	$ 20
Noncurrent	997	412	—	535	1,944	963	400	—	489	1,852
Total Assets	$ 1,020	$ 412	$ 10	$ 535	$ 1,977	$ 972	$ 400	$ 11	$ 489	$ 1,872

(a) Amounts represent assets valued at NAV as a practical expedient for fair value.
(b) Cash equivalents of $23 million and $9 million are included in Restricted cash on DTE Electric's Consolidated Statements of Financial Position at September 30, 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 $158 million and $177 million as of September 30, 2023 and December 31, 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 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 tables present the fair value reconciliation of Level 3 assets and liabilities measured at fair value on a recurring basis for DTE Energy:

	Three Months Ended September 30, 2023				Three Months Ended September 30, 2022			
	Natural Gas	Electricity	Other	Total	Natural Gas	Electricity	Other	Total
	(In millions)							
Net Assets (Liabilities) as of June 30	$ (54)	$ (4)	$ 16	$ (42)	$ (362)	$ (96)	$ 30	$ (428)
Transfers into Level 3 from Level 2	—	—	—	—	(3)	—	—	(3)
Transfers from Level 3 into Level 2	—	—	—	—	—	—	(5)	(5)
Total gains (losses)								
Included in earnings[(a)]	1	79	(1)	79	(32)	40	(1)	7
Recorded in Regulatory liabilities	—	—	(2)	(2)	—	—	(4)	(4)
Purchases, issuances, and settlements								
Settlements	25	(71)	(2)	(48)	84	(20)	(5)	59
Net Assets (Liabilities) as of September 30	$ (28)	$ 4	$ 11	$ (13)	$ (313)	$ (76)	$ 15	$ (374)
Total gains (losses) included in Net Income attributed to the change in unrealized gains (losses) related to assets and liabilities held at September 30[(a)]	$ 4	$ 26	$ (6)	$ 24	$ 29	$ 37	$ (5)	$ 61
Total gains (losses) included in Regulatory liabilities attributed to the change in unrealized gains (losses) related to assets and liabilities held at September 30	$ —	$ —	$ 1	$ 1	$ —	$ —	$ (1)	$ (1)

(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.

	Nine Months Ended September 30, 2023				Nine Months Ended September 30, 2022			
	Natural Gas	Electricity	Other	Total	Natural Gas	Electricity	Other	Total
	(In millions)							
Net Assets (Liabilities) as of December 31	**$ (255)**	**$ (33)**	**$ 11**	**$ (277)**	$ (179)	$ (45)	$ 9	$ (215)
Transfers from Level 3 into Level 2	**—**	**—**	**—**	**—**	5	—		5
Total gains (losses)								
Included in earnings[a]	**163**	**109**	**1**	**273**	(382)	22	1	(359)
Recorded in Regulatory liabilities	**—**	**—**	**3**	**3**	—	—	20	20
Purchases, issuances, and settlements								
Settlements	**64**	**(72)**	**(4)**	**(12)**	243	(53)	(15)	175
Net Assets (Liabilities) as of September 30	**$ (28)**	**$ 4**	**$ 11**	**$ (13)**	$ (313)	$ (76)	$ 15	$ (374)
Total gains (losses) included in Net Income attributed to the change in unrealized gains (losses) related to assets and liabilities held at September 30[a]	**$ 94**	**$ 94**	**$ (36)**	**$ 152**	$ (248)	$ (2)	$ (31)	$ (281)
Total gains (losses) included in Regulatory liabilities attributed to the change in unrealized gains (losses) related to assets and liabilities held at September 30	**$ —**	**$ —**	**$ 10**	**$ 10**	$ —	$ —	$ 16	$ 16

(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:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In millions)			
Net Assets as of beginning of period	**$ 14**	$ 25	**$ 11**	$ 9
Total gains (losses) recorded in Regulatory liabilities	**(2)**	(4)	**3**	20
Purchases, issuances, and settlements				
Settlements	**(2)**	(5)	**(4)**	(13)
Net Assets as of September 30	**$ 10**	$ 16	**$ 10**	$ 16
Total gains (losses) included in Regulatory liabilities attributed to the change in unrealized gains (losses) related to assets and liabilities held at September 30	**$ 1**	$ (1)	**$ 10**	$ 16

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 three and nine months ended months ended September 30, 2023 and 2022.

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

	September 30, 2023							
Commodity Contracts	Derivative Assets	Derivative Liabilities	Valuation Techniques	Unobservable Input	Range			Weighted Average
	(In millions)							
Natural Gas	**$ 158**	**$ (186)**	**Discounted Cash Flow**	**Forward basis price (per MMBtu)**	**$ (1.69)**	**—**	**$ 4.79 /MMBtu**	**$ 0.01 /MMBtu**
Electricity	**$ 110**	**$ (106)**	**Discounted Cash Flow**	**Forward basis price (per MWh)**	**$ (17.56)**	**—**	**$ 12.03 /MWh**	**$ (4.15) /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:

	September 30, 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	**$ 141**	**$ —**	**$ —**	**$ 141**	$ 80	$ —	$ —	$ 82
Short-term borrowings	**$ 1,217**	**$ —**	**$ 1,217**	**$ —**	$ 1,162	$ —	$ 1,162	$ —
Notes payable[(b)]	**$ 20**	**$ —**	**$ —**	**$ 20**	$ 18	$ —	$ —	$ 18
Long-term debt[(c)]	**$ 19,123**	**$ 742**	**$ 14,875**	**$ 934**	$ 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:

	September 30, 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]	**$ 16**	**$ —**	**$ —**	**$ 16**	$ 17	$ —	$ —	$ 17
Short-term borrowings — affiliates	**$ —**	**$ —**	**$ —**	**$ —**	$ 27	$ —	$ —	$ 27
Short-term borrowings — other	**$ 656**	**$ —**	**$ 656**	**$ —**	$ 568	$ —	$ 568	$ —
Notes payable[b]	**$ 20**	**$ —**	**$ —**	**$ 20**	$ 17	$ —	$ —	$ 17
Long-term debt[c]	**$ 10,865**	**$ —**	**$ 8,994**	**$ 126**	$ 9,696	$ —	$ 8,289	$ 128

(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 8 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.

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

	September 30, 2023	December 31, 2022
	(In millions)	
Fermi 2	**$ 1,898**	$ 1,807
Fermi 1	**3**	3
Low-level radioactive waste	**12**	15
	$ 1,913	$ 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:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In millions)			
Realized gains	**$ 5**	$ 19	**$ 24**	$ 65
Realized losses	**$ (6)**	$ (19)	**$ (32)**	$ (42)
Proceeds from sale of securities	**$ 104**	$ 194	**$ 527**	$ 707

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:

	September 30, 2023			December 31, 2022		
	Fair Value	Unrealized Gains	Unrealized Losses	Fair Value	Unrealized Gains	Unrealized Losses
	(In millions)					
Equity securities	**$ 852**	**$ 388**	**$ (19)**	$ 839	$ 342	$ (23)
Fixed income securities	**542**	**—**	**(53)**	563	1	(56)
Private equity and other	**308**	**76**	**(7)**	262	63	(5)
Hedge funds and similar investments	**172**	**3**	**(14)**	119	—	(18)
Cash equivalents	**39**	**—**	**—**	42	—	—
	$ 1,913	**$ 467**	**$ (93)**	$ 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:

	September 30, 2023
	(In millions)
Due within one year	$ 7
Due after one through five years	105
Due after five through ten years	86
Due after ten years	253
	$ 451

Fixed income securities held in nuclear decommissioning trust funds include $91 million of non-publicly traded commingled funds that do not have a contractual maturity date.

Other Securities

At September 30, 2023 and December 31, 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 three and nine months ended September 30, 2023 and 2022.

NOTE 8 — 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, certain 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 September 30, 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:

	September 30, 2023		December 31, 2022	
	Derivative Assets	Derivative Liabilities	Derivative Assets	Derivative Liabilities
	(In millions)			
Derivatives designated as hedging instruments				
Interest rate contracts	$ 22	$ —	$ 1	$ —
Foreign currency exchange contracts	—	(1)	—	(2)
Total derivatives designated as hedging instruments	$ 22	$ (1)	$ 1	$ (2)
Derivatives not designated as hedging instruments				
Commodity contracts				
Natural gas	$ 441	$ (476)	$ 744	$ (1,018)
Electricity	333	(318)	963	(935)
Environmental & Other	171	(175)	213	(214)
Foreign currency exchange contracts	1	—	1	—
Total derivatives not designated as hedging instruments	$ 946	$ (969)	$ 1,921	$ (2,167)
Current	$ 733	$ (657)	$ 1,517	$ (1,535)
Noncurrent	235	(313)	405	(634)
Total derivatives	$ 968	$ (970)	$ 1,922	$ (2,169)

The fair value of derivative instruments at DTE Electric was $10 million and $11 million at September 30, 2023 and December 31, 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 $1 million of letters of credit issued and outstanding at September 30, 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 $18 million and $82 million at September 30, 2023 and December 31, 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:

	September 30, 2023	December 31, 2022
	(In millions)	
Cash collateral netted against Derivative assets	$ —	$ (90)
Cash collateral netted against Derivative liabilities	12	113
Cash collateral recorded in Accounts receivable[(a)]	52	77
Cash collateral recorded in Accounts payable[(a)]	(15)	(27)
Total net cash collateral posted (received)	$ 49	$ 73

(a) Amounts are recorded net by counterparty.

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

	September 30, 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[(a)]						
Natural gas	**$ 441**	**$ (299)**	**$ 142**	$ 744	$ (649)	$ 95
Electricity	**333**	**(198)**	**135**	963	(643)	320
Environmental & Other	**171**	**(162)**	**9**	213	(196)	17
Interest rate contracts	**22**	**—**	**22**	1	—	1
Foreign currency exchange contracts	**1**	**—**	**1**	1	(1)	—
Total derivative assets	**$ 968**	**$ (659)**	**$ 309**	$ 1,922	$ (1,489)	$ 433
Derivative liabilities						
Commodity contracts[(a)]						
Natural gas	**$ (476)**	**$ 301**	**$ (175)**	$ (1,018)	$ 645	$ (373)
Electricity	**(318)**	**208**	**(110)**	(935)	665	(270)
Environmental & Other	**(175)**	**162**	**(13)**	(214)	201	(13)
Foreign currency exchange contracts	**(1)**	**—**	**(1)**	(2)	1	(1)
Total derivative liabilities	**$ (970)**	**$ 671**	**$ (299)**	$ (2,169)	$ 1,512	$ (657)

(a) 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 the netting offsets of Derivative assets and liabilities showing the reconciliation of derivative instruments to DTE Energy's Consolidated Statements of Financial Position:

	September 30, 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	**$ 733**	**$ 235**	**$ (657)**	**$ (313)**	$ 1,517	$ 405	$ (1,535)	$ (634)
Counterparty netting	**(505)**	**(154)**	**505**	**154**	(1,127)	(272)	1,127	272
Collateral adjustment	**—**	**—**	**7**	**5**	(62)	(28)	66	47
Total derivatives as reported	**$ 228**	**$ 81**	**$ (145)**	**$ (154)**	$ 328	$ 105	$ (342)	$ (315)

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

		Gain (Loss) Recognized in Income on Derivatives for the Three Months Ended September 30,		Gain (Loss) Recognized in Income on Derivatives for the Nine Months Ended September 30,	
	Location of Gain (Loss) Recognized in Income on Derivatives	**2023**	**2022**	**2023**	**2022**
		(In millions)			
Commodity contracts					
Natural gas	Operating Revenues — Non-utility operations	**$ (41)**	$ (52)	**$ 89**	$ (315)
Natural gas	Fuel, purchased power, gas, and other — non-utility	**37**	108	**120**	8
Electricity	Operating Revenues — Non-utility operations	**85**	61	**30**	173
Environmental & Other	Operating Revenues — Non-utility operations	**(4)**	(3)	**(5)**	15
Foreign currency exchange contracts	Operating Revenues — Non-utility operations	**1**	5	**—**	5
Total		**$ 78**	$ 119	**$ 234**	$ (114)

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 September 30, 2023:

Commodity	Number of Units
Natural gas (MMBtu)	2,208,451,991
Electricity (MWh)	37,535,900
Oil (Gallons)	4,740,000
Foreign currency exchange ($ CAD)	150,049,286
FTR (MWh)	98,119
Renewable Energy Certificates (MWh)	10,856,311
Carbon emissions (Metric Tons)	1,652,108
Interest rate contracts ($ USD)	500,000,000

Various subsidiaries 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 September 30, 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 $437 million.

As of September 30, 2023, DTE Energy had $761 million of derivatives in net liability positions, for which hard triggers exist. There is $12 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 $632 million. The net remaining amount of $117 million is derived from the $437 million noted above.

NOTE 9 — LONG-TERM DEBT

Debt Issuances

Refer to the table below for debt issued through September 30, 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
					$ 2,300

(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.

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 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.

In October 2023, DTE Gas issued $150 million of 5.57% First Mortgage Bonds due October 1, 2030 and $145 million of 5.73% First Mortgage Bonds due October 1, 2035 to a group of institutional investors in a private placement transaction. Proceeds have been used for the repayment of short-term borrowings and for general corporate purposes, including capital expenditures.

In November 2023, DTE Electric issued Securitization bonds of $602 million, including two separate tranches of $301 million. The first tranche was issued with an interest rate of 5.97% and a final maturity date of March 1, 2033. Principal payments will be due semi-annually beginning September 2024, with the final payment scheduled for March 2032. The second tranche was issued with an interest rate of 6.09% and a final maturity date of September 1, 2038. Payments will be due semi-annually beginning March 2032, with the final payment scheduled for September 2037.

The Securitization 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 from the bonds were used to reimburse DTE Electric for qualified costs incurred for 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 in the fourth quarter 2023, DTE Electric plans to use proceeds of approximately $300 million towards the retirement of debt and approximately $300 million to issue a special dividend to DTE Energy. Refer to Note 5 to the Consolidated Financial Statements, "Regulatory Matters," for additional information.

Debt Redemptions

Refer to the table below for debt redeemed through September 30, 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
					$ 1,146

In October 2023, DTE Electric redeemed at maturity its $100 million 2005 Series C 5.19% Senior Notes.

NOTE 10 — 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 September 30, 2023, the total funded debt to total capitalization ratios for DTE Energy, DTE Electric, and DTE Gas were 0.64 to 1, 0.54 to 1, and 0.46 to 1, respectively, and were in compliance with this financial covenant.

During May 2023, DTE Energy paid the amount outstanding and terminated its unsecured Canadian revolving credit facility. In June 2023, DTE Energy entered into a new $100 million uncommitted letter of credit facility, with availability to either DTE Energy or DTE Electric.

In July 2023, DTE Energy entered into an additional $50 million uncommitted letter of credit facility. DTE Energy has also amended the terms of several other letter of credit facilities during 2023, including capacities and maturity dates.

The availability under these facilities as of September 30, 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 facility[(a)]	100	—	—	100
Unsecured letter of credit facility[(b)]	—	100	—	100
Unsecured letter of credit facility[(a)]	50	—	—	50
	1,975	900	300	3,175
Amounts outstanding at September 30, 2023				
Commercial paper issuances	371	656	190	1,217
Letters of credit	144	23	—	167
	515	679	190	1,384
Net availability at September 30, 2023	**$ 1,460**	**$ 221**	**$ 110**	**$ 1,791**

(a) Uncommitted letter of credit facility 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.

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 September 30, 2023, the capacity under the facility was $200 million. The amounts outstanding under demand financing agreements were $139 million and $166 million at September 30, 2023 and December 31, 2022, respectively, and were fully offset by posted collateral.

NOTE 11 — LEASES

Lessor

Interest income recognized under finance leases was $6 million for both the three months ended September 30, 2023 and 2022, and $20 million and $17 million for the nine months ended September 30, 2023 and 2022, respectively.

DTE Energy's lease income associated with operating leases, included in Operating Revenues — Non-utility operations in the Consolidated Statements of Operations, was as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In millions)			
Fixed payments	**$ 4**	$ 3	**$ 11**	$ 11
Variable payments	**15**	21	**33**	52
	$ 19	$ 24	**$ 44**	$ 63

NOTE 12 — 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 will submit 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 September 30, 2023 and December 31, 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 currently requires 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 provides 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 of 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 allow 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 $481 million of capital expenditures, including $343 million for 2023 through 2027. This estimate may change in future periods as DTE Electric continues to evaluate the proposed EPA rule from May 18, 2023 to regulate legacy CCR surface impoundments and CCR management units, as noted above.

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 September 30, 2023 and December 31, 2022, DTE Gas had $20 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. 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 included 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 SO_2 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 September 30, 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 $40 million at September 30, 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 September 30, 2023, DTE Energy had $325 million of performance bonds outstanding, including $151 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 4,950 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

Utility capital expenditures and expenditures for non-utility businesses will be approximately $4.2 billion and $3.2 billion in 2023 for DTE Energy and DTE Electric, respectively. The Registrants have made certain commitments in connection with the estimated 2023 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 quality control concerns, 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 in the contract. 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 5 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 5 and 8 to the Consolidated Financial Statements, "Regulatory Matters" and "Financial and Other Derivative Instruments," respectively.

NOTE 13 — 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. Participants of all plans are solely DTE Energy and affiliate participants.

The following tables detail the components of net periodic benefit costs (credits) for pension benefits and other postretirement benefits for DTE Energy:

	Pension Benefits		Other Postretirement Benefits	
	2023	**2022**	**2023**	**2022**
	(In millions)			
Three Months Ended September 30,				
Service cost	**$ 15**	$ 25	**$ 4**	$ 6
Interest cost	**54**	41	**17**	12
Expected return on plan assets	**(89)**	(87)	**(28)**	(32)
Amortization of:				
Net actuarial loss	**2**	29	**2**	1
Prior service credit	**(1)**	—	**(4)**	(4)
Net periodic benefit cost (credit)	**$ (19)**	$ 8	**$ (9)**	$ (17)

	Pension Benefits		Other Postretirement Benefits	
	2023	**2022**	**2023**	**2022**
	(In millions)			
Nine Months Ended September 30,				
Service cost	**$ 43**	$ 72	**$ 13**	$ 20
Interest cost	**161**	124	**49**	36
Expected return on plan assets	**(264)**	(260)	**(83)**	(95)
Amortization of:				
Net actuarial loss	**5**	86	**7**	3
Prior service credit	**(2)**	—	**(14)**	(14)
Settlements	**7**	—	**—**	—
Net periodic benefit cost (credit)	**$ (50)**	$ 22	**$ (28)**	$ (50)

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 DTE Electric's 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.

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, operation and maintenance expense, other income and deductions, and capital expenditures was a credit of $12 million and $28 million for the three and nine months ended September 30, 2023, respectively, and a cost of $9 million and $27 million for the three and nine months ended September 30, 2022, respectively. These amounts may include recognized contractual termination benefit charges, curtailment gains, and settlement charges.

The following table details the components of net periodic benefit costs (credits) for other postretirement benefits for DTE Electric:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	**2023**	2022
	(In millions)			
Service cost	**$ 3**	$ 5	**$ 10**	$ 15
Interest cost	**12**	10	**37**	28
Expected return on plan assets	**(18)**	(22)	**(55)**	(64)
Amortization of:				
Net actuarial loss	**—**	2	**—**	4
Prior service credit	**(3)**	(4)	**(10)**	(10)
Net periodic benefit credit	**$ (6)**	$ (9)	**$ (18)**	$ (27)

Pension and Other Postretirement Contributions

No contributions are currently expected for DTE Energy's qualified pension plans or postretirement benefit plans in 2023. Plans may be updated at the discretion of management and depending on economic and financial market conditions. DTE Energy anticipates a transfer of up to $50 million of qualified pension plan funds from DTE Gas to DTE Electric during the fourth quarter 2023 in exchange for cash consideration.

NOTE 14 — 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.

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.

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.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In millions)			
Electric	**$ 20**	$ 19	**$ 55**	$ 53
Gas	**4**	4	**13**	10
DTE Vantage	**13**	15	**32**	57
Energy Trading	**20**	39	**65**	78
Corporate and Other	**—**	—	**—**	—
	$ 57	$ 77	**$ 165**	$ 198

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.

Financial data of DTE Energy's business segments follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In millions)			
Operating Revenues — Utility operations				
Electric	**$ 1,623**	$ 1,844	**$ 4,324**	$ 4,896
Gas	**227**	230	**1,245**	1,358
Operating Revenues — Non-utility operations				
Electric	**3**	3	**10**	11
DTE Vantage	**199**	227	**572**	626
Energy Trading	**893**	3,024	**3,365**	8,059
Corporate and Other	**—**	—	**—**	—
Reconciliation and Eliminations	**(57)**	(77)	**(165)**	(198)
Total	**$ 2,888**	$ 5,251	**$ 9,351**	$ 14,752

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In millions)			
Net Income (Loss) Attributable to DTE Energy by Segment				
Electric	**$ 268**	$ 363	**$ 547**	$ 750
Gas	**(5)**	(23)	**190**	179
DTE Vantage	**56**	26	**109**	68
Energy Trading	**65**	56	**234**	(80)
Corporate and Other	**(52)**	(35)	**(102)**	(99)
Net Income Attributable to DTE Energy Company	**$ 332**	$ 387	**$ 978**	$ 818

Item 2. ***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 and 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.

The following table summarizes DTE Energy's financial results:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In millions, except per share amounts)			
Net Income Attributable to DTE Energy Company	**$ 332**	$ 387	**$ 978**	$ 818
Diluted Earnings per Common Share	**$ 1.61**	$ 1.99	**$ 4.74**	$ 4.21

The decrease in Net Income Attributable to DTE Energy Company for the three months ended September 30, 2023 was due to lower earnings in the Electric and Corporate and Other segments, partially offset by higher earnings in the DTE Vantage, Gas, and Energy Trading segments. The increase in Net Income Attributable to DTE Energy Company for the nine-month period was primarily due to higher earnings in the Energy Trading, DTE Vantage and Gas segments, partially offset by lower earnings in the Electric segment.

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 32% by the end of 2023, 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.

To achieve the targeted 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, 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. DTE Energy expects its goals for customer affordability to be aided by operational efficiencies and new opportunities resulting from the Inflation Reduction Act enacted in August 2022. Such opportunities include tax credits for renewable energy, nuclear generation, energy storage, and carbon capture and sequestration, which are expected to 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 2023-2027 period are estimated at $18 billion, comprised of $9 billion for distribution infrastructure, $4 billion for base infrastructure, and $5 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 2023-2027 period are estimated at $3.6 billion, comprised of $2.0 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 $1.0 billion to $1.5 billion from 2023-2027 for renewable energy projects 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.

For further discussion of environmental matters, see Note 12 to the Consolidated Financial Statements, "Commitments and Contingencies."

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.

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.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In millions)			
Net Income (Loss) Attributable to DTE Energy by Segment				
Electric	**$ 268**	$ 363	**$ 547**	$ 750
Gas	**(5)**	(23)	**190**	179
DTE Vantage	**56**	26	**109**	68
Energy Trading	**65**	56	**234**	(80)
Corporate and Other	**(52)**	(35)	**(102)**	(99)
Net Income Attributable to DTE Energy Company	**$ 332**	$ 387	**$ 978**	$ 818

ELECTRIC

The Results of Operations discussion for DTE Electric is presented in a reduced disclosure format in accordance with General Instruction H(2) of Form 10-Q.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In millions)			
Operating Revenues				
Utility operations	$ **1,623**	$ 1,844	$ **4,324**	$ 4,896
Non-utility operations	**3**	3	**10**	11
	1,626	1,847	**4,334**	4,907
Operating Expenses				
Fuel and purchased power — utility	**438**	593	**1,113**	1,543
Operation and maintenance	**372**	409	**1,095**	1,188
Depreciation and amortization	**337**	307	**989**	909
Taxes other than income	**88**	86	**256**	258
	1,235	1,395	**3,453**	3,898
Operating Income	**391**	452	**881**	1,009
Other (Income) and Deductions	**104**	84	**279**	248
Income Tax Expense	**19**	5	**55**	11
Net Income Attributable to DTE Energy Company	$ **268**	$ 363	$ **547**	$ 750

See DTE Electric's Consolidated Statements of Operations 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 13 to the Consolidated Financial Statements, "Retirement Benefits and Trusteed Assets" for additional information.

Operating Revenues decreased $221 million and $573 million in the three and nine months ended September 30, 2023, respectively. 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 decrease in both periods was due to the following:

	Three Months	Nine Months
	(In millions)	
Power Supply Cost Recovery	$ (89)	$ (321)
Weather	(105)	(222)
Base sales	(9)	(66)
Interconnection sales	(39)	(42)
COVID-19 voluntary refund amortization in 2022	(9)	(25)
Regulatory mechanism - RPS	(14)	11
Implementation of new rates	8	23
Rate Mix	26	50
Other regulatory mechanisms and other[(a)]	10	19
	$ (221)	**$ (573)**

(a) Primarily includes regulatory mechanisms relating to DTE Securitization and EWR.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In thousands of MWh)			
DTE Electric Sales				
Residential	**4,292**	4,803	**11,070**	12,393
Commercial	**4,433**	4,541	**12,163**	12,501
Industrial	**2,202**	2,271	**6,477**	6,464
Other	**46**	48	**146**	151
	10,973	11,663	**29,856**	31,509
Interconnection sales	**2,314**	1,766	**5,229**	3,551
Total DTE Electric Sales	**13,287**	13,429	**35,085**	35,060
DTE Electric Deliveries				
Retail and wholesale	**10,973**	11,663	**29,856**	31,509
Electric retail access, including self-generators[(a)]	**1,177**	1,201	**3,317**	3,417
Total DTE Electric Sales and Deliveries	**12,150**	12,864	**33,173**	34,926

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

Fuel and purchased power — utility expense decreased $155 million and $430 million in the three and nine months ended September 30, 2023, respectively. The decrease in both periods was due to the following:

	Three Months
	(In millions)
Purchased power - lower market prices, partially offset by higher purchase volumes	$ (74)
Gas - lower prices, partially offset by higher consumption	(62)
Coal - lower consumption, partially offset by higher prices	(13)
Nuclear fuel - lower amortization due to 2023 outage	(4)
Other	(2)
	$ (155)

	Nine Months
	(In millions)
Purchased power - lower market prices and lower purchase volumes due to lower demand	$ (319)
Coal - lower consumption due to coal plant retirements, partially offset by higher prices	(84)
Gas - lower prices, partially offset by higher consumption primarily due to Blue Water Energy Center	(32)
Nuclear fuel - higher amortization due to refueling outage in 2022	17
Other	(12)
	$ (430)

Operation and maintenance expense decreased $37 million and $93 million in the three and nine months ended September 30, 2023, respectively. The decrease in the third quarter was primarily due to lower corporate support costs of $20 million, lower RPS expense of $17 million, lower benefits and other compensation expense of $10 million, and lower plant generation expense of $9 million, partially offset by higher distribution operations expense of $20 million.

The decrease in the nine-month period was primarily due to lower plant generation expense of $103 million, lower benefits and other compensation expense of $39 million, lower corporate support costs of $35 million, lower legal expense of $15 million, and lower RPS expense of $12 million, partially offset by higher distribution operations expense of $101 million and higher EWR expense of $11 million. For both the third quarter and nine-month period, the lower plant generation expense was primarily due to lower outage costs and coal plant retirements, and the higher distribution operations expense was primarily due to higher storm restoration costs.

Depreciation and amortization expense increased $30 million and $80 million in the three and nine months ended September 30, 2023, respectively. The increase in both periods was primarily due to a higher depreciable base.

Other (Income) and Deductions increased $20 million and $31 million in the three and nine months ended September 30, 2023, respectively. The increase in the third quarter was primarily due to higher net interest expense of $18 million and higher non-operating retirement benefits expense of $6 million, partially offset by higher AFUDC equity of $2 million. The increase in the nine-month period was primarily due to higher net interest expense of $33 million and higher non-operating retirement benefits expense of $23 million, partially offset by a favorable change in investment earnings of $18 million and higher AFUDC equity of $6 million.

Income Tax Expense increased $14 million and $44 million in the three and nine months ended September 30, 2023, respectively. The increase in the third quarter was primarily due to lower amortization of the TCJA regulatory liability, partially offset by lower taxes resulting from lower earnings. The increase in the nine-month period was primarily due to lower amortization of the TCJA regulatory liability and lower production tax credits, partially offset by lower taxes resulting from lower earnings and tax benefits resulting from the settlement of a state tax audit.

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.

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 is 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. These investments will support DTE Energy's goals to reduce carbon emissions and improve power reliability. The requested increase in base rates is also due to a projected sales decline from the level included in current rates and inflationary impacts on operating and interest costs. A final MPSC order in this case is expected in December 2023.

GAS

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	**2023**	2022
	(In millions)			
Operating Revenues — Utility operations	**$ 227**	$ 230	**$ 1,245**	$ 1,358
Operating Expenses				
Cost of gas — utility	**23**	39	**331**	436
Operation and maintenance	**115**	130	**366**	405
Depreciation and amortization	**51**	47	**153**	140
Taxes other than income	**23**	21	**82**	76
Asset (gains) losses and impairments, net	**—**	—	**(1)**	—
	212	237	**931**	1,057
Operating Income (Loss)	**15**	(7)	**314**	301
Other (Income) and Deductions	**23**	22	**64**	65
Income Tax Expense (Benefit)	**(3)**	(6)	**60**	57
Net Income (Loss) Attributable to DTE Energy Company	**$ (5)**	$ (23)	**$ 190**	$ 179

Operating Revenues — Utility operations decreased $3 million and $113 million in the three and nine months ended September 30, 2023, respectively. 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 decrease in both periods was due to the following:

	Three Months	Nine Months
	(In millions)	
Gas Cost Recovery	$ (16)	$ (105)
Weather	(2)	(64)
Voluntary refund	2	4
Regulatory mechanism - EWR	2	5
Base sales	1	8
Infrastructure recovery mechanism	10	29
Other	—	10
	$ (3)	**$ (113)**

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
	(In Bcf)			
Gas Markets				
Gas sales	**8**	8	**89**	100
End-user transportation	**40**	33	**129**	124
	48	41	**218**	224
Intermediate transportation	**121**	125	**401**	404
Total Gas sales	**169**	166	**619**	628

Cost of gas — utility expense decreased $16 million and $105 million in the three and nine months ended September 30, 2023, respectively. The decrease in the third quarter was primarily due to a lower cost of gas of $18 million. The decrease in the nine-month period was primarily due to lower sales volumes of $55 million and a lower cost of gas of $50 million.

Operation and maintenance expense decreased $15 million and $39 million in the three and nine months ended September 30, 2023, respectively. The decrease in the third quarter was primarily due to lower gas operations expense of $10 million and lower corporate support costs of $6 million. The decrease in the nine-month period was primarily due to lower gas operations expense of $29 million and lower corporate support costs of $16 million, partially offset by higher EWR expense of $3 million and higher legal expense of $2 million.

Depreciation and amortization expense increased $4 million and $13 million in the three and nine months ended September 30, 2023, respectively. The increase in both periods was primarily due to a higher depreciable base.

Taxes other than income expense increased $2 million and $6 million in the three and nine months ended September 30, 2023, respectively. The increase in both periods was primarily due to higher property taxes.

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 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 results and outlook are discussed below:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	**2022**	**2023**	**2022**
	(In millions)			
Operating Revenues — Non-utility operations	**$ 199**	$ 227	**$ 572**	$ 626
Operating Expenses				
Fuel, purchased power, and gas — non-utility	**98**	124	**288**	317
Operation and maintenance	**50**	64	**171**	194
Depreciation and amortization	**14**	13	**39**	39
Taxes other than income	**2**	3	**7**	8
Asset (gains) losses and impairments, net	**(12)**	1	**(9)**	(4)
	152	205	**496**	554
Operating Income	**47**	22	**76**	72
Other (Income) and Deductions	**(7)**	(9)	**(25)**	(10)
Income Taxes				
Expense	**15**	8	**28**	20
Tax credits	**(17)**	(3)	**(36)**	(6)
	(2)	5	**(8)**	14
Net Income Attributable to DTE Energy Company	**$ 56**	$ 26	**$ 109**	$ 68

Operating Revenues — Non-utility operations decreased $28 million and $54 million in the three and nine months ended September 30, 2023, respectively. The decrease in both periods was due to the following:

	Three Months	Nine Months
	(In millions)	
Lower demand and prices in the On-site business	$ (16)	$ (34)
Sales and prices in the Renewables business	2	(24)
Sale of project in the On-site business	(10)	(20)
Demand and prices in the Steel business	(5)	24
Other	1	—
	$ (28)	**$ (54)**

Fuel, purchased power, and gas — non-utility expense decreased $26 million and $29 million in the three and nine months ended September 30, 2023, respectively. The decrease in both periods was due to the following:

	Three Months	Nine Months
	(In millions)	
Lower demand and prices in the On-site business	$ (13)	$ (31)
Sale of project in the On-site business	(4)	(6)
Demand and prices in the Steel business	(12)	7
Other	3	1
	$ (26)	**$ (29)**

Operation and maintenance expense decreased $14 million and $23 million in the three and nine months ended September 30, 2023, respectively. The decrease in the third quarter was primarily due to lower operating costs in the Renewables business of $6 million and lower operating costs in the On-site business of $6 million, which was primarily driven by a decrease of $3 million due to the sale of a project. The decrease in the nine-month period was primarily due to lower operating costs in the Renewables business of $9 million and lower operating costs in the On-site business of $14 million, which was primarily driven by a decrease of $9 million to the sale of a project.

Asset (gains) losses and impairments, net changed $13 million and $5 million in the three and nine months ended September 30, 2023, respectively. The change in the third quarter 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 $5 million. The change in the nine-month period was primarily due to the $17 million gain in the Steel business, partially offset by asset write-offs in other business units of $6 million. The net gain for the nine-month period was also partially offset by $5 million due to the 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 $3 million recorded in 2022.

Other (Income) and Deductions decreased $2 million and increased $15 million in the three and nine months ended September 30, 2023, respectively. The increase in the nine-month period was primarily due to $11 million higher equity investment earnings in the Renewables business and $4 million higher interest income associated with a new project in the Steel business.

Income Taxes — Tax credits increased $14 million and $30 million in the three and nine months ended September 30, 2023, respectively. The increase in the third quarter was primarily due to investment tax credits of $11 million related to a new project in the Renewables business. The increase in the nine-month period was primarily due to investment tax credits of $17 million related to new projects in the Renewables business and $9 million for a new project in the On-site business.

Outlook — 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 will 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:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	**2022**	**2023**	**2022**
	(In millions)			
Operating Revenues — Non-utility operations	**$ 893**	$ 3,024	**$ 3,365**	$ 8,059
Operating Expenses				
Purchased power, gas, and other — non-utility	**780**	2,928	**2,975**	8,087
Operation and maintenance	**23**	16	**62**	51
Depreciation and amortization	**2**	2	**4**	4
Taxes other than income	**—**	1	**4**	6
	805	2,947	**3,045**	8,148
Operating Income (Loss)	**88**	77	**320**	(89)
Other (Income) and Deductions	**1**	3	**8**	18
Income Tax Expense (Benefit)	**22**	18	**78**	(27)
Net Income (Loss) Attributable to DTE Energy Company	**$ 65**	$ 56	**$ 234**	$ (80)

Operating Revenues — Non-utility operations decreased $2,131 million and $4,694 million in the three and nine months ended September 30, 2023, respectively. The following tables detail changes relative to comparable prior periods:

	Three Months
	(In millions)
Gas structured and gas transportation strategies - ($2,025) primarily due to lower gas prices, ($84) settled financial hedges	$ (2,109)
Unrealized MTM - $21 gains compared to ($40) losses in the prior period	61
Other realized gain (loss)	(83)
	$ (2,131)

	Nine Months
	(In millions)
Gas structured and gas transportation strategies - ($4,651) primarily due to lower gas prices, ($100) settled financial hedges	$ (4,751)
Unrealized MTM - $105 gains compared to ($143) losses in the prior period	248
Other realized gain (loss)	(191)
	$ (4,694)

Purchased power, gas, and other — non-utility expense decreased $2,148 million and $5,112 million in the three and nine months ended September 30, 2023, respectively. The following tables detail changes relative to comparable prior periods:

	Three Months
	(In millions)
Gas structured and gas transportation strategies - primarily lower gas prices	$ (2,085)
Unrealized MTM - ($36) gains compared to ($107) gains in the prior period	71
Other realized (gain) loss	(134)
	$ (2,148)

	Nine Months
	(In millions)
Gas structured and gas transportation strategies - primarily lower gas prices	$ (4,743)
Unrealized MTM - ($119) gains compared to ($7) gains in the prior period	(112)
Other realized (gain) loss	(257)
	$ (5,112)

Operation and maintenance expense increased $7 million and $11 million in the three and nine months ended September 30, 2023, respectively. The increase in both periods was primarily due to higher 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 $11 million for the three months ended September 30, 2023, which includes a $75 million unfavorable change in timing-related gains 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) increased $409 million for the nine months ended September 30, 2023, which includes a $391 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 $17 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.

Other (Income) and Deductions decreased $2 million and $10 million in the three and nine months ended September 30, 2023, respectively. The decrease in the nine-month period was primarily due to lower contributions to not-for-profit organizations.

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 Regional Transmission Organizations. 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 7 and 8 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 net loss of $52 million and $102 million for the three and nine months ended September 30, 2023, respectively, represents an increase of $17 million and $3 million from the net loss of $35 million and $99 million in the comparable 2022 periods. The increase in the third quarter was primarily due to higher net interest expense, higher state income taxes, and effective income tax rate adjustments. The increase in the nine-month period was primarily due to higher net interest expense, partially offset by effective income tax rate adjustments, lower equity investment losses, and lower corporate overhead costs.

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 2023 will be approximately $3.2 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 $4.2 billion in 2023. 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, as applicable.

	Nine Months Ended September 30,	
	2023	**2022**
	(in millions)	
Cash, Cash Equivalents, and Restricted Cash at Beginning of Period	**$ 43**	$ 35
Net cash from operating activities	**2,375**	1,412
Net cash used for investing activities	**(2,941)**	(2,453)
Net cash from financing activities	**589**	1,057
Net Increase in Cash, Cash Equivalents, and Restricted Cash	**23**	16
Cash, Cash Equivalents, and Restricted Cash at End of Period	**$ 66**	$ 51

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 by $963 million in 2023. The increase was primarily due to increases in Net Income, Depreciation and amortization, Deferred income taxes, and cash from working capital items.

The change in working capital items in 2023 was primarily due to increases in cash related to Accounts receivable and Regulatory assets and liabilities, partially offset by decreases in cash related to Accounts payable, Derivative assets and liabilities, and Other current and noncurrent assets and liabilities.

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 by $488 million in 2023 primarily due to an increase in utility plant and equipment expenditures and an increase in cash used for Notes receivable.

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 by $468 million in 2023 primarily due to decreases in cash related to Redemption of long-term debt and Short-term borrowings, net, partially offset by increases in cash related to the Issuance of long-term debt, net of issuance costs and Repurchase of common stock.

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 enacted in August 2022, 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 2023. DTE Energy anticipates these discretionary equity issuances to 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 $594 million in long-term debt, including securitization bonds and finance leases, maturing within 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 2023. 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.

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 September 30, 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 $437 million.

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

Note	Title
1	Organization and Basis of Presentation
2	Significant Accounting Policies
5	Regulatory Matters
8	Financial and Other Derivative Instruments
9	Long-Term Debt
10	Short-Term Credit Arrangements and Borrowings
12	Commitments and Contingencies
13	Retirement Benefits and Trusteed Assets

Also refer to the "Capital Investments" section above regarding DTE Energy's capital strategy and estimated spend over the next five years. For additional information regarding DTE Energy's future cash obligations, including scheduled debt maturities and interest payments, minimum lease payments, and future purchase commitments, refer to DTE Energy's Annual Report on Form 10-K for the year ended December 31, 2022.

Liquidity

DTE Energy has approximately $1.8 billion of available liquidity at September 30, 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 amounts of liquidity and to meet future operating cash and capital expenditure needs. However, virtually all of 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.

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 7 and 8 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 7 to the Consolidated Financial Statements, "Fair Value."

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

	DTE Energy (In millions)
MTM at December 31, 2022	$ (224)
Reclassified to realized upon settlement	(14)
Changes in fair value recorded to income	234
Amounts recorded to unrealized income	220
Changes in fair value recorded in Regulatory liabilities	3
Amounts recorded in other comprehensive income, pre-tax	22
Change in collateral	(11)
MTM at September 30, 2023	**$ 10**

The table below shows the maturity of DTE Energy's MTM positions. The positions from 2026 and beyond principally represent longer tenor gas structured transactions:

Source of Fair Value	2023	2024	2025	2026 and Beyond	Total Fair Value
			(In millions)		
Level 1	$ —	$ 11	$ 7	$ (2)	$ 16
Level 2	13	(1)	—	(17)	(5)
Level 3	5	37	4	(59)	(13)
MTM before collateral adjustments	$ 18	$ 47	$ 11	$ (78)	(2)
Collateral adjustments					12
MTM at September 30, 2023					**$ 10**

Item 3. ***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 September 30, 2023:

	Credit Exposure Before Cash Collateral	Cash Collateral	Net Credit Exposure
		(In millions)	
Investment Grade[(a)]			
A- and Greater	$ 366	$ —	$ 366
BBB+ and BBB	331	(3)	328
BBB-	13	—	13
Total Investment Grade	710	(3)	707
Non-investment grade[(b)]	7	—	7
Internally Rated — investment grade[(c)]	350	—	350
Internally Rated — non-investment grade[(d)]	11	—	11
Total	**$ 1,078**	**$ (3)**	**$ 1,075**

(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 13% 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 September 30, 2023, DTE Energy had floating rate debt of $1.2 billion and a floating rate debt-to-total debt ratio of 6.0%.

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 September 30, 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:

	Assuming a 10% Increase in Prices/Rates		Assuming a 10% Decrease in Prices/Rates		
	As of September 30,		As of September 30,		
Activity	**2023**	**2022**	**2023**	**2022**	**Change in the Fair Value of**
	(In millions)				
Environmental contracts	**$ (7)**	$ (8)	**$ 7**	$ 8	Commodity contracts
Gas contracts	**$ 35**	$ 19	**$ (35)**	$ (19)	Commodity contracts
Power contracts	**$ 3**	$ 13	**$ (4)**	$ (13)	Commodity contracts
Oil contracts	**$ 1**	$ 2	**$ (1)**	$ (2)	Commodity contracts
Interest rate risk — DTE Energy	**$ (717)**	$ (667)	**$ 776**	$ 718	Long-term debt
Interest rate risk — DTE Electric	**$ (477)**	$ (426)	**$ 524**	$ 466	Long-term debt

For further discussion of market risk, see Note 8 to the Consolidated Financial Statements, "Financial and Other Derivative Instruments."

Item 4. *Controls and Procedures*

DTE Energy

(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 September 30, 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) 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 September 30, 2023 that have materially affected, or are reasonably likely to materially affect, DTE Energy's internal control over financial reporting.

DTE Electric

(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 September 30, 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) 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 September 30, 2023 that have materially affected, or are reasonably likely to materially affect, DTE Electric's internal control over financial reporting.

Part II — Other Information

Item 1. *Legal Proceedings*

For information on legal proceedings and matters related to the Registrants, see Notes 5 and 12 to the Consolidated Financial Statements, "Regulatory Matters" and "Commitments and Contingencies," respectively.

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

Item 1A. *Risk Factors*

There are various risks associated with the operations of the Registrants' businesses. To provide a framework to understand the operating environment of the Registrants, a brief explanation of the more significant risks associated with the Registrants' businesses is provided in Part 1, Item 1A. Risk Factors in DTE Energy's and DTE Electric's combined 2022 Annual Report on Form 10-K. Although the Registrants have tried to identify and discuss key risk factors, others could emerge in the future.

Item 2. *Unregistered Sales of 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 September 30, 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
07/01/2023 — 07/31/2023	5,408	$ 111.60	—	—	—
08/01/2023 — 08/31/2023	3,353	$ 112.29	—	—	—
09/01/2023 — 09/30/2023	800	$ 108.15	—	—	—
Total	**9,561**		**—**		

(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.

Item 5. *Insider Trading Arrangements and Policies*

For the quarter ended September 30, 2023, no DTE Energy directors or officers have adopted or terminated any Rule 10b5-1 trading arrangements or non-Rule 10b5-1 trading arrangements.

Item 6. ***Exhibits***

Exhibit Number	Description	DTE Energy	DTE Electric
	(i) Exhibits filed herewith:		
4.1	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 (2023 Series E and F)	X	
10.1	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	X	
31.1	Chief Executive Officer Section 302 Form 10-Q Certification of Periodic Report	X	
31.2	Chief Financial Officer Section 302 Form 10-Q Certification of Periodic Report	X	
31.3	Chief Executive Officer Section 302 Form 10-Q Certification of Periodic Report		X
31.4	Chief Financial Officer Section 302 Form 10-Q Certification of Periodic Report		X
101.INS	XBRL Instance Document - The instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL 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
	(ii) Exhibits furnished herewith:		
32.1	Chief Executive Officer Section 906 Form 10-Q Certification of Periodic Report	X	
32.2	Chief Financial Officer Section 906 Form 10-Q Certification of Periodic Report	X	
32.3	Chief Executive Officer Section 906 Form 10-Q Certification of Periodic Report		X
32.4	Chief Financial Officer Section 906 Form 10-Q Certification of Periodic Report		X
	(iii) Exhibits incorporated by reference:		
10.2	Securitization Property Servicing Agreement between DTE Electric Securitization Funding II LLC and DTE Electric Company, as Servicer, dated as of November 1, 2023 (Exhibit 10.1 to DTE Electric's Form 8-K filed November 1, 2023)		X
10.3	Securitization Property Purchase and Sale Agreement between DTE Electric Securitization Funding II LLC and DTE Electric Company, as Seller, dated as of November 1, 2023 (Exhibit 10.2 to DTE Electric's Form 8-K filed November 1, 2023)		X
10.4	Administration Agreement between DTE Electric Securitization Funding II LLC and DTE Electric Company, as Administrator, dated as of November 1, 2023 (Exhibit 10.3 to DTE Electric's Form 8-K filed November 1, 2023)		X
10.5	Intercreditor Agreement by and among DTE Electric Company, DTE Electric Securitization Funding I LLC, DTE Electric Securitization Funding II LLC, The Bank of New York Mellon and U.S. Bank Trust Company, National Association, dated as of November 1, 2023 (Exhibit 10.4 to DTE Electric's Form 8-K filed November 1, 2023)		X

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrants have duly caused this report to be signed on their behalf by the undersigned, thereunto duly authorized. The signature for each undersigned Registrant shall be deemed to relate only to matters having reference to such Registrant and any subsidiaries thereof.

Date: November 1, 2023

DTE ENERGY COMPANY

By: /S/ TRACY J. MYRICK

Tracy J. Myrick
Chief Accounting Officer
(Duly Authorized Officer)

DTE ELECTRIC COMPANY

By: /S/ TRACY J. MYRICK

Tracy J. Myrick
Chief Accounting Officer
(Duly Authorized Officer)

Exhibit 4.1

FIFTY-FOURTH
SUPPLEMENTAL INDENTURE
TO
INDENTURE OF MORTGAGE AND
DEED OF TRUST
DATED AS OF MARCH 1, 1944

AS RESTATED IN
PART II OF THE TWENTY-NINTH
SUPPLEMENTAL INDENTURE DATED AS OF JULY 15, 1989
WHICH BECAME EFFECTIVE ON APRIL 1, 1994

DTE GAS COMPANY
formerly known as
Michigan Consolidated Gas Company
TO
CITIBANK, N.A.,
TRUSTEE
DATED AS OF OCTOBER 1, 2023

CREATING TWO ISSUES OF FIRST MORTGAGE BONDS,
DESIGNATED AS
2023 SERIES E BONDS
2023 SERIES F BONDS

DTE GAS COMPANY

FIFTY-FOURTH SUPPLEMENTAL INDENTURE
DATED AS OF OCTOBER 1, 2023
SUPPLEMENTAL TO INDENTURE OF MORTGAGE
AND DEED OF TRUST
DATED AS OF MARCH 1, 1944

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THIS FIFTY-FOURTH SUPPLEMENTAL INDENTURE, dated as of the 1st day of October 2023, between DTE GAS COMPANY, formerly known as Michigan Consolidated Gas Company, a corporation duly organized and existing under and by virtue of the laws of the State of Michigan (hereinafter called the "Company"), having its principal place of business at One Energy Plaza, Detroit, Michigan, 48226 and CITIBANK, N.A., a national banking association incorporated and existing under and by virtue of the laws of the United States of America, having an office at 388 Greenwich Street in the Borough of Manhattan, the City of New York, New York, 10013 as successor trustee (hereinafter with its predecessors as trustee called the "Mortgage Trustee" or the "Trustee"):

WHEREAS, the Company has heretofore executed and delivered to the Trustee an Indenture of Mortgage and Deed of Trust (the "Original Indenture"), dated as of March 1, 1944;

WHEREAS, the Company has heretofore executed and delivered to the Trustee the Twenty-ninth Supplemental Indenture, which became effective April 1, 1994, to provide for the modification and restatement of the Original Indenture as previously amended (as so amended, supplemented and modified the "Indenture"), and to secure the Company's First Mortgage Bonds, unlimited in aggregate principal amount except as therein otherwise provided, issued pursuant to the:

Thirtieth Supplemental Indenture, dated as of September 1, 1991;
Thirty-first Supplemental Indenture, dated as of December 15, 1991;
Thirty-second Supplemental Indenture, dated as of January 5, 1993;
Thirty-third Supplemental Indenture, dated as of May 1, 1995;
Thirty-fourth Supplemental Indenture, dated as of November 1, 1996;
Thirty-fifth Supplemental Indenture, dated as of June 18, 1998;
Thirty-sixth Supplemental Indenture, dated as of August 15, 2001;
Thirty-seventh Supplemental Indenture, dated as of February 15, 2003;
Thirty-eighth Supplemental Indenture, dated as of October 1, 2004;
Thirty-ninth Supplemental Indenture, dated as of April 1, 2008;
Fortieth Supplemental Indenture, dated as of June 1, 2008;
Forty-first Supplemental Indenture, dated as of August 1, 2008;
Forty-second Supplemental Indenture, dated as of December 1, 2008;
Forty-third Supplemental Indenture, dated as of December 1, 2012;
Forty-fourth Supplemental Indenture, dated as of December 1, 2013;
Forty-fifth Supplemental Indenture, dated as of December 1, 2014;
Forty-sixth Supplemental Indenture, dated as of August 1, 2015;
Forty-seventh Supplemental Indenture, dated as of December 1, 2016;
Forty-eighth Supplemental Indenture, dated as of September 1, 2017;
Forty-ninth Supplemental Indenture, dated as of August 1, 2018;
Fiftieth Supplemental Indenture, dated as of October 1, 2019;
Fifty-first Supplemental Indenture, dated as of August 1, 2020;

Fifty-second Supplemental Indenture, dated as of November 1, 2021; and
Fifty-third Supplemental Indenture, dated as of September 1, 2022

WHEREAS, at the date hereof there were outstanding First Mortgage Bonds of the Company issued under the Indenture, of 22 series in the principal amounts set forth below including Collateral Bonds):

Designation of Series	**Amount Initially Issued**	**Amount Outstanding**
First Mortgage Bonds		
2012 Series D First Mortgage Bonds	$70,000,000	$70,000,000
2013 Series C First Mortgage Bonds	$50,000,000	$50,000,000
2013 Series D First Mortgage Bonds	$70,000,000	$70,000,000
2013 Series E First Mortgage Bonds	$50,000,000	$50,000,000
2014 Series F First Mortgage Bonds	$150,000,000	$150,000,000
2015 Series C First Mortgage Bonds	$40,000,000	$40,000,000
2015 Series D First Mortgage Bonds	$125,000,000	$125,000,000
2016 Series G First Mortgage Bonds	$125,000,000	$125,000,000
2017 Series C First Mortgage Bonds	$40,000,000	$40,000,000
2017 Series D First Mortgage Bonds	$40,000,000	$40,000,000
2018 Series B First Mortgage Bonds	$195,000,000	$195,000,000
2018 Series C First Mortgage Bonds	$125,000,000	$125,000,000
2019 Series D First Mortgage Bonds	$140,000,000	$140,000,000
2019 Series E First Mortgage Bonds	$140,000,000	$140,000,000
2020 Series D First Mortgage Bonds	$125,000,000	$125,000,000
2020 Series E First Mortgage Bonds	$125,000,000	$125,000,000
2021 Series C First Mortgage Bonds	$60,000,000	$60,000,000
2021 Series D First Mortgage Bonds	$95,000,000	$95,000,000
2022 Series C First Mortgage Bonds	$130,000,000	$130,000,000
2022 Series D First Mortgage Bonds	$130,000,000	$130,000,000
Collateral Bonds (Senior Notes)		
5.70% Collateral Bonds due 2033	$200,000,000	$200,000,000
2008 Series F Collateral Bonds	$75,000,000	$75,000,000

WHEREAS, the Company desires in and by this Supplemental Indenture to establish two series of bonds to be issued under the Indenture designated and distinguished as 2023 Series E Bonds and 2023 Series F Bonds (herein collectively sometimes called the "Bonds"), to designate the terms thereof, to specify the particulars necessary to describe and define the same and to specify such other provisions and agreements in respect thereof as are in the Indenture provided or permitted; and

WHEREAS, all the conditions and requirements necessary to make this Supplemental Indenture, when duly executed and delivered, a valid, binding and legal instrument in accordance with its terms and for the purposes herein expressed, have been done, performed and fulfilled, and the execution and delivery of this Supplemental Indenture in the form and with the terms hereof have been in all respects duly authorized;

NOW, THEREFORE, in consideration of the premises and in further consideration of the sum of One Dollar in lawful money of the United States of America paid to the Company by the Trustee at or before the execution and delivery of this Fifty-Fourth Supplemental Indenture, the receipt whereof is hereby acknowledged, and of other good and valuable consideration, it is agreed by and between the Company and the Trustee as follows:

ARTICLE I
ESTABLISHMENT OF AN ISSUE OF FIRST MORTGAGE BONDS, OF THE SERIES DESIGNATED AND DISTINGUISHED AS "2023 SERIES E BONDS"

SECTION 1

There is hereby established a series of bonds to be issued under and secured by the Indenture, to be known as "First Mortgage Bonds," designated and distinguished as "2023 Series E Bonds" of the Company. The 2023 Series E Bonds shall be limited in aggregate principal amount to $150,000,000 except as provided in Article II of the Indenture and in this Supplemental Indenture with respect to transfers, exchanges and replacements of the 2023 Series E Bonds. The 2023 Series E Bonds shall be registered bonds without coupons and shall be dated as of the date of the authentication thereof by the Trustee.

The 2023 Series E Bonds shall mature on the 1st day of October 2030 (subject to earlier redemption, as provided herein), shall bear interest at the rate of 5.57% per annum, payable semi-annually on the 1st day of April and October of each year and at maturity (each a "2023 Series E Interest Payment Date"), beginning on April 1, 2024. The principal, Make-Whole Amount (as defined below), if any, and interest on the 2023 Series E Bonds shall be payable in lawful money of the United States of America; the place where such principal and Make-Whole Amount, if any, shall be payable shall be the corporate trust office of the Trustee in the Borough of Manhattan, the City of New York, New York, and the place where such interest shall be payable shall be the office or agency of the Company in said Borough of Manhattan, the City of New York, New York. The 2023 Series E Bonds shall have such other terms as set forth in the form of 2023 Series E Bond provided in Section 3.

SECTION 2

The 2023 Series E Bonds shall be subject to redemption at the option of the Company, in whole at any time or in part from time to time (any such date of redemption, a "2023 Series E Redemption Date"), at the applicable redemption price ("2023 Series E Redemption Price") set forth below.

At any time prior to August 1, 2030 (the "2023 Series E Par Call Date"), the 2023 Series E Redemption Price will be equal to 100% of the principal amount of the 2023 Series E Bonds to be redeemed on the 2023 Series E Redemption Date together with the Make-Whole Amount (as defined in the form of 2023 Series E Bond provided in Section 3), if any, plus, in each case, accrued and unpaid interest thereon to the 2023 Series E Redemption Date.

At any time on or after the 2023 Series E Par Call Date, the 2023 Series E Redemption Price will be equal to 100% of the principal amount of the bonds of 2023 Series E to be redeemed plus accrued and unpaid interest thereon to the redemption date.

Notwithstanding the foregoing, installments of interest on the 2023 Series E Bonds that are due and payable on 2023 Series E Interest Payment Dates falling on or prior to the 2023 Series E Redemption Date will be payable on the 2023 Series E Interest Payment Date to the registered holders as of the close of business on the relevant record date.

Notice of redemption shall be given to the holders of the 2023 Series E Bonds to be redeemed not more than 60 nor less than 30 days prior to the 2023 Series E Redemption Date, as provided in Section 4.05 of the Indenture. Each such notice shall specify such optional 2023 Series E Redemption Date, the aggregate principal amount of the 2023 Series E Bonds to be redeemed on such date, the principal amount of each 2023 Series E Bond held by such holder to be redeemed, and the interest to be paid on the 2023 Series E Redemption Date with respect to such principal amount being prepaid. In addition, if the 2023 Series E Redemption Date is prior to the 2023 Series E Par Call Date, each such notice shall be accompanied by a certificate of a senior financial officer of the Company as to the estimated Make-Whole Amount due in connection with such redemption (with the Reinvestment Yield calculated, solely for purposes of such estimate, using the relevant U.S. Treasury yield as of the second Business Day preceding the date of such notice), setting forth the details of such computation. The Make-Whole Amount shall be determined by the Company two Business Days prior to the applicable 2023 Series E Redemption Date and the Company shall deliver to holders of the 2023 Series E Bonds and to the Trustee a certificate of a senior financial officer specifying the calculation of such Make-Whole Amount as of the 2023 Series E Redemption Date.

Subject to the limitations of Section 4.07 of the Indenture, the notice of redemption may state that it is subject to the receipt of the redemption moneys by the Trustee on or before the 2023 Series E Redemption Date, and that such notice shall be of no effect unless such moneys are so received on or before such date.

If the 2023 Series E Bonds are only partially redeemed by the Company, the Trustee shall select which 2023 Series E Bonds are to be redeemed pro rata among all of the 2023 Series E Bonds at the time outstanding in proportion, as nearly as practicable, to the respective unpaid principal amounts thereof and otherwise in accordance with the terms of the Indenture. In the event of redemption of the 2023 Series E Bonds in part only, a new 2023 Series E Bond or 2023 Series E Bonds for the unredeemed portion will be issued in the name or names of the holders thereof upon the surrender or cancellation thereof.

If money sufficient to pay the applicable 2023 Series E Redemption Price with respect to the 2023 Series E Bonds to be redeemed on the applicable 2023 Series E Redemption Date, together with accrued interest to the 2023 Series E Redemption Date, is deposited with the Trustee on or before the related 2023 Series E Redemption Date and certain other conditions are satisfied, then the 2023 Series E Bonds to be redeemed shall no longer be secured by, or entitled to any lien or benefit of, the Indenture as provided by Section 4.04 of the Indenture.

The 2023 Series E Bonds will not be entitled to any sinking fund and will not be redeemable other than as provided in this Section 2 and the form of 2023 Series E Bond provided in Section 3.

SECTION 3

The 2023 Series E Bonds shall be registered bonds without coupons. The Trustee shall be the registrar and paying agent for the 2023 Series E Bonds, which duties it hereby accepts. The 2023 Series E Bonds may be issued in minimum denominations of $100,000 or any integral multiple of $1,000 in excess thereof.

The forms of 2023 Series E Bonds shall be substantially as follows:

[FORM OF DTE GAS COMPANY 5.57% FIRST MORTGAGE BONDS 2023 SERIES E DUE 2030]

PPN:

No. R-___ $_________________

THE SECURITIES EVIDENCED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), AND MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT (A) PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT AND (B) IN ACCORDANCE WITH ALL APPLICABLE SECURITIES LAWS OF THE STATES OF THE UNITED STATES. IN CONNECTION WITH ANY TRANSFER, THE HOLDER WILL DELIVER TO THE COMPANY AND THE TRUSTEE SUCH CERTIFICATES AND OTHER INFORMATION AS THE TRUSTEE MAY REASONABLY

REQUIRE TO CONFIRM THAT THE TRANSFER COMPLIES WITH THE FOREGOING RESTRICTIONS.

DTE GAS COMPANY

5.57% MORTGAGE BONDS

2023 SERIES E DUE 2030

Principal Amount: $____________

Authorized Denomination: $100,000 or any integral multiple of $1,000 in excess thereof.

Regular Record Date: close of business on the 15th calendar day (whether or not a Business Day) prior to the relevant Interest Payment Date

Original Issue Date: October 5, 2023

Stated Maturity: October 1, 2030

Interest Payment Dates: April 1 and October 1 of each year, beginning April 1, 2024.

Interest Rate: 5.57% per annum

DTE GAS COMPANY (hereinafter called the "Company"), a corporation of the State of Michigan, for value received, hereby promises to pay to ___________, or registered assigns, the sum of _________ Dollars ($_________) on the Stated Maturity specified above, in the coin or currency of the United States of America, and to pay interest thereon from the Original Issue Date specified above, or from the most recent Interest Payment Date to which interest has been paid or duly provided for, semi-annually in arrears on each Interest Payment Date as specified above, commencing on April 1, 2024 and on the Stated Maturity at the Interest Rate per annum specified above until the principal hereof is paid or made available for payment, and on any overdue principal and Make-Whole Amount (defined below) and, to the extent lawful, on any overdue installment of interest. The interest so payable, and punctually paid or duly provided for, on any Interest Payment Date will, as provided in the Indenture, be paid to the person in whose name this bond is registered at the close of business on the Regular Record Date as specified above next preceding such Interest Payment Date; provided that any interest payable at Stated Maturity or on a Redemption Date (defined below) will be paid to the person to whom principal is payable. Except as otherwise provided in the Indenture, any such interest not so punctually paid or duly provided for will forthwith cease to be payable to the holder on such Regular Record Date and may either be paid to the person in whose name this bond is registered at the close of business on a special record date for the payment of such defaulted interest to be fixed by the Trustee, notice whereof shall be given to holders of bonds of this series not less than 10 days prior to such special record date, or be paid at any time in any other lawful manner not inconsistent with the requirements of any securities exchange, if any, on which the bonds of this series shall be listed, and upon such notice as may be required by any such exchange, all as more fully provided in the Indenture.

Payments of interest on this bond will include interest accrued to but excluding the respective Interest Payment Dates. Interest payments for this bond shall be computed and paid on the basis of a 360-day year consisting of twelve 30-day months. The Company shall pay interest on overdue principal and Make-Whole Amount, if any, and, to the extent lawful, on overdue installments of interest at the rate per annum borne by this bond. In the event that any Interest Payment Date, Redemption Date or Stated Maturity is not a Business Day, then the required payment of principal, Make-Whole Amount, if any, and interest will be made on the next succeeding day that is a Business Day (and without any interest or other payment in respect of any such delay). “Business Day” means any day other than a day on which banking institutions in the State of New York or the State of Michigan are authorized or obligated pursuant to law or executive order to close.

Payment of principal of, Make-Whole Amount, if any, and interest on the bonds of this series shall be made in such coin or currency of the United States of America as at the time of payment is legal tender for payment of public and private debts. Payments of principal, Make-Whole Amount, if any, and interest due at the Stated Maturity or earlier redemption of such bonds shall be made at the office of the Trustee upon surrender of such bonds to the Trustee, and payments of interest shall be made, at the option of the Company, subject to such surrender where applicable, (A) by check mailed to the address of the person entitled thereto as such address shall appear in the bond register of the Trustee maintained for such purpose or (B) by wire transfer at such place and to such account at a banking institution in the United States as may be designated in writing to the Trustee at least fourteen (14) days prior to the date for payment by the person entitled thereto. Notwithstanding the foregoing, so long as any bond is held by an Institutional Investor (as defined in the Bond Purchase Agreement referenced below), payment of principal, Make-Whole Amount, if any, and interest on the bonds held by such holder shall be made in the manner specified in the Bond Purchase Agreement dated as of October 5, 2023 among the Company and the purchasers party thereto.

The bonds represented by this certificate, of the series hereinafter specified, are bonds of the Company (herein called the “bonds”) known as its “First Mortgage Bonds,” issued and to be issued in one or more series under, and all equally and ratably secured by, an Indenture of Mortgage and Deed of Trust dated as of March 1, 1944, duly executed by the Company to Citibank, N.A., successor trustee (“Trustee”), as restated in Part II of the Twenty-ninth Supplemental Indenture dated as of July 15, 1989, which became effective on April 1, 1994, to which indenture and all indentures supplemental thereto executed on and after July 15, 1989 reference is hereby made for a description of the property mortgaged and pledged, the nature and extent of the security, the terms and conditions upon which the bonds are, and are to be, issued and secured, and the rights of the holders of the bonds and of the Trustee in respect of such security (which indenture and all indentures supplemental thereto, including the Fifty-Fourth Supplemental Indenture dated as of October 1, 2023 referred to below, are hereinafter collectively called the “Indenture”). As provided in the Indenture, the bonds may be issued thereunder for various principal sums and are issuable in series, which may mature at different times, may bear interest at different rates and may otherwise vary as therein provided. The bonds represented by this certificate are part of a series designated “5.57% First Mortgage Bonds 2023 Series E” (herein called the “Bonds”), created by the Fifty-Fourth Supplemental Indenture dated as of October 1, 2023 as provided for in said Indenture.

With the consent of the Company and to the extent permitted by and as provided in the Indenture, the rights and obligations of the Company, the rights and obligations of the holders of the Bonds, and the terms and provisions of the Indenture may be modified or altered by such affirmative vote or votes of the holders of the Bonds then outstanding as are specified in the Indenture.

In case an Event of Default as defined in the Indenture shall occur, the principal of the Bonds may become or be declared due and payable in the manner, with the effect, and subject to the conditions provided in the Indenture. Upon any such declaration, the Company shall also pay to the holders of the Bonds the Make-Whole Amount on the Bonds, if any, determined as of the date the Bonds shall have been declared due and payable.

No recourse shall be had for the payment of the principal of, Make-Whole Amount, if any, or the interest on, the Bonds, or for any claim based hereon or otherwise in respect of the Bonds or the Indenture, against any incorporator, stockholder, director or officer, past, present or future, of the Company, as such, or any predecessor or successor corporation, either directly or through the Company or any such predecessor or successor corporation, whether by virtue of any constitution, statute or rule of law, or by the enforcement of any assessment or penalty or otherwise, all such liability, whether at common law, in equity, by any constitution, statute or otherwise, of incorporators, stockholders, directors or officers being waived and released by the owner hereof by the acceptance of the Bonds, and as part of the consideration for the issue thereof, and being likewise waived and released pursuant to the Indenture.

This Bond shall be subject to redemption at the option of the Company, in whole at any time or in part from time to time (any such date of optional redemption, a “Redemption Date”), at the applicable redemption price (“Redemption Price”) set forth below.

At any time prior to August 1, 2030 (the “Par Call Date”), the Redemption Price will be equal to 100% of the principal amount of the Bonds to be redeemed on the Redemption Date together with the Make-Whole Amount (as defined below), if any, plus, in each case, accrued and unpaid interest thereon to the Redemption Date.

At any time on or after the Par Call Date, the Redemption Price will be equal to 100% of the principal amount of the Bonds to be redeemed on the Redemption Date plus accrued and unpaid interest thereon to the Redemption Date.

Notwithstanding the foregoing, installments of interest on the Bonds that are due and payable on Interest Payment Dates falling on or prior to a Redemption Date will be payable on the Interest Payment Date to the registered Holders as of the close of business on the relevant Record Date.

"Make-Whole Amount" means, with respect to any Bond, a premium in an amount equal to the excess, if any, of the Discounted Value of the Remaining Scheduled Payments with respect to the Called Principal of such Bond over the amount of such Called Principal, provided that the Make-Whole Amount may in no event be less than zero. If the Settlement Date is prior to the Par Call Date, the Make-Whole Amount with respect to any Called Principal of a Bond shall be determined as if the Stated Maturity of such Bond were the Par Call Date; provided that the Make-Whole Amount shall in no event be less than zero. For the purposes of determining the Make-Whole Amount, the following terms have the following meanings:

"Called Principal" means, with respect to a Bond, the principal of the Bond that is to be redeemed on a Redemption Date or has become or is declared to be immediately due and payable pursuant to Section 9.01 of the Indenture, as the context requires.

"Discounted Value" means, with respect to the Called Principal of a Bond, the amount obtained by discounting all Remaining Scheduled Payments with respect to such Called Principal from their respective scheduled due dates to the Settlement Date with respect to such Called Principal, in accordance with accepted financial practice and at a discount factor (applied on the same periodic basis as that on which interest on the Bond is payable) equal to the Reinvestment Yield with respect to such Called Principal.

"Reinvestment Yield" means, with respect to the Called Principal of a Bond, the sum of (a) 0.50% (50 basis points) plus (b) the yield to maturity implied by the "Ask Yield(s)" reported, as of 10:00 a.m. (New York City time) on the second Business Day preceding the Settlement Date with respect to such Called Principal, on the display designated as "Page PX-1" (or such other display as may replace Page PX-1), on Bloomberg Financial Markets for the most recently issued, actively traded on-the-run, benchmark U.S. Treasury securities ("Reported") having a maturity equal to the Remaining Average Life of such Called Principal as of such Settlement Date.

If there are no such U.S. Treasury securities Reported having a maturity equal to such Remaining Average Life, then such implied yield to maturity will be determined by (a) converting U.S. Treasury bill quotations to bond equivalent yields in accordance with accepted financial practice and (b) interpolating linearly between the "Ask Yields" Reported for the applicable most recently issued, actively traded on-the-run, U.S. Treasury securities with the maturities (1) closest to and greater than such Remaining Average Life and (2) closest to and less than the Remaining Average Life. The Reinvestment Yield shall be rounded to the number of decimal places as appears in the interest rate of the applicable Bond. If such yields are not Reported or the yields Reported as of such time are not ascertainable (including by way of interpolation), then "Reinvestment Yield" means, with respect to the Called Principal of any Bond, the sum of (x) 0.50% (50 basis points) plus (y) the yield to maturity implied by the U.S. Treasury constant maturity yields reported, for the latest day for which such yields have been so reported as of the second Business Day preceding the Settlement Date with respect to such Called Principal, in Federal Reserve Statistical Release H.15 (519) (or any comparable successor publication) for the U.S. Treasury constant maturity having a term equal to the Remaining Average Life of such Called Principal as of such Settlement Date. If there is no such U.S. Treasury constant maturity having a term equal to such Remaining Average Life, such implied yield to maturity will be determined by interpolating linearly between (1) the U.S. Treasury constant maturity so reported with the term closest to and greater than such Remaining Average Life and (2) the U.S. Treasury constant maturity so reported with the term closest to and less than such Remaining Average Life. The Reinvestment Yield shall be rounded to the number of decimal places as appears in the interest rate of the applicable Bond.

"Remaining Average Life" means, with respect to any Called Principal, the number of years obtained by dividing (i) such Called Principal into (ii) the sum of the products obtained by multiplying (a) the principal component of each Remaining Scheduled Payment with respect to such Called Principal by (b) the number of years, computed on the basis of a 360-day year comprised of twelve 30-day months and calculated to two decimal places, that will elapse between the Settlement Date with respect to such Called Principal and the Stated Maturity (or, if redeemed prior to the Par Call Date, the Par Call Date) of such Remaining Scheduled Payment.

"Remaining Scheduled Payments" means, with respect to the Called Principal of a Bond, all payments of such Called Principal and interest thereon that would be due after the Settlement Date with respect to such Called Principal if no payment of such Called Principal were made prior to its Stated Maturity (or, if redeemed prior to the Par Call Date, the Par Call Date), provided that if such Settlement Date is not a date on which interest payments are due to be made under the terms of the Bond, then the amount of the next succeeding scheduled interest payment will be reduced by the amount of interest accrued to such Settlement Date and required to be paid on such Settlement Date.

"Settlement Date" means, with respect to the Called Principal of a Bond, the Redemption Date on which such Called Principal is to be redeemed or has become or is declared to be immediately due and payable pursuant to Section 9.01 of the Indenture as the context requires.

Notice of redemption shall be given to the holders of the Bonds to be redeemed not more than 60 nor less than 30 days prior to the Redemption Date, as provided in Section 4.05 of the Indenture. Each such notice shall specify such Redemption Date, the aggregate principal amount of the Bonds to be redeemed on such date, the principal amount of each Bond held by such holder to be redeemed, and the interest to be paid on the Redemption Date with respect to such principal amount being prepaid. In addition, if the Redemption Date is prior to the Par Call Date, each such notice shall be accompanied by a certificate of a senior financial officer of the Company as to the estimated Make-Whole Amount due in connection with such redemption (with the Reinvestment Yield calculated, solely for purposes of such estimate, using the relevant U.S. Treasury yield as of the second Business Day preceding the date of such notice), setting forth the details of such computation. The Make-Whole Amount shall be determined by the Company two Business Days prior to the applicable Redemption Date and the Company shall deliver to holders of the Bonds and to the Trustee a certificate of a senior financial officer specifying the calculation of such Make-Whole Amount as of the Redemption Date.

Subject to the limitations of Section 4.07 of the Indenture, the notice of redemption may state that it is subject to the receipt of the redemption moneys by the Trustee on or before the Redemption Date, and that such notice shall be of no effect unless such moneys are so received on or before such date; a notice of redemption so conditioned shall be of no force or effect if such money is not so received and, in such event, the Company shall not be required to redeem this Bond.

If the Bonds are only partially redeemed by the Company, the Trustee shall select which Bonds are to be redeemed pro rata among all of the Bonds at the time outstanding in proportion, as nearly as practicable, to the respective unpaid principal amounts thereof and otherwise in accordance with the terms of the Indenture. In the event of redemption of the Bonds in part only, a new Bond or Bonds for the unredeemed portion will be issued in the name or names of the holders thereof upon the surrender or cancellation thereof.

If money sufficient to pay the applicable Redemption Price with respect to the Bonds to be redeemed on the applicable Redemption Date, together with accrued interest to the Redemption Date, is deposited with the Trustee on or before the related Redemption Date and certain other conditions are satisfied, then the Bonds to be redeemed shall no longer be secured by, or entitled to any lien or benefit of, the Indenture as provided by Section 4.04 of the Indenture.

The Indenture contains terms, provisions and conditions relating to the consolidation or merger of the Company with or into, and the conveyance, or other transfer or lease, subject to the lien of the Indenture, of the trust estate to, another corporation, to the assumption by such other corporation, in certain circumstances, of the obligations of the Company under the Indenture and on the Bonds and to the succession of such other corporation in certain circumstances, to the powers and rights of the Company under the Indenture.

The Indenture contains provisions for defeasance at any time of the entire indebtedness of the Bonds or certain covenants with respect thereto upon compliance by the Company with certain conditions set forth therein.

This Bond shall not be valid or become obligatory for any purpose unless and until the certificate of authentication hereon shall have been manually executed by the Trustee or its successor in trust under the Indenture.

IN WITNESS WHEREOF, DTE GAS COMPANY has caused this certificate to be executed under its name with the signature of its duly authorized Officer, under its corporate seal, which may be a facsimile, attested with the signature of its Corporate Secretary.

Dated:

DTE GAS COMPANY

By:______________________________

Attest:

By:______________________________

CERTIFICATE OF AUTHENTICATION

The bonds represented by this certificate constitute Bonds of the series designated and described in the within-mentioned Indenture.

CITIBANK, N.A., as Trustee

By:______________________________
Authorized Officer

Dated:

[End of 2023 Series E Bond Form]

SECTION 4

Each certificate evidencing the 2023 Series E Bonds (and all 2023 Series E Bonds issued in exchange therefor or in substitution thereof) shall bear a legend in substantially the following form (each defined term in the legend being defined as such for purposes of the legend only):

THE SECURITIES EVIDENCED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), AND MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT (A) PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT AND (B) IN ACCORDANCE WITH ALL APPLICABLE SECURITIES LAWS OF THE STATES OF THE UNITED STATES. IN CONNECTION WITH ANY TRANSFER, THE HOLDER WILL DELIVER TO THE COMPANY AND THE TRUSTEE SUCH CERTIFICATES AND OTHER INFORMATION AS THE TRUSTEE MAY REASONABLY REQUIRE TO CONFIRM THAT THE TRANSFER COMPLIES WITH THE FOREGOING RESTRICTIONS.

The 2023 Series E Bonds shall be exchangeable upon surrender thereof at the corporate trust office of the Trustee in the Borough of Manhattan, the City of New York, New York, for registered bonds of the same aggregate principal amount and other terms, but of different authorized denomination or denominations, such exchanges to be made without service charge (except for any stamp tax or other governmental charge).

When 2023 Series E Bonds are presented to the Trustee with a request (i) to register the transfer of such 2023 Series E Bonds; or (ii) to exchange such 2023 Series E Bonds for 2023 Series E Bonds of the same series of any authorized denominations of the same aggregate principal amount and Stated Maturity, the Trustee shall register the transfer or make the exchange as requested if its reasonable requirements for such transaction are met; provided, however, that the 2023 Series E Bonds surrendered for transfer or exchange: (A) shall be duly endorsed or be accompanied by a written instrument of transfer in form reasonably satisfactory to the Company and the Trustee, duly executed by the holder thereof or his attorney duly authorized in writing; and (B) are accompanied by the following additional information and documents, as applicable: (x) if such 2023 Series E Bonds are being delivered to the Company by a holder for registration in the name of such holder, without transfer, a certification from such holder to that effect; or (y) if such 2023 Series E Bonds are being transferred to the Company, a certification to that effect; or (z) if such 2023 Series E Bonds are being transferred pursuant to an exemption from registration in accordance with Rule 144 under the Securities Act or in reliance upon another exemption from the registration requirements of the Securities Act, (i) a certification to that effect and (ii) if the Company so requests, other evidence reasonably satisfactory to it as to the compliance with the restrictions set forth in the legend set forth above.

Every 2023 Series E Bond so surrendered shall be accompanied by a proper transfer power duly executed by the registered owner or by a duly authorized attorney transferring such 2023 Series E Bond to the Company, and the signature to such transfer power shall be guaranteed to the satisfaction of the Trustee. All 2023 Series E Bonds so surrendered shall be forthwith canceled and delivered to or upon the order of the Company. All 2023 Series E Bonds executed, authenticated and delivered in exchange for 2023 Series E Bonds so surrendered shall be valid obligations of the Company, evidencing the same debt as the 2023 Series E Bonds surrendered, and shall be secured by the same lien and be entitled to the same benefits and protection as the 2023 Series E Bonds in exchange for which they are executed, authenticated and delivered.

The Company shall not be required to make any such exchange or any registration of transfer after the 2023 Series E Bond so presented for exchange or registration of transfer, or any portion thereof, has been called for redemption and notice thereof given to the registered owner.

SECTION 5

Pending the preparation of definitive 2023 Series E Bonds, the Company may from time to time execute, and upon its written order, the Trustee shall authenticate and deliver, in lieu of such definitive 2023 Series E Bonds and subject to the same provisions, limitations and conditions, one or more temporary 2023 Series E Bonds, in registered form, of any denomination specified in the written order of the Company for the authentication and delivery thereof, and with such omissions, insertions and variations as may be determined by the Board of Directors of the Company. Such temporary 2023 Series E Bonds shall be substantially of the tenor of the 2023 Series E Bonds to be issued as herein before recited.

If any such temporary 2023 Series E Bonds shall at any time be so authenticated and delivered in lieu of definitive 2023 Series E Bonds, the Company shall upon request at its own expense prepare, execute and deliver to the Trustee and thereupon, upon the presentation and surrender of temporary 2023 Series E Bonds, the Trustee shall authenticate and deliver in exchange therefor, without charge to the holder, definitive Bonds of the same series and other terms, if any, and for the same principal sum in the aggregate as the temporary 2023 Series E Bonds surrendered. All temporary 2023 Series E Bonds so surrendered shall be forthwith canceled by the Trustee and delivered to or upon the order of the Company. Until exchanged for definitive 2023 Series E Bonds the temporary 2023 Series E Bonds shall in all respects be entitled to the lien and security of the Indenture and all supplemental indentures.

ARTICLE II
ESTABLISHMENT OF AN ISSUE OF FIRST MORTGAGE BONDS, OF THE SERIES DESIGNATED AND DISTINGUISHED AS “2023 SERIES F BONDS”

SECTION 1

There is hereby established a series of bonds to be issued under and secured by the Indenture, to be known as “First Mortgage Bonds,” designated and distinguished as “2023 Series F Bonds” of the Company. The 2023 Series F Bonds shall be limited in aggregate principal amount to $145,000,000 except as provided in Article II of the Indenture and in this Supplemental Indenture with respect to transfers, exchanges and replacements of the 2023 Series F Bonds. The 2023 Series F Bonds shall be registered bonds without coupons and shall be dated as of the date of the authentication thereof by the Trustee.

The 2023 Series F Bonds shall mature on the 1st day of October, 2035 (subject to earlier redemption, as provided herein), shall bear interest at the rate of 5.73% per annum, payable semi-annually on the 1st day of April and October of each year and at maturity (each a “2023 Series F Interest Payment Date”), beginning on April 1, 2024. The principal, Make-Whole Amount (as defined below), if any, and interest on the 2023 Series F Bonds shall be payable in lawful money of the United States of America; the place where such principal and Make-Whole Amount, if any, shall be payable shall be the corporate trust office of the Trustee in the Borough of Manhattan, the City of New York, New York, and the place where such interest shall be payable shall be the office or agency of the Company in said Borough of Manhattan, the City of New York, New York. The

2023 Series F Bonds shall have such other terms as set forth in the form of 2023 Series F Bond provided in Section 3.

SECTION 2

The 2023 Series F Bonds shall be subject to redemption at the option of the Company, in whole at any time or in part from time to time (any such date of redemption, a “2023 Series F Redemption Date”), at the applicable redemption price (“2023 Series F Redemption Price”) set forth below.

At any time prior to July 1, 2035 (the “2023 Series F Par Call Date”), the 2023 Series F Redemption Price will be equal to 100% of the principal amount of the 2023 Series F Bonds to be redeemed on the 2023 Series F Redemption Date together with the Make-Whole Amount (as defined in the form of 2023 Series F Bond provided in Section 3), if any, plus, in each case, accrued and unpaid interest thereon to the 2023 Series F Redemption Date.

At any time on or after the 2023 Series F Par Call Date, the 2023 Series F Redemption Price will be equal to 100% of the principal amount of the bonds of 2023 Series F to be redeemed plus accrued and unpaid interest thereon to the redemption date.

Notwithstanding the foregoing, installments of interest on the 2023 Series F Bonds that are due and payable on 2023 Series F Interest Payment Dates falling on or prior to the 2023 Series F Redemption Date will be payable on the 2023 Series F Interest Payment Date to the registered holders as of the close of business on the relevant record date.

Notice of redemption shall be given to the holders of the 2023 Series F Bonds to be redeemed not more than 60 nor less than 30 days prior to the 2023 Series F Redemption Date, as provided in Section 4.05 of the Indenture. Each such notice shall specify such optional 2023 Series F Redemption Date, the aggregate principal amount of the 2023 Series F Bonds to be redeemed on such date, the principal amount of each 2023 Series F Bond held by such holder to be redeemed, and the interest to be paid on the 2023 Series F Redemption Date with respect to such principal amount being prepaid. In addition, if the 2023 Series F Redemption Date is prior to the 2023 Series F Par Call Date, each such notice shall be accompanied by a certificate of a senior financial officer of the Company as to the estimated Make-Whole Amount due in connection with such redemption (with the Reinvestment Yield calculated, solely for purposes of such estimate, using the relevant U.S. Treasury yield as of the second Business Day preceding the date of such notice), setting forth the details of such computation. The Make-Whole Amount shall be determined by the Company two Business Days prior to the applicable 2023 Series F Redemption Date and the Company shall deliver to holders of the 2023 Series F Bonds and to the Trustee a certificate of a senior financial officer specifying the calculation of such Make-Whole Amount as of the 2023 Series F Redemption Date.

Subject to the limitations of Section 4.07 of the Indenture, the notice of redemption may state that it is subject to the receipt of the redemption moneys by the Trustee on or before the 2023 Series F Redemption Date, and that such notice shall be of no effect unless such moneys are so received on or before such date.

If the 2023 Series F Bonds are only partially redeemed by the Company, the Trustee shall select which 2023 Series F Bonds are to be redeemed pro rata among all of the 2023 Series F Bonds at the time outstanding in proportion, as nearly as practicable, to the respective unpaid principal amounts thereof and otherwise in accordance with the terms of the Indenture. In the event of redemption of the 2023 Series F Bonds in part only, a new 2023 Series F Bond or 2023 Series F Bonds for the unredeemed portion will be issued in the name or names of the holders thereof upon the surrender or cancellation thereof.

If money sufficient to pay the applicable 2023 Series F Redemption Price with respect to the 2023 Series F Bonds to be redeemed on the applicable 2023 Series F Redemption Date, together with accrued interest to the 2023 Series F Redemption Date, is deposited with the Trustee on or before the related 2023 Series F Redemption Date and certain other conditions are satisfied, then the 2023 Series F Bonds to be redeemed shall no longer be secured by, or entitled to any lien or benefit of, the Indenture as provided by Section 4.04 of the Indenture.

The 2023 Series F Bonds will not be entitled to any sinking fund and will not be redeemable other than as provided in this Section 2 and the form of 2023 Series F Bond provided in Section 3.

SECTION 3

The 2023 Series F Bonds shall be registered bonds without coupons. The Trustee shall be the registrar and paying agent for the 2023 Series F Bonds, which duties it hereby accepts. The 2023 Series F Bonds may be issued in minimum denominations of $100,000 or any integral multiple of $1,000 in excess thereof.

The forms of 2023 Series F Bonds shall be substantially as follows:

[FORM OF DTE GAS COMPANY 5.73% FIRST MORTGAGE BONDS 2023 SERIES F DUE 2035]

PPN:

No. R-___ $_________________

THE SECURITIES EVIDENCED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), AND MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT (A) PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT AND (B) IN ACCORDANCE WITH ALL APPLICABLE SECURITIES LAWS OF THE

STATES OF THE UNITED STATES. IN CONNECTION WITH ANY TRANSFER, THE HOLDER WILL DELIVER TO THE COMPANY AND THE TRUSTEE SUCH CERTIFICATES AND OTHER INFORMATION AS THE TRUSTEE MAY REASONABLY REQUIRE TO CONFIRM THAT THE TRANSFER COMPLIES WITH THE FOREGOING RESTRICTIONS.

DTE GAS COMPANY

5.73% MORTGAGE BONDS

2023 SERIES F DUE 2035

Principal Amount: $____________

Authorized Denomination: $100,000 or any integral multiple of $1,000 in excess thereof.

Regular Record Date: close of business on the 15th calendar day (whether or not a Business Day) prior to the relevant Interest Payment Date

Original Issue Date: October 5, 2023

Stated Maturity: October 1, 2035

Interest Payment Dates: April 1 and October 1 of each year, beginning April 1, 2024.

Interest Rate: 5.73% per annum

DTE GAS COMPANY (hereinafter called the "Company"), a corporation of the State of Michigan, for value received, hereby promises to pay to ____________, or registered assigns, the sum of __________ Dollars ($_________) on the Stated Maturity specified above, in the coin or currency of the United States of America, and to pay interest thereon from the Original Issue Date specified above, or from the most recent Interest Payment Date to which interest has been paid or duly provided for, semi-annually in arrears on each Interest Payment Date as specified above, commencing on April 1, 2024 and on the Stated Maturity at the Interest Rate per annum specified above until the principal hereof is paid or made available for payment, and on any overdue principal and Make-Whole Amount (defined below) and, to the extent lawful, on any overdue installment of interest. The interest so payable, and punctually paid or duly provided for, on any Interest Payment Date will, as provided in the Indenture, be paid to the person in whose name this bond is registered at the close of business on the Regular Record Date as specified above next preceding such Interest Payment Date; provided that any interest payable at Stated Maturity or on a Redemption Date (defined below) will be paid to the person to whom principal is payable. Except as otherwise provided in the Indenture, any such interest not so punctually paid or duly provided for will forthwith cease to be payable to the holder on such Regular Record Date and may either be paid to the person in whose name this bond is registered at the close of business on a special record date for the payment of such defaulted interest to be fixed by the Trustee, notice whereof shall be given to holders of bonds of this series not less than 10 days prior to such special record date, or be paid at any time in any other lawful manner not inconsistent with the requirements of any securities exchange, if any, on which the bonds of this series shall be listed, and upon such notice as may be required by any such exchange, all as more fully provided in the Indenture.

Payments of interest on this bond will include interest accrued to but excluding the respective Interest Payment Dates. Interest payments for this bond shall be computed and paid on the basis of a 360-day year consisting of twelve 30-day months. The Company shall pay interest on overdue principal and Make-Whole Amount, if any, and, to the extent lawful, on overdue installments of interest at the rate per annum borne by this bond. In the event that any Interest Payment Date, Redemption Date or Stated Maturity is not a Business Day, then the required payment of principal, Make-Whole Amount, if any, and interest will be made on the next succeeding day that is a Business Day (and without any interest or other payment in respect of any such delay). "Business Day" means any day other than a day on which banking institutions in the State of New York or the State of Michigan are authorized or obligated pursuant to law or executive order to close.

Payment of principal of, Make-Whole Amount, if any, and interest on the bonds of this series shall be made in such coin or currency of the United States of America as at the time of payment is legal tender for payment of public and private debts. Payments of principal, Make-Whole Amount, if any, and interest due at the Stated Maturity or earlier redemption of such bonds shall be made at the office of the Trustee upon surrender of such bonds to the Trustee, and payments of interest shall be made, at the option of the Company, subject to such surrender where applicable, (A) by check mailed to the address of the person entitled thereto as such address shall appear in the bond register of the Trustee maintained for such purpose or (B) by wire transfer at such place and to such account at a banking institution in the United States as may be designated in writing to the Trustee at least fourteen (14) days prior to the date for payment by the person entitled thereto. Notwithstanding the foregoing, so long as any bond is held by an Institutional Investor (as defined in the Bond Purchase Agreement referenced below), payment of principal, Make-Whole Amount, if any, and interest on the bonds held by such holder shall be made in the manner specified in the Bond Purchase Agreement dated as of October 5, 2023 among the Company and the purchasers party thereto.

The bonds represented by this certificate, of the series hereinafter specified, are bonds of the Company (herein called the "bonds") known as its "First Mortgage Bonds," issued and to be issued in one or more series under, and all equally and ratably secured by, an Indenture of Mortgage and Deed of Trust dated as of March 1, 1944, duly executed by the Company to Citibank, N.A., successor trustee ("Trustee"), as restated in Part II of the Twenty-ninth Supplemental Indenture dated as of July 15, 1989, which became effective on April 1, 1994, to which indenture and all indentures supplemental thereto executed on and after July 15, 1989 reference is hereby made for a description of the property mortgaged and pledged, the nature and extent of the security, the terms and conditions upon which the bonds are, and are to be, issued and secured, and the rights of the holders of the bonds and of the Trustee in respect of such security (which indenture and all indentures supplemental thereto, including the Fifty-Fourth Supplemental Indenture dated as of October 1, 2023 referred to below, are hereinafter collectively called the "Indenture"). As provided in the Indenture, the bonds may be issued thereunder for various principal sums and are issuable in series, which may mature at different times, may bear interest at different rates and may otherwise vary as therein provided. The bonds represented by this certificate are part of a series designated "5.73% First Mortgage Bonds 2023 Series F" (herein called the "Bonds"), created by the Fifty-Fourth Supplemental Indenture dated as of October 1, 2023 as provided for in said Indenture.

With the consent of the Company and to the extent permitted by and as provided in the Indenture, the rights and obligations of the Company, the rights and obligations of the holders of the Bonds, and the terms and provisions of the Indenture may be modified or altered by such affirmative vote or votes of the holders of the Bonds then outstanding as are specified in the Indenture.

In case an Event of Default as defined in the Indenture shall occur, the principal of the Bonds may become or be declared due and payable in the manner, with the effect, and subject to the conditions provided in the Indenture. Upon any such declaration, the Company shall also pay to the holders of the Bonds the Make-Whole Amount on the Bonds, if any, determined as of the date the Bonds shall have been declared due and payable.

No recourse shall be had for the payment of the principal of, Make-Whole Amount, if any, or the interest on, the Bonds, or for any claim based hereon or otherwise in respect of the Bonds or the Indenture, against any incorporator, stockholder, director or officer, past, present or future, of the Company, as such, or any predecessor or successor corporation, either directly or through the Company or any such predecessor or successor corporation, whether by virtue of any constitution, statute or rule of law, or by the enforcement of any assessment or penalty or otherwise, all such liability, whether at common law, in equity, by any constitution, statute or otherwise, of incorporators, stockholders, directors or officers being waived and released by the owner hereof by the acceptance of the Bonds, and as part of the consideration for the issue thereof, and being likewise waived and released pursuant to the Indenture.

This Bond shall be subject to redemption at the option of the Company, in whole at any time or in part from time to time (any such date of optional redemption, a "Redemption Date"), at the applicable redemption price ("Redemption Price") set forth below.

At any time prior to July 1, 2035 (the "Par Call Date"), the Redemption Price will be equal to 100% of the principal amount of the Bonds to be redeemed on the Redemption Date together with the Make-Whole Amount (as defined below), if any, plus, in each case, accrued and unpaid interest thereon to the Redemption Date.

At any time on or after the Par Call Date, the Redemption Price will be equal to 100% of the principal amount of the Bonds to be redeemed on the Redemption Date plus accrued and unpaid interest thereon to the Redemption Date.

Notwithstanding the foregoing, installments of interest on the Bonds that are due and payable on Interest Payment Dates falling on or prior to a Redemption Date will be payable on the Interest Payment Date to the registered Holders as of the close of business on the relevant Record Date.

"Make-Whole Amount" means, with respect to any Bond, a premium in an amount equal to the excess, if any, of the Discounted Value of the Remaining Scheduled Payments with respect to the Called Principal of such Bond over the amount of such Called Principal, provided that the Make-Whole Amount may in no event be less than zero. If the Settlement Date is prior to the Par Call Date, the Make-Whole Amount with respect to any Called Principal of a Bond shall be determined as if the Stated Maturity of such Bond were the Par Call Date; provided that the Make-Whole Amount shall in no event be less than zero. For the purposes of determining the Make-Whole Amount, the following terms have the following meanings:

"Called Principal" means, with respect to a Bond, the principal of the Bond that is to be redeemed on a Redemption Date or has become or is declared to be immediately due and payable pursuant to Section 9.01 of the Indenture, as the context requires.

"Discounted Value" means, with respect to the Called Principal of a Bond, the amount obtained by discounting all Remaining Scheduled Payments with respect to such Called Principal from their respective scheduled due dates to the Settlement Date with respect to such Called Principal, in accordance with accepted financial practice and at a discount factor (applied on the same periodic basis as that on which interest on the Bond is payable) equal to the Reinvestment Yield with respect to such Called Principal.

"Reinvestment Yield" means, with respect to the Called Principal of a Bond, the sum of (a) 0.50% (50 basis points) plus (b) the yield to maturity implied by the "Ask Yield(s)" reported, as of 10:00 a.m. (New York City time) on the second Business Day preceding the Settlement Date with respect to such Called Principal, on the display designated as "Page PX-1" (or such other display as may replace Page PX-1), on Bloomberg Financial Markets for the most recently issued, actively traded on-the-run, benchmark U.S. Treasury securities ("Reported") having a maturity equal to the Remaining Average Life of such Called Principal as of such Settlement Date.

If there are no such U.S. Treasury securities Reported having a maturity equal to such Remaining Average Life, then such implied yield to maturity will be determined by (a) converting U.S. Treasury bill quotations to bond equivalent yields in accordance with accepted financial practice and (b) interpolating linearly between the "Ask Yields" Reported for the applicable most recently issued, actively traded on-the-run, U.S. Treasury securities with the maturities (1) closest to and greater than such Remaining Average Life and (2) closest to and less than the Remaining Average Life. The Reinvestment Yield shall be rounded to the number of decimal places as appears in the interest rate of the applicable Bond. If such yields are not Reported or the yields Reported as of such time are not ascertainable (including by way of interpolation), then "Reinvestment Yield" means, with respect to the Called Principal of any Bond, the sum of (x) 0.50% (50 basis points) plus (y) the yield to maturity implied by the U.S. Treasury constant maturity yields reported, for the latest day for which such yields have been so reported as of the second Business Day preceding the Settlement Date with respect to such Called Principal, in Federal Reserve Statistical Release H.15 (519) (or any comparable successor publication) for the U.S. Treasury constant maturity having a term equal to the Remaining Average Life of such Called Principal as of such Settlement Date. If there is no such U.S. Treasury constant maturity having a term equal to such Remaining Average Life, such implied yield to maturity will be determined by interpolating linearly between (1) the U.S. Treasury constant maturity so reported with the term closest to and greater than such Remaining Average Life and (2) the U.S. Treasury constant maturity so reported with the term closest to and less than such Remaining Average Life. The Reinvestment Yield shall be rounded to the number of decimal places as appears in the interest rate of the applicable Bond.

"Remaining Average Life" means, with respect to any Called Principal, the number of years obtained by dividing (i) such Called Principal into (ii) the sum of the products obtained by multiplying (a) the principal component of each Remaining Scheduled Payment with respect to such Called Principal by (b) the number of years, computed on the basis of a 360-day year comprised of twelve 30-day months and calculated to two decimal places, that will elapse between the Settlement Date with respect to such Called Principal and the Stated Maturity (or, if redeemed prior to the Par Call Date, the Par Call Date) of such Remaining Scheduled Payment.

"Remaining Scheduled Payments" means, with respect to the Called Principal of a Bond, all payments of such Called Principal and interest thereon that would be due after the Settlement Date with respect to such Called Principal if no payment of such Called Principal were made prior to its Stated Maturity (or, if redeemed prior to the Par Call Date, the Par Call Date), provided that if such Settlement Date is not a date on which interest payments are due to be made under the terms of the Bond, then the amount of the next succeeding scheduled interest payment will be reduced by the amount of interest accrued to such Settlement Date and required to be paid on such Settlement Date.

"Settlement Date" means, with respect to the Called Principal of a Bond, the Redemption Date on which such Called Principal is to be redeemed or has become or is declared to be immediately due and payable pursuant to Section 9.01 of the Indenture as the context requires.

Notice of redemption shall be given to the holders of the Bonds to be redeemed not more than 60 nor less than 30 days prior to the Redemption Date, as provided in Section 4.05 of the Indenture. Each such notice shall specify such Redemption Date, the aggregate principal amount of the Bonds to be redeemed on such date, the principal amount of each Bond held by such holder to be redeemed, and the interest to be paid on the Redemption Date with respect to such principal amount being prepaid. In addition, if the Redemption Date is prior to the Par Call Date, each such notice shall be accompanied by a certificate of a senior financial officer of the Company as to the estimated Make-Whole Amount due in connection with such redemption (with the Reinvestment Yield calculated, solely for purposes of such estimate, using the relevant U.S. Treasury yield as of the second Business Day preceding the date of such notice), setting forth the details of such computation. The Make-Whole Amount shall be determined by the Company two Business Days prior to the applicable Redemption Date and the Company shall deliver to holders of the Bonds and to the Trustee a certificate of a senior financial officer specifying the calculation of such Make-Whole Amount as of the Redemption Date.

Subject to the limitations of Section 4.07 of the Indenture, the notice of redemption may state that it is subject to the receipt of the redemption moneys by the Trustee on or before the Redemption Date, and that such notice shall be of no effect unless such moneys are so received on or before such date; a notice of redemption so conditioned shall be of no force or effect if such money is not so received and, in such event, the Company shall not be required to redeem this Bond.

If the Bonds are only partially redeemed by the Company, the Trustee shall select which Bonds are to be redeemed pro rata among all of the Bonds at the time outstanding in proportion, as nearly as practicable, to the respective unpaid principal amounts thereof and otherwise in accordance with the terms of the Indenture. In the event of redemption of the Bonds in part only, a new Bond or Bonds for the unredeemed portion will be issued in the name or names of the holders thereof upon the surrender or cancellation thereof.

If money sufficient to pay the applicable Redemption Price with respect to the Bonds to be redeemed on the applicable Redemption Date, together with accrued interest to the Redemption Date, is deposited with the Trustee on or before the related Redemption Date and certain other conditions are satisfied, then the Bonds to be redeemed shall no longer be secured by, or entitled to any lien or benefit of, the Indenture as provided by Section 4.04 of the Indenture.

The Indenture contains terms, provisions and conditions relating to the consolidation or merger of the Company with or into, and the conveyance, or other transfer or lease, subject to the lien of the Indenture, of the trust estate to, another corporation, to the assumption by such other corporation, in certain circumstances, of the obligations of the Company under the Indenture and on the Bonds and to the succession of such other corporation in certain circumstances, to the powers and rights of the Company under the Indenture.

The Indenture contains provisions for defeasance at any time of the entire indebtedness of the Bonds or certain covenants with respect thereto upon compliance by the Company with certain conditions set forth therein.

This Bond shall not be valid or become obligatory for any purpose unless and until the certificate of authentication hereon shall have been manually executed by the Trustee or its successor in trust under the Indenture.

IN WITNESS WHEREOF, DTE GAS COMPANY has caused this certificate to be executed under its name with the signature of its duly authorized Officer, under its corporate seal, which may be a facsimile, attested with the signature of its Corporate Secretary.

Dated:

DTE GAS COMPANY

By:______________________________

Attest:

By:______________________________

CERTIFICATE OF AUTHENTICATION

The bonds represented by this certificate constitute Bonds of the series designated and described in the within-mentioned Indenture.

CITIBANK, N.A., as Trustee

By:______________________________
Authorized Officer

Dated:

[End of 2023 Series F Bond Form]

SECTION 4

Each certificate evidencing the 2023 Series F Bonds (and all 2023 Series F Bonds issued in exchange therefor or in substitution thereof) shall bear a legend in substantially the following form (each defined term in the legend being defined as such for purposes of the legend only):

THE SECURITIES EVIDENCED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), AND MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT (A) PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT AND (B) IN ACCORDANCE WITH ALL APPLICABLE SECURITIES LAWS OF THE

STATES OF THE UNITED STATES. IN CONNECTION WITH ANY TRANSFER, THE HOLDER WILL DELIVER TO THE COMPANY AND THE TRUSTEE SUCH CERTIFICATES AND OTHER INFORMATION AS THE TRUSTEE MAY REASONABLY REQUIRE TO CONFIRM THAT THE TRANSFER COMPLIES WITH THE FOREGOING RESTRICTIONS.

The 2023 Series F Bonds shall be exchangeable upon surrender thereof at the corporate trust office of the Trustee in the Borough of Manhattan, the City of New York, New York, for registered bonds of the same aggregate principal amount and other terms, but of different authorized denomination or denominations, such exchanges to be made without service charge (except for any stamp tax or other governmental charge).

When 2023 Series F Bonds are presented to the Trustee with a request (i) to register the transfer of such 2023 Series F Bonds; or (ii) to exchange such 2023 Series F Bonds for 2023 Series F Bonds of the same series of any authorized denominations of the same aggregate principal amount and Stated Maturity, the Trustee shall register the transfer or make the exchange as requested if its reasonable requirements for such transaction are met; provided, however, that the 2023 Series F Bonds surrendered for transfer or exchange: (A) shall be duly endorsed or be accompanied by a written instrument of transfer in form reasonably satisfactory to the Company and the Trustee, duly executed by the holder thereof or his attorney duly authorized in writing; and (B) are accompanied by the following additional information and documents, as applicable: (x) if such 2023 Series F Bonds are being delivered to the Company by a holder for registration in the name of such holder, without transfer, a certification from such holder to that effect; or (y) if such 2023 Series F Bonds are being transferred to the Company, a certification to that effect; or (z) if such 2023 Series F Bonds are being transferred pursuant to an exemption from registration in accordance with Rule 144 under the Securities Act or in reliance upon another exemption from the registration requirements of the Securities Act, (i) a certification to that effect and (ii) if the Company so requests, other evidence reasonably satisfactory to it as to the compliance with the restrictions set forth in the legend set forth above.

Every 2023 Series F Bond so surrendered shall be accompanied by a proper transfer power duly executed by the registered owner or by a duly authorized attorney transferring such 2023 Series F Bond to the Company, and the signature to such transfer power shall be guaranteed to the satisfaction of the Trustee. All 2023 Series F Bonds so surrendered shall be forthwith canceled and delivered to or upon the order of the Company. All 2023 Series F Bonds executed, authenticated and delivered in exchange for 2023 Series F Bonds so surrendered shall be valid obligations of the Company, evidencing the same debt as the 2023 Series F Bonds surrendered, and shall be secured by the same lien and be entitled to the same benefits and protection as the 2023 Series F Bonds in exchange for which they are executed, authenticated and delivered.

The Company shall not be required to make any such exchange or any registration of transfer after the 2023 Series F Bond so presented for exchange or registration of transfer, or any portion thereof, has been called for redemption and notice thereof given to the registered owner.

SECTION 5

Pending the preparation of definitive 2023 Series F Bonds, the Company may from time to time execute, and upon its written order, the Trustee shall authenticate and deliver, in lieu of such definitive 2023 Series F Bonds and subject to the same provisions, limitations and conditions, one or more temporary 2023 Series F Bonds, in registered form, of any denomination specified in the written order of the Company for the authentication and delivery thereof, and with such omissions, insertions and variations as may be determined by the Board of Directors of the Company. Such temporary 2023 Series F Bonds shall be substantially of the tenor of the 2023 Series F Bonds to be issued as herein before recited.

If any such temporary 2023 Series F Bonds shall at any time be so authenticated and delivered in lieu of definitive 2023 Series F Bonds, the Company shall upon request at its own expense prepare, execute and deliver to the Trustee and thereupon, upon the presentation and surrender of temporary 2023 Series F Bonds, the Trustee shall authenticate and deliver in exchange therefor, without charge to the holder, definitive Bonds of the same series and other terms, if any, and for the same principal sum in the aggregate as the temporary 2023 Series F Bonds surrendered. All temporary 2023 Series F Bonds so surrendered shall be forthwith canceled by the Trustee and delivered to or upon the order of the Company. Until exchanged for definitive 2023 Series F Bonds the temporary 2023 Series F Bonds shall in all respects be entitled to the lien and security of the Indenture and all supplemental indentures.

ARTICLE III
ISSUE OF BONDS

The 2023 Series E Bonds in the aggregate principal amount of $150,000,000 and 2023 Series F Bonds in the aggregate principal amount of $145,000,000 may be executed, authenticated and delivered from time to time as permitted by the provisions of the Indenture, including with respect to exchange and replacement of bonds.

ARTICLE IV
THE TRUSTEE

The Trustee shall not be responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Supplemental Indenture or the due execution hereof by the Company, or for or in respect of the recitals and statements contained herein, all of which recitals and statements are made solely by the Company.

Except as herein otherwise provided, no duties, responsibilities or liabilities are assumed, or shall be construed to be assumed, by the Trustee by reason of this Supplemental Indenture other than as set forth in the Indenture and this Supplemental Indenture as executed and accepted on behalf of the Trustee, subject to all the terms and conditions set forth in the Indenture, as fully to all intents as if the same were herein set forth at length.

ARTICLE V
RECORDING AND FILING OF SUPPLEMENTAL INDENTURE DATED AS OF SEPTEMBER 1, 2022

Pursuant to the terms and provisions of the Original Indenture, a Supplemental Indenture dated as of September 1, 2022 providing for the terms of First Mortgage Bonds to be issued thereunder designated as 2022 Series C Mortgage Bonds and 2022 Series D Mortgage Bonds has heretofore been entered into between the Company and the Trustee and has been filed in the Office of the Secretary of State of Michigan as a financing statement on October 6, 2022 (Filing No. 20221006001028-0) and has been recorded as a real estate mortgage in the offices of the respective Register of Deeds of certain counties in the State of Michigan, as follows:

COUNTY	DATE Recorded	Liber/ Instrument no.	Page
Alcona County Register of Deeds	10/06/2022	202200003491	
Alger County Register of Deeds	10/05/2022	202202102	--
Alpena County Register of Deeds	10/06/2022	549	913
Antrim County Register of Deeds	10/06/2022	202200007976	--
Arenac County Register of Deeds	10/05/2022	202203432	--
Barry County Register of Deeds	10/11/2022	2022-010473	--
Benzie County Register of Deeds	10/06/2022	2022R-04172	--
Charlevoix County Register of Deeds	10/06/2022	1361	188
Cheboygan County Register of Deeds	10/06/2022	1494	862
Chippewa County Register of Deeds	10/06/2022	1377	436
Clare County Register of Deeds	10/06/2022	1536	727
Clinton County Register of Deeds	10/06/2022	5329725	--
Crawford County Register of Deeds	10/06/2022	785	651
Delta County Register of Deeds	10/06/2022	1352	77
Dickinson County Register of Deeds	10/06/2022	983	20
Emmet County Register of Deeds	10/06/2022	1247	661
Gladwin County Register of Deeds	10/06/2022	1253	809

COUNTY	DATE Recorded	Liber/ Instrument no.	Page
Grand Traverse County Register of Deeds	10/06/2022	2022R-16138	--
Gratiot County Register of Deeds	10/06/2022	01110	00700-00734
Ionia County Register of Deeds	10/06/2022	0672	7701
Iosco County Register of Deeds	10/06/2022	2022006020	--
Iron County Register of Deeds	10/06/2022	816	426
Isabella County Register of Deeds	10/06/2022	1897	4568
Jackson County Register of Deeds	10/06/2022	2219	0853
Kalkaska County Register of Deeds	10/06/2022	3165097	--
Kent County Register of Deeds	10/06/2022	202210060077791	--
Lake County Register of Deeds	10/06/2022	441	709
Leelanau County Register of Deeds	10/06/2022	2022005706	--
Lenawee County Register of Deeds	10/06/2022	2646	0008
Livingston County Register of Deeds	10/06/2022	2022R-026503	--
Macomb County Register of Deeds	10/06/2022	28845	949
Manistee County Register of Deeds	10/06/2022	2022R005639	--
Marquette County Register of Deeds	10/06/2022	2022R-09883	--
Mason County Register of Deeds	10/06/2022	2022R06167	--
Mecosta County Register of Deeds	10/06/2022	921	908
Menominee County Register of Deeds	10/07/2022	905	1
Missaukee County Register of Deeds	10/06/2022	2022-03180	--
Monroe County Register of Deeds	10/07/2022	2022R19596	--
Montcalm County Register of Deeds	10/06/2022	2022R-11642	--
Montmorency County Register of Deeds	10/06/2022	408	166
Muskegon County Register of Deeds	10/06/2022	4312	177
Newaygo County Register of Deeds	10/07/2022	490	4828
Oakland County Register of Deeds	10/10/2022	58176	820
Oceana County Register of Deeds	10/06/2022	2022	20757
Ogemaw County Register of Deeds	10/06/2022	3177693	--
Osceola County Register of Deeds	10/06/2022	1033	75

COUNTY	**DATE Recorded**	**Liber/ Instrument no.**	**Page**
Oscoda County Register of Deeds	10/06/2022	222-02640	--
Otsego County Register of Deeds	10/06/2022	1615	384
Ottawa County Register of Deeds	10/06/2022	2022-0035144	--
Presque Isle County Register of Deeds	10/07/2022	00676	00893-00927
Roscommon County Register of Deeds	10/07/2022	1182	1434
St. Clair County Register of Deeds	10/06/2022	5567	834
Saginaw County Register of Deeds	10/06/2022	2022026503	--
Shiawassee County Register of Deeds	10/11/2022	1301	180
Washtenaw County Register of Deeds	10/06/2022	5499	595
Wayne County Register of Deeds	10/06/2022	57894	432
Wexford County Register of Deeds	10/06/2022	694	59

ARTICLE VI
RECORDING OF AFFIDAVIT OF FACTS AFFECTING REAL PROPERTY

An Affidavit of Facts Affecting Real Property dated February 11, 2013 (the "Affidavit") has been recorded in the offices of the respective Registers of Deeds of certain counties in the State of Michigan. The Affidavit, signed by the Company's then President and Chief Operating Officer, was given pursuant to MCL 565.451a to give notice of the fact that pursuant to a joint resolution of the Company's sole shareholder and its board of directors, the Company amended its articles of incorporation effective January 1, 2013 to change its name from MICHIGAN CONSOLIDATED GAS COMPANY to DTE GAS COMPANY.

ARTICLE VII
MISCELLANEOUS PROVISIONS

Except insofar as herein otherwise expressly provided, all the provisions, terms and conditions of the Indenture shall be deemed to be incorporated in, and made a part of, this Fifty-Fourth Supplemental Indenture, and the Twenty-ninth Supplemental Indenture dated as of July 15, 1989, as supplemented by the Thirtieth Supplemental Indenture dated as of September 1, 1991, by the Thirty-first Supplemental Indenture dated as of December 15, 1991, by the Thirty-second Supplemental Indenture dated as of January 5, 1993, by the Thirty-third Supplemental Indenture dated as of May 1, 1995, by the Thirty-fourth Supplemental Indenture dated as of November 1, 1996, by the Thirty-fifth Supplemental Indenture dated as of June 18, 1998, by the Thirty-sixth Supplemental Indenture dated as of August 15, 2001, by the Thirty-seventh Supplemental Indenture dated as of February 15, 2003, by the Thirty-eighth Supplemental Indenture dated as of October 1, 2004, by the Thirty-ninth Supplemental Indenture dated as of April 1, 2008, by the Fortieth Supplemental Indenture dated as of June 1, 2008, by the Forty-first Supplemental Indenture dated as of August 1, 2008, by the Forty-second Supplemental Indenture dated as of December 1, 2008, by the Forty-third Supplemental Indenture dated as of December 1, 2012, by the Forty-fourth Supplemental Indenture dated as of December 1, 2013, by the Forty-fifth Supplemental Indenture dated as of December 1, 2014, by the Forty-sixth Supplemental Indenture dated as of August 1, 2015, by the Forty-seventh Supplemental Indenture dated as of December 1, 2016, by the Forty-eighth Supplemental Indenture dated as of September 1, 2017, by the Forty-ninth Supplemental Indenture dated as of August 1, 2018, by the Fiftieth Supplemental Indenture dated as of October 1, 2019, by the Fifty-First Supplemental Indenture dated as of August 1, 2020, by the Fifty-Second Supplemental Indenture dated as of November 1, 2021, by the Fifty-Third Supplemental Indenture dated as of September 1, 2022, and by this Supplemental Indenture is in all respects ratified and confirmed; and the Indenture and said Supplemental Indentures shall be read, taken and construed as one and the same instrument.

Except to the extent specifically provided therein, no provision of this Supplemental Indenture or any future supplemental indenture is intended to modify, and the parties do hereby adopt and confirm, the provisions of Section 318(c) of the Trust Indenture Act, which amend and supersede provisions of the Indenture in effect prior to November 15, 1990.

Nothing in this Supplemental Indenture is intended, or shall be construed, to give to any person or corporation, other than the parties hereto and the holders of Bonds issued and to be issued under and secured by the Indenture, any legal or equitable right, remedy or claim under or in respect of this Supplemental Indenture, or under any covenant, condition or provision herein contained, all the covenants, conditions and provisions of this Supplemental Indenture being intended to be, and being, for the sole and exclusive benefit of the parties hereto and of the holders of bonds issued and to be issued under the Indenture and secured thereby.

All covenants, promises and agreements in this Supplemental Indenture contained by or on behalf of the Company shall bind its successors and assigns whether so expressed or not.

This Supplemental Indenture may be executed in any number of counterparts, and each of such counterparts when so executed shall be deemed to be an original; but all such counterparts shall together constitute but one and the same instrument.

IN WITNESS WHEREOF, DTE GAS COMPANY has caused this Supplemental Indenture to be executed by its duly authorized Officer, and its corporate seal to be hereunto affixed, and Citibank, N.A., as Trustee as aforesaid, has caused the same to be executed by one of its authorized signatories and its corporate seal to be hereunto affixed, on the respective dates of their acknowledgments hereinafter set forth, as of the date and year first above written.

DTE GAS COMPANY

By: /s/Timothy Lepczyk
Timothy Lepczyk
Assistant Treasurer

Signed, sealed, acknowledged and
delivered by DTE GAS COMPANY in the presence of:

/s/Daniel Richards
Daniel Richards

/s/Choi Portis
Choi Portis

State of Michigan }
} ss.
County of Wayne }

The foregoing instrument was acknowledged before me this 3rd day of October 2023, by Timothy Lepczyk, as Assistant Treasurer of DTE Gas Company, a Michigan corporation, on behalf of the corporation.

/s/Julia Moskwa
Julia N. Moskwa
Notary Public, Oakland County, MI
Acting in Wayne County, MI
My Commission Expires: August 2, 2026

Julia Moskwa
Notary Public of Michigan
Oakland County
Expires 08/02/2026
Acting in the County of Wayne

Citibank, N.A., as Trustee

By: /s/Keri-anne Marshall

Name: Keri-anne Marshall

Its: Senior Trust Officer

Signed, sealed, acknowledged and
delivered by CITIBANK, N.A.
in the presence of:

/s/Eva Waite
Name: Eva Waite

/s/Nerlie Delly
Name: Nerlie Delly

State of New York	}	
	}	ss.
County of New York	}	

The foregoing instrument was acknowledged before me this 4th day of October, 2023, by Keri-anne Marshall, as Senior Trust Officer of Citibank, N.A., a national banking association, on behalf of the association, as Trustee, as in said instrument described.

/s/Peter J. Lopez
Peter J. Lopez
Notary Public, State of New York
No. 01LO6117957
Qualified in Suffolk County
Acting in New York County, NY
Certificate Filed in New York County
Commission Expires: 11/1/2024

This instrument was drafted by:

Choi Portis
DTE Energy
One Energy Plaza, 1610 WCB
Detroit, MI 48226

When recorded return to:

Choi Portis
DTE Energy
One Energy Plaza, 1610 WCB
Detroit, MI 48226

Exhibit 10.1

EXECUTION VERSION

AMENDMENT NO. 1
TO
FIFTH AMENDED AND RESTATED FIVE-YEAR CREDIT AGREEMENT

THIS AMENDMENT NO. 1 TO FIFTH AMENDED AND RESTATED FIVE-YEAR CREDIT AGREEMENT (this "Amendment") is made as of October25, 2023, by and among DTE ENERGY COMPANY (the "Borrower"), the lenders listed on the signature pages hereof (the "Lenders"), and CITIBANK, N.A. ("Citibank"), as Administrative Agent (the "Administrative Agent"), under that certain Fifth Amended and Restated Five-Year Credit Agreement, dated as of October 25, 2022, by and among the Borrower, the lenders from time to time parties thereto and the Administrative Agent (as amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"). Capitalized terms used but not otherwise defined herein shall have the meanings given to them in the Credit Agreement.

WITNESSETH

WHEREAS, the Borrower, the Lenders and the Administrative Agent are parties to the Credit Agreement;

WHEREAS, the Borrower has requested that the Administrative Agent and the Lenders amend the Credit Agreement on the terms and conditions set forth herein; and

WHEREAS, the Borrower, the Administrative Agent and the Lenders have agreed to amend the Credit Agreement on the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the premises set forth above, the terms and conditions contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto have agreed to the following:

1. Amendments to the Credit Agreement. Effective as of October 25, 2023 (the "Amendment Effective Date") and subject to the satisfaction of the conditions precedent set forth in Section 3 below, the Credit Agreement is hereby amended as follows:

1.1. Section 1.01 of the Credit Agreement is hereby amended to insert the following new definition alphabetically therein:

"Convertible Debt" means Debt that is either (a) convertible into equity (and cash in lieu of fractional shares) and/or cash (in an amount determined by reference to the price of such equity) or (b) sold as units with call options, warrants or rights to purchase (or substantially equivalent derivative transactions) that are exercisable for equity and/or cash (in an amount determined by reference to the price of such equity).

1.2. Section 6.01 (d) of the Credit Agreement is hereby amended and restated in its entirety as follows:

(d) The Borrower or any of its Significant Subsidiaries shall fail to pay any principal of or premium or interest on any Debt that is outstanding in a principal or notional amount of at least $100,000,000 in the aggregate (but excluding Debt outstanding hereunder and Nonrecourse Debt) of the Borrower or such Significant Subsidiary (as the case may be), when the same becomes due and payable (whether by scheduled maturity, required prepayment, acceleration, demand or otherwise), and such failure shall continue after the applicable grace period, if any, specified in the agreement or instrument relating to such Debt; or any other event shall occur or condition shall exist under any agreement or instrument relating to any such Debt and shall continue after the applicable grace period, if any, specified in such agreement or instrument, if the effect of such event or condition is to accelerate, or to permit the acceleration of, the maturity of such Debt; or any such Debt shall be declared to be due and payable, or required to be prepaid or redeemed (other than by a regularly scheduled required prepayment or redemption), purchased or defeased, or an offer to prepay, redeem, purchase or defease such Debt shall be required to be made, in each case prior to the stated maturity thereof; provided, however, that none of the following events will, in and of themselves, be an Event of Default under this Section 6.01(d): (x) the occurrence of any customary event or condition that vests the right of any holder of Convertible Debt to submit any Convertible Debt for conversion, exchange or exercise in accordance with its terms; or (y) any actual conversion, exchange or exercise of any Convertible Debt in accordance with its terms, unless, in each case of clauses (x) and (y), such occurrence, conversion, exchange or exercise results from a default under such Convertible Debt or an event of the type that constitutes (or, with notice or passage of time, would constitute) an Event of Default; or

2. <u>Conditions of Effectiveness</u>. This Amendment shall become effective as of the Amendment Effective Date upon (i) the Administrative Agent's receipt of (a) duly executed counterparts of the signature pages hereof by each of the Borrower, Lenders constituting Required Lenders and the Administrative Agent and (b) such other documents, instruments and agreements as the Administrative Agent shall reasonably request and (ii) the Borrower's payment of all fees and reasonable expenses due and payable to the Administrative Agent, the Required Lenders and any Arranger on the Amendment Effective Date, including, to the extent invoiced, reimbursements or payment of all out-of pocket expenses required to be reimbursed or paid by the Borrower under the Credit Agreement, if any.

3. <u>Representations and Warranties and Reaffirmations of the Borrower</u>.

3.1. The Borrower hereby represents and warrants that (i) this Amendment and the Credit Agreement as previously executed and as modified hereby constitute legal, valid and binding obligations of the Borrower and are enforceable against the

Borrower in accordance with their terms (except as enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the enforcement of creditors' rights generally), and (ii) no Default or Event of Default has occurred and is continuing.

3.2. Upon the effectiveness of this Amendment and after giving effect hereto, the Borrower hereby reaffirms all covenants, representations and warranties made in the Credit Agreement as modified hereby, and agrees that all such covenants, representations and warranties shall be deemed to have been remade as of the Amendment Effective Date, except that any such covenant, representation, or warranty that was made as of a specific date shall be considered reaffirmed only as of such date.

4. Reference to and Effect on the Credit Agreement.

4.1. Upon the effectiveness of Section 1 hereof, on and after the date hereof, each reference in the Credit Agreement (including any reference therein to "this Credit Agreement," "this Agreement," "hereunder," "hereof," "herein" or words of like import referring thereto) or in any other Loan Document shall mean and be a reference to the Credit Agreement as modified hereby.

4.2. Except as specifically modified above, the Credit Agreement and all other documents, instruments and agreements executed and/or delivered in connection therewith shall remain in full force and effect, and are hereby ratified and confirmed.

4.3. The execution, delivery and effectiveness of this Amendment shall not operate as a waiver of any right, power or remedy of the Administrative Agent or any Lender, nor constitute a waiver of any provision of the Credit Agreement or any other documents, instruments and agreements executed and/or delivered in connection therewith.

4.4. Upon satisfaction of the conditions set forth in Section 2 hereof and the execution hereof by the Borrower, Lenders constituting Required Lenders and the Administrative Agent, this Amendment shall be binding upon all parties to the Credit Agreement.

4.5. This Amendment shall constitute a Loan Document.

5. GOVERNING LAW. THIS AMENDMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK.

6. Headings. Section headings in this Amendment are included herein for convenience of reference only and shall not constitute a part of this Amendment for any other purpose.

7. Counterparts. This Amendment may be executed by one or more of the parties to this Amendment on any number of separate counterparts and all of said counterparts taken together shall be deemed to constitute one and the same instrument. Delivery of an executed counterpart of a signature page to this Agreement by telecopy, e-mailed .pdf or any other electronic means that reproduces an image of the actual executed signature page shall be effective as delivery of a manually executed counterpart of this Amendment. The words “execution,” “signed,” “signature,” “delivery,” and words of like import in or relating to any document to be signed in connection with this Amendment and the transactions contemplated hereby shall be deemed to include Electronic Signatures, deliveries or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature, physical delivery thereof or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act.

8. Sections 8.11 and 8.12 of the Credit Agreement are hereby incorporated by reference into this Amendment and shall apply hereto mutatis mutandis.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, this Amendment has been duly executed as of the day and year first above written.

DTE ENERGY COMPANY, as the Borrower

By: ___________________________
Name:
Title:

CITIBANK, N.A., as Administrative Agent
and as a Lender

By: ______________________________
Name:
Title:

[_________________], as a Lender

By:
Name:
Title:

Exhibit 31.1

FORM 10-Q CERTIFICATION

I, Gerardo Norcia, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q 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: November 1, 2023

Gerardo Norcia
Chairman and Chief Executive Officer of DTE Energy Company

Exhibit 31.2

FORM 10-Q CERTIFICATION

I, David Ruud, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q 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: November 1, 2023

Exhibit 31.3

FORM 10-Q CERTIFICATION

I, Gerardo Norcia, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q 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: November 1, 2023

Gerardo Norcia
Chief Executive Officer of DTE Electric Company

Exhibit 31.4

FORM 10-Q CERTIFICATION

I, David Ruud, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q 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

Date: November 1, 2023

David Ruud
Executive Vice President and
Chief Financial Officer of DTE Electric Company

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 Quarterly Report on Form 10-Q of DTE Energy Company (the "Company") for the quarter ended September 30, 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 the Company.

Date: November 1, 2023

/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 the Company and will be retained by the 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 Quarterly Report on Form 10-Q of DTE Energy Company (the “Company”) for the quarter ended September 30, 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 the Company.

Date: November 1, 2023

/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 the Company and will be retained by the 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 Quarterly Report on Form 10-Q of DTE Electric Company (the "Company") for the quarter ended September 30, 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 the Company.

Date: November 1, 2023

/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 the Company and will be retained by the 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 Quarterly Report on Form 10-Q of DTE Electric Company (the "Company") for the quarter ended September 30, 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 the Company.

Date: November 1, 2023

/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 the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.