U-21534 DTE ELEC – Staff Exhibits Numbers

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Danielle Rogers
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Lisa Kindschy
S-16.0: Actual capital expenditures through April 2024 for Non-Routine Steam Generation additions from discovery response STDE-2.1a and STDE-2.1b
S-16.1: Calculation of the reduction for the Monroe Bottom Ash Conversion project and updated project sheets from discovery response STDE-2.1d
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Updated O&M Exhibits for Steam, M 1 ERC & Fuel Supply, Nuclear and Other Power Generation using a 2023 Historic Year

Elaina Braunschweig
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Brittney Klocke
S-18.1 – Audit Response BMK-1.2
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Mark Pung
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Tayler Becker
S-20.0 (TJB-1) Company Discovery Response

Michigan Public Service Commission
DTE Electric Company
Tree Trim Regulatory Asset - Return On
Projected 12 Month Period Ending December 31, 2025
($000)

Case No.: U-21534
Exhibit: A-11
Schedule: A1.1
Witness: S.Rueckert
Page: 1 of 1

Line No.	(a) Description	(b) Test Period Amount	(c) Reference
1	**Return on Tree Trim Regulatory Asset**		
2	Average Balance Regulatory Asset	275,450	Line 16
3	Deferred Tax Liability	(71,342)	- Line 2 x 25.9% Composite Tax Rate
4	Average Net Rate Base	204,108	
5	Staff Rate of Return on Short-Term Debt	4.96%	Exhibit S-4, Schedule D3
6	Return on Tree Trim	10,133	

		2019-A	2020-A	2021-A	2022-A	2023	2024	2025	
7	**Tree Trim Regulatory Asset**								
8	Approved Tree Trim - Surge Funding	43,300	74,100	70,500	58,200	67,000	52,700	43,700	Exhibit A-13 C5.6.1, Line 2
9	Carrying Charges through April 30, 2020 1/		1,200						
10	Additional Funding Request	-	-	-	-	-	-	87,000	Exhibit A-13 C5.6.1, Line 3
11	Total Tree Trim Reg Asset Deferral	43,300	75,300	70,500	58,200	67,000	52,700	130,700	
12	Total Tree Trim Reg Asset Cumulative	43,300	118,600	189,100	247,300	157,400	210,100	340,800	Cumulative Line 11
13	Approved for Securitization 2/				(156,900)				Case U-21015
14	Cumulative Balance at December 31				90,400	157,400	210,100	340,800	
15	Cumulative Balance at December 31						210,100	340,800	Assumes 100% of annual spend
16	Average Balance							275,450	

1/ Interest at U-20162 authorized STD rate of 3.56% until U-20561 order was in effect.
2/ Securitization approved per U-21015 order dated June 23, 2021 (up to $156.9 per order page 91)

Michigan Public Service Commission
DTE Electric Company
Projected Revenue Deficiency (Sufficiency)
Projected 12 Month Period Ending December 31, 2025
($000)

Case No.: U-21534
Exhibit: S-1
Schedule: A1
Witness: RFNichols

Line No.	(a) Description	(b) Source	(c) Applicant Projection	(d) Staff Adjustment	(e) Staff Projection
1	Rate Base	Exh. Exhibit:, Sch. Schedule	$ 22,107,989	$ (140,976)	$ 21,967,013
2	Adjusted Net Operating Income	Exh. A-13, Sch. C1	$ 1,087,100	$ 87,474	$ 1,174,574
3	Overall Rate of Return	Line 2 ÷ Line 1	4.92%	0.43%	5.35%
4	Required Rate of Return	Exh. A-14, Sch. D1	5.92%	-0.26%	5.66%
5	Income Requirements	Line 1 x Line 4	$ 1,309,478	$ (66,179)	$ 1,243,299
6	Income Deficiency (Sufficiency)	Line 5 - Line 2	$ 222,378	$ (153,653)	$ 68,725
7	Revenue Conversion Factor	Exh. A-13, Sch. C2	1.3496	-	1.3496
8	Revenue Deficiency / (Sufficiency)	Line 6 x Line 7	$ 300,129	$ (207,376)	$ 92,753
9	Return On - Tree Trim Regulatory Asset	Exh. A-11, Sch. A1.1	18,786	(8,653)	10,133
10	Return On - Monroe Regulatory Asset	Exh. A-11, Sch. A1.2	137,518	(572)	136,947
11	Revenue Deficiency / (Sufficiency)-Total	Sum Lines 8, 9, 10	$ 456,434	$ (216,600)	$ 239,833

Michigan Public Service Commission
DTE Electric Company
Monroe Regulatory Asset - Return On
Projected 12 Month Period Ending December 31, 2025
($000)

Case No.: U-21534
Exhibit: S-1
Schedule: A1.2
Witness: RFNichols

Line No.	(a) Description	(b) Test Period Amount	(c) Reference
1	**Return on Monroe Regulatory Asset**		
2	Monroe Regulatory Asset - Average Balance	2,093,063	Exhibit A-12, Schedule B4.4, Line 8
3	Pre-tax Weighted Average Cost of Capital 1/	6.54%	Exhibit S-4, Schedule D1
4	Return on Monroe Regulatory Asset	136,947	

1/ Pretax WACC as proposed in this case was recalculated using 9% ROE in accordance with U-21193 order dated July 26, 2023

Michigan Public Service Commission
DTE Electric Company
Projected Working Capital
Test Year Ending December 31, 2025
($000)

Case No: U-21534
Exhibit: S-2
Schedule: B4
Witness: JJHecht

Line No.	Description	(a) Applicant Projection	(b) Staff Adjustment	(c) Staff Projection
1	**OTHER PROPERTY AND INVESTMENTS**			
2	Non-Current Portion of Allowances	533	-	533
3	Investment and Special Funds	38,749	-	38,749
4	Nuclear Decommissioning Trust Funds	0	-	0
5	TOTAL OTHER PROPERTY & INVESTMENTS	39,282	-	39,282
6	**CURRENT ASSETS**			
7	Cash	11,011	-	11,011
8	Notes Receivable	-	-	-
9	Notes Receivable-Assoc. Co.	-	-	-
10	Customer Accounts Receivable	531,991	-	531,991
11	Other Accounts Receivable	82,804	(6,111)	76,693
12	Other Accounts Receivable-Assoc. Co.	-	-	-
13	Uncollectible Reserve	(52,834)	-	(52,834)
14	Unbilled Revenues	275,981	-	275,981
15	Inventories - Fuel	169,363	-	169,363
16	Inventories - Material and Supplies	322,862	-	322,862
17	Prepayments	108,056	-	108,056
18	Other Current Assets	0	-	0
19	TOTAL CURRENT ASSETS	1,449,234	(6,111)	1,443,123
20	**DEFERRED DEBITS**			
21	Unamortized Loss on Reacquired Debt	27,448	-	27,448
22	Reg Asset - Fermi 2	0	-	0
23	Def Debit - Prepaid Pension Asset	694,569	-	694,569
24	Reg Asset - Recoverable Pension & OPEB FAS 158	(0)	-	(0)
25	Reg Asset - Pension Deferral	21,651	-	21,651
26	Reg Asset - Monroe	-	-	-
27	Reg Asset - Ludington	9,933	-	9,933
28	Reg Asset - Transitional Recovery Mechanism (TRM)	-	-	-
29	Reg Asset - Customer 360	31,193	-	31,193
30	Reg Asset - Tier 2 Plants	-	-	-
31	Reg Asset - Residential Income Assistance	2,241	-	2,241
32	Reg Asset - Program Eval. Review Committee (PERC)	2,875	-	2,875
33	Reg Asset - Advanced Distribution Management System (ADMS)	15,514	-	15,514
34	Reg Asset - Charging Forward	38,681	(4,564)	34,117
35	Reg Asset - Enhanced Tree Trimming Program	-	-	-
36	Reg Asset - Advanced Customer Pricing Pilot Costs	3,190	-	3,190
37	Reg Asset – Time of Day Deferred Project Costs	5,784	-	5,784
38	Reg Asset – Open	-	-	-
39	Reg Asset - Pension Capitalized	(0)	-	(0)
40	Reg Asset - Demand Response	3,187	-	3,187
41	Reg Asset - Incentive Deferral	3,884	-	3,884
42	Reg Asset - Low Income Assistance Tracker	24	-	24
43	Reg Asset - Low Income Payment Stability Plan	1,043	-	1,043
44	Reg Asset - TCJA Under Recovery	400	-	400
45	Reg Asset - OPEN	-	-	-
46	Def Debit - Preliminary Survey and Investigation Charges	80	-	80
47	Def Debit - Prepaid OPEB	191,040	-	191,040
48	Def Debit - Combined Operating License (COL)	-	-	-
49	Def Debit - EWR Performance Incentive	-	-	-
50	Other Deferred Debits	38,306	-	38,306
51	TOTAL DEFERRED DEBITS	1,091,042	(4,564)	1,086,478
52	TOTAL ASSETS AND OTHER DEBITS	2,579,558	(10,675)	2,568,883
53	**NON-CURRENT LIABILITIES**			
54	Accumulated Provision for Injuries and Damages	38,139	-	38,139
55	Accrued Post Retirement Benefits	0	-	0
56	Accrued Pension Liabilities	(0)	-	(0)
57	Other Non-Current Liabilities	(0)	-	(0)
58	TOTAL NON-CURRENT LIABILITES	38,139	-	38,139
59	**CURRENT LIABILITIES**			
60	Accounts Payable	576,308	-	576,308
61	Accounts Payable - Assoc. Co.	73,784	-	73,784
62	Taxes Payable	8,040	-	8,040
63	Interest Payable	117,102	-	117,102
64	Fermi 2 Outage Accrual	25,923	-	25,923
65	Other Current Liabilities	168,651	-	168,651
66	TOTAL CURRENT LIABILITIES	969,809	-	969,809
67	**DEFERRED CREDITS**			
68	Regulatory Liab-Other Post Empl Benefits (OPEB)	130,275	-	130,275
69	Regulatory Liab-OPEB Capitalized	95,172	-	95,172
70	Regulatory Liab- Pension Capitalized	23,843	-	23,843
71	Regulatory Liab- Negative Pension	-	-	-
72	Fermi 2 Decommissioning	0	-	0
73	Other Deferred Credits	26,949	-	26,949
74	TOTAL DEFERRED CREDITS	276,239	-	276,239
75	TOTAL LIABILITIES AND OTHER CREDITS	1,284,186	-	1,284,186
76	Total Working Capital	**1,295,372**	**(10,675)**	**1,284,697**

Michigan Public Service Commission
DTE Electric Company
Projected Rate Base
Test Year Ending December 31, 2025
($000)

Case No.: U-21534
Exhibit: S-2
Schedule: B1
Witness: JJHecht

Line No.	(a) Description	(b) Source	(c) Applicant Projection	(d) Staff Adjustments	(e) Staff Projection
1	Utility Plant in Service:				
2	Plant in Service	Exh. A-12, Sch. B2, L6	24,872,100	(143,540)	24,728,561
3	Plant Held for Future Use	Exh. A-12, Sch. B2, L7	22,532	-	22,532
4	Construction Work in Progress	Exh. A-12, Sch. B2, L8	2,450,590	-	2,450,590
5	Acquisition Adjustments	Exh. A-12, Sch. B2, L9	83,332	-	83,332
6	Total Utility Plant	Sum Lines 2 thru 5	27,428,555	(143,540)	27,285,015
7	Depreciation Reserve	Exh. A-12, Sch. B3, L6	(6,777,289)	13,238	(6,764,051)
8	Net Utility Plant	Line 6 + Line 7	20,651,266	(130,301)	20,520,964
9	Net Capital Lease Property	Exh. A-12, Sch. B4.1, col. (c), L10	6,051	-	6,051
10	Property under Operating Leases	Exh. A-12, Sch. B4.1, col. (c), L11	-	-	-
11	Net Nuclear Fuel Property	Exh. A-12, Sch. B4.1, col. (c), L12	162,350	-	162,350
12	Total Utility Property and Plant	Sum Lines 8 thru 11	20,819,666	(130,301)	20,689,365
13	Less: Capital Lease Obligations	Exh. A-12, Sch. B4.1, col. (c), L85 + L100	7,049	-	7,049
14	Net Plant	Line 12 - Line 13	20,812,617	(130,301)	20,682,316
15	Allowance for Working Capital	Exh.A-12, Sch. B4	1,295,372	(10,675)	1,284,697
16	Total Rate Base	Line 14 + Line 15	22,107,989	(140,976)	21,967,013

MICHIGAN PUBLIC SERVICE COMMISSION

DTE Electric Energy Company
Development of Projected Net Operating Income
for the Test Year Ended December 31, 2025
($000)

Case No.: U-21534
Exhibit: S-3
Schedule: C1.1
Witness: RFNichols
Page: 1 of 1

		Revenue				Expenses									NOI			
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
Line No.	Description (Witness)	Sales Revenue	Base Fuel & Purchase Power Rev.	Other Revenue and R2 Rider	Total	Fuel and Purchased Power	Other O&M Expense	Depreciation & Amort.	Property Taxes	Other Taxes	State & Local Income Taxes	FIT	Other Utility (Income) / Deductions	Total	NOI	AFUDC	Loss on Reacquired Securities	Adjusted NOI
	Company Filed																	
1	**Operating Income (Initial Filing)**	3,995,976	1,354,105	115,336	5,465,416	1,354,105	1,266,950	1,266,245	328,772	53,180	61,413	107,776	(6,400)	4,432,041	1,033,375	55,969	(2,244)	1,087,100
	Staff Adjustments																	
2																		
3	Revenue																	
4	RIA	2,740			2,740						170	540		710	2,030			2,030
5	Senior Credit	495			495						31	97		128	367			367
6					-						-	-		-	-			-
7	Steam Power Generation (Kindschy)				-		(19,392)				1,204	3,820		(14,369)	14,369			14,369
8					-						-	-		-	-			-
9	Fuel Supply & MERC Fuel Handling (Kindschy)				-		(463)				29	91		(343)	343			343
10					-						-	-		-	-			-
11	Nuclear Power Generation (Kindschy)				-		(371)				23	73		(275)	275			275
12					-						-	-		-	-			-
13	Other Power Generation (Kindschy)				-		(3,009)				187	593		(2,229)	2,229			2,229
14					-						-	-		-	-			-
15	Customer Service				-						-	-		-	-			-
16	Merchant Fees (McMillan-Sepkoski)				-		(1,236)				77	243		(916)	916			916
17					-						-	-		-	-			-
18	Uncollectible Accounts Expense (Rueckert)				-		(9,841)				611	1,938		(7,292)	7,292			7,292
19					-						-	-		-	-			-
20	Regulated Marketing (McMillan-Sepkoski)				-		(292)				18	58		(216)	216			216
21					-						-	-		-	-			-
22	Corporate Support				-						-	-		-	-			-
23	Injuries & Damages (Rueckert)				-		(2,863)				178	564		(2,121)	2,121			2,121
24	Incentive Compensation (McMillan-Sepkoski)				-		(39,233)				2,436	7,727		(29,069)	29,069			29,069
25	Restricted Stock (McMillan-Sepkoski)				-		(8,960)				556	1,765		(6,639)	6,639			6,639
26	Projects with Level 2 Cost Estimates (Rogers)				-		(2,386)				148	470		(1,768)	1,768			1,768
27	Projects with Level 3 Cost Estimates (Rogers)				-		(84)				5	17		(62)	62			62
28	Cost to Achieve Projected Expense (Rogers)				-		(3,174)				197	625		(2,352)	2,352			2,352
29					-						-	-		-	-			-
30	Pension & Benefits				-						-	-		-	-			-
31	Employee Savings Plan (Rueckert)				-		(7,859)				488	1,548		(5,823)	5,823			5,823
32	Active Healthcare (Rueckert)				-		(2,334)				145	460		(1,729)	1,729			1,729
33	Other Benefits - General Benefits (Rueckert)				-		(1,344)				83	265		(996)	996			996
34	Other Benefits - Admin Fees (Rueckert)				-		(2,588)				161	510		(1,918)	1,918			1,918
35					-						-	-		-	-			-
36					-						-	-		-	-			-
37					-						-	-		-	-			-
38					-						-	-		-	-			-
39					-						-	-		-	-			-
40					-						-	-		-	-			-
41					-						-	-		-	-			-
42					-						-	-		-	-			-
43	Impact of Cap Ex Adj on Prop. Tax & Depr. (Hecht)				-			(12,270)	(117)		769	2,440		(9,178)	9,178			9,178
44					-						-	-		-	-			-
45	Impact of Cap Ex Adj on Depreciation (Hecht)										-	-		-	-			-
46	Proforma Interest (Nichols)				-						531	1,685		2,216	(2,216)			(2,216)
47	Interest Synchronization (Nichols)	-	-	-	-	-	-	-	-	-	1	2	-	2	(2)	-	-	(2)
48	**Total Adjustments**	3,235	-	-	3,235	-	(105,429)	(12,270)	(117)	-	8,049	25,528	-	(84,239)	87,474	-	-	87,474
49	**Staff NOI - Test Year**	3,999,211	1,354,105	115,336	5,468,651	1,354,105	1,161,522	1,253,974	328,656	53,180	69,462	133,304	(6,400)	4,347,803	1,120,848	55,969	(2,244)	1,174,574

Michigan Public Service Commission
DTE Electric Company
Projected Net Operating Income
Projected 12 Month Period Ending Dec. 31, 2025
($000)

Case No.: U-21534
Exhibit: S-3
Schedule: C1
Witness: RFNichols

	(a)	(b)	(c)	(d)	(e)
Line No.	**Description**	**Source**	**Appicant Projection**	**Staff Adjustment**	**Staff Projection**
1	**Operating Revenues**	Exh. A-13, Sch. C3	5,465,416	3,235	5,468,651
2	**Operating Expenses**				
3	Fuel and Purchased Power	Exh. A-13, Sch. C4	1,354,105	-	1,354,105
4	Operations and Maintenance Expenses	Exh. A-13, Sch. C5	1,266,950	(105,429)	1,161,522
5	Depreciation and Amortization	Exh. A-13, Sch. C6	1,266,245	(12,270)	1,253,974
6	Property Taxes	Exh. A-13, Sch. C7, C7.1	328,772	(117)	328,656
7	Other Taxes	Exh. A-13, Sch. C7	53,180	-	53,180
8	State & Local Income Taxes	Exh. A-13, Sch. C9, C10	61,413	8,049	69,462
9	Federal Income Taxes	Exh. A-13, Sch. C8	107,776	25,528	133,304
10	Other Utility (Income)/Deductions	Exh. A-13, Sch. C13	(6,400)	-	(6,400)
11	Total Operating Expenses		4,432,041	(84,239)	4,347,803
12	**Operating Income**		1,033,375	87,474	1,120,848
13	**Operating Income Adjustments**				
14	Allowance for Funds Used During Construction	Exh. A-13, Sch. C11	55,969	-	55,969
15	Loss on Reaquired Securities	Exh. A-13, Sch. C12	(2,244)	-	(2,244)
16	Total Operating Income Adjustments		53,726	-	53,726
17	**Adjusted Net Operating Income**		1,087,100	87,474	1,174,574

Michigan Public Service Commission
DTE Electric Company
Projected Operation and Maintenance Expenses
Summary
($000)

Case No.: U-21534
Exhibit: S-3
Schedule: C5
Witness: MLSchreur
Page: 1 of 1

Line No.	(a) Description	(b) Exhibit Source A-13	Applicant Projection	Staff Adjustment	Staff Projection
1	Steam Power Generation	C5.1	213,406	(19,392)	194,013
2	Fuel Supply & MERC Fuel Handling	C5.2	8,115	(463)	7,652
3	Nuclear Power Generation	C5.3	159,366	(371)	158,996
4	Hydraulic Power Generation	C5.4	11,218	-	11,218
5	Other Power Generation	C5.5	31,485	(3,009)	28,476
6	Distribution	C5.6	359,210	-	359,210
7	Customer Service	C5.7	118,625	(1,236)	117,389
8	Uncollectible Accounts Expense	C5.8	50,870	(9,841)	41,029
9	Regulated Marketing	C5.9	32,154	(292)	31,862
10	Corporate Support	C5.10	198,243	(56,700)	141,543
11	Pension and Benefits	C5.11	84,259	(14,125)	70,134
12	Total O&M Expense		1,266,950	(105,429)	1,161,521

Expenses	Witness	Amount
Steam Power Generation	Kindschy	(19,392)
Fuel Supply & Merc Fuel Handling	Kindschy	(463)
Nuclear Power Generation	Kindschy	(371)
Other Power Generation	Kindschy	(3,009)
Customer Service		
Merchant Fees	McMillan-Sepkoski	(1,236)
Uncollectible Accounts Expense	Rueckert	(9,841)
Regulated Marketing	McMillan-Sepkoski	(292)
Corporate Support		
Injuries & Damages	Rueckert	(2,863)
Incentive Compensation	McMillan-Sepkoski	(39,233)
Restricted Stock	McMillan-Sepkoski	(8,960)
Projects with Level 2 Cost Estimates	Rogers	(2,386)
Projects with Level 3 Cost Estimates	Rogers	(84)
Cost to Achieve Projected Expense	Rogers	(3,174)
Pension & Benefits		
Employee Savings Plan	Rueckert	(7,859)
Active Healthcare	Rueckert	(2,334)
Other Benefits - General Benefits	Rueckert	(1,344)
Other Benefits - Admin Fees	Rueckert	(2,588)
TOTAL		(105,429)

Michigan Public Service Commission
DTE Electric Company
Projected Tax Effect of Interest Allowed in Ratemaking Formula
Projected 12 Month Period Ending Dec. 31, 2025
($000)

Case No.: U-21534
Exhibit: S-3
Schedule: C14
Witness: RFNichols

Line No.	(a) Description	(b) Projection	(c) Source
1	Rate Base	$ 21,967,013	Exh.A-12, Sch. B1
2	Weighted Cost of Debt (1)	1.77%	Exh.A-14, Sch. D1
3	Interest Allowed in Ratemaking Formula	$ 387,887	Line 1 x Line 2
4	Applicant Projection	$ 396,440	WP-KMV-3
5	Increase / (Decrease) in Interest Deduction	$ (8,553)	Line 3 - Line 4
6	Composite State and Municipal Income Tax Rate	6.21%	Exh. A-13, Sch. C2
7	Effect on State and Municipal Income Tax Expense	$ 531	(Line 5 x Line 6) x -1
8	Effect on Federal Taxable Income	$ (8,022)	(Line 5 + Line 7) x -1
9	Federal Income Tax Rate	21.00%	Exh. A-13, Sch. C2
10	Effect on Federal Income Tax Expense	$ 1,685	Line 8 x Line 9
11	Total Tax Effect on Net Operating Income	$ (2,216)	(Line 7 + Line 10) x -1

(1) Includes Short and Long-Term Interest

Michigan Public Service Commission
DTE Electric Company
Projected Tax Effect of Interest Synchronization Adjustment
Projected 12 Month Period Ending Dec. 31, 2025
($000)

Case No.: U-21534
Exhibit: S-3
Schedule: C15
Witness: RFNichols

Line No.	(a) Description	(b) Projection	(b) Source
1	Rate Base	21,967,013	Exh. Exhibit S-2, Sch.Schedule B-1
2	Weight of JDITC Reserve - Debt	0.07%	Exh. S-4, Sch. D-1
3	Cost of Long-Term Debt	4.21%	Exh. S-4, Sch. D-1
4	Imputed Interest	659	L1 x L2 x L3
5	Applicant Projection	667	Exh. A-12, Sch. C15
6	Interest Deduction Change	(8)	Line 4 - Line 5
7	Composite State and Municipal Income Tax Rate	6.21%	A-13, Sch. C2
8	Effect on State and Municipal Income Tax Expense	1	(Line 5 x Line 6) x -1
9	Imputed Effect on Federal Taxable Income	(8)	(Line 5 + Line 7) x -1
10	Federal Income Tax Rate	21.00%	Exh. S-3, Sch. C2
11	Imputed Effect on Fed. Income Tax Expense	2	Line 8 x Line 9
12	Synchronization Tax Adjustment to NOI	(2)	(Line 7 + Line 10) x -1

Case No: U-21534
Witness: J. E. Ufolla
Exhibit No: S-4
Schedule No: D-1
Date: 7/26/2024
Page: 1 of 1

DTE Electric Company
Staff Overall Ratemaking Capital Structure
Recommended fot Test Year Ending December 31,2025

Line	Description	Amount (000)	Permanent Ratio	Total Capital Ratio	Cost Rate	Weighted Cost	Conversion Factor	Pre-Tax Weighted Cost
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	Long-Term Debt	$ 8,663,922	49.97%	39.19%	4.21%	1.65%	1.0000	1.65%
2	Preferred Stock	$0	0.00%	0.00%	0.00%	0.00%	1.3496	0.00%
3	Common Equity	$ 8,673,528	50.03%	39.23%	9.90%	3.88%	1.3496	5.24%
4	Total Permanent Capital	$17,337,450	100.00%					
5	Short-Term Debt	$509,454		2.30%	4.96%	0.11%	1.0000	0.11%
6	Deferred FIT	$4,229,600		19.13%	0.00%	0.00%	1.0000	0.00%
7	ITC							
8	Def ITC - Long Term Debt	$15,734		0.07%	4.21%	0.00%	1.0000	0.00%
9	Def ITC - Preferred Stock	$0		0.00%	0.00%	0.00%	1.3496	0.00%
10	Def ITC - Common Equity	$15,751		0.07%	9.90%	0.01%	1.3496	0.01%
11	Total ITC	$31,485				0.01%		0.01%
12	Total Capitalization	$22,107,989		100.00%		5.66%		7.02%

DTE Electric Company
Cost of Long-Term Debt
Projected 12 Months Ending December 31, 2025

Case No: U-21534
Witness: J. E. Ufolla
Exhibit No: S-4
Schedule No: D-2
Date: 7/26/2024

Line No.	Issue Name	Original Issue Date	Stated Maturity	Interest Rate	Amount of Offering ($000)	Price to Public (%)	Expenses of Financing (%)	Net Proceeds to the Company (%)	Cost Based On Net Proceeds (%)	Amount Outstanding ($000)	Annual Cost ($000)
1	2002 Series B	10/23/02	10/15/32	6.350%	225,000	99.33%	1.0%	98.369%	6.47%	225,000	14,566
2	2005 Series BR	02/07/05	02/15/35	5.450%	200,000	99.59%	1.0%	98.562%	5.55%	200,000	11,098
3	2005 Series E	10/06/05	10/01/37	5.700%	250,000	99.40%	1.0%	98.420%	5.81%	250,000	14,523
4	2006 Series A	06/01/06	06/01/36	6.625%	250,000	99.95%	1.0%	98.954%	6.71%	250,000	16,766
5	2007 Series A	12/18/07	03/15/38	6.470%	50,000	100.00%	0.8%	99.168%	6.53%	50,000	3,266
6	2011 Series E	09/01/11	09/01/26	4.460%	77,000	100.00%	0.6%	99.411%	4.51%	77,000	3,476
7	2011 Series F	09/01/11	09/01/41	5.670%	46,000	100.00%	0.6%	99.411%	5.71%	46,000	2,627
8	2011 Series H	09/20/11	09/01/41	4.500%	140,000	98.87%	1.1%	97.814%	4.64%	140,000	6,490
9	2012 Series B	06/22/12	06/15/42	3.950%	250,000	99.57%	1.0%	98.541%	4.03%	250,000	10,086
10	2013 Series A	03/27/13	04/01/43	4.000%	375,000	99.55%	1.0%	98.500%	4.09%	375,000	15,327
11	2014 Series A	06/04/14	06/01/26	3.770%	100,000	100.00%	0.6%	99.392%	3.83%	100,000	3,834
12	2014 Series B	06/04/14	06/01/44	4.600%	150,000	100.00%	0.6%	99.392%	4.64%	150,000	6,957
13	2014 Series E	07/02/14	07/01/44	4.300%	350,000	99.85%	1.0%	98.832%	4.37%	350,000	15,296
14	2015 Series A	03/11/15	03/15/45	3.700%	500,000	99.77%	1.0%	98.735%	3.77%	500,000	18,854
15	2016 Series A	05/17/16	06/01/46	3.700%	300,000	99.93%	1.1%	98.824%	3.77%	300,000	11,297
16	2017 Series B	08/09/17	08/15/47	3.750%	440,000	99.95%	1.1%	98.850%	3.81%	440,000	16,784
17	2018 Series A	05/07/18	05/15/48	4.050%	525,000	99.55%	1.1%	98.456%	4.14%	525,000	21,736
18	2019 Series A	02/15/19	03/01/49	3.950%	650,000	99.20%	1.1%	98.111%	4.06%	650,000	26,385
19	2020 Series A	02/26/20	03/01/30	2.250%	600,000	99.88%	0.8%	99.042%	2.36%	600,000	14,148
20	2020 Series B	02/26/20	03/01/50	2.950%	500,000	99.96%	1.1%	98.893%	3.01%	500,000	15,031
21	2020 Series C	04/06/20	03/01/31	2.625%	600,000	99.83%	0.8%	99.004%	2.73%	600,000	16,387
22	2021 Green Series	03/29/21	04/01/28	1.900%	575,000	99.92%	0.9%	99.062%	2.04%	575,000	11,756
23	2021 Green Series	03/29/21	04/01/51	3.250%	425,000	99.17%	1.1%	98.062%	3.35%	425,000	14,250
24	1995CC 2021 Rem	09/01/21	09/01/30	1.450%	82,350	100.00%	0.7%	99.317%	1.53%	82,350	1,261
25	2008ET2 2021 Rer	09/01/21	08/01/29	1.350%	59,175	100.00%	0.7%	99.310%	1.44%	59,175	854
26	2022 Series A 110(	02/24/22	03/01/32	3.000%	500,000	99.60%	0.9%	98.696%	3.15%	500,000	15,764
27	2022 Green Series	02/24/22	03/01/52	3.650%	400,000	99.39%	1.1%	98.260%	3.75%	400,000	14,988
28	2023 Series A 110(	03/03/23	04/01/33	5.200%	600,000	99.79%	0.9%	98.908%	5.34%	600,000	32,045
29	2023 Series B 110(	03/03/23	04/01/53	5.400%	600,000	99.82%	1.1%	98.707%	5.49%	600,000	32,928
30	2023DT Series 11(	06/01/23	06/03/30	3.875%	100,000	100.00%	1.3%	98.730%	4.09%	100,000	4,085
31	2024 Series B	02/29/24	12/01/26	4.850%	500,000	99.98%	0.5%	99.455%	5.06%	500,000	25,308
32	2024 Series C	02/29/24	03/01/34	5.200%	500,000	99.95%	0.8%	99.124%	5.31%	500,000	26,570
33	2025 Series A	03/01/25	03/01/55	5.330%	800,000	100.00%	1.0%	99.00%	5.40%	800,000	43,181
34	2025 Series B	07/01/25	07/01/55	5.330%	500,000	100.00%	1.0%	99.00%	5.40%	500,000	26,988
34											
35	Cost Rate								4.214%	$ 12,219,525	$ 514,911
36	13 Month Average										

Treasury 30-Year Bond Yield
IHS Markit US Economic Outlook

Date	2025 Yield
May-24	3.960%
Apr-24	3.800%
Mar-24	3.790%
Average	3.850%

Notes:
2024 rates can be seen on Exhibit S-X
2025 rates include 2025 30-year bond yield (above) plus 148 basis point spread (Lepczyk Testimony TJL-13)

Case No: U-21534
Witness: J. E. Ufolla
Exhibit No: S-4
DTE Electric Company
Schedule No: D-3
Cost of Short-Term Debt
Date: 7/26/2024
Projected 12 Months Ending December 31,2025
Page: 1 of 1

(a) Line	(b) Description	(c) Average Short Term Debt Balance	(d) Cost Rate	(e) Total Cost
1	Short-Term Debt	$ 509,454	4.71%	$ 23,995
2	Credit Fees			$ 1,297
3	Total		4.96%	$ 25,292

	Projected Rate	Spread	Cost Rate
SOFR - 2025	4.51%	0.20%	4.71%

Source:
Projected Rate - S&P Global Market Intelligence (May 2024)
Spread and Credit Fees - Exhibit A-14 Schedule D3

Case No: U-21534
Witness: J. E. Ufolla
DTE Electric Company — Exhibit No: S-4
Cost of Preferred Stock — Schedule No: D-4
Projected 12 Months Ending December 31, 2025 — Date: 7/26/2024
Page: 1 of 1

(a) Line	(b) Description	(c) Amount Oustanding	(d) Cost Rate	(e) Total Cost
1	Preferred Stock	-	0%	-

Case No: U-21534
Witness: J. E. Ufolla
DTE Electric Company
Exhibit No: S-4
Cost of Common Equity
Schedule No: D-5
Projected 12 Months Ending December 31, 2025
Date: 7/26/2024

(a) Line	(b) Description	(c) Amount Oustanding	(d) Cost Rate	(e) Total Cost
1	Common Equity	$ 8,673,528	9.90%	$ 858,679

Electric Proxy Group Corporate Statistics

(a) Line No.	(b) Company	(c) Ticker Symbol	(d) Moody's Issuer Rating	(e) S&P Issuer Rating	(f) Dividend Payout %	(g) Value Line Beta	(h) Holding Company Equity %	(i) Net Plant ($000,000)
1	Alliant Energy Corp	LNT	Baa2	A-	65.00%	0.90	45.20%	17,157
2	Ameren Corp	AEE	Baa1	BBB+	57.00%	0.90	43.80%	31,262
3	American Electric Power Co	AEP	Baa2	BBB+	70.00%	0.80	42.00%	71,283
4	CenterPoint Energy Inc	CNP	Baa2	BBB+	58.00%	1.15	35.50%	29,853
5	CMS Energy Corp	CMS	Baa2	BBB+	65.00%	0.85	33.10%	25,072
6	Entergy Corp	ETR	Baa2	BBB+	40.00%	0.95	38.60%	43,834
7	Evergy Inc	EVRG	Baa2	BBB+	73.00%	0.95	48.00%	22,137
8	OGE Energy Corp	OGE	Baa1	BBB+	73.00%	1.05	52.40%	10,547
9	WEC Energy Corp	WEC	Baa1	A-	68.00%	0.85	44.50%	31,582
10	Avangrid Inc	AGR	Baa2	BBB+	84.00%	0.95	66.30%	32,857
11	Consolidated Edison Inc	ED	Baa1	A-	62.00%	0.80	49.10%	49,608
12	Dominion Energy	D	Baa2	BBB+	66.00%	0.90	42.40%	58,780
13	Eversource Energy	ES	Baa2	A-	61.00%	0.95	37.00%	39,499
14	PPL Corporation	PPL	Baa1	A-	67.00%	1.15	48.80%	31,418
15	Public Service Enterprise Group	PEG	Baa2	BBB+	65.00%	0.95	46.50%	38,031
16	Pinnacle West Capital Corp	PNW	Baa2	BBB+	77.00%	0.95	45.00%	17,980
17	Sempra Energy	SRE	Baa2	BBB+	52.00%	1.00	49.20%	54,960
18	Xcel Energy Inc	XEL	Baa1	BBB+	59.00%	0.85	41.40%	51,642
19	Average				65%	0.94	44.93%	36,528
20	DTE Electric		A2	A-			50.00%	22,108

Selection Criteria:

- Value Line Electric Utiliy
- Has data available from all Staff sources for DCF and CAPM
- Currently paying Dividend to Shareholders
- Must not be a target of a merger or acquisition
- Credit rating of Baa1/BBB+ or Higher
- Net plant between $10 - 80 Billion

Sources:

(f) (g) (h) Value Line Reports (March, April 2024)

Case No: U-21534
Witness: J. E. Ufolla
Exhibit No: S-4
Schedule No: D-5
Date: 7/26/2024
Page: 3 of 11

Projected Growth Rates (%)

(a) Line No.	(b) Company	(c) Ticker Symbol	(d) 5-Year Yahoo Earnings	(e) 5-Year ValueLine Earnings	(f) 5-Year Zacks Earnings	(g) Average Growth
1	Alliant Energy Corp	LNT	6.30%	6.50%	6.10%	6.30%
2	Ameren Corp	AEE	4.80%	6.50%	6.50%	5.93%
3	American Electric Power Co	AEP	6.19%	6.50%	5.80%	6.16%
4	CenterPoint Energy Inc	CNP	7.70%	6.00%	7.00%	6.90%
5	CMS Energy Corp	CMS	7.40%	5.00%	7.38%	6.59%
6	Entergy Corp	ETR	6.80%	0.50%	7.46%	4.92%
7	Evergy Inc	EVRG	2.50%	7.50%	5.00%	5.00%
8	OGE Energy Corp	OGE	-12.34%	6.50%	5.00%	-0.28%
9	WEC Energy Corp	WEC	6.68%	6.00%	7.17%	6.62%
10	Avangrid Inc	AGR	0.40%	3.50%	6.00%	3.30%
11	Consolidated Edison Inc	ED	6.09%	6.00%	2.00%	4.70%
12	Dominion Energy	D	19.50%	3.00%	10.55%	11.02%
13	Eversource Energy	ES	3.25%	6.00%	4.16%	4.47%
14	PPL Corporation	PPL	6.80%	7.50%	6.46%	6.92%
15	Public Service Enterprise Group	PEG	5.25%	5.00%	6.24%	5.50%
16	Pinnacle West Capital Corp	PNW	6.90%	4.50%	7.55%	6.32%
17	Sempra Energy	SRE	5.90%	7.00%	6.00%	6.30%
18	Xcel Energy Inc	XEL	6.73%	7.00%	6.41%	6.71%
19	Average		5.38%	5.58%	6.27%	5.74%

Discounted Cash flow Model (DCF)

(a) Line No.	(b) Company	(c) Ticker Symbol	(d) Dividend Yield	(e) Growth Rate	(f) Cost of Equity DCF	(g) Adjusted DCF
1	Alliant Energy Corp	LNT	3.74%	6.30%	10.04%	10.16%
2	Ameren Corp	AEE	3.60%	5.93%	9.53%	9.64%
3	American Electric Power Co	AEP	3.85%	6.16%	10.01%	10.13%
4	CenterPoint Energy Inc	CNP	2.70%	6.90%	9.60%	9.69%
5	CMS Energy Corp	CMS	3.28%	6.59%	9.87%	9.98%
6	Entergy Corp	ETR	4.04%	4.92%	8.96%	9.06%
7	Evergy Inc	EVRG	4.61%	5.00%	9.61%	9.73%
8	OGE Energy Corp	OGE	4.61%	-0.28%	4.33%	4.32%
9	WEC Energy Corp	WEC	3.94%	6.62%	10.56%	10.69%
10	Avangrid Inc	AGR	4.72%	3.30%	8.02%	8.10%
11	Consolidated Edison Inc	ED	3.40%	4.70%	8.10%	8.18%
12	Dominion Energy	D	5.03%	11.02%	16.05%	16.32%
13	Eversource Energy	ES	4.67%	4.47%	9.14%	9.24%
14	PPL Corporation	PPL	3.53%	6.92%	10.45%	10.57%
15	Public Service Enterprise Grou	PEG	3.27%	5.50%	8.77%	8.86%
16	Pinnacle West Capital Corp	PNW	4.57%	6.32%	10.89%	11.03%
17	Sempra Energy	SRE	3.22%	6.30%	9.52%	9.62%
18	Xcel Energy Inc	XEL	3.92%	6.71%	10.63%	10.76%
19	Proxy Average					**9.78%**
20	Proxy Low Value					4.32%
21	Proxy High Value					16.32%
22	Proxy Median					9.71%

DCF = Dividend Yield + Growth Rate

Adjusted DCF = Growth Rate + (Dividend Yield)(1 + 0.5 Growth Rate)

Sources:

(d) Value Line Reports (March, April 2024)
(e) Exhibit S-4 Schedule D-5 Page 3

Capital Asset Pricing Model (CAPM)

(a) Line	(b) Company	(c) Ticker Symbol	(d) Valule Line Beta	(e) Risk Free Rate	(f) 1928-2023 Risk Premium	(g) Historical CAPM
1	Alliant Energy Corp	LNT	0.90	3.850%	6.80%	9.97%
2	Ameren Corp	AEE	0.90	3.850%	6.80%	9.97%
3	American Electric Power Co	AEP	0.80	3.850%	6.80%	9.29%
4	CenterPoint Energy Inc	CNP	1.15	3.850%	6.80%	11.67%
5	CMS Energy Corp	CMS	0.85	3.850%	6.80%	9.63%
6	Entergy Corp	ETR	0.95	3.850%	6.80%	10.31%
7	Evergy Inc	EVRG	0.95	3.850%	6.80%	10.31%
8	OGE Energy Corp	OGE	1.05	3.850%	6.80%	10.99%
9	WEC Energy Corp	WEC	0.85	3.850%	6.80%	9.63%
10	Avangrid Inc	AGR	0.95	3.850%	6.80%	10.31%
11	Consolidated Edison Inc	ED	0.80	3.850%	6.80%	9.29%
12	Dominion Energy	D	0.90	3.850%	6.80%	9.97%
13	Eversource Energy	ES	0.95	3.850%	6.80%	10.31%
14	PPL Corporation	PPL	1.15	3.850%	6.80%	11.67%
15	Public Service Enterprise Group	PEG	0.95	3.850%	6.80%	10.31%
16	Pinnacle West Capital Corp	PNW	0.95	3.850%	6.80%	10.31%
17	Sempra Energy	SRE	1.00	3.850%	6.80%	10.65%
18	Xcel Energy Inc	XEL	0.85	3.850%	6.80%	9.63%
19	Proxy Average		0.94			**10.23%**
20	Proxy Low Value		0.80			9.29%
21	Proxy High Value		1.15			11.67%
22	Proxy Median		0.95			10.31%

Source:
(e) Exhibit S-4 Schedule D-2
(f) Exhibit S-4 Schedule D-5 Page 6

Historical Risk Premium

Year	S&P 500 Total Returns	Long Term Gov Bonds Income Returns	Difference
1928	43.81%	3.22%	40.59%
1929	-8.30%	3.47%	-11.77%
1930	-25.12%	3.32%	-28.44%
1931	-43.84%	3.33%	-47.17%
1932	-8.64%	3.69%	-12.33%
1933	49.98%	3.12%	46.86%
1934	-1.19%	3.18%	-4.37%
1935	46.74%	2.81%	43.93%
1936	31.94%	2.77%	29.17%
1937	-35.34%	2.66%	-38.00%
1938	29.28%	2.64%	26.64%
1939	-1.10%	2.40%	-3.50%
1940	-10.67%	2.23%	-12.90%
1941	-12.77%	1.94%	-14.71%
1942	19.17%	2.46%	16.71%
1943	25.06%	2.44%	22.62%
1944	19.03%	2.46%	16.57%
1945	35.82%	2.34%	33.48%
1946	-8.43%	2.04%	-10.47%
1947	5.20%	2.13%	3.07%
1948	5.70%	2.40%	3.30%
1949	18.30%	2.25%	16.05%
1950	30.81%	2.12%	28.69%
1951	23.68%	2.38%	21.30%
1952	18.15%	2.66%	15.49%
1953	-1.21%	2.84%	-4.05%
1954	52.56%	2.79%	49.77%
1955	32.60%	2.75%	29.85%
1956	7.44%	2.99%	4.45%
1957	-10.46%	3.44%	-13.90%
1958	43.72%	3.27%	40.45%
1959	12.06%	4.01%	8.05%
1960	0.34%	4.26%	-3.92%
1961	26.64%	3.83%	22.81%
1962	-8.81%	4.00%	-12.81%
1963	22.61%	3.89%	18.72%
1964	16.42%	4.15%	12.27%
1965	12.40%	4.19%	8.21%
1966	-9.97%	4.49%	-14.46%
1967	23.80%	4.59%	19.21%
1968	10.81%	5.50%	5.31%
1969	-8.24%	5.95%	-14.19%
1970	3.56%	6.74%	-3.18%
1971	14.22%	6.32%	7.90%
1972	18.76%	5.87%	12.89%
1973	-14.31%	6.51%	-20.82%
1974	-25.90%	7.27%	-33.17%
1975	37.00%	7.99%	29.01%
1976	23.83%	7.89%	15.94%
1977	-6.98%	7.14%	-14.12%
1978	6.51%	7.90%	-1.39%
1979	18.52%	8.86%	9.66%
1980	31.74%	9.97%	21.77%
1981	-4.70%	11.55%	-16.25%
1982	20.42%	13.50%	6.92%
1983	22.34%	10.38%	11.96%
1984	6.15%	11.74%	-5.59%
1985	31.24%	11.25%	19.99%
1986	18.49%	8.98%	9.51%
1987	5.81%	7.92%	-2.11%
1988	16.54%	8.97%	7.57%
1989	31.48%	8.81%	22.67%
1990	-3.06%	8.19%	-11.25%
1991	30.23%	8.22%	22.01%
1992	7.49%	7.26%	0.23%
1993	9.97%	7.17%	2.80%
1994	1.33%	6.59%	-5.26%
1995	37.20%	7.60%	29.60%
1996	22.68%	6.18%	16.50%
1997	33.10%	6.64%	26.46%
1998	28.34%	5.83%	22.51%
1999	20.89%	5.57%	15.32%
2000	-9.03%	6.50%	-15.53%
2001	-11.85%	5.53%	-17.38%
2002	-21.97%	5.59%	-27.56%
2003	28.36%	4.80%	23.56%
2004	10.74%	5.02%	5.72%
2005	4.83%	4.69%	0.14%
2006	15.61%	4.68%	10.93%
2007	5.48%	4.86%	0.62%
2008	-36.55%	4.45%	-41.00%
2009	25.94%	3.47%	22.47%
2010	14.82%	4.25%	10.57%
2011	2.10%	3.82%	-1.72%
2012	15.89%	1.47%	14.42%
2013	32.15%	2.90%	29.25%
2014	13.52%	3.41%	10.11%
2015	1.38%	2.47%	-1.09%
2016	11.77%	2.30%	9.47%
2017	21.61%	2.67%	18.94%
2018	-4.23%	2.82%	-7.05%
2019	31.21%	2.55%	28.66%
2020	18.02%	1.53%	16.49%
2021	28.47%	1.73%	26.74%
2022	-18.04%	2.61%	-20.65%
2023	26.06%	4.09%	21.97%
1928-2023 Average	11.66%	4.86%	**6.80%**

Sources: S&P 500 Total Return - Damodaran Online (NYU) Stocks, bonds, and Bills
Government Bond Retruns 1928-2022 - Kroll SBBI Yearbook 2023
Government Bond Retruns 2023 onward - Federal Reserve (FRED) Market Yield on U.S. Treasury Securities at 30-Year Constant Maturity

Dow Jones Utility Average

Line	(a) Date	(b) Index value	(c) Price Return %	(d) TR Index Value	(e) TR % avg
1	3-Jan-00	276.72		577.38	
2	29-Dec-00	412.16	48.95	890.95	54.31
3	31-Dec-01	293.94	(28.68)	656.90	(26.27)
4	31-Dec-02	215.18	(26.79)	503.29	(23.38)
5	31-Dec-03	266.90	24.04	651.22	29.39
6	31-Dec-04	334.95	25.50	848.16	30.24
7	30-Dec-05	405.11	20.95	1061.35	25.14
8	29-Dec-06	456.77	12.75	1237.84	16.63
9	31-Dec-07	532.69	16.62	1486.82	20.11
10	31-Dec-08	370.76	(30.40)	1072.94	(27.84)
11	31-Dec-09	398.01	7.35	1206.78	12.47
12	31-Dec-10	404.99	1.75	1284.76	6.46
13	30-Dec-11	464.88	14.79	1537.94	19.71
14	31-Dec-12	453.09	(2.54)	1563.18	1.64
15	31-Dec-13	490.57	8.27	1761.56	12.69
16	31-Dec-14	618.08	25.99	2301.45	30.65
17	31-Dec-15	577.82	(6.51)	2230.94	(3.06)
18	31-Dec-16	659.61	14.15	2636.44	18.18
19	31-Dec-17	723.37	9.67	2988.41	13.35
20	31-Dec-18	712.93	(1.44)	3047.76	1.99
21	31-Dec-19	879.17	23.32	3879.67	27.30
22	31-Dec-20	864.64	(1.65)	3939.83	1.55
22	31-Dec-21	980.78	13.43	4609.97	17.01
22	30-Dec-22	967.40	(1.36)	4686.93	1.67
23	31-Dec-23	881.67	(8.86)	4420.24	(5.69)

Source

Column (b & d): data source from S&P Global with reference to the Dow Jones Utility Average Total Return
Address is https://www.spglobal.com/spdji/en/indices/equity/dow-jones-utility-average/#overview

Historical Utility Equity and Bond Data

	ELECTRIC UTILITY				Bond Yields	
Period	Market Price - Weighted Average - $ Per Share (End of Dec)	Capital Gain/Loss % Growth (Loss) on Nat. Gas Stock	Dividend Yield on Nat. Gas Stock (End of Dec) (Mergent)	Total Return (Capital Gain +Dividend Yield)	Yields on A-Rated Public Utility Bonds (end of Dec)	30-Year Treasury Yields (1931-2022)
1931	43.23		7.40	7.40	6.24	3.33%
1932	39.42	(8.81)	5.63	(3.18)	5.85	3.69%
1933	28.73	(27.12)	6.09	(21.03)	7.22	3.12%
1934	21.06	(26.70)	6.74	(19.96)	5.36	3.18%
1935	36.06	71.23	3.69	74.92	4.29	2.81%
1936	41.60	15.36	4.28	19.64	3.83	2.77%
1937	24.24	(41.73)	6.93	(34.80)	4.03	2.66%
1938	27.55	13.66	5.26	18.92	3.74	2.64%
1939	28.85	4.72	5.23	9.95	3.38	2.40%
1940	22.22	(22.98)	7.07	(15.91)	3.10	2.23%
1941	13.45	(39.47)	9.44	(30.03)	3.06	1.94%
1942	14.29	6.25	8.96	15.21	3.06	2.46%
1943	21.01	47.03	6.66	53.69	2.99	2.44%
1944	21.09	0.38	6.40	6.78	2.97	2.46%
1945	31.14	47.65	4.40	52.05	2.75	2.34%
1946	32.71	5.04	4.52	9.56	2.76	2.04%
1947	25.60	(21.74)	6.17	(15.57)	3.05	2.13%
1948	26.20	2.34	6.22	8.56	3.06	2.40%
1949	30.57	16.68	5.50	22.18	2.78	2.25%
1950	30.81	0.79	6.00	6.79	2.86	2.12%
1951	33.85	9.87	5.61	15.48	3.29	2.38%
1952	37.85	11.82	5.07	16.89	3.22	2.66%
1953	39.61	4.65	5.28	9.93	3.38	2.84%
1954	47.56	20.07	4.50	24.57	3.11	2.79%
1955	49.35	3.76	4.60	8.36	3.35	2.75%
1956	48.96	(0.79)	4.84	4.05	3.91	2.99%
1957	50.30	2.74	4.89	7.63	4.36	3.44%
1958	66.37	31.95	3.87	35.82	4.49	3.27%
1959	65.77	(0.90)	4.01	3.11	4.96	4.01%
1960	76.82	16.80	3.57	20.37	4.65	4.26%
1961	99.32	29.29	2.88	32.17	4.65	3.83%
1962	96.49	(2.85)	3.18	0.33	4.44	4.00%
1963	102.31	6.03	3.25	9.28	4.46	3.89%
1964	115.54	12.93	3.19	16.12	4.54	4.15%
1965	114.86	(0.59)	3.50	2.91	4.83	4.19%
1966	105.99	(7.72)	3.94	(3.78)	5.67	4.49%
1967	98.19	(7.36)	4.52	(2.84)	6.67	4.59%
1968	104.04	5.96	4.40	10.36	6.87	5.50%
1969	84.62	(18.67)	5.47	(13.20)	8.59	5.95%
1970	88.59	4.69	5.34	10.03	8.48	6.74%
1971	85.56	(3.42)	5.62	2.20	7.90	6.32%
1972	83.61	(2.28)	5.88	3.60	7.48	5.87%
1973	60.87	(27.20)	8.28	(18.92)	8.24	6.51%
1974	41.17	(32.36)	11.73	(20.63)	10.27	7.27%
1975	55.66	35.20	8.97	44.17	10.11	7.99%
1976	66.29	19.10	7.92	27.02	8.62	7.89%
1977	68.19	2.87	8.33	11.20	8.64	7.14%
1978	59.75	(12.38)	10.01	(2.37)	9.70	7.90%
1979	56.41	(5.59)	11.24	5.65	11.79	8.86%
1980	54.42	(3.53)	12.26	8.73	14.63	9.97%
1981	57.20	5.11	12.52	17.63	16.29	11.55%
1982	70.26	22.83	10.87	33.70	14.43	13.50%
1983	72.03	2.52	11.11	13.63	13.52	10.38%
1984	80.16	11.29	10.44	21.73	13.11	11.74%
1985	94.98	18.49	9.17	27.66	10.97	11.25%
1986	113.66	19.67	7.89	27.56	9.12	8.98%
1987	94.24	(17.09)	9.68	(7.41)	10.98	7.92%
1988	100.94	7.11	8.63	15.74	10.06	8.97%
1989	122.52	21.38	7.22	28.60	9.44	8.81%
1990	117.77	(3.88)	7.44	3.56	9.73	8.19%
1991	144.02	22.29	6.26	28.55	8.88	8.22%
1992	141.06	(2.06)	6.25	4.19	8.43	7.26%
1993	146.70	4.00	6.16	10.16	7.34	7.17%
1994	115.50	(21.27)	7.80	(13.47)	8.76	6.59%
1995	142.90	23.72	6.34	30.06	7.23	7.60%
1996	136.00	(4.83)	6.67	1.84	7.59	6.18%
1997	155.73	14.51	5.82	20.33	7.16	6.64%
1998	181.84	16.77	4.40	21.17	6.91	5.83%
1999	137.30	(24.49)	5.87	(18.62)	8.14	5.57%
2000	227.09	65.40	3.84	69.24	7.84	6.50%
2001	200.50	(11.71)	4.47	(7.24)	7.83	5.53%
2002	169.50	(15.46)	5.21	(10.25)	6.93	5.59%

	Dow Jones Utility Average (Total Return)			
	Index Value	Return %		
2003		29.39	6.27	4.80%
2004		30.24	5.92	5.02%
2005		25.14	5.80	4.69%
2006		16.63	5.81	4.68%
2007		20.11	6.16	4.86%
2008		(27.84)	6.54	4.45%
2009		12.47	5.79	3.47%
2010		6.46	5.56	4.25%
2011		19.71	4.33	3.82%
2012		1.64	4.00	1.47%
2013	1,761.56	12.69	4.81	2.90%
2014	2,301.45	30.65	3.94	3.41%
2015	2,230.94	(3.06)	4.39	2.47%
2016	2,636.44	18.18	4.22	2.30%
2017	2,988.41	13.35	3.75	2.67%
2018	3,047.76	1.99	4.26	2.82%
2019	3,879.67	27.30	3.48	2.55%
2020	3,939.83	1.55	2.71	1.53%
2021	4,609.97	17.01	3.02	1.73%
2022	4,686.93	1.67	5.44	2.61%
2023	4,420.24	(5.69)	5.19	4.09%

1931 - 2023	**Electric Utility Return Average**	**10.77**		
1931 - 2023	**Average Yield on Public Utility Bonds**		**6.28**	
1931 - 2023	**Average Yield on Treasury Bonds**			**5.99**

1931-2002 Electric Utility stocks data from Mergent Public Utility Manual and Bond Record
2003-2023 Dow Jones Utility Average TR Index from S&P Global
Public Utility Bond Yields - Mergent Bond Record

Risk Premium Method

(a) Line No.	(b)	(c)
1	Electric Utility Realized Market Return Average (1931 - 2023)[1]	10.77%
2	Realized Utility Bond Yield Average (1931 - 2023)	6.28%
3	Treasury Bond Yield Average (1931 - 2023)	5.99%
4	Historical Spread Utility Equity-Bond [1] - [2]	4.49%
5	Historical Spread Utility Bond-Treasury Bond [1] - [3]	4.78%
Utility Bond Risk Premium		
6	Value Line Long Term Utility Bond Returns	5.56%
7	Historical Cost of Equity Estimate [4] + [6]	**10.05%**
Treasury Bond Risk Premium		
8	Treasury Bond Yield	3.85%
9	Historical Cost of Equity Estimate [5] + [8]	**8.63%**

Sources

(Line 1-3) Exhibit S-4 Schedule D-5 page 8

(Line 6) - Value Line Selection and Options Utility (25/30-year) A and Baa/BBB

Date	Utility A-rated	Utility Baa/BBB-rated
6/7/2024	5.60	5.92
5/31/2024	5.59	5.92
5/24/2024	5.64	5.96
5/17/2024	5.63	5.95
5/10/2024	5.74	6.06
5/3/2024	5.74	6.07
4/26/2024	5.73	6.05
4/19/2024	5.55	5.85
4/12/2024	5.49	5.81
4/5/2024	5.45	5.77
3/29/2024	5.50	5.82
3/22/2024	5.33	5.66
3/15/2024	5.44	5.76
3/8/2024	5.47	5.78
Average	**5.56**	**5.88**

(Line 8) Exhibit S-4 Schedule D-2

Allowed Returns on Common Equity
Electric Utility Rate Case Decisions
State Commissions Across the United States
(2023 - 2024)

Time Period	ROE Allowed	Number of Rate Cases
Q1 2024	9.66%	12
Q2 2024		
Q3 2024		
Q4 2024		
Full Year Average	**9.66%**	12
Q1 2023	9.71%	10
Q2 2023	9.42%	11
Q3 2023	9.54%	16
Q4 2023	9.67%	26
Full Year Average	**9.60%**	63

Source:
S&P Global Market Intelligence
Regulatory Research Associates
RRA Regulatory Focus
Major Rate Case Decisions

Summary of Cost of Equity Estimates

(a)	(b)	(c)	(d)
Line No.	Methodology		Proxy Results
1	DCF Single Step	Average	9.78%
2		Median	9.71%
3	Historical CAPM	Average	10.23%
4		Median	10.31%
7	Utility Bond Risk Premium: A-Rated Bonds		10.05%
9	Treasury Bond Risk Premium		8.63%
10	Average Gas Utility Other State ROE Decision 2024:		9.66%
11	Average Gas Utility Other State ROE Decision 2023:		9.60%
12	ROE Range		9.30% - 10.30%
13	ROE used in Overall Cost of Capital:		**9.90%**

DTE Electric Company
Staff's Unbundled Cost of Service, Production by Customer Class
TME December 31, 2025
(thousands of dollars)

Case No.: U-21534
Exhibit: S-6
Schedule: F1.1
Witness: M. J. Pung

Production by Class

Cost of Service Study

PRODUCTION COSTS

		(a)	(b)	(c)	(d)	(e)
		Total Electric	Total Residential	Total Commercial Secondary	Total Primary	E-1 St Lgt D9 OPL E-2 Signals
1	Rate Base	8,730,429	4,204,740	2,226,037	2,278,799	20,854
	Revenues:					
2	Revenue From Electric Sales	3,064,187	1,357,891	779,751	915,758	10,787
3	D13 Present Revenue	10,496	4,725	2,713	3,020	38
4	Misc Revenue	34,520	26,514	4,913	3,041	51
5	Total Adjusted Revenues	3,109,203	1,389,131	787,377	921,819	10,876
	Expenses:					
6	Fuel	914,888	392,003	233,702	284,815	4,367
7	Purchased Power	439,217	172,536	102,537	162,372	1,771
8	O & M Expense	516,190	228,542	132,479	153,089	2,079
9	Depreciation	510,279	249,163	129,906	130,136	1,074
10	Other (Reg Assets, etc)	-	-	-	-	-
11	Remove Reg Assets	-	-	-	-	-
12	Accretion of Loss/ Gain on Sale	-	-	-	-	-
13	Other Taxes	121,838	58,241	31,085	32,203	308
14	Income Taxes	97,836	46,538	25,421	25,672	206
15	Amortizations	-	-	-	-	-
16	Total Expenses	2,600,247	1,147,025	655,131	788,286	9,806
17	Net Oper Income	508,955	242,106	132,246	133,533	1,070
18	AFUDC & Other	56,695	27,706	14,432	14,438	118
19	Net Adjustments	860	414	219	224	2
20	Adj Net Oper Income	566,510	270,226	146,898	148,196	1,191
21	Rate of Return	6.49%	6.43%	6.60%	6.50%	5.71%
22	Return @ 5.6598443144768 %	494,129	237,982	125,990	128,976	1,180
23	Income Deficiency	(72,382)	(32,244)	(20,907)	(19,220)	(10)
24	Base Revenue Def / (Sufficiency)	(97,689)	(43,518)	(28,217)	(25,940)	(14)
25	Tree Trim Surge Rev Req (Dist Only)	-	-	-	-	-
26	Monroe Reg Asset Rev Req (Prod Only)	136,947	66,936	34,861	34,865	286
27	Base Revenue Def/ (Sufficiency) w Tree Trim Surge & Monroe	39,258	23,418	6,643	8,925	271
28	Less: D13 Incremental Revenues	(278)	(125)	(72)	(80)	(1)
29	R10 Tax Gross-Up Adjustment (Prod Only)	(0)	3	2	(5)	0
30	**Total Revenue Def/ (Sufficiency)**	**39,536**	**23,546**	**6,717**	**9,000**	**272**
31	**Total Base Revenue Requirement**	**3,103,722**	**1,381,437**	**786,467**	**924,758**	**11,059**

DTE Electric Company
Staff's Unbundled Cost of Service, Production by Customer Class
TME December 31, 2025
(thousands of dollars)

Case No.: U-21534
Exhibit: S-6
Schedule: F1.1
Witness: M. J. Pung
Page: 2 of 4

Production by Class

Cost of Service Study

PRODUCTION COSTS

		(f) D-1.11/Other Residential Service	(g) D-1.2 Time Of Use	(h) D-2 Residential Space Ht	(i) Total Residential	(j) D-3/Other General Service	(k) D-3.2 Secondary Schools	(l) D-4 Lg Genl Service	(m) Total Commercial Secondary
1	Rate Base	4,113,569	39,355	51,816	4,204,740	1,788,569	73,575	363,892	2,226,037
	Revenues:								
2	Revenue From Electric Sales	1,323,961	14,282	19,648	1,357,891	621,948	26,144	131,658	779,751
3	D13 Present Revenue	4,607	50	68	4,725	2,164	91	458	2,713
4	Misc Revenue	25,939	192	384	26,514	4,261	110	542	4,913
5	Total Adjusted Revenues	1,354,507	14,524	20,100	1,389,131	628,373	26,345	132,659	787,377
	Expenses:								
6	Fuel	380,714	4,554	6,736	392,003	185,714	7,864	40,125	233,702
7	Purchased Power	167,825	1,968	2,743	172,536	81,432	3,443	17,663	102,537
8	O & M Expense	222,582	2,503	3,458	228,542	105,466	4,434	22,579	132,479
9	Depreciation	243,937	2,270	2,956	249,163	104,540	4,283	21,083	129,906
10	Other (Reg Assets, etc)	-	-	-	-	-	-	-	-
11	Remove Reg Assets	-	-	-	-	-	-	-	-
12	Accretion of Loss/ Gain on Sale	-	-	-	-	-	-	-	-
13	Other Taxes	56,959	553	730	58,241	24,955	1,029	5,102	31,085
14	Income Taxes	45,546	431	561	46,538	20,358	853	4,209	25,421
15	Amortizations	-	-	-	-	-	-	-	-
16	Total Expenses	1,117,561	12,280	17,184	1,147,025	522,465	21,906	110,761	655,131
17	Net Oper Income	236,945	2,244	2,916	242,106	105,908	4,439	21,898	132,246
18	AFUDC & Other	27,126	252	328	27,706	11,615	476	2,341	14,432
19	Net Adjustments	405	4	5	414	176	7	36	219
20	Adj Net Oper Income	264,476	2,500	3,249	270,226	117,700	4,922	24,275	146,898
21	Rate of Return	6.43%	6.35%	6.27%	6.43%	6.58%	6.69%	6.67%	6.60%
22	Return @ 5.6598443144768 %	232,822	2,227	2,933	237,982	101,230	4,164	20,596	125,990
23	Income Deficiency	(31,654)	(273)	(317)	(32,244)	(16,470)	(758)	(3,680)	(20,907)
24	Base Revenue Def / (Sufficiency)	(42,722)	(368)	(428)	(43,518)	(22,228)	(1,023)	(4,966)	(28,217)
25	Tree Trim Surge Rev Req (Dist Only)	-	-	-	-	-	-	-	-
26	Monroe Reg Asset Rev Req (Prod Only)	65,535	609	792	66,936	28,057	1,149	5,655	34,861
27	Base Revenue Def/ (Sufficiency) w Tree Trim Surge &	22,813	241	365	23,418	5,829	126	688	6,643
28	Less: D13 Incremental Revenues	(122)	(1)	(2)	(125)	(57)	(2)	(12)	(72)
29	R10 Tax Gross-Up Adjustment (Prod Only)	3	0	0	3	1	0	0	2
30	**Total Revenue Def/ (Sufficiency)**	**22,938**	**242**	**366**	**23,546**	**5,888**	**128**	**701**	**6,717**
31	**Total Base Revenue Requirement**	**1,346,899**	**14,524**	**20,014**	**1,381,437**	**627,836**	**26,272**	**132,359**	**786,467**

DTE Electric Company
Staff's Unbundled Cost of Service, Production by Customer Class
TME December 31, 2025
(thousands of dollars)

Case No.: U-21534
Exhibit: S-6
Schedule: F1.1
Witness: M. J. Pung
Page: 3 of 4

Production by Class

Cost of Service Study

PRODUCTION COSTS

		(n)	(o)	(p)	(q)	(r)	(s)
		D-11/Other Primary	D-6.2 Primary Schools	D-8 Interrupt Supply	R-1.1/R-1.2 Metal Melt Process Heat	R-10 Interrupt Supply	Total Primary
1	Rate Base	2,000,560	155,817	67,081	55,341	0	2,278,799
	Revenues:						
2	Revenue From Electric Sales	761,701	50,619	29,445	26,252	47,740	915,758
3	D13 Present Revenue	2,650	176	102	91	-	3,020
4	Misc Revenue	2,667	177	105	93	-	3,041
5	Total Adjusted Revenues	767,018	50,972	29,652	26,436	47,740	921,819
	Expenses:						
6	Fuel	240,867	15,775	10,574	9,924	7,674	284,815
7	Purchased Power	106,946	7,078	4,340	3,923	40,085	162,372
8	O & M Expense	133,914	9,170	5,286	4,719	(0)	153,089
9	Depreciation	114,333	9,142	3,688	2,974	-	130,136
10	Other (Reg Assets, etc)	-	-	-	-	-	-
11	Remove Reg Assets	-	-	-	-	-	-
12	Accretion of Loss/ Gain on Sale	-	-	-	-	-	-
13	Other Taxes	28,266	2,174	963	801	-	32,203
14	Income Taxes	23,006	1,231	774	660	-	25,672
15	Amortizations	-	-	-	-	-	-
16	Total Expenses	647,332	44,570	25,625	23,000	47,759	788,286
17	Net Oper Income	119,686	6,402	4,028	3,436	(19)	133,533
18	AFUDC & Other	12,686	1,016	408	329	-	14,438
19	Net Adjustments	197	15	7	5	-	224
20	Adj Net Oper Income	132,568	7,433	4,443	3,770	(19)	148,196
21	Rate of Return	6.63%	4.77%	6.62%	6.81%	-25231422.61%	6.50%
22	Return @ 5.6598443144768 %	113,229	8,819	3,797	3,132	0	128,976
23	Income Deficiency	(19,340)	1,386	(646)	(638)	19	(19,220)
24	Base Revenue Def / (Sufficiency)	(26,102)	1,870	(872)	(861)	25	(25,940)
25	Tree Trim Surge Rev Req (Dist Only)	-	-	-	-	-	-
26	Monroe Reg Asset Rev Req (Prod Only)	30,632	2,454	985	793	-	34,865
27	Base Revenue Def/ (Sufficiency) w Tree Trim Surge &	4,531	4,324	113	(68)	25	8,925
28	Less: D13 Incremental Revenues	(70)	(5)	(3)	(2)	-	(80)
29	R10 Tax Gross-Up Adjustment (Prod Only)	2	0	0	0	(7)	(5)
30	**Total Revenue Def/ (Sufficiency)**	**4,602**	**4,328**	**116**	**(65)**	**19**	**9,000**
31	**Total Base Revenue Requirement**	**766,303**	**54,948**	**29,561**	**26,187**	**47,759**	**924,758**

DTE Electric Company
Staff's Unbundled Cost of Service, Production by Customer Class
TME December 31, 2025
(thousands of dollars)

Case No.: U-21534
Exhibit: S-6
Schedule: F1.1
Witness: M. J. Pung

Production by Class

Cost of Service Study

PRODUCTION COSTS

		(t)	(u)	(v)	(w)
		D-9 OPL Residential	D-9 OPL Commercial	E-1 St Lght	E-2 Signals
1	Rate Base	434	1,967	8,863	9,590
	Revenues:				
2	Revenue From Electric Sales	257	1,225	5,488	3,817
3	D13 Present Revenue	1	4	19	13
4	Misc Revenue	1	4	33	13
5	Total Adjusted Revenues	259	1,233	5,540	3,843
	Expenses:				
6	Fuel	120	544	2,453	1,250
7	Purchased Power	47	212	956	557
8	O & M Expense	54	243	1,094	689
9	Depreciation	21	93	420	541
10	Other (Reg Assets, etc)	-	-	-	-
11	Remove Reg Assets	-	-	-	-
12	Accretion of Loss/ Gain on Sale	-	-	-	-
13	Other Taxes	7	30	135	137
14	Income Taxes	2	18	78	108
15	Amortizations	-	-	-	-
16	Total Expenses	250	1,140	5,135	3,281
17	Net Oper Income	9	94	405	563
18	AFUDC & Other	2	10	46	60
19	Net Adjustments	0	0	1	1
20	Adj Net Oper Income	11	104	452	624
21	Rate of Return	2.62%	5.29%	5.10%	6.50%
22	Return @ 5.6598443144768 %	25	111	502	543
23	Income Deficiency	13	7	50	(81)
24	Base Revenue Def / (Sufficiency)	18	10	67	(109)
25	Tree Trim Surge Rev Req (Dist Only)	-	-	-	-
26	Monroe Reg Asset Rev Req (Prod Only)	5	25	111	145
27	Base Revenue Def/ (Sufficiency) w Tree Trim Surge &	23	34	178	36
28	Less: D13 Incremental Revenues	(0)	(0)	(1)	(0)
29	R10 Tax Gross-Up Adjustment (Prod Only)	0	0	0	0
30	**Total Revenue Def/ (Sufficiency)**	**23**	**35**	**179**	**36**
31	**Total Base Revenue Requirement**	**281**	**1,259**	**5,667**	**3,853**

DTE Electric Company
Staff's Unbundled Cost of Service, Distribution by Voltage Class
TME December 2025
(thousands of dollars)

Case No.: U-21534
Exhibit: S-6
Schedule: F1.2
Witness: M. J. Pung
Page: 1 of 1

Distribution by Voltage

Cost of Service Study
DISTRIBUTION COSTS

		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
		Total Electric	Residential Secondary	Commercial Secondary	Primary	Subtransmission	Transmission	D-9 OPL Residential	D-9 OPL Commercial	E-1 St Lght	E-2 Signals
1	Rate Base	13,236,583	8,074,096	3,645,521	1,012,084	83,351	111,493	12,629	32,430	255,458	9,521
	Revenues:										
2	Revenue From Electric Sales	2,278,066	1,431,967	593,121	161,015	11,229	11,411	1,850	8,352	57,552	1,571
3	D13 Present Revenue	566	356	147	40	3	3	0	2	14	0
4	Misc Revenue	80,816	59,881	10,761	3,552	2,086	3,663	22	253	572	26
5	Total Adjusted Revenues	2,359,448	1,492,204	604,030	164,607	13,318	15,077	1,872	8,606	58,137	1,597
	Expenses:										
6	Fuel	-	-	-	-	-	-	-	-	-	-
7	Purchased Power	-	-	-	-	-	-	-	-	-	-
8	O & M Expense	645,332	444,542	148,094	36,259	1,924	3,209	432	1,486	8,955	432
9	Depreciation	743,695	456,980	200,456	46,820	3,176	3,624	1,437	3,200	27,497	506
10	Other (Reg Assets, etc)	-	-	-	-	-	-	-	-	-	-
11	Remove Reg Assets	-	-	-	-	-	-	-	-	-	-
12	Accretion of Loss/ Gain on Sale	-	-	-	-	-	-	-	-	-	-
13	Other Taxes	259,998	160,088	69,330	19,021	1,560	2,070	345	826	6,579	179
14	Income Taxes	104,931	63,600	27,495	9,232	983	912	(50)	457	2,231	71
15	Amortizations	-	-	-	-	-	-	-	-	-	-
16	Total Expenses	1,753,956	1,125,208	445,375	111,332	7,643	9,815	2,164	5,969	45,262	1,187
17	Net Oper Income	605,493	366,996	158,655	53,274	5,674	5,262	(291)	2,637	12,876	410
18	AFUDC & Other	*1,177*	*718*	*324*	*90*	*7*	*10*	*1*	*3*	*23*	*1*
19	Net Adjustments	1,394	850	384	107	9	12	1	3	27	1
20	Adj Net Oper Income	608,064	368,564	159,363	53,471	5,690	5,283	(289)	2,644	12,925	412
21	Rate of Return	4.59%	4.56%	4.37%	5.28%	6.83%	4.74%	-2.29%	8.15%	5.06%	4.33%
22	Return @ 5.6598443144768 %	749,170	456,981	206,331	57,282	4,718	6,310	715	1,836	14,459	539
23	Income Deficiency	141,106	88,417	46,968	3,812	(973)	1,027	1,004	(808)	1,533	127
24	Base Revenue Def / (Sufficiency)	190,442	119,331	63,389	5,144	(1,313)	1,386	1,355	(1,091)	2,069	171
25	Tree Trim Surge Rev Req (Dist Only)	10,133	6,595	3,055	388	0	1	3	12	71	8
26	Monroe Reg Asset Rev Req (Prod Only)	-	-	-	-	-	-	-	-	-	-
27	Base Revenue Def/ (Sufficiency) w Tree Trim Surge & Monroe	200,575	125,927	66,444	5,532	(1,313)	1,387	1,358	(1,079)	2,140	179
28	Less: D13 Incremental Revenues	59	37	15	4	0	0	0	0	1	0
29	R10 Tax Gross-Up Adjustment (Prod Only)	-	-	-	-	-	-	-	-	-	-
30	**Total Revenue Def/ (Sufficiency)**	**200,516**	**125,890**	**66,429**	**5,528**	**(1,313)**	**1,386**	**1,358**	**(1,079)**	**2,139**	**179**
31	**Total Base Revenue Requirement**	**2,478,583**	**1,557,856**	**659,550**	**166,542**	**9,916**	**12,797**	**3,208**	**7,272**	**59,691**	**1,750**

DTE Electric Company
Staff's Customer Charges by Voltage Class
(thousands of dollars)

Case No. U-21534
Exhibit: S-6
Schedule: F1.4
Witness M. J. Pung
Page: 1 of 1

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
	Account	Residential	Commercial Secondary	Primary	Sub-Trans	Transmission	Total
	Dist Operation Exp:						
1	586 Meters	$ 7,752	$ 1,194	$ 110	$ 7	$ 5	$ 9,068
2	587 Customer Installs	394	61	6	0	0	460
3							
4	**Dist Maintenance Exp:**						
5	597 Meters	-	-	-	-	-	-
6							
7	**Customer Accounts**						
8	901 Supervision	2,024	209	3	0	0	2,237
9	902 Meter Read	1,916	295	27	2	1	2,241
10	903 Customer Records	83,550	10,887	106	3	3	94,548
11	905 Miscellaneous	0	0	0	0	0	0
12							
13	**Cust Serv & Inf**						
14	907 Supervision	3,745	384	5	0	0	4,135
15	908 Customer Assist	14,784	1,518	21	1	0	16,324
16	909 Info & Instr	(3)	(0)	(0)	(0)	(0)	(3)
17	910 Miscellaneous	5,544	569	8	0	0	6,122
18							
19	**Depreciation Expense**						
20	369 Services Depreciation Expense	33,213	4,648	467	102	269	38,699
21	370 Meters Depreciation Expense	25,080	3,862	356	22	17	29,338
22							
23	**Return on Meters and Services in Rate Base**						
24	**Plant**						
25	369 Services	$ 520,847	$ 72,607	$ 7,089	$ 1,552	$ 4,082	$ 606,177
26	370 Meters	487,907	75,139	6,921	432	337	570,737
27	**CWIP**						
28	369 Services	(12,132)	(1,528)	(27)	(6)	(15)	(13,708)
29	370 Meters	5,640	869	80	5	4	6,597
30	**Reserve**						
31	369 Services	357,937	50,219	5,145	1,127	2,962	417,390
32	370 Meters	116,441	17,932	1,652	103	80	136,208
33							
34	**Rate base**	$ 527,884	$ 78,936	$ 7,267	$ 754	$ 1,364	$ 616,205
35							
36	Weighted average cost of capital (WACC)	5.66%	5.66%	5.66%	5.66%	5.66%	5.66%
37							
38	Return (Line 34 * Line 36)	$ 29,877	$ 4,468	$ 411	$ 43	$ 77	$ 34,876
39							
40	**Property Tax**						
41	Property Tax on meters and services	$ 12,671	$ 5,695	$ 1,573	$ 129	$ 169	20,237
42							
43	**Total Customer Related Cost**	**$ 220,548**	**$ 33,789**	**$ 3,093**	**$ 309**	**$ 543**	**$ 258,282**
44							
45	Customers	2,074,827	212,968	2,909	93	70	2,290,867
46	Cost per Customer per Year	106.30	158.66	1,063.21	3,330.53	7,803.32	
47							
48	**Cost per Customer per Month**	**$ 8.86**	**$ 13.22**	**$ 88.60**	**$ 277.54**	**$ 650.28**	

DTE Electric Company
Capacity Charge Revenue Requirement by Customer Class /
Staff's SRM Capacity Charge
(thousands of dollars)

Case No. U-21534
Exhibit: S-6
Schedule: F1.5
Witness: M. J. Pung

CAPACITY CHARGE

Cost of Service Study
75-0-25
PRODUCTION COSTS

		(a)	(b)	(c)	(d)	(e)
		Total Electric	Total Residential	Total Commercial Secondary	Total Primary	E-1 St Lgt D9 OPL E-2 Signals
	CAPACITY COSTS DETERMINATION					
1	Net Production Costs Rev. Req. (Exh A-16 Sch F1.1 Line 29)	$ 3,103,722				
2	Less Fuel (Exh A-16 Sch F1.1 Line 6)	(914,888)				
3	Less MERC Rev Req (Exh A-16, Sch F1.5 Page 6 Line 9)	(6,392)				
4	Less MISO Energy in PP (Exh A-13 Sch C4 Lines 21-22)	(40,376)				
5	Less Other Energy in PP (WP A16 F1 Sch 11.5 Line 14)	(260,787)				
6	Less Variable O&M (Exh A-16 Sch F1.5 Page 5 Line 8)	(30,392)				
7	Subtotal	$ 1,850,887				
8						
9	Proj 2025 Energy Sales Rev Net of Fuel (per A-26, Sch P3, Line 23)	(815,274)				
10						
11	Capacity Revenue Requirement (Line 6 + Line 7)	$ 1,035,613				
12						
13	SRM Capacity Charge Demand (DTE 2022 10-k, pg 9 / net gen capacity 11,717 MW + long-term contracts 560 MW)	12,277 MW				
14						
15	SRM Capacity Charge per MW-Year (Line 11 / Line 13 x 1,000)	84,354				
16						
17	SRM Capacity Charge per MW-Day (Line 15 / 365)	231.11				
18						
19	**Allocator**					
20	Sch 200B 4 CP Excl R10 (alloc. 251)	100.0000	51.7411	25.3267	22.8438	0.0884
21						
22	**Revenue Requirement**					
23	Capacity Revenue Requirement (Line 8 * Line 9/100)	$ 1,035,613	$ 535,838	$ 262,287	$ 236,574	$ 915
24	Non-Capacity Revenue Requirement (Line 12 less Line 10)	2,068,109	845,600	524,181	688,184	10,144
25	Total Production Revenue Requirement (Exh A-16 Sch F1.1 L 27)	$ 3,103,722	$ 1,381,437	$ 786,467	$ 924,758	$ 11,059

DTE Electric Company
Capacity Charge Revenue Requirement by Customer Class /
Staff's SRM Capacity Charge
(thousands of dollars)

CAPACITY CHARGE

Cost of Service Study
75-0-25
PRODUCTION COSTS

		(f)	(g)	(i)	(j)	(g)	(h)	(i)	(j)
		D-1.11/Other Residential Service	D-1.2 Time Of Use	D-2 Residential Space Ht	Total Residential	D-3/Other General Service	D-3.2 Secondary Schools	D-4 Lg Genl Service	Total Commercial Secondary
	Allocator								
20	Sch 200B 4 CP Excl R10 (alloc. 251)	50.7990	0.4196	0.5225	51.7411	20.5234	0.8270	3.9763	25.3267
	Revenue Requirement								
23	Capacity Rev Req (P1 Line 7 * Line 8/100)	$ 526,081	$ 4,345	$ 5,411	$ 535,838	$ 212,543	$ 8,564	$ 41,180	$ 262,287
24	Non-Capacity Revenue Requirement (Line 12 less Line 10)	820,817	10,179	14,603	845,600	415,293	17,708	91,180	524,181
25	Total Production Revenue Requirement (Exh A-16 Sch F1.1 L 27)	$ 1,346,899	$ 14,524	$ 20,014	$ 1,381,437	$ 627,836	$ 26,272	$ 132,359	$ 786,467

DTE Electric Company
Capacity Charge Revenue Requirement by Customer Class /
Staff's SRM Capacity Charge
(thousands of dollars)

Case No. U-21534
Exhibit: S-6
Schedule: F1.5
Witness: M. J. Pung

CAPACITY CHARGE

Cost of Service Study
75-0-25
PRODUCTION COSTS

		(k)	(l)	(m)	(n)	(o)	(p)
		D-11/Other Primary	D-6.2 Primary Schools	D-8 Interrupt Supply	R-1.1/R-1.2 Metal Melt Process Heat	R-10 Interrupt Supply	Total Primary
	Allocator						
20	Sch 200B 4 CP Excl R10 (alloc. 251)	20.1388	1.8002	0.5316	0.3733	-	22.8438
	Revenue Requirement						
23	Capacity Rev Req (P1 Line 7 * Line 8/100)	$ 208,560	$ 18,643	$ 5,505	$ 3,866	$ -	$ 236,574
24	Non-Capacity Revenue Requirement (Line 12 less Line 10)	557,744	36,304	24,056	22,321	47,759	688,184
25	Total Production Revenue Requirement (Exh A-16 Sch F1.1 L 27)	$ 766,303	$ 54,948	$ 29,561	$ 26,187	$ 47,759	$ 924,758

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DTE Electric Company
Capacity Charge Revenue Requirement by Customer Class /
Staff's SRM Capacity Charge
(thousands of dollars)

Case No. U-21534
Exhibit: S-6
Schedule: F1.5
Witness: M. J. Pung

CAPACITY CHARGE

Cost of Service Study

75-0-25

PRODUCTION COSTS

		(q)	(r)	(s)	(t)
		D-9 OPL Residential	D-9 OPL Commercial	E-1 St Lght	E-2 Signals
	Allocator				
20	Sch 200B 4 CP Excl R10 (alloc. 251)	-	-	-	0.0884
	Revenue Requirement				
23	Capacity Rev Req (P1 Line 7 * Line 8/100)	$ -	$ -	$ -	$ 915
24	Non-Capacity Revenue Requirement (Line 12 less Line 10)	281	1,259	5,667	2,938
25	Total Production Revenue Requirement (Exh A-16 Sch F1.1 L 27)	$ 281	$ 1,259	$ 5,667	$ 3,853

DTE Electric Company
Staff's Variable Production OM Costs
(thousands of dollars)

Case No.: U-21534
Exhibit: S-6
Schedule: F1.5
Witness: M. J. Pung
Page: 5 of 6

		(a) Total O&M	(b) Labor O&M	(c) Variable O&M (a)-(b)
	POWER PRODUCTION EXPENSES			
1	501 Fuel Handling 1/	$ 25,008	$ -	$ 25,008
2	502 Steam Expenses 2/	13,902	15,792	$ -
3	505 Electric Expenses 2/	1,988	3,238	$ -
4	519 Coolants and Water	2,553	2,251	$ 302
5	520 Steam Expenses	(11,268)	4,299	$ -
6	538 Electric Expense	1,116	-	$ 1,116
7	548 Peaker Expense	3,984	17	3,967
8	TOTAL	$ 37,284	$ 25,597	$ 30,392

1/ Labor O&M deduction in 501 Fuel Handling eliminated per U-20836 Order
2/ Normalized to eliminate negative variable O&M

DTE Electric Company
Staff's MERC Revenue Requirement for Capacity Charge Calculation
(thousands of dollars)

Case No.: U-21534
Exhibit: S-6
Schedule: F1.5
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Page: 6 of 6

			(a) Amount
		Source	
	MERC		
1	Gross Plant in Service	WP A16 F1 Sch 5	$ 101,217
2	Less: Accumulated Depreciation	WP A16 F1 Sch 6	(77,899)
3	CWIP	WP A16 F1 Sch 8	156
4	Net Plant	Sum Lines 1 - 3	23,474
5	Weighted Average Cost of Capital	Exh A-14 Sch D1	5.66%
6	Return	Line 4 x Line 5	$ 1,329
7	Depreciation Expense	WP A16 F1 Sch 7	4,089
8	Property Tax	WP A16 F1 Sch 17	975
9	MERC Revenue Requirement	Sum Lines 6 - 8	$ 6,392

DTE Electric Company
Case No. U-21534
Staff Present and Proposed Revenue by Rate Schedule

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Residential Service Rate Non-Transmitting Meter - D1

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
Page: 2 of 58

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
1	Power Supply Charges						
2	Non-Capacity Charge	90,377	MWh	$0.07809	7,058	$0.05654	5,110
3	Capacity Charges:						
4	First 17 KWH/Day	50,492	MWh	$0.01128	570	$0.03118	1,575
5	Excess	39,884	MWh	$0.01626	649	$0.04495	1,793
6	Power Supply Subtotal	90,377	MWh	**9.16¢**	**8,276**	**9.38¢**	**8,477**
7							
8	PSCR	90,377	MWh	$0.00000	0	$0.00000	0
9	REPS	9,516	Meters	$0.00000	0	$0.00000	0
10	Total Full Service Power Supply	90,377	MWh	**9.16¢**	**8,276**	**9.38¢**	**8,477**
11							
12	**Full Service Distribution**	Quantity	Units				
13							
14	Service Charge	9,516	Cust.	$8.50	971	$8.50	971
15	Income Assistance	121	Cust.	($8.50)	(12)	($8.50)	(12)
16	Senior Citizen Provision	454	Cust.	($4.25)	(23)	($4.25)	(23)
17							
18	Distribution Charge	90,377	MWh	$0.08137	7,354	$0.08962	8,099
19	Distribution System	90,377	MWh	**9.17¢**	**8,289**	**10.00¢**	**9,034**
20	IRM	90,377	MWh	$0.000941	85	$0.000941	85
21	Nuclear Decomm.	90,377	MWh	$0.000882	80	$0.000882	80
22	Energy Waste Reduction	90,377	MWh	$0.002552	231	$0.002552	231
23	LIEAF	9,516	Cust.	$0.88	100	$0.88	100
24	Distribution Surcharges	90,377	MWh	**0.55¢**	**496**	**0.55¢**	**496**
25							
26	Total Full Service Distribution			**9.72¢**	**8,785**	**10.54¢**	**9,530**
27	**Total Full Service D1**	90,377	MWh	**18.88¢**	**17,061**	**19.92¢**	**18,007**
28							
29	**Choice**	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
30							
31	Capacity Charges:						
32	First 17 KWH/Day	0	MWh	$0.01128	0	$0.03118	0
33	Excess	0	MWh	$0.01626	0	$0.04495	0
34	Capacity Total	0	MWh		**0**		**0**
35							
36	Distribution Charges						
37	Service Charge	0	Cust.	$8.50	0	$8.50	0
38	Income Assistance	0	Cust.	($8.50)	0	($8.50)	0
39	Senior Citizen Provision	0	Cust.	($4.25)	0	($4.25)	0
40							
41	Distribution Charge	0	MWh	$0.08137	0	$0.08962	0
42	Distribution System	0	MWh		**0**		**0**
43	IRM	0	MWh	$0.000941	0	$0.000941	0
44	Nuclear Decomm.	0	MWh	$0.000882	0	$0.000882	0
45	Energy Waste Reduction	0	MWh	$0.002552	0	$0.002552	0
46	LIEAF	0	Cust.	$0.88	0	$0.88	0
47	Distribution Surcharges	0	MWh		**0**		**0**
48							
49	**Total Choice D1**	0	MWh		**0**		**0**
50							
51	**Total D1**	90,377	MWh	**18.88¢**	**17,061**	**19.92¢**	**18,007**
52	Increase/Decrease ($)						947

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Interruptible Space-Conditioning Service Rate - D1.1 Residential

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply						
1	Power Supply Charges						
2	Non-Capacity Charge	321,827	MWh	$0.06085	19,583	$0.04414	14,206
3	Capacity Charges						
4	Summer Energy	300,672	MWh	$0.01089	3,274	$0.02976	8,949
5	Winter Winter	21,155	MWh	$0.00270	57	$0.00738	156
6	Power Supply Subtotal	321,827	MWh		22,915		23,312
7							
8	PSCR	321,827	MWh	$0.00000	0	$0.00000	0
9	Total Full Service Power Supply	321,827	MWh	**7.12¢**	**22,915**	**7.24¢**	**23,312**
10							
11	**Full-Service Distribution**	Quantity	Units				
12		Customers	Months				
13	Service Charge (June-Oct)	255,750	5	$1.95	2,494	$1.95	2,494
14							
15	Distribution Charge	321,827	MWh	$0.08137	26,187	$0.08962	28,841
16	Distribution System	321,827	MWh	**8.91¢**	**28,681**	**9.74¢**	**31,334**
17	IRM	321,827	MWh	$0.000941	303	$0.000941	303
18	Nuclear Decomm.	321,827	MWh	$0.000882	284	$0.000882	284
19	Energy Waste Reduction	321,827	MWh	$0.002552	821	$0.002552	821
20	Distribution Surcharges	321,827	MWh	**0.44¢**	**1,408**	**0.44¢**	**1,408**
21							
22	Total Full Service Distribution	321,827	MWh	**9.35¢**	**30,089**	**10.17¢**	**32,742**
23	**Total Full-Service D1.1**	321,827	MWh	**16.47¢**	**53,003**	**17.42¢**	**56,054**
24							
25	**Choice**	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
26							
27	Capacity Charges						
28	Summer Energy	0	MWh	$0.01089	0	$0.02976	0
29	Winter Energy	0	MWh	$0.00270	0	$0.00738	0
30	Capacity Total	0	MWh		**0**		**0**
31							
32	Distribution Charges						
33		Customers	Months				
34	Service Charge (June-Oct)	0	5	$1.95	0	$1.95	0
35							
36	Distribution Energy	0	MWh	$0.08137	0	$0.08962	0
37	Distribution System	0	MWh		**0**		**0**
38	IRM	0	MWh	0.000941	0	0.000941	0
39	Nuclear Decomm.	0	MWh	$0.000882	0	$0.000882	0
40	Energy Waste Reduction	0	MWh	$0.002552	0	$0.002552	0
41	Distribution Surcharges	0	MWh		**0**		**0**
42							
43	**Total Choice D1.1**	0	MWh		**0**		**0**
44							
45	**Total D1.1**	321,827	MWh	**16.47¢**	**53,003**	**17.42¢**	**56,054**
46	Increase/Decrease ($)						3,051

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Residential Service Rate Enhanced TOU - D1.2

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply						
1	Power Supply Charges						
2	Non-Capacity Charge						
3	Summer:						
4	On-Peak	19,491	MWh	$0.13949	$2,719	$0.11146	2,172
5	Off-Peak	58,273	MWh	$0.04696	$2,737	$0.03752	2,187
6	Winter:						
7	On-Peak	26,292	MWh	$0.11783	$3,098	$0.09415	2,475
8	Off-Peak	92,765	MWh	$0.04512	$4,186	$0.03606	3,345
9	Capacity Charges						
10	Summer:						
11	On-Peak	19,491	MWh	$0.01690	329	$0.04758	927
12	Off-Peak	58,273	MWh	$0.00569	332	$0.01602	933
13	Winter:						
14	On-Peak	26,292	MWh	$0.01427	375	$0.04019	1,057
15	Off-Peak	92,765	MWh	$0.00547	507	$0.01539	1,428
16	Power Supply Subtotal	196,822	MWh		14,282		14,524
17							
18	PSCR	196,822	MWh	$0.00000	0	$0.00000	0
19	REPS	13,500	Meters	$0.00000	0	$0.00000	0
20	Total Full Service Power Supply	196,822	MWh	**7.26¢**	**14,282**	**7.38¢**	**14,524**
21							
22	**Full Service Distribution**	Quantity	Units				
23							
24	Service Charge	13,500	Cust.	$8.50	1,377	$8.50	1,377
25	Income Assistance	76	Cust.	($8.50)	(8)	($8.50)	(8)
26	Senior Citizen Provision	317	Cust.	($4.25)	(16)	($4.25)	(16)
27							
28	Distribution Energy	196,822	MWh	$0.08137	16,015	$0.08962	17,638
29	Distribution System	196,822	MWh	**8.82¢**	**17,368**	**9.65¢**	**18,991**
30	IRM	196,822	MWh	$0.000941	185	$0.000941	185
31	Nuclear Decomm.	196,822	MWh	$0.000882	174	$0.000882	174
32	Energy Waste Reduction	196,822	MWh	$0.002552	502	$0.002552	502
33	LIEAF	13,500	Cust.	$0.88	143	$0.88	143
34	Distribution Surcharges	196,822	MWh	**0.51¢**	**1,004**	**0.51¢**	**1,004**
35							
36	Total Full Service Distribution	196,822	MWh	**9.33¢**	**18,372**	**10.16¢**	**19,995**
37	**Total Full-Service D1.2**	196,822	MWh	**16.59¢**	**32,655**	**17.54¢**	**34,519**
38							
39	**Choice**	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
40							
41	Capacity Charges						
42	Summer:						
43	On-Peak	0	MWh	$0.01690	0	$0.04758	0
44	Off-Peak	0	MWh	$0.00569	0	$0.01602	0
45	Winter:						
46	On-Peak	0	MWh	$0.01427	0	$0.04019	0
47	Off-Peak	0	MWh	$0.00547	0	$0.01539	0
48	Capacity Total	0	MWh		**0**		**0**
49							
50	Service Charge	0	Cust.	$8.50	0	$8.50	0
51	Income Assistance	0	Cust.	($8.50)	0	($8.50)	0
52	Senior Citizen Provision		Cust.	($4.25)	0	($4.25)	0
53							
54	Distribution Charge	0	MWh	$0.08137	0	$0.08962	0
55	Distribution System	0	MWh		**0**		**0**
56	IRM	0	MWh	$0.000941	0	$0.000941	0
57	Nuclear Decomm.	0	MWh	$0.000882	0	$0.000882	0
58	Energy Waste Reduction	0	MWh	$0.002552	0	$0.002552	0
59	LIEAF	0	Cust.	$0.88	0	$0.88	0
60	Distribution Surcharges	0	MWh		**0**		**0**
61							
62	**Total Choice D1.2**	0	MWh		**0**		**0**
63							
64	**Total D1.2**	196,822	MWh	**16.59¢**	**32,655**	**17.54¢**	**34,519**
65	Increase/Decrease ($)						1,865

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Residential Service Special Low Income Pilot Rate - D1.6

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Revenue ($000)	(e) Proposed Rate	(f) Revenue ($000)
	Full Service Power Supply						
1	Power Supply Charges						
2	Non-Capacity Charge	242,162	MWh	$0.07809	18,910	$0.05654	13,692
3	Capacity Charges						
4	First 17 KWH/Day	159,969	MWh	$0.01128	1,804	$0.03118	4,988
5	Excess	82,193	MWh	$0.01626	1,336	$0.04495	3,695
6	Power Supply Subtotal	242,162	MWh	9.11¢	22,051	9.24¢	22,375
7							
8	PSCR	242,162	MWh	$0.00000	0	$0.00000	0
9	REPS	32,000	Meters	$0.00000	0	$0.00000	0
10	Total Full Service Power Supply	242,162	MWh	**9.11¢**	**22,051**	**9.24¢**	**22,375**
11							
12	**Full Service Distribution**	Quantity	Units				
13							
14	Service Charge	32,000	Cust.	$8.50	3,264	$8.50	3,264
15	Income Assistance	32,000	Cust.	($40.00)	(15,360)	($40.00)	(15,360)
16							
17	Distribution Charge	242,162	MWh	$0.08137	19,705	$0.08962	21,701
18	Distribution System	242,162	MWh	**3.14¢**	**7,609**	**3.97¢**	**9,605**
19	IRM	242,162	MWh	$0.000941	228	$0.000941	228
20	Nuclear Decomm.	242,162	MWh	$0.000882	214	$0.000882	214
21	Energy Waste Reduction	242,162	MWh	$0.002552	618	$0.002552	618
22	LIEAF	32,000	Cust.	$0.88	338	$0.88	338
23	Distribution Subtotal	242,162	MWh	**0.58¢**	**1,397**	**0.58¢**	**1,397**
24							
25	Total Full Service Distribution			**3.72¢**	**9,006**	**4.54¢**	**11,003**
26	**Total Full Service D1.6**	242,162	MWh	**12.83¢**	**31,057**	**13.78¢**	**33,378**
27							
28	**Choice**	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
29							
30	Capacity Charges						
31	First 17 KWH/Day	0	MWh	$0.01128	0	$0.03118	0
32	Excess	0	MWh	$0.01626	0	$0.04495	0
33	Total Capacity	0			**0**		**0**
34							
35	Service Charge	0	Cust.	$8.50	0	$8.50	0
36	Income Assistance	0	Cust.	($40.00)	0	($40.00)	0
37							
38	Distribution Charge	0	MWh	$0.08137	0	$0.08962	0
39	Distribution System	0	MWh		**0**		**0**
40	IRM	0	MWh	0.000941	0	0.000941	0
41	Nuclear Decomm.	0	MWh	$0.000882	0	$0.000882	0
42	Energy Waste Reduction	0	MWh	$0.002552	0	$0.002552	0
43	LIEAF	0	Cust.	$0.88	0	$0.88	0
44	Distribution Subtotal	0	MWh		**0**		**0**
45							
46	**Total Choice D1.6**	0	MWh		**0**		**0**
47							
48	**Total D1.6**	242,162	MWh	**12.83¢**	**31,057**	**13.78¢**	**33,378**
49	Increase/Decrease ($)						2,320

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Geothermal Time of Day Service Rate - Residential D1.7

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
Page: 6 of 58

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
1	Power Supply Charges						
2	Non-Capacity Charge	108,929	MWh	$0.04582	$4,991		
3	Summer Energy (11 a.m. Peak Start)						
4	On-Peak	6,541	MWh			$0.08439	552
5	Off-Peak	15,676	MWh			$0.02795	438
6	Winter Energy (11 a.m. Peak Start)						
7	On-Peak	17,639	MWh			$0.03646	643
8	Off-Peak	69,072	MWh			$0.02865	1,979
9							
10	Capacity Charges:						
11	Summer Energy (11 a.m. Peak Start)						
12	On-Peak	6,541	MWh	$0.04248	$278	$0.05409	354
13	Off-Peak	15,676	MWh	$0.00001	$0	$0.01792	281
14	Winter Energy (11 a.m. Peak Start)						
15	On-Peak	17,639	MWh	$0.01717	$303	$0.02337	412
16	Off-Peak	69,072	MWh	$0.00369	$255	$0.01836	1,268
17	Power Supply Subtotal	108,929	MWh		$5,827		5,928
18							
19	PSCR	108,929	MWh	$0.00000	0	$0.00000	0
20	Total Power Supply	108,929	MWh	**5.35¢**	**5,827**	**5.44¢**	**5,928**
21							
22	**Full Service Distribution**	Quantity	Units				
23							
24	Service Charge ($/day)	8,160	Cust.	$0.067	200	$0.067	200
25							
26	Distribution Charge	108,929	MWh	$0.08137	8,864	$0.08962	9,762
27	Distribution System	108,929	MWh	**8.32¢**	**9,063**	**9.14¢**	**9,961**
28	IRM	108,929	MWh	$0.000941	103	$0.000941	103
29	Nuclear Decomm.	108,929	MWh	$0.000882	96	$0.000882	96
30	Energy Waste Reduction	108,929	MWh	$0.002552	278	$0.002552	278
31	Distribution Surcharges	108,929	MWh	**0.44¢**	**477**	**0.44¢**	**477**
32							
33	Total Full Service Distribution	108,929	MWh	**8.76¢**	**9,540**	**9.58¢**	**10,438**
34	**Total Full-Service D1.7**	108,929	MWh	**14.11¢**	**15,366**	**15.02¢**	**16,366**
35							
36	**Choice**	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
37							
38	Capacity Charges:						
39	Summer Energy (11 a.m. Peak Start)						
40	On-Peak	0	MWh	$0.04248	0	$0.05409	0
41	Off-Peak	0	MWh	$0.00001	0	$0.01792	0
42	Winter Energy (11 a.m. Peak Start)						
43	On-Peak	0	MWh	$0.01717	0	$0.02337	0
44	Off-Peak	0	MWh	$0.00369	0	$0.01836	0
45	Total Capacity	0	MWh		**0**		**0**
46							
47	Distribution Charges						
48	Service Charge ($/day)	0	Cust.	$0.067	0	$0.067	0
49							
50	Distribution Charge	0	MWh	$0.08137	0	$0.08962	0
51	Distribution System	0	MWh		**0**		**0**
52	IRM	0	MWh	$0.000941	0	$0.000941	0
53	Nuclear Decomm.	0	MWh	$0.000882	0	$0.000882	0
54	Energy Waste Reduction	0	MWh	$0.002552	0	$0.002552	0
55	Distribution Surcharges	0	MWh		**0**		**0**
56							
57	**Total Choice D1.7**	0	MWh		**0**		**0**
58							
59	**Total D1.7**	108,929	MWh	**14.11¢**	**15,366**	**15.02¢**	**16,366**
60	Increase/Decrease ($)						999

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Residential Service Rate Dynamic Peak Pricing - D1.8

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
1	Non-Capacity Charge						
2	Off-Peak (11pm-7am)	87,291	MWh	$0.03940	3,439	$0.02808	2,452
3	Mid-Peak (7pm-11pm, 7am-3pm)	57,481	MWh	$0.07635	4,389	$0.05443	3,129
4	On-Peak (3pm-7pm)	21,918	MWh	$0.14747	3,232	$0.10608	2,325
5	Critical Peak (3pm-7pm)	83	MWh	$0.14747	12	$0.10608	9
6	Capacity Charges:						
7	Off-Peak (11pm-7am)	87,291	MWh	$0.00590	515	$0.01786	1,559
8	Mid-Peak (7pm-11pm, 7am-3pm)	57,481	MWh	$0.01144	658	$0.03461	1,990
9	On-Peak (3pm-7pm)	21,918	MWh	$0.02067	453	$0.06630	1,453
10	Critical Peak (3pm-7pm)	83	MWh	$0.80253	67	$0.84392	70
11	Power Supply Subtotal	166,773	MWh	$0.07654	12,765	$0.07787	12,986
12							
13	PSCR	166,773	MWh	$0.00000	0	$0.00000	0
14	REPS	21,200	Cust	$0.00000	0	$0.00000	0
15	Total Full Service Power Supply	166,773	MWh	**7.65¢**	**12,765**	**7.79¢**	**12,986**
16							
17	**Full Service Distribution**	Quantity	Units				
18							
19	Sales Applied to Min.		MWh				
20	Service Charge	21,200	Cust.	$8.50	2,162	$8.50	2,162
21	Income Assistance	958	Cust.	($8.50)	(98)	($8.50)	(98)
22	Senior Citizen Provision	498	Cust.	($4.25)	(25)	($4.25)	(25)
23							
24	Distribution Charge	166,773	MWh	$0.08137	13,570	$0.08962	14,945
25	Distribution System	166,773	MWh	**9.36¢**	**15,610**	**10.18¢**	**16,985**
26	IRM	166,773	MWh	$0.000941	157	$0.000941	157
27	Nuclear Decomm.	166,773	MWh	$0.000882	147	$0.000882	147
28	Energy Waste Reduction	166,773	MWH	$0.002552	426	$0.002552	426
29	LIEAF	21,200	cust	$0.88	224	$0.88	224
30	Distribution Surcharges	166,773	MWh	**0.57¢**	**954**	**0.57¢**	**954**
31							
32	Total Full Service Distribution			**9.93¢**	**16,563**	**10.76¢**	**17,938**
33	**Total Full Service D1.8**	166,773	MWh	**17.59¢**	**29,328**	**18.54¢**	**30,924**
34	Increase/Decrease ($)						1,596

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Residential Electric Vehicle Rate - D1.9

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply						
1	Power Supply Charges						
2	Non-Capacity Charge	12,539	MWh				
3	On-Peak	2,063	MWh	$0.14635	302	$0.10606	219
4	Off-Peak	10,477	MWh	$0.03657	383	$0.02650	278
5	Capacity Charge						
6							
7	On-Peak	2,063	MWh	$0.02470	51	$0.06793	140
8	Off-Peak	10,477	MWh	$0.00618	65	$0.01700	178
9		12,539	MWh				
10							
11	PSCR	12,539	MWh	$0.00000	0	$0.00000	0
12	Total Full Service Power Supply	12,539	MWh	**6.39¢**	**801**	**6.50¢**	**815**
13							
14	**Full Service Distribution**	Quantity	Units				
15							
16	Service Charge ($/month)	4,978	Cust.	$1.95	116	$1.95	116
17							
18	Distribution Charge	12,539	MWh	$0.08137	1,020	$0.08962	1,124
19	Distribution System	12,539	MWh	**9.07¢**	**1,137**	**9.89¢**	**1,240**
20	IRM	12,539	MWh	$0.000941	12	$0.000941	12
21	Nuclear Decomm.	12,539	MWh	$0.000882	11	$0.000882	11
22	Energy Waste Reduction	12,539	MWh	$0.002552	32	$0.002552	32
23	Distribution Surcharges	12,539	MWh	**0.44¢**	**55**	**0.44¢**	**55**
24							
25	Total Full Service Distribution	12,539	MWh	**9.50¢**	**1,192**	**10.33¢**	**1,295**
26	**Total Full Service D1.9**	12,539	MWh	**15.89¢**	**1,992**	**16.82¢**	**2,110**
27							
28	**Choice**	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
29							
30	Capacity Charge						
31							
32	On-Peak	0	MWh	$0.02470	0	$0.06793	0
33	Off-Peak	0	MWh	$0.00618	0	$0.01700	0
34	Total Capacity	0	MWh		**0**		**0**
35							
36	Distribution Charges						
37	Service Charge ($/month)	0	Cust.	$1.95	0	$1.95	0
38							
39	Distribution Charge	0	MWh	$0.08137	0	$0.08962	0
40	Distribution System	0	MWh		**0**		**0**
41	IRM	0	MWh	$0.000941	0	$0.000941	0
42	Nuclear Decomm.	0	MWh	$0.000882	0	$0.000882	0
43	Energy Waste Reduction	0	MWh	$0.002552	0	$0.002552	0
44	Distribution Surcharges	0	MWh		**0**		**0**
45							
46	**Total Choice D1.9**	0	MWh		**0**		**0**
47							
48	**Total D1.9**	12,539	MWh	**15.89¢**	**1,992**	**16.82¢**	**2,110**
49	Increase/Decrease ($)						117

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Residential Service Rate Standard TOU - D1.11

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
Page: 9 of 58

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply						
1	Power Supply Charges						
2	Non-Capacity Charges						
3	June - September						
4	On Peak (3pm-7pm, M-F)	887,019	MWh	$0.12201	108,225	$0.08837	78,382
5	Off Peak	4,534,773	MWh	$0.07354	333,487	$0.05324	241,413
6	October - May						
7	On Peak (3pm-7pm, M-F)	1,077,809	MWh	$0.08518	91,808	$0.06232	67,165
8	Off Peak	7,248,881	MWh	$0.07354	533,083	$0.05324	385,902
9	Capacity Charges:						
10	June - September						
11	On Peak (3pm-7pm, M-F)	887,019	MWh	$0.02060	18,273	$0.05664	50,237
12	Off Peak	4,534,773	MWh	$0.01241	56,277	$0.03412	154,727
13	October - May						
14	On Peak (3pm-7pm, M-F)	1,077,809	MWh	$0.01438	15,499	$0.03994	43,047
15	Off Peak	7,248,881	MWh	$0.01241	89,959	$0.03412	247,333
16							
17	Power Supply Subtotal	13,748,482	MWh	**9.07¢**	**1,246,609**	**9.22¢**	**1,268,207**
18							
19	PSCR	13,748,482	MWh	$0.00000	0	$0.00000	0
20	REPS	1,968,733	Meters	$0.00000	0	$0.00000	0
21	Total Full Service Power Supply	13,748,482	MWh	**9.07¢**	**1,246,609**	**9.22¢**	**1,268,207**
22							
23	**Full Service Distribution**	Quantity	Units				
24							
25	Service Charge	1,968,733	Cust.	$8.50	200,811	$8.50	200,811
26	Income Assistance	54,148	Cust.	($8.50)	(5,523)	($8.50)	(5,523)
27	Senior Citizen Provision	92,553	Cust.	($4.25)	(4,720)	($4.25)	(4,720)
28							
29	Distribution Charge	13,748,482	MWh	$0.08137	1,118,714	$0.08962	1,232,073
30	Distribution System	13,748,482	MWh	**9.52¢**	**1,309,281**	**10.35¢**	**1,422,640**
31	IRM	13,748,482	MWh	$0.000941	12,937	$0.000941	12,937
32	Nuclear Decomm.	13,748,482	MWh	$0.000882	12,126	$0.000882	12,126
33	Energy Waste Reduction	13,748,482	MWh	$0.002552	35,086	$0.002552	35,086
34	LIEAF	1,968,733	Cust.	$0.88	20,790	$0.88	20,790
35	Distribution Surcharges	13,748,482	MWh	**0.59¢**	**80,939**	**0.59¢**	**80,939**
36							
37	Total Full Service Distribution			**10.11¢**	**1,390,221**	**10.94¢**	**1,503,580**
38	**Total Full Service D1.11**	13,748,482	MWh	**19.18¢**	**2,636,830**	**20.16¢**	**2,771,787**
39							
40	**Choice**	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
41							
42	Capacity Charges:						
43	June - September						
44	On Peak (3pm-7pm, M-F)	0	MWH	$0.02060	0	$0.05664	0
45	Off Peak	0	MWH	$0.01241	0	$0.03412	
46	October - May						
47	On Peak (3pm-7pm, M-F)	0	MWH	$0.01438	0	$0.03994	0
48	Off Peak	0	MWH	$0.01241	0	$0.03412	0
49							
50	Capacity Total	0	MWh		**0**		**0**
51							
52	Distribution Charges						
53	Service Charge	0	Cust.	$8.50	0	$8.50	0
54	Income Assistance	0	Cust.	($8.50)	0	($8.50)	0
55	Senior Citizen Provision	0	Cust.	($4.25)	0	($4.25)	0
56							
57	Distribution Charge	0	MWh	$0.08137	0	$0.08962	0
58	Distribution System	0	MWh		**0**		**0**
59	IRM	0	MWh	0.000941	0	0.000941	0
60	Nuclear Decomm.	0	MWh	$0.000882	0	$0.000882	0
61	Energy Waste Reduction	0	MWh	$0.002552	0	$0.002552	0
62	LIEAF	0	Cust.	$0.88	0	$0.88	0
63	Distribution Surcharges	0	MWh		**0**		**0**
64							
65	**Total Choice D1.11**	0	MWh		**0**		**0**
66							
67	**Total D1.11**	13,748,482	MWh	**19.18¢**	**2,636,830**	**20.16¢**	**2,771,787**
68	Increase/Decrease ($)						134,957

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Residential Service Rate Overnight Savers - D1.13
Designed Revenue Neutral to D1.11

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
Page: 10 of 58

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Proposed D1.11 Rates Rate	(d) Revenue ($000)	(e) Revenue Neutral Design Rate	(f) Revenue ($000)
	Full Service Power Supply						
1	Power Supply Charges						
2	Non-Capacity Charge						
3	June - September						
4	On Peak (3pm-7pm, M-F)	881,337	MWh			$0.09832	86,650
5	Off Peak (7am-3pm & 7pm-1am M-F; 7am-1am weekend)	3,561,782	MWh			$0.06616	235,636
6	Super Off Peak (1am-7am)	978,673	MWh			$0.04178	40,892
7	October - May						
8	On Peak (3pm-7pm, M-F)	1,067,922	MWh			$0.05608	59,887
9	Off Peak (7am-3pm & 7pm-1am M-F; 7am-1am weekend)	5,439,585	MWh			$0.05033	273,785
10	Super Off Peak (1am-7am)	1,819,184	MWh			$0.04178	76,012
11	Capacity Charges:						
12	June - September						
13	On Peak (3pm-7pm, M-F)	881,337	MWh			$0.06301	55,536
14	Off Peak (7am-3pm & 7pm-1am M-F; 7am-1am weekend)	3,561,782	MWh			$0.04240	151,024
15	Super Off Peak (1am-7am)	978,673	MWh			$0.02678	26,209
16	October - May						
17	On Peak (3pm-7pm, M-F)	1,067,922	MWh			$0.03594	38,383
18	Off Peak (7am-3pm & 7pm-1am M-F; 7am-1am weekend)	5,439,585	MWh			$0.03226	175,475
19	Super Off Peak (1am-7am)	1,819,184	MWh			$0.02678	48,718
20	Power Supply Subtotal	13,748,482	MWh	**9.22¢**	**1,268,207**		**1,268,207**
21							
22	PSCR	13,748,482	MWh	$0.00000	0	$0.00000	0
23	REPS	1,968,733	Meters	$0.00000	0	$0.00000	0
24	Total Full Service Power Supply	13,748,482	MWh	**9.22¢**	**1,268,207**	**9.22¢**	**1,268,207**
25							
26	**Full Service Distribution**	Quantity	Units				
27							
28	Service Charge	1,968,733	Cust.			$8.50	200,811
29	Income Assistance	54,148	Cust.			($8.50)	(5,523)
30	Senior Citizen Provision	92,553	Cust.			($4.25)	(4,720)
31							
32							
33							
34	Distribution Charge	13,748,482	MWh				
35	June - September						
36	On Peak (3pm-7pm, M-F)	881,337	MWh			$0.18050	159,080
37	Off Peak (7am-3pm & 7pm-1am M-F; 7am-1am weekend)	3,561,782	MWh			$0.13537	482,172
38	Super Off Peak (1am-7am)	978,673	MWh			$0.04512	44,162
39	October - May						
40	On Peak (3pm-7pm, M-F)	1,067,922	MWh			$0.09025	96,379
41	Off Peak (7am-3pm & 7pm-1am M-F; 7am-1am weekend)	5,439,585	MWh			$0.06769	368,189
42	Super Off Peak (1am-7am)	1,819,184	MWh			$0.04512	82,090
43	Distribution System	13,748,482	MWh	**10.35¢**	**1,422,640**	**10.35¢**	**1,422,640**
44	IRM	13,748,482	MWh	$0.000941	12,937	$0.000941	12,937
45	Nuclear Decomm.	13,748,482	MWh	$0.000882	12,126	$0.000882	12,126
46	Energy Waste Reduction	13,748,482	MWh	$0.002552	35,086	$0.002552	35,086
47	LIEAF	1,968,733	Cust.	$0.88	20,790	$0.88	20,790
48	Distribution Surcharges	13,748,482	MWh	**0.59¢**	**80,939**	**0.59¢**	**80,939**
49							
50	Total Full Service Distribution			**10.94¢**	**1,503,580**	**10.94¢**	**1,503,580**
51	**Total Full Service D1.13**	13,748,482	MWh	**20.16¢**	**2,771,787**	**20.16¢**	**2,771,787**
52							
53	**Choice**	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
54							
55	Capacity Charges:						
56	June - September						
57	On Peak (3pm-7pm, M-F)	0	MWH			$0.06301	0
58	Off Peak (7am-3pm & 7pm-1am M-F; 7am-1am weekend)	0	MWH			$0.04240	0
59	Super Off Peak (1am-7am)	0	MWH			$0.02678	0
60	October - May						
61	On Peak (3pm-7pm, M-F)	0	MWH			$0.03594	0
62	Off Peak (7am-3pm & 7pm-1am M-F; 7am-1am weekend)	0	MWH			$0.03226	0
63	Super Off Peak (1am-7am)	0	MWH			$0.02678	0
64	Capacity Total	0	MWh		**0**		**0**
65							
66	Distribution Charges						
67	Service Charge	0	Cust.		0	$8.50	0
68	Income Assistance	0	Cust.		0	($8.50)	0
69	Senior Citizen Provision	0	Cust.		0	($4.25)	0
70							
71	Distribution Charge						
72	June - September						
73	On Peak (3pm-7pm, M-F)	0	MWH			$0.18050	0
74	Off Peak (7am-3pm & 7pm-1am M-F; 7am-1am weekend)	0	MWH			$0.13537	0
75	Super Off Peak (1am-7am)	0	MWH			$0.04512	0
76	October - May						
77	On Peak (3pm-7pm, M-F)	0	MWH			$0.09025	0
78	Off Peak (7am-3pm & 7pm-1am M-F; 7am-1am weekend)	0	MWH			$0.06769	0
79	Super Off Peak (1am-7am)	0	MWh		0	$0.04512	0
80	Distribution System	0	MWh		**0**		**0**
81	IRM	0	MWh	$0.000941	0	$0.000941	0
82	Nuclear Decomm.	0	MWh	$0.000882	0	$0.000882	0
83	Energy Waste Reduction	0	MWh	$0.002552	0	$0.002552	0
84	LIEAF	0	Cust.	$0.88	0	$0.88	0
85	Distribution Surcharges	0	MWh		**0**		**0**
86							
87	**Total Choice D1.13**	0	MWh		**0**		**0**
88							
89	**Total D1.13**	13,748,482	MWh	**20.16¢**	**2,771,787**	**20.16¢**	**2,771,787**

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Residential Space Heating Rate - D2

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
Page: 11 of 58

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
1	Power Supply Charges						
2	Non-Capacity Charge	282,672	MWh	$0.06274	17,735	$0.05166	14,603
3	Capacity Charges						
4	Summer						
5	First 17 KWH/Day	56,257	MWh	$0.01059	596	$0.02996	1,685
6	Excess	29,544	MWh	$0.01514	447	$0.04283	1,265
7	Winter						
8	First 20 KWH/Day	102,530	MWh	$0.00624	640	$0.01765	1,810
9	Excess	94,341	MWh	$0.00244	230	$0.00690	651
10							
11	PSCR	282,672	MWh	$0.00000	0	$0.00000	0
12	REPS	29,878	Meters	$0.00000	0	$0.00000	0
13	Total Full Service Power Supply	282,672	MWh	**6.95¢**	**19,648**	**7.08¢**	**20,014**
14							
15	**Full Service Distribution**	Quantity	Units				
16							
17	Service Charge	29,878	Cust.	$8.50	3,048	$8.50	3,048
18	Income Assistance	831	Cust.	($8.50)	(85)	($8.50)	(85)
19	Senior Citizen Provision	702	Cust.	($4.25)	(36)	($4.25)	(36)
20							
21	Distribution Charge						
22	Summer	85,801	MWh	$0.08137	6,982	$0.08962	7,689
23	Winter	196,871	MWh	$0.08137	16,019	$0.08962	17,643
24	Distribution System	282,672	MWh	**9.17¢**	**25,928**	**10.00¢**	**28,259**
25	IRM	282,672	MWh	$0.000941	266	$0.000941	266
26	Nuclear Decomm.	282,672	MWh	$0.000882	249	$0.000882	249
27	Energy Waste Reduction	282,672	MWh	$0.002552	721	$0.002552	721
28	LIEAF	29,878	Cust.	$0.88	316	$0.88	316
29	Distribution Surcharges	282,672	MWh	**0.55¢**	**1,552**	**0.55¢**	**1,552**
30							
31	Total Full Service Distribution	282,672	MWh	**9.72¢**	**27,480**	**10.55¢**	**29,811**
32	**Total Full Service D2**	282,672	MWh	**16.67¢**	**47,128**	**17.63¢**	**49,825**
33							
34	**Choice**	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
35							
36	Capacity Charges						
37	Summer						
38	First 17 KWH/Day	0	MWh	$0.01059	0	$0.02996	0
39	Excess	0	MWh	$0.01514	0	$0.04283	0
40	Winter						
41	First 20 KWH/Day	0	MWh	$0.00624	0	$0.01765	0
42	Excess	0	MWh	$0.00244	0	$0.00690	0
43	Total Capacity				**0**		**0**
44							
45	Distribution Charges						
46	Service Charge	0	Cust.	$8.50	0	$8.50	0
47	Income Assistance	0	Cust.	($8.50)	0	($8.50)	0
48	Senior Citizen Provision		Cust.	($4.25)	0	($4.25)	0
49							
50	Distribution Charge						
51	Summer	0	MWh	$0.08137	0	$0.08962	0
52	Winter	0	MWh	$0.08137	0	$0.08962	0
53	Distribution System	0	MWh		**0**		**0**
54	IRM	0	MWh	$0.000941	0	$0.000941	0
55	Nuclear Decomm.	0	MWh	$0.000882	0	$0.000882	0
56	Energy Waste Reduction	0	MWh	$0.002552	0	$0.002552	0
57	LIEAF	0	Cust.	$0.88	0	$0.88	0
58	Distribution Surcharges	0	MWh		**0**		**0**
59							
60	**Total Choice D2**	0	MWh		**0**		**0**
61							
62	**Total D2**	282,672	MWh	**16.67¢**	**47,128**	**17.63¢**	**49,825**
63	Increase/Decrease ($)						2,697

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Water Heating Service Rate - Residential D5

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply						
1	Non-Capacity Charge	97,669	MWh	$0.04132	4,036	$0.02994	2,925
2	Capacity Charge	97,669	MWh	$0.00698	682	$0.01919	1,874
3							
4	PSCR	97,669	MWh	$0.00000	0	$0.00000	0
5	Total Full Service Power Supply	97,669	MWh	**4.83¢**	**4,717**	**4.91¢**	**4,799**
6							
7	**Full-Service Distribution**	Quantity	Units				
8							
9	Service Charge	45,020	Cust.	$1.95	1,053	$1.95	1,053
10							
11	Distribution Charge	97,669	MWh	$0.08137	7,947	$0.08962	8,753
12	Distribution System	97,669	MWh	**9.22¢**	**9,001**	**10.04¢**	**9,806**
13	IRM	97,669	MWh	$0.000941	92	$0.000941	92
14	Nuclear Decomm.	97,669	MWh	$0.000882	86	$0.000882	86
15	Energy Waste Reduction	97,669	MWh	$0.002552	249	$0.002552	249
16	Distribution Surcharges	97,669	MWh	**0.44¢**	**427**	**0.44¢**	**427**
17							
18	Total Full Service Distribution	97,669	MWh	**9.65¢**	**9,428**	**10.48¢**	**10,233**
19	**Total Full Service D5**	97,669	MWh	**14.48¢**	**14,146**	**15.39¢**	**15,033**
20							
21	**Choice**	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
22							
23	Capacity Charge	0	MWh	$0.00698	0	$0.01919	0
24	Total Capacity	0			**0**		**0**
25							
26	Distribution Charges						
27	Service Charge	0	Cust.	$1.95	0	$1.95	0
28							
29	Distribution Charge	0	MWh	$0.08137	0	$0.08962	0
30	Distribution System	0			**0**		**0**
31	IRM	0	MWh	$0.000941	0	$0.000941	0
32	Nuclear Decomm.	0	MWh	$0.000882	0	$0.000882	0
33	Energy Waste Reduction	0	MWh	$0.002552	0	$0.002552	0
34	Distribution Surcharges	0	MWh		**0**		**0**
35							
36	**Total Choice Distribution D5**	0	MWh		**0**		**0**
37							
38	**Total D5**	97,669	MWh	**14.48¢**	**14,146**	**15.39¢**	**15,033**
39	Increase/Decrease ($)						887

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Interruptible Space Conditioning Service Rate - Commercial D1.1

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
Page: 13 of 58

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply						
	Capacity						
1	Energy						
2	Summer	3,490	MWh	$0.01049	37	$0.02885	101
3	Winter	1,662	MWh	$0.00470	8	$0.01293	21
4							
5	Non-capacity energy	5,153		$0.06077	313	$0.04634	239
6	Power Supply Subtotal	5,153	MWh		**358**		**361**
7							
8	PSCR	5,153	MWh	$0.00000	0	$0.00000	0
9	REPS	800	Meters	$0.00	0	$0.00	0
10	Total Full Service Power Supply	5,153	MWh	**6.94¢**	**358**	**7.00¢**	**361**
11							
12	**Full Service Distribution**						
13							
14	Service Charge (June-Oct)	800	Cust.	$1.95	8	$1.95	8
15							
16	Distribution Charge	5,153	MWh	$0.05288	272	$0.05917	305
17	Distribution System	5,153	MWh	**5.44¢**	**280**	**6.07¢**	**313**
18	IRM	5,153	MWh	$0.000595	3	$0.000595	3
19	Nuclear Decomm.	5,153	MWh	$0.000882	5	$0.000882	5
20	Energy Waste Reduction	800	Meters	$5.50	53	$5.50	53
21	LIEAF	800	Meters	$0.88	8	$0.88	8
22	Distribution Surcharges	5,153	MWh	**1.34¢**	**69**	**1.34¢**	**69**
23							
24	Total Distribution	5,153	MWh	**6.78¢**	**349**	**7.41¢**	**382**
25	**Total Full Service D1.1**	5,153	MWh	**13.71¢**	**707**	**14.41¢**	**743**
26							
27	**Choice Distribution**	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
28							
29	Capacity						
30	Energy						
31	Summer	0	MWh	$0.01049	0	$0.02885	0
32	Winter	0	MWh	$0.00470	0	$0.01293	0
33							
34	Service Charge (June-Oct)	8	Cust.	$1.95	0	$1.95	0
35							
36	Distribution Charge	11	MWh	$0.05288	1	$0.05917	1
37	Distribution System	11	MWh	**5.99¢**	**1**	**6.62¢**	**1**
38	IRM	11	MWh	0.000595	0	0.000595	0
39	Nuclear Decomm.	11	MWh	$0.000882	0	$0.000882	0
40	Energy Waste Reduction	8	Meters	$5.50	1	$5.50	1
41	LIEAF	8	Meters	$0.88	0	$0.88	0
42	Distribution Surcharges	11	MWh	**5.64¢**	**1**	**5.64¢**	**1**
43							
44	**Total Choice D1.1**	11	MWh	**11.62¢**	**1**	**12.25¢**	**1**
45							
46	**Total D1.1**	5,164	MWh	**13.71¢**	**708**	**14.41¢**	**744**
47	Increase/Decrease ($)						36

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Commercial Geothermal Time of Day (D1.7)

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
Page: 14 of 58

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue	(e) Proposed Rate	(f) Proposed Revenue
	Full Service Power Supply	Quantity	Units	Rate	Revenue	Rate	Revenue
	Capacity Charges				($000)		($000)
1	Energy						
2	Summer (11 a.m. Peak Start)						
3	On-Peak	1,258	MWh	$0.00893	11	$0.01692	21
4	Off-Peak	2,843	MWh	$0.00464	13	$0.01546	44
5	Winter (11 a.m. Peak Start)						
6	On-Peak	2,799	MWh	$0.00572	16	$0.01583	44
7	Off-Peak	8,489	MWh	$0.00572	49	$0.01583	134
8							
9	Non-Capacity Energy	15,388	MWh	$0.04059	625		
10	Summer (11 a.m. Peak Start)						
11	On-Peak	1,258	MWh			$0.03307	42
12	Off-Peak	2,843	MWh			$0.03020	86
13	Winter (11 a.m. Peak Start)						
14	On-Peak	2,799	MWh			$0.03092	87
15	Off-Peak	8,489	MWh			$0.03092	262
16	Power Supply Subtotal	15,388	MWh		**714**		**720**
17							
18	PSCR	15,388	MWh	$0.00000	0	$0.00000	0
19	REPS	198	Meters	$0.00	0	$0.00	0
20	Total Full Service Power Supply	15,388	MWh	**4.64¢**	**714**	**4.68¢**	**720**
21							
22	**Full Service Distribution**	Quantity	Units				
23							
24	Service Charge	198	Cust.	$0.067	5	$0.067	5
25							
26	Distribution Charge	15,388	MWh	$0.05288	814	$0.05917	911
27	Distribution System	15,388	MWh	**5.32¢**	**819**	**5.95¢**	**915**
28	IRM	15,388	MWh	$0.000595	9	$0.000595	9
29	Nuclear Decomm.	15,388	MWh	$0.000882	14	$0.000882	14
30	Energy Waste Reduction	198	Meters	$5.50	13	$5.50	13
31	LIEAF	198	Meters	$0.88	2	$0.88	2
32	Distribution Surcharges	15,388	MWh	**0.25¢**	**38**	**0.25¢**	**38**
33							
34	Total Distribution	15,388	MWh	**5.57¢**	**856**	**6.19¢**	**953**
35	**Total Full Service D1.7**	15,388	MWh	**10.20¢**	**1,570**	**10.88¢**	**1,674**
36							
37	**Choice Distribution**	Quantity	Units	Rate	Revenue	Rate	Revenue
38					($000)		($000)
39	Capacity Charges						
40	Energy						
41	Summer (11 a.m. Peak Start)						
42	On-Peak		MWh	$0.00893	0	$0.01692	0
43	Off-Peak		MWh	$0.00464	0	$0.01546	0
44	Winter (11 a.m. Peak Start)						
45	On-Peak		MWh	$0.00572	0	$0.01583	0
46	Off-Peak		MWh	$0.00572	0	$0.01583	0
47							
48	Service Charge	1	Cust.	$0.067	0	$0.067	0
49							
50	Distribution Charge	198	MWh	$0.05288	10	$0.05917	12
51	Distribution System	198	MWh	**5.30¢**	**11**	**5.93¢**	**12**
52	IRM	198	MWh	$0.000595	0	$0.000595	0
53	Nuclear Decomm.	198	MWh	$0.000882	0	$0.000882	0
54	Energy Waste Reduction	1	Meters	$5.50	0	$5.50	0
55	LIEAF	1	Meters	$0.88	0	$0.88	0
56	Distribution Surcharges	198	MWh	**0.19¢**	**0**	**0.19¢**	**0**
57							
58	**Total Choice D1.7**	198	MWh	**5.49¢**	**11**	**6.12¢**	**12**
59							
60	**Total D1.7**	15,586	MWh	**10.14¢**	**1,581**	**10.82¢**	**1,686**
61	Increase/Decrease ($)						105

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Commercial Dynamic Peak Pricing Rate - D1.8

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply						
	Capacity						
1	Energy						
2	Off-Peak (11pm-7am)	460	MWh	$0.00570	3	$0.01550	7
3	Mid-Peak (7 pm-11pm, 7am-3pm)	387	MWh	$0.01119	4	$0.03045	12
4	On-Peak (3 pm- 7 pm)	125	MWh	$0.02062	3	$0.05610	7
5	Critical Peak (3pm-7pm)	0	MWh	$0.80517	0	$0.83785	0
6							
7	Non-capacity energy	972	MWh				
8	Off-Peak (11pm-7am)	460	MWh	$0.04002	18	$0.03053	14
9	Mid-Peak (7 pm-11pm, 7am-3pm)	387	MWh	$0.07863	30	$0.05998	23
10	On-Peak (3 pm- 7 pm)	125	MWh	$0.14483	18	$0.11215	14
11	Critical Peak (3pm-7pm)	0	MWh	$0.14483	0	$0.11215	0
12	Power Supply Subtotal	972	MWh		**77**		**78**
13							
14	PSCR	972	MWh	$0.00000	0	$0.00000	0
15	REPS	28	Cust.	$0.00	0	$0.00	0
16	Total Full Service Power Supply	972	MWh	**7.90¢**	**77**	**7.97¢**	**78**
17							
18	**Full Service Distribution**	Quantity	Units				
19							
20	Service Charge	28	Cust.	$11.25	4	$11.25	4
21							
22	Distribution Charge	972	MWh	$0.05288	51	$0.05917	58
23	Distribution System	972	MWh	**5.68¢**	**55**	**6.31¢**	**61**
24	IRM	972	MWh	$0.000595	1	$0.000595	1
25	Nuclear Decomm.	972	MWh	$0.000882	1	$0.000882	1
26	Energy Waste Reduction	28	Cust.	$5.50	2	$5.50	2
27	LIEAF	28		$0.88	0	$0.88	0
28	Distribution Surcharges	972	MWh	**0.37¢**	**4**	**0.37¢**	**4**
29	Total Full Service D1.1						
30	Total Full Service Distribution	972	MWh	**6.04¢**	**59**	**6.67¢**	**65**
31	**Total Full Service D1.8**	972	MWh	**13.94¢**	**136**	**14.65¢**	**142**
32	Increase/Decrease ($)						7

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Commercial Electric Vehicle Rate - D1.9

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply						
1	Power Supply Charges						
2	Capacity						
3	Option I						
4	On-Peak	105	MWh	$0.02470	3	$0.06793	7
5	Off-Peak	237	MWh	$0.00618	1	$0.01700	4
6		342	MWh				
7							
8	Non-capacity energy charge						
	On-Peak	105	MWh	$0.14635	15	$0.10606	11
	Off-Peak	237	MWh	$0.03657	9	$0.02650	6
9							
10	PSCR	342	MWh	$0.00000	0	$0.00000	0
11							
12							
13	Total Full Service Power Supply	342	MWh	**8.20¢**	**28**	**8.34¢**	29
14							
15	**Full Service Distribution**						
16							
17	Option I Service Charge ($/month)	22	Cust.	$1.95	1	$1.95	1
18							
19	Distribution Charge	342	MWh	$0.08137	28	$0.08962	31
20	Distribution System	342	MWh	**8.29¢**	**28**	**9.11¢**	31
21	IRM	342	MWh	$0.000595	0	$0.000595	0
22	Nuclear Decomm.	342	MWh	$0.000882	0	$0.000882	0
23	Energy Waste Reduction	22	Meters	$5.50	1	$5.50	1
24	LIEAF	342	Meters	$0.88	4	$0.88	4
25	Distribution Surcharges	342	MWh	**1.63¢**	**6**	**1.63¢**	**6**
26							
27	Total Full Service Distribution	342	MWh	**9.92¢**	**34**	**10.74¢**	**37**
28	**Total Full-Service D1.9**	342	MWh	**18.12¢**	**62**	**19.08¢**	**65**
29							
30	**Choice Distribution**			Rate	Revenue ($000)	Rate	Revenue ($000)
31							
32	Capacity						
33	Option I						
34	On-Peak	0	MWh	$0.02470	0	$0.06793	0
35	Off-Peak	0	MWh	$0.00618	0	$0.01700	0
36		0	MWh				
37	Option I Service Charge ($/month)	0	Cust.	$1.95	0	$1.95	0
38							
39	Distribution Charge	0	MWh	$0.08137	0	$0.08962	0
40	Distribution System	0	MWh		0		0
41	IRM	0	MWh	$0.000595	0	$0.000595	0
42	Nuclear Decomm.	0	MWh	$0.000882	0	$0.000882	0
43	Energy Waste Reduction	0	Meters	$5.50	0	$5.50	0
44	LIEAF	0	Meters	$0.880000	0	$0.880000	0
45	Distribution Subtotal	0	MWh		0		0
46							
47							
48	**Total Choice D1.9**	0	MWh		0		0
49							
50	**Total D1.9**	342	MWh	**18.12¢**	**62**	**19.08¢**	**65**
51	Increase/Decrease ($)						3

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
General Service Rate - D3

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply						
1	Capacity						
2	Energy	7,457,882	MWh	$0.01010	75,325	$0.02770	206,591
3							
4	Non-Capacity						
5	Energy	7,457,882		$0.07096	529,211	$0.05413	403,667
6							
7	PSCR	7,457,882	MWh	$0.00000	0	$0.00000	0
8	REPS	197,670	Meters	$0.00	0	$0.00	0
9	Total Full Service Power Supply	7,457,882	MWh	**8.11¢**	**604,536**	**8.18¢**	**610,258**
10							
11	**Full Service Distribution**	Quantity	Units				
12							
13	Service Charge	197,670	Cust.	$11.25	26,685	$11.25	26,685
14							
15	Distribution Charge	7,457,882	MWh	$0.05288	394,373	$0.05917	441,304
16	Distribution System	7,457,882	MWh	**5.65¢**	**421,058**	**6.28¢**	**467,989**
17	IRM	7,457,882	MWh	$0.000595	4,437	$0.000595	4,437
18	Nuclear Decomm.	7,457,882	MWh	$0.000882	6,578	$0.000882	6,578
19	Energy Optimization	197,670	Meters	$5.50	13,046	$5.50	13,046
20	LIEAF	197,670	Meters	$0.88	2,087	$0.88	2,087
21	Distribution Surcharges	7,457,882	MWh	**0.35¢**	**26,149**	**0.35¢**	**26,149**
22							
23	Total Full Service Distribution	7,457,882	MWh	**6.00¢**	**447,207**	**6.63¢**	**494,138**
24	**Total Full Service D3**	7,457,882	MWh	**14.10¢**	**1,051,743**	**14.81¢**	**1,104,397**
25							
26	**Choice Distribution**	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
27							
28	Capacity						
29	Energy	0	MWh	$0.01010	0	$0.02770	0
30							
31	Service Charge	1,843	Cust.	$11.25	249	$11.25	249
32							
33	Distribution Charge	261,446	MWh	$0.05288	13,825	$0.05917	15,471
34	Distribution System	261,446	MWh	**5.38¢**	**14,074**	**6.01¢**	**15,719**
35	IRM	261,446	MWh	$0.000595	156	$0.000595	156
36	Nuclear Decomm.	261,446	MWh	$0.000882	231	$0.000882	231
37	Energy Optimization	1,843	Meters	$5.50	122	$5.50	122
38	LIEAF	1,843	Meters	$0.88	19	$0.88	19
39	Distribution Surcharges	261,446	MWh	**0.20¢**	**527**	**0.20¢**	**527**
40							
41	**Total Choice D3**	261,446	MWh	**5.58¢**	**14,601**	**6.21¢**	**16,246**
42							
43	**Total D3**	7,719,328	MWh	**13.81¢**	**1,066,344**	**14.52¢**	**1,120,643**
44	Increase/Decrease ($)						54,299

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Unmetered General Service Rate - D3.1

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
1	Connected Load	254,666,315	Watts				
2							
3	Capacity						
4	Energy	89,133	MWh	0.00848	756	0.02354	2,098
5							
6	Non-capacity energy	89,133	MWh	0.11247	10,025	0.10517	9,375
7							
8	PSCR	89,133	MWh	0.00000	0	0	0
9	IRM	89,133	MWh	0.000595	53	0.000595	53
10	Nuclear Decommissioning	89,133	MWh	0.000882	79	0.000882	79
11							
12	Energy Waste Reduction	2,300	Meters	5.50	152	5.50	152
13							
14	REPS	2,300	Meters	0.00	0	0.00	0
15							
16	**Total D3.1**	89,133	MWh		**11,064**		**11,756**
	Increase/Decrease ($)						692

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Secondary Educational Institute - D3.2

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
1	Capacity						
2	Energy	331,944	MWh	$0.00939	3,117	$0.02580	8,564
3							
4	Non-capacity energy	331,944	MWh	$0.06937	23,027	$0.05335	17,708
5							
6	PSCR	331,944	MWh	$0.00000	0	$0.00000	0
7	REPS	1,185	Meters	$0.00	0	$0.00	0
8	Total Full Service Power Supply	331,944	MWh	**7.88¢**	**26,144**	**7.91¢**	**26,272**
9							
10	**Full Service Distribution**	Quantity	Units				
11							
12	Service Charge	1,185	Cust.	$11.25	160	$11.25	160
13							
14	Distribution Charge	331,944	MWh	$0.05288	17,553	$0.05917	19,642
15	Distribution System	331,944	MWh	**5.34¢**	**17,713**	**5.97¢**	**19,802**
16	IRM	331,944	MWh	$0.000595	198	$0.000595	198
17	Nuclear Decomm.	331,944	MWh	$0.000882	293	$0.000882	293
18	Energy Waste Reduction	1,185	Meters	$5.50	78	$5.50	78
19	LIEAF	1,185	Meters	$0.88	13	$0.88	13
20	Distribution Surcharges	331,944	MWh	**0.18¢**	**581**	**0.18¢**	**581**
21							
22	Total Full Service Distribution	331,944	MWh	**5.51¢**	**18,294**	**6.14¢**	**20,383**
23	**Total Full Service D3.2**	331,944	MWh	**13.39¢**	**44,438**	**14.06¢**	**46,655**
24							
25	**Choice Distribution**	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
26							
27	Capacity						
28	Energy	0	MWh	$0.00939	0	$0.02580	0
29							
30	Service Charge	767	Cust.	$11.25	104	$11.25	104
31							
32	Distribution Charge	296,801	MWh	$0.05288	15,695	$0.05917	17,563
33	Distribution System	296,801	MWh	**5.32¢**	**15,798**	**5.95¢**	**17,666**
34	IRM	296,801	MWh	$0.000595	177	$0.000595	177
35	Nuclear Decomm.	296,801	MWh	$0.000882	262	$0.000882	262
36	Energy Waste Reduction	767	Meters	$5.50	51	$5.50	51
37	LIEAF	767	Meters	$0.88	8	$0.88	8
38	Distribution Surcharges	296,801	MWh	**0.00¢**	**497**	**0.17¢**	**497**
39							
40	**Total Choice D3.2**	296,801	MWh	**5.49¢**	**16,296**	**6.12¢**	**18,163**
41							
42	**Total D3.2**	628,745	MWh	**9.66¢**	**60,733**	**10.31¢**	**64,818**
43	Increase/Decrease ($)						4,085

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Interruptible General Service Rate - D3.3

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply	Quantity	Units	Rate	Revenue	Rate	Revenue
1	Capacity						
2	Energy	54,552	MWh	$0.00844	460	$0.02315	1,263
3							
4	Non-capacity energy	54,552	MWh	$0.05929	3,234	$0.04523	2,467
5							
6	PSCR	54,552	MWh	$0.00000	0	$0.00000	0
7	REPS	64	Meters	$0.00	0	$0.00	0
8	Total Full Service Power Supply	54,552	MWh	**6.77¢**	**3,695**	**6.84¢**	**3,730**
9							
10	**Full Service Distribution**	Quantity	Units				
11							
12	Service Charge	64	Cust.	$11.25	9	$11.25	9
13							
14	Distribution Charge	54,552	MWh	$0.05288	2,885	$0.05917	3,228
15	Distribution System	54,552	MWh	**5.30¢**	**2,893**	**5.93¢**	**3,237**
16	IRM	54,552	MWh	$0.000595	32	$0.000595	32
17	Nuclear Decomm.	54,552	MWh	$0.000882	48	$0.000882	48
18	Energy Waste Reduction	64	Meters	$5.50	4	$5.50	4
19	LIEAF	64	Meters	$0.88	1	$0.88	1
20	Distribution Surcharges	54,552	MWh	**0.16¢**	**85**	**0.16¢**	**85**
21							
22	Full Service Distribution	54,552	MWh	**5.46¢**	**2,979**	**6.09¢**	**3,322**
23	**Total Full Service D3.3**	54,552	MWh	**12.23¢**	**6,674**	**12.93¢**	**7,052**
24							
25	**Choice Distribution**	Quantity	Units	Rate	Revenue	Rate	Revenue
26					($000)		($000)
27	Capacity						
28	Energy	0	MWh	$0.00844	0	$0.02315	0
29							
30	Service Charge	4	Cust.	$11.25	1	$11.25	1
31							
32	Distribution Charge	7,513	MWh	$0.05288	397	$0.05917	445
33	Distribution System	7,513	MWh	**5.30¢**	**398**	**5.92¢**	**445**
34	IRM	7,513	MWh	0.000595	4	0.000595	4
35	Nuclear Decomm.	7,513	MWh	$0.000882	7	$0.000882	7
36	Energy Waste Reduction	4	Meters	$5.50	0	$5.50	0
37	LIEAF	4	Meters	$0.88	0	$0.88	0
38	Distribution Surcharges	7,513	MWh	**0.15¢**	**11**	**0.15¢**	**11**
39							
40	**Total Choice D3.3**	7,513	MWh	**5.45¢**	**409**	**6.08¢**	**457**
41							
42	**Total D3.3**	62,065	MWh	**11.41¢**	**7,083**	**12.10¢**	**7,508**
43	Increase/Decrease ($)						426

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Company Owned Charging Service - D3.5

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
1							
2	Non Capacity On Peak (2pm-5pm, M-F)	0	MWh	$0.07688	0	$0.07761	0
3	Non Capacity Off Peak	0	MWh	$0.06843	0	$0.06908	0
4	PSCR	0	MWh	$0.00000	0	$0.00000	0
5	Session Fee						
6	< 200 kW	0	session	$21.00	0	$21.00	0
7	> 200 kW	0	session	$66.00	0	$66.00	0
8	IRM	0	MWh	0.000595	0	0.000595	0
9	Nuclear Decomm.	0	MWh	0.000882	0	0.000882	0
10	Energy Waste Reduction	0	MWh	0.000000	0	0.000000	0
11	LIEAF	0	MWh	0.000000	0	0.000000	0
12							
13							
14	**Total D3.5**	0	MWh		**0**	**0.00¢**	**0**
	Increase/Decrease ($)						-

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Optional TOU General Service Rate - D3.11
Designed Revenue Neutral to D3

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
Page: 22 of 58

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Proposed D3 Rate	(d) Revenue ($000)	(e) Revenue Neutral Design Rate	(f) Revenue ($000)
	Full Service Power Supply						
1	Capacity						
2	June - September						
3	On Peak (1pm - 5pm M-F)	620,107	MWh			$0.04358	27,025
4	Off Peak	2,120,378	MWh			$0.02599	55,116
5	October - May						
6	On Peak (1pm - 5pm M-F)	1,005,260	MWh			$0.02781	27,960
7	Off Peak	3,712,137	MWh			$0.02599	96,491
8							
9	Non-Capacity						
10	June - September						
11	On Peak (1pm - 5pm M-F)	620,107	MWh			$0.08515	52,805
12	Off Peak	2,120,378	MWh			$0.05079	107,693
13	October - May						
14	On Peak (1pm - 5pm M-F)	1,005,260	MWh			$0.05435	54,632
15	Off Peak	3,712,137	MWh			$0.05079	188,538
16							
17	PSCR	7,457,882	MWh			$0.00000	0
18	REPS	197,670	Meters			$0.00	0
19	Total Full Service Power Supply	7,457,882	MWh	**8.18¢**	**610,258**	**8.18¢**	**610,258**
20							
21	**Full Service Distribution**	Quantity	Units				
22							
23	Service Charge	197,670	Cust.	$11.25	26,685	$11.25	26,685
24							
25	Distribution Charge	7,457,882	MWh	$0.05917	441,304	$0.05917	441,304
26	Distribution System	7,457,882	MWh	**6.28¢**	**467,989**	**6.28¢**	**467,989**
27	IRM	7,457,882	MWh	$0.000595	4,437	$0.000595	4,437
28	Nuclear Decomm.	7,457,882	MWh	$0.000882	6,578	$0.000882	6,578
29	Energy Optimization	197,670	Meters	$5.50	13,046	$5.50	13,046
30	LIEAF	197,670	Meters	$0.88	2,087	$0.88	2,087
31	Distribution Surcharges	7,457,882	MWh	**0.35¢**	**26,149**	**0.35¢**	**26,149**
32							
33	Total Full Service Distribution	7,457,882	MWh	**6.63¢**	**494,138**	**6.63¢**	**494,138**
34	**Total Full Service D3.11**	7,457,882	MWh	**14.81¢**	**1,104,397**	**14.81¢**	**1,104,397**
35							
36	**Choice Distribution**	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
37							
38	Capacity						
39	June - September						
40	On Peak (1pm - 5pm M-F)	0	MWh			$0.04358	0
41	Off Peak	0	MWh			$0.02599	0
42	October - May						
43	On Peak (1pm - 5pm M-F)	0	MWh			$0.02781	0
44	Off Peak	0	MWh			$0.02599	0
45							
46	Service Charge	1,843	Cust.	$11.25	249	$11.25	249
47							
48	Distribution Charge	261,446	MWh	$0.05917	15,471	$0.05917	15,471
49	Distribution System	261,446	MWh	**6.01¢**	**15,719**	**6.01¢**	**15,719**
50	IRM	261,446	MWh	$0.000595	156	$0.000595	156
51	Nuclear Decomm.	261,446	MWh	$0.000882	231	$0.000882	231
52	Energy Optimization	1,843	Meters	$5.50	122	$5.50	122
53	LIEAF	1,843	Meters	$0.88	19	$0.88	19
54	Distribution Surcharges	261,446	MWh	**0.20¢**	**527**	**0.20¢**	**527**
55							
56	**Total Choice D3.11**	261,446	MWh	**6.21¢**	**16,246**	**6.21¢**	**16,246**
57							
58	**Total D3.11**	7,719,328	MWh	**14.52¢**	**1,120,643**	**14.52¢**	**1,120,643**
59	Increase/Decrease ($)						-

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Large General Service Rate - D4

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
Page: 23 of 58

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
1	**Capacity**						
2	Demand Charge	4,219,890	kW	$3.57	15,065	$9.76	41,180
3	Energy						
4	First 200 Hrs. Use	853,413	MWh	$0.00000	0	$0.00000	0
5	Excess	885,101	MWh	$0.00000	0	$0.00000	0
6	Power Supply Subtotal	1,738,514	MWh		**15,065**		**41,180**
7							
8	**Non-capacity**						
9	Demand Charge	4,219,890	kW	13.02	54,943	$6.92	29,201
10	Energy						
11	First 200 Hrs. Use	853,413	MWh	0.04012	34,239	$0.04033	34,421
12	Excess	885,101	MWh	0.03097	27,412	$0.03113	27,558
13	PSCR	1,738,514	MWh	$0.00000	0	$0.00000	0
14	REPS	7,791	Meters	$0.00	0	$0.00	0
15	Total Full Service Power Supply	1,738,514	MWh	**7.57¢**	**131,658**	**7.61¢**	**132,359**
16							
17	**Full Service Distribution**	Quantity	Units				
18							
19	Service Charge	7,791	Cust.	$13.67	1,278	$13.67	1,278
20							
21	Distribution Demand Charge	4,219,890	kW	$21.80	91,994	$24.23	102,250
22	Distribution Energy Charge	1,738,514	MWh	$0.000000	0	$0.000000	0
23	Distribution Charges	1,738,514	MWh	**5.37¢**	**93,272**	**5.95¢**	**103,528**
24	IRM	4,219,890	kW	$0.2454	1,036	$0.2454	1,036
25	Nuclear Decomm.	1,738,514	MWh	$0.000882	1,533	$0.000882	1,533
26	Energy Waste Reduction	7,791	Meters	$140.21	13,109	$140.21	13,109
27	LIEAF	7,791	Meters	$0.88	82	$0.88	82
28	Distribution Surcharges	1,738,514	MWh	**0.91¢**	**15,760**	**0.91¢**	**15,760**
29							
30	Total Full Service Distribution	1,738,514	MWh	**6.27¢**	**109,031**	**6.86¢**	**119,287**
31	**Total Full Service D4**	1,738,514	MWh	**13.84¢**	**240,690**	**14.47¢**	**251,647**
32							
33	**Choice Distribution**	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
34							
35	Capacity						
36	Demand Charge	0	kW	$3.57	0	$9.76	0
37	Energy						
38	First 200 Hrs. Use	0	MWh	$0.00000	0	$0.00000	0
39	Excess	0	MWh	$0.00000	0	$0.00000	0
40							
41	Service Charge	773	Cust.	$13.67	127	$13.67	127
42							
43	Distribution Demand Charge	647,797	kW	$21.80	14,122	$24.23	15,696
44	Distribution Energy Charge	254,735	MWh	$0.00000	0	$0.00000	0
45	Distribution System	254,735	MWh	**5.59¢**	**14,249**	**6.21¢**	**15,823**
46	IRM	647,797	kW	$0.2454	159	$0.2454	159
47	Nuclear Decomm.	254,735	MWh	$0.000882	225	$0.000882	225
48	Energy Waste Reduction	773	Meters	$140.21	1,301	$140.21	1,301
49	LIEAF	773	Meters	$0.88	8	$0.88	8
50	Distribution Surcharges	254,735	MWh	**0.66¢**	**1,692**	**0.66¢**	**1,692**
51							
52	**Total Choice D4**	254,735	MWh	**6.26¢**	**15,941**	**6.88¢**	**17,516**
53							
54	**Total D4**	1,993,249	MWh	**12.88¢**	**256,631**	**13.50¢**	**269,162**
55	Increase/Decrease ($)						12,531

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Water Heating Service Rate - Commercial D5

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply	Quantity	Units	Rate	Revenue	Rate	Revenue
1	Capacity						
2	Energy	9,881	MWh	$0.00595	59	$0.01631	161
3							
4	Non-capacity energy	9,881	MWh	$0.04178	413	$0.03187	315
5							
6	PSCR	9,881	MWh	$0.00000	0	$0.00000	0
7	REPS	764	Meters	$0.00	0	$0.00	0
8	Total Full Service Power Supply	9,881	MWh	**4.77¢**	**472**	**4.82¢**	**476**
9							
10	**Full Service Distribution**	Quantity	Units				
11							
12	Service Charge	764	Cust.	$1.95	18	$1.95	18
13							
14	Distribution Charge	9,881	MWh	$0.05288	523	$0.05917	585
15	Distribution System	9,881	MWh	**5.47¢**	**540**	**6.10¢**	**603**
16	IRM	9,881	MWh	$0.000595	6	$0.000595	6
17	Nuclear Decomm.	9,881	MWh	$0.000882	9	$0.000882	9
18	Energy Waste Reduction	764	Meters	$5.50	50	$5.50	50
19	LIEAF	764	Meters	$0.88	8	$0.88	8
20	Distribution Surcharges	9,881	MWh	**0.74¢**	**73**	**0.74¢**	**73**
21							
22	Total Full Service Distribution	9,881	MWh	**6.21¢**	**613**	**6.84¢**	**676**
23	**Total Full Service D5**	9,881	MWh	**10.98¢**	**1,085**	**11.66¢**	**1,152**
24							
25	**Choice Distribution**	Quantity	Units	Rate	Revenue	Rate	Revenue
26					($000)		($000)
27	Capacity						
28	Energy	0	MWh	$0.00595	0	$0.01631	0
29							
30	Service Charge	1	Cust.	$1.95	0	$1.95	0
31							
32	Distribution Charge	4	MWh	$0.05288	0	$0.05917	0
33	Distribution System	4	MWh	**5.81¢**	**0**	**6.44¢**	**0**
34	IRM	4	MWh	$0.000595	0	$0.000595	0
35	Nuclear Decomm.	4	MWh	$0.000882	0	$0.000882	0
36	Energy Waste Reduction	1	Meters	$5.50	0	$5.50	0
37	LIEAF	1	Meters	$0.88	0	$0.88	0
38	Distribution Surcharges	4	MWh	**1.87¢**	**0**	**1.87¢**	**0**
39							
40	**Total Choice D5**	4	MWh	**7.69¢**	**0**	**8.32¢**	**0**
41							
42	**Total D5**	9,886	MWh	**10.98¢**	**1,085**	**11.65¢**	**1,152**
43	Increase/Decrease ($)						67

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Energy Only Street Lighting E1.1

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply						
1	**Capacity**						
2	Energy						
3	Secondary	10,251	MWh	$0.00692	71	$0.01906	195
4	Dusk to Midnight	4	MWh	$0.03023	0	$0.08326	0
5	Primary Energy	0	MWh	$0.00692	0	$0.01906	0
6							
7	Non-capacity charge	10,256		$0.04892	502	$0.03729	382
8	Power Supply Subtotal	10,256	MWh	**5.58¢**	**573**	**5.64¢**	**578**
9							
10	PSCR	10,256	MWh	$0.00000	0	$0.00000	0
11	REPS	279	Meters	$0.00	0	$0.00	0
12	Total Full Service Power Supply	10,256	MWh	**5.58¢**	**573**	**5.64¢**	**578**
13							
14	**Full Service Distribution**						
15							
16	Distribution Charge	10,256	MWh	$0.05288	542	$0.05917	607
17	Distribution System	10,256	MWh	**5.29¢**	**542**	**5.92¢**	**607**
18	IRM	10,256	MWh	$0.000595	6	$0.000595	6
19	Nuclear Decomm.	10,256	MWh	$0.000882	9	$0.000882	9
20	Energy Waste Reduction	279	Meters	$5.50	18	$5.50	18
21	LIEAF	279	Meters	$0.88	3	$0.88	3
22	Distribution Surcharges	10,256	MWh	**0.36¢**	**36**	**0.36¢**	**36**
23							
24	Total Distribution	10,256	MWh	**5.64¢**	**579**	**6.27¢**	**643**
25	**Total Full Service E1.1**	10,256	MWh	**11.23¢**	**1,152**	**11.91¢**	**1,222**
26							
27	**Choice Distribution**	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
28							
29	**Capacity**						
30	Energy						
31	Secondary	0	MWh	$0.00692	0	$0.01906	0
32	Dusk to Midnight	0	MWh	$0.03023	0	$0.08326	0
33	Primary Energy	0	MWh	$0.00692	0	$0.01906	0
34							
35	Distribution Charge	0	MWh	$0.05288	0	$0.05917	0
36	Distribution System	0	MWh		**0**		**0**
37	IRM	0	MWh	$0.000595	0	$0.000595	0
38	Nuclear Decomm.	0	MWh	$0.000882	0	$0.000882	0
39	Energy Waste Reduction	0	Meters	$5.50	0	$5.50	0
40	LIEAF	0	Meters	$0.88	0	$0.88	0
41	Distribution Surcharges	0	MWh		**0**		**0**
42							
43	**Total Choice E1.1**	0	MWh		**0**		**0**
44							
45	**Total E1.1**	10,256	MWh	**11.23¢**	**1,152**	**11.91¢**	**1,222**
46	Increase/Decrease ($)						70

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Greenhouse Lighting Service Rate - Standard Contract Rider No. R7

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
1	**Capacity**						
2	Energy	4,153	MWh	$0.00577	24	$0.01583	66
3							
4	Non-capacity						
5	Energy	4,153	MWh	$0.04054	168	$0.03092	128
6							
7	PSCR	4,153	MWh	$0.00000	0	$0.00000	0
8	REPS	9	Meters	$0.00	0	$0.00	0
9	Total Full Service Power Supply	4,153	MWh	**4.63¢**	**192**	**4.67¢**	**194**
10							
11	**Full Service Distribution**	Quantity	Units				
12							
13	Service Charge	9	Cust.	$1.95	0	$1.95	0
14							
15	Distribution Charge	4,153	MWh	$0.05288	220	$0.05917	246
16	Distribution System	4,153	MWh	**5.29¢**	**220**	**5.92¢**	**246**
17	IRM	4,153	MWh	$0.000595	2	$0.000595	2
18	Nuclear Decomm.	4,153	MWh	$0.000882	4	$0.000882	4
19	Energy Waste Reduction	9	Meters	$5.50	1	$5.50	1
20	LIEAF	9	Meters	$0.88	0	$0.88	0
21	Distribution Surcharges	4,153	MWh	**0.16¢**	**7**	**0.16¢**	**7**
22							
23	Total Distribution	4,153	MWh	**5.46¢**	**227**	**6.09¢**	**253**
24	**Total Full Service R7**	4,153	MWh	**10.09¢**	**419**	**10.76¢**	**447**
25							
26	**Choice Distribution**	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
27							
28	**Capacity**						
29	Energy	0	MWh	$0.00577	0	$0.01583	0
30							
31	Service Charge	0	Cust.	$1.95	0	$1.95	0
32							0
33	Distribution Charge	0	MWh	$0.05288	0	$0.05917	0
34	Distribution System	0	MWh		**0**		**0**
35	IRM	0	MWh	$0.000595	0	$0.000595	0
36	Nuclear Decomm.	0	MWh	$0.000882	0	$0.000882	0
37	Energy Waste Reduction	0	Meters	$5.50	0	$5.50	0
38	LIEAF	0	Meters	$0.88	0	$0.88	0
39	Distribution Surcharges	0	MWh		**0**		**0**
40							
41	**Total Choice R7**	0	MWh		**0**		**0**
42							
43	**Total R7**	4,153	MWh	**10.09¢**	**419**	**10.76¢**	**447**
44	Increase/Decrease ($)						28

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Commercial Space Conditioning Rate - Standard Contract Rider No. R8

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
Page: 27 of 58

	(a)	(b)		(c)	(d)	(e)	(f)
	Description	**Billing Determinants**		**Present**		**Proposed**	
	Full Service Power Supply	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
1	**Capacity**						
2	Energy						
3	Summer June-Oct						
4	R8 All KWH- Separate Meter	18,111	MWh	$0.01539	279	$0.04268	773
5	R8a initial Block of D3	1,429	MWh	$0.01010	14	$0.02770	40
6	R8a Excess	444	MWh	$0.01539	7	$0.04268	19
7							
8	Winter Nov-May						
9	R8 First 1000 KWH- Sep Mtr	5,018	MWh	$0.01539	77	$0.04268	214
10	R8 Excess	33,771	MWh	$0.00510	172	$0.01414	478
11							
12	R8a initial Block of D3	2,614	MWh	$0.01010	26	$0.02770	72
13	Excess	11,955	MWh	$0.00510	61	$0.01414	169
14							
15	Non-capacity Charge	73,342	MWh	$0.06173	4,527	$0.04702	3,448
16	Power Supply Subtotal	73,342	MWh		**5,164**		**5,213**
17							
18	PSCR	73,342	MWh	$0.00000	0	$0.00000	0
19	REPS	1,678	Meters	$0.00	0	$0.00	0
20	Total Full Service Power Supply	73,342	MWh	**7.04¢**	**5,164**	**7.11¢**	**5,213**
21							
22	**Full Service Distribution**	Quantity	Units				
23							
24	Service Charge						
25	R8 Separate Meter	1,066	Cust.	$11.25	144	$11.25	144
26	R8a	612	Cust.	$11.25	83	$11.25	83
27							
28	Distribution Charge	73,342	MWh	$0.05288	3,878	$0.05917	4,340
29	Distribution System	73,342	MWh	**5.60¢**	**4,105**	**6.23¢**	**4,566**
30	IRM	73,342	MWh	$0.000595	44	$0.000595	44
31	Nuclear Decomm.	73,342	MWh	$0.000882	65	$0.000882	65
32	Energy Waste Reduction	1,066	Meters	$5.50	$70	$5.50	70
33	LIEAF	1,066	Meters	$0.88	11	$0.88	11
34	Distribution Surcharges	73,342	MWh	**0.26¢**	**190**	**0.26¢**	**190**
35							
36	Total Distribution	73,342	MWh	**5.86¢**	**4,295**	**6.49¢**	**4,756**
37	**Total Full Service R8**	73,342	MWh	**12.90¢**	**9,459**	**13.59¢**	**9,969**
38							
39	**Choice Distribution**	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
40							
41	**Capacity**						
42	Energy						
43							
44	R8 All KWH- Separate Meter	0	MWh	$0.01539	0	$0.04268	0
45	R8a initial Block of D3	0	MWh	$0.01010	0	$0.02770	0
46	R8a Excess	0	MWh	$0.01539	0	$0.04268	0
47							
48	Winter Nov-May						
49	R8 First 1000 KWH- Sep Mtr	0	MWh	$0.01539	0	$0.04268	0
50	R8 Excess	0	MWh	$0.00510	0	$0.01414	0
51							
52	R8a initial Block of D3	0	MWh	$0.01010	0	$0.02770	0
53	Excess	0	MWh	$0.00510	0	$0.01414	0
54							
55	Service Charge						
56	R8 Separate Meter	14	Cust.	$11.25	2	$11.25	2
57	R8a	0	Cust.	$11.25	0	$11.25	0
58							
59	Distribution Charge	1,371	MWh	$0.05288	73	$0.05917	81
60	Distribution System	1,371	MWh	**5.43¢**	**74**	**6.06¢**	**83**
61	IRM	1,371	MWh	$0.000595	1	$0.000595	1
62	Nuclear Decomm.	1,371	MWh	$0.000882	1	$0.000882	1
63	Energy Waste Reduction	14	Meters	$5.50	1	$5.50	1
64	LIEAF	14	Meters	$0.88	0	$0.88	0
65	Distribution Surcharges	1,371	MWh	**0.23¢**	**3**	**0.23¢**	**3**
66							
67	**Total Choice R8**	1,371	MWh	**5.65¢**	**78**	**6.28¢**	**86**
68							
69	**Total R8**	74,713	MWh	**12.76¢**	**9,537**	**13.46¢**	**10,056**
70	Increase/Decrease ($)						519

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Primary Supply Rate - D11
All Voltages

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
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Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply						
	Capacity						
1	Power Supply Demand	21,460,521	kW	3.56	76,399	9.77	209,642
2	Voltage Level Discount						
3	Subtransmission	2,259,951	kW	(0.07)	(158)	(0.20)	(449)
4	Transmission	6,643,543	kW	(0.15)	(997)	(0.41)	(2,736)
5							
6	Energy						
7	On-Peak	2,894,545	MWh		0		0
8	Off-Peak	8,610,839	MWh		0		0
9	Total Energy	11,505,383	MWh				
10							
11	Voltage Level Discount						
12	Subtransmission	1,298,106	MWh	0.00000	0	0.00000	0
13	Transmission	4,354,860	MWh	0.00000	0	0.00000	0
14	Total Capacity	11,505,383	MWh		75,245		206,457
15							
16	**Non-Capacity**						
17	Power Supply Demand	21,460,521	kW	13.33	286,069	7.24	155,311
18	Voltage Level Adjustment						
19	Subtransmission	2,259,951	kW	(0.24)	(542)	(0.15)	(332)
20	Transmission	6,643,543	kW	(0.53)	(3,521)	(0.31)	(2,027)
21	Energy						
22	On-Peak	2,894,545	MWh	0.04257	123,221	0.04278	123,839
23	Off-Peak	8,610,839	MWh	0.03257	280,455	0.03278	282,295
24	Voltage Level Discount						
25	Subtransmission	1,298,106	MWh	(0.00062)	(805)	(0.00062)	(811)
26	Transmission	4,354,860	MWh	(0.00138)	(6,010)	(0.00139)	(6,057)
27	Power Supply Subtotal	11,505,383	MWh		754,111		758,675
28							
29	PSCR	11,505,383	MWh	0.00000	0	0.00000	0
30	REPS	2,079	Cust.	0.0	0	0.0	0
31	Total Full Service Power Supply	11,505,383	MWh	**6.55¢**	**754,111**	**6.59¢**	**758,675**
32							
33	**Full Service Distribution**	Quantity	Units				
34							
35	Service Charge - PV	1,949	Cust.	70	1,637	70	1,637
36	Service Charge - SV	70	Cust.	375	315	375	315
37	Service Charge - TV	60	Cust.	375	270	375	270
38	Distribution Charges						
39	Primary	15,679,728	kW	6.15	96,430	6.36	99,766
40		5,852,418	MWh				
41	Subtransmission	3,118,737	kW	1.96	6,113	1.74	5,433
42		1,298,106	MWh				
43	Transmission	8,008,087	kW	0.86	6,887	0.94	7,550
44		4,354,860	MWh				
45	Substation Credit						
46	Demand	3,035,972	kW	(0.30)	(911)	(0.30)	(911)
47	Energy	181,296	MWh	(0.0004)	(73)	(0.0004)	(73)
48	Distribution System	11,505,383	MWh	0.96¢	110,668	0.99¢	113,987
49							
50	IRM - PV	15,679,728	kW	0.0727	1,140	0.0727	1,140
51	IRM - SV	3,118,737	kW	0.0312	97	0.0312	97
52	IRM - TV	8,008,087	kW	0.0000	0	0.0000	0
53	Nuclear Decommissioning	11,505,383	MWh	0.000882	10,148	0.000882	10,148
54	Energy Waste Reduction	2,463	Meters	1,237.99	36,597	1,237.99	36,597
55	LIEAF	2,463	Meters	0.88	26	0.88	26
56	Distribution Surcharges	11,505,383	MWh	0.42¢	48,008	0.42¢	48,008
57							
58	Total Full Service Distribution	11,505,383	MWh	**1.38¢**	**158,676**	**1.41¢**	**161,995**
59	**Total Full Service D11**	11,505,383	MWh	**7.93¢**	**912,788**	**8.00¢**	**920,670**

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Primary Supply Rate - D11 (Cont'd)
All Voltages

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
60	**Choice Distribution**						
61	**Capacity**						
62	Power Supply Demand	0	kW	3.56	0	9.77	0
63	Voltage Level Discount						
64	Subtransmission	0	kW	(0.07)	0	(0.20)	0
65	Transmission	0	kW	(0.15)	0	(0.41)	0
66							
67	Energy						
68	On-Peak	0	MWh	0.00000	0	0.00000	0
69	Off-Peak	0	MWh	0.00000	0	0.00000	0
70	Total Energy	0	MWh				
71							
72	Voltage Level Discount						
73	Subtransmission	0	MWh	0.00000	0	0.00000	0
74	Transmission	0	MWh	0.00000	0	0.00000	0
75	Total Capacity	0	MWh		0		0
76							
77	Service Charge - PV	530	Cust.	70	445	70	445
78	Service Charge - SV	11	Cust.	375	50	375	50
79	Service Charge - TV	8	Cust.	375	34	375	34
80	Distribution Charges						
81	Primary	5,033,729	kW	6.15	30,957	6.36	32,028
82		2,011,974	MWh				
83	Subtransmission	558,645	kW	1.96	1,095	1.74	973
84		204,630	MWh				
85	Transmission	2,289,408	kW	0.86	1,969	0.94	2,159
86		831,189	MWh				
87	Substation Credit						
88	Demand	1,797,568	kW	(0.30)	(539)	(0.30)	(539)
89	Energy	41,020	MWh	(0.0004)	(16)	(0.0004)	(16)
90	Distribution System	3,047,793	MWh	1.12¢	33,995	1.15¢	35,133
91							
92	IRM - PV	5,033,729	kW	0.0727	366	0.0727	366
93	IRM - SV	558,645	kW	0.0312	17	0.0312	17
94	IRM - TV	2,289,408	kW	0	0	0	0
95	Nuclear Decommissioning	3,047,793	MWh	0.000882	2,688	0.000882	2,688
96	Energy Waste Reduction	631	Meters	1,237.99	9,367	1,237.99	9,367
97	LIEAF	631	Meters	0.88	7	0.88	7
98	Distribution Surcharges	3,047,793	MWh	0.41¢	12,446	0.41¢	12,446
99							
100	**Total Choice D11**	3,047,793	MWh	**1.52¢**	**46,440**	**1.56¢**	**47,579**
101							
102	**Total D11**	14,553,177	MWh	**6.59¢**	**959,228**	**6.65¢**	**968,249**
103	Increase/Decrease ($)						9,021

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Primary Educational Institute - D6.2
All Voltages

Case No.: U-21534
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Schedule: F3
Witness: D.W. Isakson
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Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply						
	Capacity						
1	Power Supply Demand	1,641,257	kW	3.58	5,876	11.47	18,826
2							
3	Voltage Level Adjustment						
4	Subtransmission	783,019	kW	(0.07)	(55)	(0.23)	(183)
5	Transmission	0	kW	(0.15)	0	(0.48)	0
6							
7	Energy						
8	On-Peak	195,100	MWh	0.00000	0	0.00000	0
9	Off-Peak	503,918	MWh	0.00000	0	0.00000	0
10	Total Energy	699,018	MWh				
11							
12	Voltage Level Discount						
13	Subtransmission	326,833	MWh	0.00000	0	0.00000	0
14	Transmission	0	MWh	0.00000	0	0.00000	0
15	Total Capacity	699,018	MWh		5,821		18,643
16							
17	**Non-Capacity**						
18	Power Supply Demand	1,641,257	kW	10.04	16,478	3.33	5,463
19	Voltage Level Adjustment						
20	Subtransmission	783,019	kW	(0.18)	(141)	(0.07)	(53)
21	Transmission	0	kW	(0.40)	0	(0.14)	0
22							
23							
24	Energy						
25	On-Peak	195,100	MWh	0.04322	8,432	0.04673	9,117
26	Off-Peak	503,918	MWh	0.04022	20,268	0.04373	22,036
27	Voltage Level Discount						
28	Subtransmission	326,833	MWh	(0.00073)	(239)	(0.00079)	(258)
29	Transmission	0	MWh	(0.00162)	0	(0.00176)	0
30	Power Supply Subtotal	699,018	MWh		50,619		54,948
31							
32	PSCR	699,018	MWh	0.00000	0	0.00000	0
33	REPS	123	Cust.	0.0	0	0.0	0
34	Total Full Service Power Supply	699,018	MWh	**7.24¢**	**50,619**	**7.86¢**	**54,948**
35							
36	**Full Service Distribution**	Quantity	Units				
37							
38	Service Charge - PV	117	Cust.	70	98	70	98
39	Service Charge - SV	6	Cust.	375	27	375	27
40	Service Charge - TV	0	Cust.	375	0	375	0
41	Distribution Charges						
42	Primary	1,127,347	kW	6.15	6,933	6.36	7,173
43		372,184	MWh				
44	Subtransmission	999,979	kW	1.96	1,960	1.74	1,742
45		326,833	MWh				
46	Transmission	0	kW	0.86	0	0.94	0
47		0	MWh				
48	Substation Credit						
49	Demand	13,544	kW	(0.30)	(4)	(0.30)	(4)
50	Energy	0	MWh	(0.0004)	(0)	(0.0004)	(0)
51	Distribution System	699,018	MWh	1.29¢	9,014	1.29¢	9,036
52							
53	IRM - PV	1,127,347	kW	0.0727	82	0.0727	82
54	IRM - SV	999,979	kW	0.0312	31	0.0312	31
52	IRM - TV	0	kW	0	0	0	0
53	Nuclear Decommissioning	699,018	MWh	0.000882	617	0.000882	617
54	Energy Waste Reduction	146	Meters	1,237.99	2,169	1,237.99	2,169
55	LIEAF	146	Meters	0.88	2	0.88	2
56	Distribution Surcharges	699,018	MWh	0.41¢	2,900	0.41¢	2,900
57							
58	Total Full Service Distribution	699,018	MWh	**1.70¢**	**11,915**	**1.71¢**	**11,936**
59	**Total Full Service D6.2**	699,018	MWh	**8.95¢**	**62,534**	**9.57¢**	**66,884**

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Primary Educational Institute - D6.2 (Cont'd)
All Voltages

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
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Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
60	**Choice Distribution**						
61	**Capacity**						
62	Power Supply Demand		kW	3.58	0	11.47	0
63							
64	Energy						
65	On-Peak		MWh	0.00000	0	0.00000	0
66	Off-Peak		MWh	0.00000	0	0.00000	0
67	Total Energy		MWh				
68							
69	Voltage Level Adjustment						
70	Subtransmission		kW	(0.07)	0	(0.23)	0
71	Transmission		kW	(0.15)	0	(0.48)	0
72	Total Capacity						0
73							
74	Service Charge - PV	153	Cust.	70	129	70	129
75	Service Charge - SV	0	Cust.	375	0	375	0
76	Service Charge - TV	0	Cust.	375	0	375	0
77	Distribution Charges						
78	Primary	1,528,071	kW	6.15	9,398	6.36	9,723
79		394,774	MWh				
80	Subtransmission	0	kW	1.96	0	1.74	0
81		0	MWh				
82	Transmission	0	kW	0.86	0	0.94	0
83		0	MWh				
84	Substation Credit						
85	Demand	0	kW	(0.30)	0	(0.30)	0
86	Energy	0	MWh	(0.0004)	0	(0.0004)	0
87	Distribution System	394,774	MWh	2.41¢	9,526	2.50¢	9,851
88							
89	IRM - PV	1,528,071	kW	0.0727	111	0.0727	111
90	IRM - SV	0	kW	0.0312	0	0.0312	0
91	IRM - TV	0	kW	0	0	0	0
92	Nuclear Decommissioning	394,774	MWh	0.000882	348	0.000882	348
93	Energy Waste Reduction	156	Meters	1,237.99	2,314	1,237.99	2,314
94	LIEAF	156	Meters	0.88	2	0.88	2
95	Distribution Surcharges	394,774	MWh	0.70¢	2,775	0.70¢	2,775
96							
97	**Total Choice D6.2**	394,774	MWh	**3.12¢**	**12,301**	**3.20¢**	**12,626**
98							
99	**Total D6.2**	1,093,792	MWh	**6.84¢**	**74,835**	**7.27¢**	**79,510**
100	Increase/Decrease ($)						4,675

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Interruptible Supply Rate - D8
All Voltages

Case No.: U-21534
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Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply	Quantity	Units	Rate	Revenue	Rate	Revenue
	Capacity						
1	Power Supply Demand	941,965	kW	1.62	1,526	4.51	4,246
2	Voltage Level Adjustment						
3	Subtransmission	112,036	kW	(0.03)	(3)	(0.09)	(10)
4	Transmission	153,588	kW	(0.07)	(11)	(0.19)	(29)
5							
6	Product Protection Demand	135,807	kW	3.56	483	9.77	1,327
7	Voltage Level Adjustment						
8	Subtransmission	8,292	kW	(0.07)	(1)	(0.20)	(2)
9	Transmission	65,050	kW	(0.15)	(10)	(0.41)	(27)
10							
11	Energy						
12	On-Peak	135,663	MWh	0.00000	0	0.00000	0
13	Off-Peak	374,067	MWh	0.00000	0	0.00000	0
14	Total Energy	509,730	MWh				
15							
16	Voltage Level Discount						
17	Subtransmission	62,933	MWh	0.00000	0	0.00000	0
18	Transmission	125,103	MWh	0.00000	0	0.00000	0
19	Total Capacity	509,730	MWh		1,985		5,505
20							
21	**Non-Capacity**						
22	Power Supply Demand	941,965	kW	8.50	8,007	5.62	5,289
23	Voltage Level Adjustment						
24	Subtransmission	112,036	kW	(0.15)	(17)	(0.11)	(13)
25	Transmission	153,588	kW	(0.33)	(51)	(0.24)	(36)
26							
27	Product Protection Demand	135,807	kW	13.33	1,810	7.24	983
28	Voltage Level Discount						
29	Subtransmission	8,292	kW	(0.24)	(2)	(0.15)	(1)
30	Transmission	65,050	kW	(0.53)	(34)	(0.31)	(20)
31							
32	Energy						
33	On-Peak	135,663	MWh	0.04257	5,775	0.04278	5,804
34	Off-Peak	374,067	MWh	0.03257	12,183	0.03278	12,263
35	Voltage Level Discount						
36	Subtransmission	62,933	MWh	(0.00062)	(39)	(0.00062)	(39)
37	Transmission	125,103	MWh	(0.00138)	(173)	(0.00139)	(174)
38	Power Supply Subtotal	509,730	MWh		29,445		29,561
39							
40	PSCR	509,730	MWh	0.00000	0	0.00000	0
41	REPS	125	Cust.	0.00	0	0.00	0
42	Total Full Service Power Supply	509,730	MWh	**5.78¢**	**29,445**	**5.80¢**	**29,561**
43							
44	**Full Service Distribution**	Quantity	Units				
45							
46	Service Charge - PV	119	Cust.	70	100	70	100
47	Service Charge - SV	4	Cust.	375	18	375	18
48	Service Charge - TV	2	Cust.	375	9	375	9
49	Distribution Charges						
50	Primary	880,229	kW	6.15	5,413	6.36	5,601
51		321,694	MWh				
52	Subtransmission	129,679	kW	1.96	254	1.74	226
53		62,933	MWh				
54	Transmission	277,821	kW	0.86	239	0.94	262
55		125,103	MWh				
56	Substation Credit						
57	Demand	268,469	kW	(0.30)	(81)	(0.30)	(81)
58	Energy	0	MWh	(0.0004)	0	(0.0004)	0
59	Distribution System	509,730	MWh	1.17¢	5,953	1.20¢	6,135
60							
61	IRM - PV	880,229	kW	0.0727	64	0.0727	64
62	IRM - SV	129,679	kW	0.0312	4	0.0312	4
63	IRM - TV	277,821	kW	0	0	0	0
64	Nuclear Decommissioning	509,730	MWh	0.000882	450	0.000882	450
65	Energy Waste Reduction	133	Meters	1,237.99	1,979	1,237.99	1,979
66	LIEAF	133	Meters	0.88	1	0.88	1
67	Distribution Surcharges	509,730		0.49¢	2,498	0.49¢	2,498
68							
69	Total Full Service Distribution	509,730	MWh	**1.66¢**	**8,451**	**1.69¢**	**8,633**
70	**Total Full Service D8**	509,730	MWh	**7.43¢**	**37,896**	**7.49¢**	**38,194**

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Interruptible Supply Rate - D8 (Cont'd)
All Voltages

Case No.: U-21534
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Schedule: F3
Witness: D.W. Isakson
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Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
71	**Choice Distribution**						
72	**Capacity**						
73	Power Supply Demand	0	kW	1.62	0	4.51	0
74	Voltage Level Discount						
75	Subtransmission	0	kW	(0.03)	0	(0.09)	0
76	Transmission	0	kW	(0.07)	0	(0.19)	0
77							
78	Product Protection Demand	0	kW	3.56	0	9.77	0
79	Voltage Level Discount						
80	Subtransmission	0	kW	(0.07)	0	(0.20)	0
81	Transmission	0	kW	(0.15)	0	(0.41)	0
82							
83	Energy						
84	On-Peak	0	MWh	0.00000	0	0.00000	0
85	Off-Peak	0	MWh	0.00000	0	0.00000	0
86	Total Energy	0	MWh				
87							
88	Voltage Level Discount						
89	Subtransmission	0	MWh	0.00000	0	0.00000	0
90	Transmission	0	MWh	0.00000	0	0.00000	0
91	Total Capacity	0	MWh				0
92							
93	Service Charge - PV	10	Cust.	70	8	70	8
94	Service Charge - SV	2	Cust.	375	9	375	9
95	Service Charge - TV	0	Cust.	375	0	375	0
96	Distribution Charges						
97	Primary	226,275	kW	6.15	1,392	6.36	1,440
98		110,144	MWh				
99	Subtransmission	66,324	kW	1.96	130	1.74	116
100		23,118	MWh				
101	Transmission	0	kW	0.86	0	0.94	0
102		0	MWh				
103	Substation Credit						
104	Demand	0	kW	(0.30)	0	(0.30)	0
105	Energy	0	MWh	(0.0004)	0	(0.0004)	0
106	Distribution System	133,261	MWh	1.15¢	1,539	1.18¢	1,573
107							
108	IRM - PV	226,275	kW	0.072700	16	0.072700	16
109	IRM - SV	66,324	kW	0.031200	2	0.031200	2
110	IRM - TV	0	kW	0.000000	0	0.000000	0
111	Nuclear Decommissioning	133,261	MWh	0.000882	118	0.000882	118
112	Energy Waste Reduction	16	Meters	1,237.99	233	1,237.99	233
113	LIEAF	16	Meters	0.88	0	0.88	0
114	Distribution Surcharges	133,261	MWh	0.28¢	370	0.28¢	370
115							
116	**Total Choice D8**	133,261	MWh	**1.43¢**	**1,909**	**1.46¢**	**1,942**
117							
118	**Total D8**	642,991	MWh	**6.19¢**	**39,805**	**6.24¢**	**40,137**
119	Increase/Decrease ($)						332

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
All Electric School Building Rate - D10
Primary Voltage

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply	Quantity	Units	Rate	Revenue	Rate	Revenue
	Capacity						
1	Energy						
2	Energy -- Winter	14,018	MWh	0.00094	13	0.01579	221
3	Energy -- Summer	6,872	MWh	0.02107	145	0.03592	247
4	Total Capacity	20,890	MWh		158		468
5							
6	**Non-Capacity**						
7	Energy	20,890	MWh	0.07430	1,552	0.05994	1,252
8	Power Supply Subtotal						
9							
10	PSCR	20,890	MWh	0.00000	0	0.00000	0
11	REPS	19	Cust.	0.00	0	0.00	0
12	Total Full Service Power Supply	20,890	MWh	**8.19¢**	**1,710**	**8.24¢**	**1,720**
13							
14	**Full Service Distribution**	Quantity	Units				
15							
16	Service Charge	19	Cust.	70	16	70	16
17							
18	Distribution Charges						
19	Primary	20,890	MWh	0.01968	411	0.01884	394
20	Distribution System	20,890	MWh	2.04¢	427	1.96¢	410
21							
22	IRM	20,890	MWh	0.000233	5	0.000233	5
23	Nuclear Decommissioning	20,890	MWh	0.000882	18	0.000882	18
24	Energy Waste Reduction	19	Meters	1,237.99	283	1,237.99	283
25	LIEAF	19	Meters	0.88	0	0.88	0
26	Distribution Surcharges	20,890	MWh	1.47¢	307	1.47¢	307
27							
28	Total Full Service Distribution	20,890	MWh	**3.51¢**	**734**	**3.43¢**	**717**
29	**Total Full Service D10**	20,890	MWh	**11.70¢**	**2,444**	**11.67¢**	**2,437**
30							
31	**Choice Distribution**	Quantity	Units	Rate	Revenue	Rate	Revenue
32	**Capacity**				($000)		($000)
33	Energy						
34	Energy -- Winter	0	MWh	0.00094	0	0.01579	0
35	Energy -- Summer	0	MWh	0.02107	0	0.03592	0
36	Total Capacity	0	MWh				0
37							
38	Service Charge	12	Cust.	70	10	70	10
39							
40	Distribution Charges						
41	Primary	13,396	MWh	0.01968	264	0.01884	252
42	Distribution System	13,396	MWh	2.04¢	274	1.96¢	262
43							
44	IRM	13,396	MWh	0.000233	3	0.000233	3
45	Nuclear Decommissioning	13,396	MWh	0.000882	12	0.000882	12
46	Energy Waste Reduction	12	Meters	1,237.99	178	1,237.99	178
47	LIEAF	12	Meters	0.88	0	0.88	0
48	Distribution Surcharges	13,396	MWh	1.44¢	193	1.44¢	193
49							
50	**Total Choice D10**	13,396	MWh	**3.49¢**	**467**	**3.40¢**	**456**
51							
52	**Total D10**	34,286	MWh	**8.49¢**	**2,911**	**8.44¢**	**2,893**
53	Increase/Decrease ($)						(18)

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
EXPERIMENTAL LARGE CUSTOMER LOW
PEAK DEMAND SUPPLY RATE - D12
All Voltages

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
Page: 35 of 58

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Revenue ($000)	(e) Proposed Rate	(f) Revenue ($000)
	Full Service Power Supply						
	Capacity						
1	Power Supply Demand (October through May)	0	kW	0.32	0	0.32	0
2	Power Supply Demand (June through September)	0	kW	8.00	0	8.05	0
3							
4	Voltage Level Discount - Transmission						
5	CVLD (October through May)	0	kW	(0.005)	0	(0.005)	0
6	CVLD (June through September)	0	kW	(0.14)	0	(0.14)	0
7							
8	Total Capacity				0		0
9							
10	**Non-Capacity**						
11	Power Supply Demand (October through May)	0	kW	0.32	0	0.32	0
12	Power Supply Demand (June through September)	0	kW	41.16	0	41.41	0
13							
14	Voltage Level Discount - Transmission						
15	NCVLD (October through May)	0	kW	(0.005)	0	(0.005)	0
16	NCVLD (June through September)	0	kW	(0.70)	0	(0.70)	0
17							
18	Energy						
19	On-Peak	0	MWh	0.04112	0	0.04137	0
20	Off-Peak	0	MWh	0.03611	0	0.03633	0
21							
22	Voltage Level Discount - Transmission	0	MWh	(0.00056)	0	(0.00056)	0
23							
24	Power Supply Subtotal	0	MWh		0		0
25							
26	PSCR	0	MWh	0.00000	0	0.00000	0
27	REPS	0	Cust.	0.0	0	0.0	0
28	Total Full Service Power Supply	0	MWh		**0**		**0**
29							
30	**Full Service Distribution** Quantity		Units				
31							
32	Service Charge - SV	0	Cust.	375	0	375	0
33	Service Charge - TV	0	Cust.	375	0	375	0
34	Distribution Charges						
35	Subtransmission	0	kW	1.96	0	1.74	0
36		0	MWh				
37	Transmission	0	kW	0.86	0	0.94	0
38		0	MWh				
39	Substation Credit						
40	Demand	0	kW	(0.30)	0	(0.30)	0
41	Energy	0	MWh	(0.0004)	0	(0.0004)	0
42	Distribution System	0	MWh	#DIV/0!	0	#DIV/0!	0
43							
44	IRM - SV	0	kW	0.031200	0	0.031200	0
45	IRM - TV	0	kW	0.000000	0	0.000000	0
46	Nuclear Decommissioning	0	MWh	0.000882	0	0.000882	0
47	Energy Waste Reduction	0	Meters	1,237.99	0	1,237.99	0
48	LIEAF	0	Meters	0.88	0	0.88	0
49	Distribution Surcharges	0	MWh		0	#DIV/0!	0
50							
51	Total Full Service Distribution	0	MWh		**0**		**0**
52	**Total Full Service D12**	0	MWh		**0**		**0**

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
XL High Load Factor Rate - D13
All Voltages

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply						
1	Capacity	200,000	MWh	0.01514	3,028	0.01514	3,028
2	Non-Capacity	200,000	MWh	0.03430	6,860	0.03287	6,574
3	Transmission	200,000	MWh	0.00304	608	0.00308	616
4	Power Supply Subtotal	200,000	MWh		10,496		10,218
5							
6	REPS	3	Cust.	0.00	0	0.00	0
7	Total Full Service Power Supply	200,000	MWh	**5.25¢**	**10,496**	**5.11¢**	**10,218**
8							
9	**Full Service Distribution**	Quantity	Units				
10							
11	Service Charge - PV	1	Cust.	70	1	70	1
12	Service Charge - SV	0	Cust.	375	0	375	0
13	Service Charge - TV	2	Cust.	375	9	375	9
14							
15	Distribution Charges						
16	Primary	32,850	MWH	0.00936	307	0.00968	318
17	Sub-transmission	0	MWH	0.00298	0	0.00265	0
18	Transmission	167,150	MWH	0.00131	219	0.00144	240
19							
20	Administration Charge	200,000	MWH	0.00015	30	0.00015	30
21							
22	Substation Credit						
23	Primary Side		MWH	(0.00040)	0	(0.00040)	0
24	Customer Owned		MWH	(0.00055)	0	(0.00055)	0
25							
26	Distribution System	200,000	MWh	0.28¢	566	0.30¢	598
27							
28	IRM - PV	32,850	MWh	0.000133	4	0.000133	4
29	IRM - SV	0	MWh	0.000057	0	0.000057	0
30	IRM - TV	167,150	MWh	0.000000	0	0.000000	0
31	Energy Waste Reduction	3	Meters	1,237.99	45	1,237.99	45
32	LIEAF	3	Meters	0.88	0	0.88	0
33	Distribution Surcharges	200,000	MWh	0.02¢	49	0.02¢	49
34							
35	Total Full Service Distribution	200,000	MWh	**0.31¢**	**615**	**0.32¢**	**647**
36	**Total Full Service D13**	200,000	MWh	**5.56¢**	**11,111**	**5.43¢**	**10,865**
37	Increase/Decrease ($)						(246)

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Optional TOU Primary Supply Rate - D14
Designed Revenue Neutral to D11
All Voltages

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Proposed D11 Rate	(d) Proposed D11 Revenue ($000)	(e) Revenue Neutral Design Rate	(f) Revenue Neutral Design Revenue ($000)
	Full Service Power Supply	Quantity	Units	Rate	Revenue	Rate	Revenue
	Capacity						
1	June - September						
2	On Peak (11am - 7pm M-F, excl holidays)	1,070,182	MWh			0.02817	30,146
3	Off Peak	3,054,881	MWh			0.01676	51,208
4	October - May						
5	On Peak (11am - 7pm M-F, excl holidays)	1,824,363	MWh			0.01947	35,522
6	Off Peak	5,555,958	MWh			0.01676	93,133
7	Voltage Level Discount						
8	Subtransmission	1,298,106	MWh			(0.00032)	(419)
9	Transmission	4,354,860	MWh			(0.00072)	(3,132)
10	Total Capacity	11,505,383	MWh				
11							
12	**Non-Capacity**						
13	June - September						
14	On Peak (11am - 7pm M-F, excl holidays)	1,070,182	MWh			0.07534	80,632
15	Off Peak	3,054,881	MWh			0.04484	136,967
16	October - May						
17	On Peak (11am - 7pm M-F, excl holidays)	1,824,363	MWh			0.05208	95,013
18	Off Peak	5,555,958	MWh			0.04484	249,105
19	Voltage Level Discount						
20	Subtransmission	1,298,106	MWh			(0.00086)	(1,122)
21	Transmission	4,354,860	MWh			(0.00192)	(8,377)
22	Power Supply Subtotal	11,505,383	MWh		0		758,675
23							
24	PSCR	11,505,383	MWh	0.00000	0	0.00000	0
25	REPS	2,079	Cust.	0.0	0	0.0	0
26	Total Full Service Power Supply	11,505,383	MWh	**6.59¢**	**758,675**	**6.59¢**	**758,675**
27							
28	**Full Service Distribution**	Quantity	Units				
29							
30	Service Charge - PV	1,949	Cust.	70	1,637	70	1,637
31	Service Charge - SV	70	Cust.	375	315	375	315
32	Service Charge - TV	60	Cust.	375	270	375	270
33	Distribution Charges						
34	Primary	15,679,728	kW	6.36	99,766	6.36	99,766
35		5,852,418	MWh				
36	Subtransmission	3,118,737	kW	1.74	5,433	1.74	5,433
37		1,298,106	MWh				
38	Transmission	8,008,087	kW	0.94	7,550	0.94	7,550
39		4,354,860	MWh				
40	Substation Credit						
41	Demand	3,035,972	kW	(0.30)	(911)	(0.30)	(911)
42	Energy	181,296	MWh	(0.0004)	(73)	(0.0004)	(73)
43	Distribution System	11,505,383	MWh	0.99¢	113,987	0.99¢	113,987
44							
45	IRM - PV	15,679,728	kW	0.0727	1,140	0.0727	1,140
46	IRM - SV	3,118,737	kW	0.0312	97	0.0312	97
47	IRM - TV	8,008,087	kW	0	0	0.0000	0
48	Nuclear Decommissioning	11,505,383	MWh	0.000882	10,148	0.000882	10,148
49	Energy Waste Reduction	2,463	Meters	1,237.99	36,597	1,237.99	36,597
50	LIEAF	2,463	Meters	0.88	26	0.88	26
51	Distribution Surcharges	11,505,383	MWh	0.42¢	48,008	0.42¢	48,008
52							
53	Total Full Service Distribution	11,505,383	MWh	**1.41¢**	**161,995**	**1.41¢**	**161,995**
54	**Total Full Service D14**	11,505,383	MWh	**8.00¢**	**920,670**	**8.00¢**	**920,670**

Michigan Public Service Commission
DTE Electric Company
Optional TOU Primary Supply Rate - D14 Cont'd
Designed Revenue Neutral to D11
All Voltages

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
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Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Proposed D11 Rate	(d) Revenue ($000)	(e) Revenue Neutral Design Rate	(f) Revenue ($000)
55	**Choice Distribution**						
56	**Capacity**						
57	June - September						
58	On Peak (11am - 7pm M-F, excl holidays)	0	MWh			0.02817	0
59	Off Peak	0	MWh			0.01676	0
60	October - May						0
61	On Peak (11am - 7pm M-F, excl holidays)	0	MWh			0.01947	0
62	Off Peak	0	MWh			0.01676	0
63	Voltage Level Discount						0
64	Subtransmission	0	MWh			(0.00032)	0
65	Transmission	0	MWh			(0.00072)	0
66	Total Capacity	0	MWh		0		0
67							
68	Service Charge - PV	530	Cust.	70	445	70	445
69	Service Charge - SV	11	Cust.	375	50	375	50
70	Service Charge - TV	8	Cust.	375	34	375	34
71	Distribution Charges						
72	Primary	5,033,729	kW	6.36	32,028	6.36	32,028
73		2,011,974	MWh				
74	Subtransmission	558,645	kW	1.74	973	1.74	973
75		204,630	MWh				
76	Transmission	2,289,408	kW	0.94	2,159	0.94	2,159
77		831,189	MWh				
78	Substation Credit						
79	Demand	1,797,568	kW	(0.30)	(539)	(0.30)	(539)
80	Energy	41,020	MWh	(0.0004)	(16)	(0.0004)	(16)
81	Distribution System	3,047,793	MWh	1.15¢	35,133	1.15¢	35,133
82							
83	IRM - PV	5,033,729	kW	0.0727	366	0.0727	366
84	IRM - SV	558,645	kW	0.0312	17	0.0312	17
85	IRM - TV	2,289,408	kW	0	0	0	0
86	Nuclear Decommissioning	3,047,793	MWh	0.000882	2,688	0.000882	2,688
87	Energy Waste Reduction	631	Meters	1,237.99	9,367	1,237.99	9,367
88	LIEAF	631	Meters	0.88	7	0.88	7
89	Distribution Surcharges	3,047,793	MWh	0.41¢	12,446	0.41¢	12,446
90							
91	**Total Choice D14**	3,047,793	MWh	**1.56¢**	**47,579**	**1.56¢**	**47,579**
92							
93	**Total D14**	14,553,177	MWh	**6.65¢**	**968,249**	**6.65¢**	**968,249**
94	Increase/Decrease ($)						(0)

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Alternative Metal Melting Rider - R1.1

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply						
	Capacity						
1	Energy						
2	Secondary						
3	First 100 Hours Use	2,315	MWh	0.00706	16	0.01902	44
4	Excess Hours Use	803	MWh	0.00267	2	0.00719	6
5	Primary						
6	First 100 Hours Use	6,627	MWh	0.00525	35	0.01415	94
7	Excess Hours Use	712	MWh	0.00191	1	0.00515	4
8	Subtransmission						
9	First 100 Hours Use	15,552	MWh	0.00512	80	0.01380	215
10	Excess Hours Use	35,693	MWh	0.00178	64	0.00480	171
11	Transmission						
12	First 100 Hours Use	37,938	MWh	0.00434	165	0.01169	444
13	Excess Hours Use	25,522	MWh	0.00144	37	0.00388	99
14	Total Capacity	125,163	MWh		399		1,076
15							
16	**Non-Capacity**						
17	Energy	125,163	MWh	0.05251	6,572	0.04723	5,911
18	Power Supply Subtotal				6,971		6,987
19							
20	PSCR	125,163	MWh	0.00000	0	0.00000	0
21	REPS	17	Cust.	0.00	0	0.00	0
22	Total Full Service Power Supply	125,163	MWh	**5.57¢**	**6,971**	**5.58¢**	**6,987**
23							
24	**Full Service Distribution**	Quantity	Units	Rate	Revenue ($000)	Rate	Revenue ($000)
25							
26	Distribution Charges						
27	Secondary						
28	First 100 Hours Use	2,315	MWh	0.05288	122	0.05917	137
29	Excess Hours Use	803	MWh	0.05288	42	0.05917	48
30	Primary						
31	First 100 Hours Use	6,627	MWh	0.01832	121	0.01926	128
32	Excess Hours Use	712	MWh	0.01832	13	0.01926	14
33	Subtransmission						
34	First 100 Hours Use	15,552	MWh	0.00677	105	0.00510	79
35	Excess Hours Use	35,693	MWh	0.00677	242	0.00510	182
36	Transmission						
37	First 100 Hours Use	37,938	MWh	0.00274	104	0.00571	217
38	Excess Hours Use	25,522	MWh	0.00274	70	0.00571	146
39							
40	Substation Credit						
41	Energy	3,966	MWh	(0.00300)	(12)	(0.00300)	(12)
42	Distribution System	125,163	MWh	0.65¢	808	1.48¢	938
43							
44	IRM - DV	3,118	MWh	0.000555	2	0.000555	2
45	IRM - PV	7,339	MWh	0.000229	2	0.000229	2
46	IRM - SV	51,246	MWh	0.000104	5	0.000104	5
47	IRM - TV	63,460	MWh	0	0	0	0
48	Nuclear Decommissioning	125,163	MWh	0.000882	110	0.000882	110
49	Energy Waste Reduction	23	Meters	1,237.99	345	1,237.99	345
50	LIEAF	23	Meters	0.88	0	0.88	0
51	Distribution Surcharges	125,163	MWh	0.37¢	464	0.37¢	464
52							
53	Total Full Service Distribution	125,163	MWh	**1.02¢**	**1,273**	**1.12¢**	**1,402**
54	**Total Full Service R1.1**	125,163	MWh	**6.59¢**	**8,244**	**6.70¢**	**8,389**

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Alternative Metal Melting Rider - R1.1 (Cont'd)

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
55	**Choice Distribution**						
56	**Capacity**						
57	Energy						
58	Secondary						
59	First 100 Hours Use	0	MWh	0.00706	0	0.01902	0
60	Excess Hours Use	0	MWh	0.00267	0	0.00719	0
61	Primary						
62	First 100 Hours Use	0	MWh	0.00525	0	0.01415	0
63	Excess Hours Use	0	MWh	0.00191	0	0.00515	0
64	Subtransmission						
65	First 100 Hours Use	0	MWh	0.00512	0	0.01380	0
66	Excess Hours Use	0	MWh	0.00178	0	0.00480	0
67	Transmission						
68	First 100 Hours Use	0	MWh	0.00434	0	0.01169	0
69	Excess Hours Use	0	MWh	0.00144	0	0.00388	0
70	Total Capacity	0	MWh				0
71							
72	Distribution Charges						
73	Secondary						
74	First 100 Hours Use	0	MWh	0.05288	0	0.05917	0
75	Excess Hours Use	0	MWh	0.05288	0	0.05917	0
76	Primary						
77	First 100 Hours Use	0	MWh	0.01832	0	0.01926	0
78	Excess Hours Use	0	MWh	0.01832	0	0.01926	0
79	Subtransmission						
80	First 100 Hours Use	0	MWh	0.00677	0	0.00510	0
81	Excess Hours Use	0	MWh	0.00677	0	0.00510	0
82	Transmission						
83	First 100 Hours Use	0	MWh	0.00274	0	0.00571	0
84	Excess Hours Use	0	MWh	0.00274	0	0.00571	0
85							
86	Substation Credit						
87	Energy	0	MWh	(0.00300)	0	(0.00300)	0
88	Distribution System	0	MWh		0		0
89							
90	IRM - DV	0	MWh	0.000555	0	0.000555	0
91	IRM - PV	0	MWh	0.000229	0	0.000229	0
92	IRM - SV	0	MWh	0.000104	0	0.000104	0
93	IRM - TV	0	MWh	0	0	0	0
94	Nuclear Decommissioning	0	MWh	0.000882	0	0.000882	0
95	Energy Optimization	0	Meters	1,237.99	0	1,237.99	0
96	LIEAF	0	Meters	0.88	0	0.88	0
97	Distribution Surcharges	0	MWh		0		0
98							
99	**Total Choice R1.1**	0	MWh		**0**		**0**
100							
101	**Total R1.1**	125,163	MWh	**6.59¢**	**8,244**	**6.70¢**	**8,389**
102	Increase/Decrease ($)						145

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Electric Process Heat Rider - R1.2

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply						
	Capacity						
1	Energy						
2	Secondary						
3	First 100 Hours Use	12,311	MWh	0.00706	87	0.01902	234
4	Excess Hours Use	22,552	MWh	0.00267	60	0.00719	162
5	Primary						
6	First 100 Hours Use	81,851	MWh	0.00525	430	0.01415	1,158
7	Excess Hours Use	203,438	MWh	0.00191	389	0.00515	1,047
8	Subtransmission						
9	First 100 Hours Use	6,424	MWh	0.00512	33	0.01380	89
10	Excess Hours Use	20,884	MWh	0.00178	37	0.00480	100
11	Transmission						
12	First 100 Hours Use	0	MWh	0.00434	0	0.01169	0
13	Excess Hours Use	0	MWh	0.00144	0	0.00388	0
14	Total Capacity	347,461	MWh		1,035		2,790
15							
16	**Non-Capacity**						
17	Energy	347,461	MWh	0.05251	18,245	0.04723	16,410
18	Power Supply Subtotal	347,461			19,281		19,200
19							
20	PSCR	347,461	MWh	0.00000	0	0.00000	0
21	REPS	156	Cust.	0.00	0	0.00	0
22	Total Full Service Power Supply	347,461	MWh	**5.55¢**	**19,281**	**5.53¢**	**19,200**
23							
24	**Full Service Distribution**	Quantity	Units				
25							
26	Distribution Charges						
27	Secondary						
28	First 100 Hours Use	12,311	MWh	0.05288	651	0.05917	729
29	Excess Hours Use	22,552	MWh	0.05288	1,193	0.05917	1,334
30	Primary						
31	First 100 Hours Use	81,851	MWh	0.01832	1,500	0.01926	1,576
32	Excess Hours Use	203,438	MWh	0.01832	3,727	0.01926	3,918
33	Subtransmission						
34	First 100 Hours Use	6,424	MWh	0.00677	43	0.00510	33
35	Excess Hours Use	20,884	MWh	0.00677	141	0.00510	107
36	Transmission						
37	First 100 Hours Use	0	MWh	0.00274	0	0.00571	0
38	Excess Hours Use	0	MWh	0.00274	0	0.00571	0
39							
40	Substation Credit						
41	Energy	0	MWh	(0.00300)	0	(0.00300)	0
42	Distribution System	347,461	MWh	2.09¢	7,255	2.21¢	7,696
43							
44	IRM - DV	34,864	MWh	0.000555	19	0.000555	19
45	IRM - PV	285,289	MWh	0.000229	65	0.000229	65
46	IRM - SV	27,308	MWh	0.000104	3	0.000104	3
47	IRM - TV	0	MWh	0	0	0	0
48	Nuclear Decommissioning	347,461	MWh	0.000882	306	0.000882	306
49	Energy Waste Reduction	180	Meters	1,237.99	2,676	1,237.99	2,676
50	LIEAF	180	Meters	0.88	2	0.88	2
51	Distribution Surcharges	347,461	MWh	0.88¢	3,072	0.88¢	3,072
52							
53	Total Full Service Distribution	347,461	MWh	**2.97¢**	**10,327**	**3.10¢**	**10,768**
54	**Total Full Service R1.2**	347,461	MWh	**8.52¢**	**29,608**	**8.62¢**	**29,968**

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Electric Process Heat Rider - R1.2 (Cont'd)

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
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Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Choice Distribution						
55	**Capacity**						
56	Energy						
57	Secondary						
58	First 100 Hours Use	0	MWh	0.00706	0	0.01902	0
59	Excess Hours Use	0	MWh	0.00267	0	0.00719	0
60	Primary						
61	First 100 Hours Use	0	MWh	0.00525	0	0.01415	0
62	Excess Hours Use	0	MWh	0.00191	0	0.00515	0
63	Subtransmission						
64	First 100 Hours Use	0	MWh	0.00512	0	0.01380	0
65	Excess Hours Use	0	MWh	0.00178	0	0.00480	0
66	Transmission						
67	First 100 Hours Use	0	MWh	0.00434	0	0.01169	0
68	Excess Hours Use	0	MWh	0.00144	0	0.00388	0
69	Total Capacity	0	MWh				0
70							
71	Distribution Charges						
72	Secondary						
73	First 100 Hours Use	0	MWh	0.05288	0	0.05917	0
74	Excess Hours Use	0	MWh	0.05288	0	0.05917	0
75	Primary						
76	First 100 Hours Use	5,269	MWh	0.01832	97	0.01926	101
77	Excess Hours Use	17,116	MWh	0.01832	314	0.01926	330
78	Subtransmission						
79	First 100 Hours Use	0	MWh	0.00677	0	0.00510	0
80	Excess Hours Use	0	MWh	0.00677	0	0.00510	0
81	Transmission						
82	First 100 Hours Use	0	MWh	0.00274	0	0.00571	0
83	Excess Hours Use	0	MWh	0.00274	0	0.00571	0
84							
85	Substation Credit						
86	Energy			(0.00300)	0	(0.00300)	0
87	Distribution System	22,385	MWh	1.83¢	410	1.93¢	431
88							
89	IRM - DV	0	MWh	0.000555	0	0.000555	0
90	IRM - PV	22,385	MWh	0.000229	5	0.000229	5
91	IRM - SV	0	MWh	0.000104	0	0.000104	0
92	IRM - TV	0	MWh	0	0	0	0
93	Nuclear Decommissioning	22,385	MWh	0.000882	20	0.000882	20
94	Energy Waste Reduction	6	Meters	1,237.99	83	1,237.99	83
95	LIEAF	6	Meters	0.88	0	0.88	0
96	Distribution Surcharges	22,385	MWh	0.48¢	108	0.48¢	108
97							
98	**Total Choice Distribution R1.2**	22,385	MWh	**2.31¢**	**518**	**2.41¢**	**539**
99							
100	**Total R1.2**	369,846	MWh	**8.15¢**	**30,125**	**8.25¢**	**30,507**
101	Increase/Decrease ($)						381

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Parallel Operation And Standby Service Rider - R3
All Voltages

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
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Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply						
1	**Station Power**						
2	**Capacity**						
3	Administrative Charge	7,386	MWh	0.00000	0	0.00000	0
4	Station Power Capacity	7,386	MWh		0		0
5							
6	**Non-Capacity**						
7	MISO Energy Charge	7,386	MWh	0.03935	291	0.03935	291
8	Net Trans MISO MKT	7,386	MWh	0.00767	57	0.00769	57
9	Administrative Charge	7,386	MWh	0.00000	0	0.00000	0
10	Station Power PS Subtotal	7,386	MWh		347		347
11							
12	**Standard R3**						
13	**Capacity**						
14	Power Supply Demand						
15	Generation Reservation Fee	111,811	kW	0.13	15	0.35	39
16	Daily Demand	1,519,268	kW	0.36	547	0.98	1,484
17	Maintenance Demand	84,577	kW	0.18	15	0.49	41
18							
19							
20							
21							
22							
23	Energy						
24	Secondary	2,502	MWh	0.01010	25	0.02770	69
25	Primary Total	64,300	MWh	0.00000	0	0.00000	0
26		66,802	MWh				
27							
28							
29							
30							
31	Standard R3 Capacity	66,802	MWh		602		1,634
32							
33	**Non-Capacity**						
34	Power Supply Demand						
35	Generation Reservation Fee	111,811	kW	0.48	54	0.26	29
36	Daily Demand	1,519,268	kW	1.33	2,021	0.72	1,100
37	Maintenance Demand	84,577	kW	0.67	57	0.36	31
38							
39	Energy						
40	Secondary	2,502	MWh	0.07096	178	0.05413	135
41	Primary Total	64,300	MWh	0.04890	3,144	0.04906	3,155
42	Primary Off-Peak Discount	48,273	MWh	(0.010000)	(483)	(0.010000)	(483)
42							
43	Voltage Level Discount						
44	Subtransmission	24,083	MWh	(0.00062)	(15)	(0.00062)	(15)
45	Transmission	17,970	MWh	(0.00138)	(25)	(0.00139)	(25)
46	Standard R3 PS Subtotal	66,802			5,532		5,561
47							
48	PSCR	66,802	MWh	0.00000	0	0.00000	0
49	REPS	40	Cust.	0.00	0	0.00	0
50	Total Full Service Power Supply	74,189	MWh	**7.93¢**	**5,880**	**7.96¢**	**5,908**

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Parallel Operation And Standby Service Rider - R3 (Cont'd)
All Voltages

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
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Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present	(d)	(e) Proposed	(f)
51	**Full Service Distribution**						
52	Service Charge						
53	Secondary	13	Cust.	70	11	70	11
54	Service Charge - PV	14	Cust.	70	12	70	12
55	Service Charge - SV	12	Cust.	375	54	375	54
56	Service Charge - TV	1	Cust.	375	5	375	5
57	Distribution Charges						
58	Secondary	15,050	kW	13.22	199	14.79	223
59		2,502	MWh	0.05288	132	0.05917	148
60	Primary	78,089	kW	6.15	480	6.36	497
61		22,247	MWh				
62	Subtransmission	483,801	kW	1.96	948	1.74	843
63		24,083	MWh				
64	Transmission	92,427	kW	0.86	79	0.94	87
65		17,970	MWh				
66	Substation Credit						
67	Demand	101,092	kW	(0.30)	(30)	(0.30)	(30)
68	Energy	8,892	MWh	(0.00040)	(4)	(0.00040)	(4)
69	Distribution System	66,802	MWh	2.82¢	1,886	2.76¢	1,844
70							
71	IRM - DV	2,502	MWh	0.000595	1	0.000595	1
72	IRM - PV	78,089	kW	0.0727	6	0.072700	6
73	IRM - SV	483,801	kW	0.0312	15	0.031200	15
74	IRM - TV	92,427	kW	0.0000	0	0.000000	0
75	Nuclear Decommissioning	66,802	MWh	0.000882	59	0.000882	59
76	Energy Waste Reduction	46	Meters	1,237.99	678	1,237.99	678
77	LIEAF	46	Meters	0.88	0	0.88	0
78	Distribution Surcharges	66,802	MWh	1.14¢	760	1.14¢	760
79							
80	Total Full Service Distribution	66,802	MWh	**3.96¢**	**2,646**	**3.90¢**	**2,604**
81	**Total Full Service R3**	74,189	MWh	**11.49¢**	**8,526**	**11.47¢**	**8,512**
82	Increase/Decrease ($)						(13)

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Interruptible Supply Rider - R10
All Voltages

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
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Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate	(d) Present Revenue ($000)	(e) Proposed Rate	(f) Proposed Revenue ($000)
	Full Service Power Supply	Quantity	Units	Rate	Revenue	Rate	Revenue
1	**Capacity**						
2	Administrative Charge	998,081	MWh	0.00000	0	0.00000	0
3	Total Capacity	998,081	MWh				
4							
5	**Non-Capacity**						
6	Administrative Charge	998,081	MWh	0.00000	0	0.00000	0
7	MISO Energy Charge	998,081	MWh	0.03935	39,274	0.03935	39,274
8	Net Trans MISO MKT	998,081	MWh	0.00767	7,655	0.00769	7,674
9	Voltage Level Service Adder						
10	Primary	30,650	MWh	5.50%	79	5.50%	79
11	Subtransmission	21,262	MWh	3.73%	37	3.73%	37
12	Transmission	946,169	MWh	1.56%	694	1.56%	694
13	Power Supply Subtotal	998,081	MWh		47,740		47,759
14							
15	REPS	0	meters	0.00	0	0.00	0
16	Total Full Service Power Supply	998,081	MWh	**4.78¢**	**47,740**	**4.79¢**	**47,759**
17							
18	**Full Service Distribution**	Quantity	Units				
19							
20	Service Charge - PV	12	Cust.	70	10	70	10
21	Service Charge - SV	8	Cust.	375	36	375	36
22	Service Charge - TV	33	Cust.	375	149	375	149
23	Distribution Charges						
24	Primary	178,736	kW	6.15	1,099	6.36	1,137
25		30,650	MWh				
26	Subtransmission	65,584	kW	1.96	129	1.74	114
27		21,262	MWh				
28	Transmission	3,790,403	kW	0.86	3,260	0.94	3,574
29		946,169	MWh				
30	Substation Credit						
31	Demand	1,250,515	kW	(0.30)	(375)	(0.30)	(375)
32	Energy	144,780	MWh	(0.0004)	(58)	(0.0004)	(58)
33	Distribution System	998,081	MWh	0.43¢	4,249	0.46¢	4,587
34							
35	IRM - PV	178,736	kW	0.0727	13	0.0727	13
36	IRM - SV	65,584	kW	0.0312	2	0.0312	2
37	IRM - TV	3,790,403	kW	0	0	0	0
38	Nuclear Decommissioning	998,081	MWh	0.000882	880	0.000882	880
39	Energy Waste Reduction	0	Meters	1,237.99	0	1,237.99	0
40	LIEAF	0	Meters	0.88	0	0.88	0
41	Distribution Surcharges	998,081	MWh	0.09¢	895	0.09¢	895
42							
43	Total Full Service Distribution	998,081	MWh	**0.52¢**	**5,145**	**0.55¢**	**5,482**
44	**Total Full Service R10**	998,081	MWh	**5.30¢**	**52,885**	**5.33¢**	**53,242**

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Interruptible Supply Rider - R10 (Cont'd)
All Voltages

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line	(a)	(b)		(c)	(d)	(e)	(f)
No.	**Description**	**Billing Determinants**		**Present**		**Proposed**	
45	**Choice Distribution**	Quantity	Units	Rate	Revenue	Rate	Revenue
46	**Capacity**				($000)		($000)
47	Administrative Charge	0	MWh	0.00000		0.00000	0
48	Total Capacity	0	MWh				0
49							
50	Service Charge - PV	0	Cust.	70	0	70	0
51	Service Charge - SV	0	Cust.	375	0	375	0
52	Service Charge - TV	0	Cust.	375	0	375	0
53	Distribution Charges						
54	Primary	0	kW	6.15	0	6.36	0
55							
56	Subtransmission	0	kW	1.96	0	1.74	0
57							
58	Transmission	0	kW	0.86	0	0.94	0
59							
60	Substation Credit						
61	Demand	0	kW	(0.30)	0	(0.30)	0
62	Energy	0	MWh	(0.0004)	0	(0.0004)	0
63	Distribution System	0	MWh		0		0
64							
65	IRM - PV	0	kW	0.0727	0	0.0727	0
66	IRM - SV	0	kW	0.0312	0	0.0312	0
67	IRM - TV	0	kW	0	0	0	0
68	Nuclear Decommissioning			0.000882	0	0.000882	0
69	Energy Waste Reduction			1,237.99	0	1,237.99	0
70	LIEAF	0	Meters	0.88	0	0.88	0
71	Distribution Surcharges				0		0
72							
73	**Total Choice Distribution R10**	0	MWh		**0**		**0**
74							
75	**Total R10**	998,081	MWh	**5.30¢**	**52,885**	**5.33¢**	**53,242**
76	Increase/Decrease ($)						357

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Outdoor Protective Lighting - D9 Residential

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
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Line No.	(a) Description	(b) Billing Determinants		(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
				Present				Proposed			
		Quantity	Units	Rate ($/luminaire/ mth)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)	Rate ($/luminaire/ mth)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)
1	Overhead										
2	Mercury Vapor										
3	100 W	0	Lamps	15.04	4.46	0.00	0	9.02	4.61	0.00	0
4	175 W	3,129	Lamps	18.68	4.46	0.00	825	19.52	4.61	0.00	860
5	250 W	1	Lamps	22.32	4.46	0.00	0	23.35	4.61	0.00	0
6	400 W	54	Lamps	29.40	4.46	0.00	24	30.79	4.61	0.00	25
7	1,000 W	3	Lamps	60.24	4.46	0.00	3	62.85	4.61	0.00	3
8											
9	High Pressure Sodium Vapor										
10	100 W	3,245	Lamps	14.00	4.46	0.00	627	14.62	4.61	0.00	654
11	150 W	1	Lamps	16.71	4.46	0.00	0	17.47	4.61	0.00	0
12	250 W	399	Lamps	21.49	4.46	0.00	126	22.49	4.61	0.00	131
13	360 W	0	Lamps	25.11	4.46	0.00	0	26.66	4.61	0.00	0
14	400 W	31	Lamps	26.42	4.46	0.00	13	27.70	4.61	0.00	13
15	1,000 W	4	Lamps	53.23	4.46	0.00	3	55.90	4.61	0.00	4
16											
17	Metal Halide										
18	100 W	0	Lamps	14.03	4.46	0.00	0	12.26	4.61	0.00	0
19	150 W	0	Lamps	16.77	4.46	0.00	0	15.71	4.61	0.00	0
20	175 W	0	Lamps	18.14	4.46	0.00	0	17.43	4.61	0.00	0
21	250 W	0	Lamps	22.25	4.46	0.00	0	22.61	4.61	0.00	0
22	320 W	0	Lamps	26.09	4.46	0.00	0	26.34	4.61	0.00	0
23	400 W	0	Lamps	30.48	4.46	0.00	0	31.80	4.61	0.00	0
24	1,000 W	1	Lamps	63.38	4.46	0.00	1	65.71	4.61	0.00	1
25		0									
26	LED	0									
27	20 - 29 W	0	Lamps	11.20	4.46	0.00	0	11.93	4.61	0.00	0
28	30 - 39 W	0	Lamps	11.79	4.46	0.00	0	12.27	4.61	0.00	0
29	40 - 49 W	0	Lamps	12.37	4.46	0.00	0	12.88	4.61	0.00	0
30	50 - 59 W	722	Lamps	12.95	4.46	0.00	120	13.48	4.61	0.00	125
31	60 - 69 W	1,458	Lamps	13.53	4.46	0.00	254	14.09	4.61	0.00	265
32	70 - 79 W	11	Lamps	14.12	4.46	0.00	2	14.71	4.61	0.00	2
33	80 - 89 W	0	Lamps	14.70	4.46	0.00	0	15.32	4.61	0.00	0
34	90 - 99 W	0	Lamps	15.28	4.46	0.00	0	15.94	4.61	0.00	0
35	100 - 109 W	0	Lamps	15.86	4.46	0.00	0	16.55	4.61	0.00	0
36	110 - 119 W	4	Lamps	16.45	4.46	0.00	1	17.15	4.61	0.00	1
37	120 - 129 W	0	Lamps	17.03	4.46	0.00	0	17.78	4.61	0.00	0
38	130 - 139 W	140	Lamps	17.61	4.46	0.00	33	18.37	4.61	0.00	35
39	140 - 149 W	4	Lamps	18.14	4.46	0.00	1	18.93	4.61	0.00	1
40	150 - 159 W	0	Lamps	18.66	4.46	0.00	0	19.50	4.61	0.00	0
41	160 - 169 W	0	Lamps	19.18	4.46	0.00	0	20.05	4.61	0.00	0
42	170 - 179 W	0	Lamps	19.71	4.46	0.00	0	20.60	4.61	0.00	0
43	180 - 189 W	0	Lamps	20.23	4.46	0.00	0	21.16	4.61	0.00	0
44	190 - 199 W	0	Lamps	20.75	4.46	0.00	0	21.71	4.61	0.00	0
45	200 - 209 W	0	Lamps	21.28	4.46	0.00	0	22.22	4.61	0.00	0
46	210 - 219 W	2	Lamps	21.80	4.46	0.00	1	22.77	4.61	0.00	1
47	220 - 229 W	0	Lamps	22.32	4.46	0.00	0	23.31	4.61	0.00	0
48	230 - 239 W	5	Lamps	22.85	4.46	0.00	2	23.87	4.61	0.00	2
49	240 - 249 W	0	Lamps	23.37	4.46	0.00	0	24.48	4.61	0.00	0
50	250 - 259 W	0	Lamps	23.89	4.46	0.00	0	25.04	4.61	0.00	0
51	260 - 269 W	0	Lamps	24.42	4.46	0.00	0	25.59	4.61	0.00	0
52	270 - 279 W	0	Lamps	24.94	4.46	0.00	0	26.14	4.61	0.00	0
53	280 - 289 W	8	Lamps	25.47	4.46	0.00	3	26.62	4.61	0.00	3
54	290 - 299 W	14	Lamps	25.99	4.46	0.00	5	27.16	4.61	0.00	5
55	300 - 309 W	0	Lamps	26.51	4.46	0.00	0	27.80	4.61	0.00	0
56	310 - 319 W	0	Lamps	27.04	4.46	0.00	0	28.36	4.61	0.00	0
57	320 - 329 W	0	Lamps	27.56	4.46	0.00	0	28.91	4.61	0.00	0
58	330 - 339 W	0	Lamps	28.08	4.46	0.00	0	29.47	4.61	0.00	0
59	340 - 349 W	0	Lamps	28.61	4.46	0.00	0	30.02	4.61	0.00	0
60	350 - 359 W	0	Lamps	29.13	4.46	0.00	0	30.57	4.61	0.00	0
61	360 - 369 W	0	Lamps	29.65	4.46	0.00	0	31.13	4.61	0.00	0
62	370 - 379 W	0	Lamps	30.18	4.46	0.00	0	31.68	4.61	0.00	0
63	380 - 389 W	0	Lamps	30.70	4.46	0.00	0	32.23	4.61	0.00	0
64	390 - 399 W	0	Lamps	31.22	4.46	0.00	0	32.65	4.61	0.00	0

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Outdoor Protective Lighting - D9 Residential (Cont'd)

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants		(c) Present	(d)	(e)	(f)	(g)	(h)	(i)	(j)
								Proposed			
		Quantity	Units	Rate ($/luminaire/ mth)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)	Rate ($/luminaire/ mth)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)
65	Underground										
66	Mercury Vapor										
67	100 W	0	Lamps	27.60	4.46	0.00	0	26.75	4.61	0.00	0
68	175 W	1	Lamps	30.35	4.46	0.00	0	29.38	4.61	0.00	0
69	250 W	0	Lamps	35.65	4.46	0.00	0	34.48	4.61	0.00	0
70	400 W	0	Lamps	46.25	4.46	0.00	0	44.70	4.61	0.00	0
71	1,000 W	0	Lamps	86.55	4.46	0.00	0	77.79	4.61	0.00	0
72											
73	High Pressure Sodium Vapor										
74	70 W	0	Lamps	24.09	4.46	0.00	0	23.36	4.61	0.00	0
75	100 W	1	Lamps	24.86	4.46	0.00	0	24.08	4.61	0.00	0
76	150 W	0	Lamps	26.49	4.46	0.00	0	19.20	4.61	0.00	0
77	250 W	0	Lamps	29.75	4.46	0.00	0	28.75	4.61	0.00	0
78	400 W	0	Lamps	34.64	4.46	0.00	0	21.71	4.61	0.00	0
79	1,000 W	0	Lamps	54.21	4.46	0.00	0	27.72	4.61	0.00	0
80											
81	Metal Halide										
82	100 W	0	Lamps	30.54	4.46	0.00	0	10.99	4.61	0.00	0
83	150 W	0	Lamps	34.29	4.46	0.00	0	16.49	4.61	0.00	0
84	175 W	0	Lamps	36.17	4.46	0.00	0	19.24	4.61	0.00	0
85	250 W	0	Lamps	41.79	4.46	0.00	0	27.48	4.61	0.00	0
86	400 W	0	Lamps	53.05	4.46	0.00	0	42.14	4.61	0.00	0
87	1,000 W	0	Lamps	98.08	4.46	0.00	0	96.19	4.61	0.00	0
88											
89	LED										
90	20 - 29 W	0	Lamps	25.22	4.46	0.00	0	24.49	4.61	0.00	0
91	30 - 39 W	2	Lamps	25.66	4.46	0.00	1	24.91	4.61	0.00	1
92	40 - 49 W	0	Lamps	26.10	4.46	0.00	0	25.43	4.61	0.00	0
93	50 - 59 W	0	Lamps	26.55	4.46	0.00	0	25.77	4.61	0.00	0
94	60 - 69 W	0	Lamps	27.00	4.46	0.00	0	26.20	4.61	0.00	0
95	70 - 79 W	74	Lamps	27.41	4.46	0.00	25	26.59	4.61	0.00	25
96	80 - 89 W	0	Lamps	27.84	4.46	0.00	0	27.00	4.61	0.00	0
97	90 - 99 W	0	Lamps	28.25	4.46	0.00	0	27.40	4.61	0.00	0
98	100 - 109 W	0	Lamps	28.66	4.46	0.00	0	27.79	4.61	0.00	0
99	110 - 119 W	0	Lamps	29.09	4.46	0.00	0	28.20	4.61	0.00	0
100	120 - 129 W	0	Lamps	29.49	4.46	0.00	0	28.46	4.61	0.00	0
101	130 - 139 W	1	Lamps	29.89	4.46	0.00	0	28.97	4.61	0.00	0
102	140 - 149 W	0	Lamps	30.27	4.46	0.00	0	29.22	4.61	0.00	0
103	150 - 159 W	0	Lamps	30.65	4.46	0.00	0	29.59	4.61	0.00	0
104	160 - 169 W	0	Lamps	31.03	4.46	0.00	0	29.97	4.61	0.00	0
105	170 - 179 W	0	Lamps	31.41	4.46	0.00	0	30.35	4.61	0.00	0
106	180 - 189 W	0	Lamps	31.79	4.46	0.00	0	30.73	4.61	0.00	0
107	190 - 199 W	0	Lamps	32.17	4.46	0.00	0	31.11	4.61	0.00	0
108	200 - 209 W	0	Lamps	32.56	4.46	0.00	0	31.53	4.61	0.00	0
109	210 - 219 W	0	Lamps	32.94	4.46	0.00	0	31.86	4.61	0.00	0
110	220 - 229 W	0	Lamps	33.32	4.46	0.00	0	32.24	4.61	0.00	0
111	230 - 239 W	0	Lamps	33.70	4.46	0.00	0	32.62	4.61	0.00	0
112	240 - 249 W	0	Lamps	34.08	4.46	0.00	0	33.00	4.61	0.00	0
113	250 - 259 W	0	Lamps	34.47	4.46	0.00	0	33.38	4.61	0.00	0
114	260 - 269 W	0	Lamps	34.85	4.46	0.00	0	33.76	4.61	0.00	0
115	270 - 279 W	0	Lamps	35.23	4.46	0.00	0	34.09	4.61	0.00	0
116	280 - 289 W	0	Lamps	35.61	4.46	0.00	0	34.45	4.61	0.00	0
117	290 - 299 W	0	Lamps	35.99	4.46	0.00	0	34.81	4.61	0.00	0
118	300 - 309 W	0	Lamps	36.37	4.46	0.00	0	35.27	4.61	0.00	0
119	310 - 319 W	0	Lamps	36.76	4.46	0.00	0	35.65	4.61	0.00	0
120	320 - 329 W	0	Lamps	37.14	4.46	0.00	0	36.03	4.61	0.00	0
121	330 - 339 W	0	Lamps	37.52	4.46	0.00	0	36.40	4.61	0.00	0
122	340 - 349 W	0	Lamps	37.90	4.46	0.00	0	36.78	4.61	0.00	0
123	350 - 359 W	0	Lamps	38.28	4.46	0.00	0	37.16	4.61	0.00	0
124	360 - 369 W	0	Lamps	38.66	4.46	0.00	0	37.54	4.61	0.00	0
125	370 - 379 W	0	Lamps	39.05	4.46	0.00	0	37.92	4.61	0.00	0
126	380 - 389 W	0	Lamps	39.43	4.46	0.00	0	38.30	4.61	0.00	0
127	390 - 399 W	0	Lamps	39.81	4.46	0.00	0	38.67	4.61	0.00	0
128											
129	Lamp Total	9,315	Lamps				2,070				2,157
130											
131	PSCR	6,023	MWh	$ -			0	$ -			0
132											
133	Additional Light Credit	0	Lamps	-97.92			0	-97.92			0
134	Post Charge	0	Posts	82.56			0	84.96			0
135											
136	Other Charges										
137		Number of Poles		$ /Pole/Year				$ /Pole/Year			
138	New Poles	1,608	Poles	24.48			39	24.48			39
139	Subtotal						2,109				2,196
140	IRM	6,023	MWh	0.005352			32	0.005352			32
141	Nuclear Decommissioning	6,023	MWh	0.000882			5	0.000882			5
142	Subtotal	9,315	Lamps				2,147				2,233
143											
144		Investment		Carrying Charge/Year				Carrying Charge/Year			
145	Special Facilities	10,839		-18%			(2)	-18%			(2)
146	Subtotal	9,315	Lamps				2,145				2,231
147											
148	Energy Waste Reduction	6,023	MWh	0.002552			15	0.002552			15
149	REPS	8,680	Meters	0.00%			0				0
150	**Total Residential D9**	6,023	MWh				**2,160**				**2,247**
151	Increase/Decrease ($)										87

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Outdoor Protective Lighting - D9 Commercial

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants		(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
				Present				Proposed			
		Quantity	Units	Rate ($/luminaire/ mth)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)	Rate ($/luminaire/ mth)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)
1	Overhead										
2	Mercury Vapor										
3	100 W	0	Lamps	15.04	4.46	0.00	0	9.02	4.61	0.00	0
4	175 W	3,454	Lamps	18.68	4.46	0.00	910	19.52	4.61	0.00	949
5	250 W	113	Lamps	22.32	4.46	0.00	37	23.35	4.61	0.00	38
6	400 W	916	Lamps	29.40	4.46	0.00	400	30.79	4.61	0.00	418
7	1,000 W	99	Lamps	60.24	4.46	0.00	91	62.85	4.61	0.00	95
8											
9	High Pressure Sodium Vapor										
10	100 W	2,248	Lamps	14.00	4.46	0.00	435	14.62	4.61	0.00	453
11	150 W	0	Lamps	16.71	4.46	0.00	0	17.47	4.61	0.00	0
12	250 W	3,950	Lamps	21.49	4.46	0.00	1,244	22.49	4.61	0.00	1,299
13	360 W	0	Lamps	25.11	4.46	0.00	0	26.66	4.61	0.00	0
14	400 W	2,086	Lamps	26.42	4.46	0.00	843	27.70	4.61	0.00	881
15	1,000 W	59	Lamps	53.23	4.46	0.00	50	55.90	4.61	0.00	52
16											
17	Metal Halide										
18	100 W	0	Lamps	14.03	4.46	0.00	0	12.26	4.61	0.00	0
19	150 W	0	Lamps	16.77	4.46	0.00	0	15.71	4.61	0.00	0
20	175 W	0	Lamps	18.14	4.46	0.00	0	17.43	4.61	0.00	0
21	250 W	0	Lamps	22.25	4.46	0.00	0	22.61	4.61	0.00	0
22	320 W	0	Lamps	26.09	4.46	0.00	0	26.34	4.61	0.00	0
23	400 W	3	Lamps	30.48	4.46	0.00	1	31.80	4.61	0.00	1
24	1,000 W	165	Lamps	63.38	4.46	0.00	158	65.71	4.61	0.00	164
25											
26	LED										
27	20 - 29 W	0	Lamps	11.20	4.46	0.00	0	11.93	4.61	0.00	0
28	30 - 39 W	9	Lamps	11.79	4.46	0.00	1	12.27	4.61	0.00	1
29	40 - 49 W	0	Lamps	12.37	4.46	0.00	0	12.88	4.61	0.00	0
30	50 - 59 W	1,909	Lamps	12.95	4.46	0.00	316	13.48	4.61	0.00	329
31	60 - 69 W	2,053	Lamps	13.53	4.46	0.00	358	14.09	4.61	0.00	373
32	70 - 79 W	230	Lamps	14.12	4.46	0.00	42	14.71	4.61	0.00	44
33	80 - 89 W	10	Lamps	14.70	4.46	0.00	2	15.32	4.61	0.00	2
34	90 - 99 W	0	Lamps	15.28	4.46	0.00	0	15.94	4.61	0.00	0
35	100 - 109 W	0	Lamps	15.86	4.46	0.00	0	16.55	4.61	0.00	0
36	110 - 119 W	6	Lamps	16.45	4.46	0.00	1	17.15	4.61	0.00	1
37	120 - 129 W	0	Lamps	17.03	4.46	0.00	0	17.78	4.61	0.00	0
38	130 - 139 W	2,438	Lamps	17.61	4.46	0.00	577	18.37	4.61	0.00	601
39	140 - 149 W	17	Lamps	18.14	4.46	0.00	4	18.93	4.61	0.00	4
40	150 - 159 W	0	Lamps	18.66	4.46	0.00	0	19.50	4.61	0.00	0
41	160 - 169 W	0	Lamps	19.18	4.46	0.00	0	20.05	4.61	0.00	0
42	170 - 179 W	0	Lamps	19.71	4.46	0.00	0	20.60	4.61	0.00	0
43	180 - 189 W	0	Lamps	20.23	4.46	0.00	0	21.16	4.61	0.00	0
44	190 - 199 W	0	Lamps	20.75	4.46	0.00	0	21.71	4.61	0.00	0
45	200 - 209 W	119	Lamps	21.28	4.46	0.00	35	22.22	4.61	0.00	36
46	210 - 219 W	467	Lamps	21.80	4.46	0.00	141	22.77	4.61	0.00	147
47	220 - 229 W	1	Lamps	22.32	4.46	0.00	0	23.31	4.61	0.00	0
48	230 - 239 W	1,186	Lamps	22.85	4.46	0.00	377	23.87	4.61	0.00	394
49	240 - 249 W	0	Lamps	23.37	4.46	0.00	0	24.48	4.61	0.00	0
50	250 - 259 W	0	Lamps	23.89	4.46	0.00	0	25.04	4.61	0.00	0
51	260 - 269 W	0	Lamps	24.42	4.46	0.00	0	25.59	4.61	0.00	0
52	270 - 279 W	0	Lamps	24.94	4.46	0.00	0	26.14	4.61	0.00	0
53	280 - 289 W	842	Lamps	25.47	4.46	0.00	302	26.62	4.61	0.00	315
54	290 - 299 W	1,592	Lamps	25.99	4.46	0.00	584	27.16	4.61	0.00	610
55	300 - 309 W	0	Lamps	26.51	4.46	0.00	0	27.80	4.61	0.00	0
56	310 - 319 W	0	Lamps	27.04	4.46	0.00	0	28.36	4.61	0.00	0
57	320 - 329 W	0	Lamps	27.56	4.46	0.00	0	28.91	4.61	0.00	0
58	330 - 339 W	0	Lamps	28.08	4.46	0.00	0	29.47	4.61	0.00	0
59	340 - 349 W	0	Lamps	28.61	4.46	0.00	0	30.02	4.61	0.00	0
60	350 - 359 W	0	Lamps	29.13	4.46	0.00	0	30.57	4.61	0.00	0
61	360 - 369 W	0	Lamps	29.65	4.46	0.00	0	31.13	4.61	0.00	0
62	370 - 379 W	0	Lamps	30.18	4.46	0.00	0	31.68	4.61	0.00	0
63	380 - 389 W	0	Lamps	30.70	4.46	0.00	0	32.23	4.61	0.00	0
64	390 - 399 W	8	Lamps	31.22	4.46	0.00	4	32.65	4.61	0.00	4

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Outdoor Protective Lighting - D9 Commercial (Cont'd)

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
Page: 50 of 58

Line No.	(a) Description	(b) Billing Determinants Quantity	Units	(c) Present Rate ($/luminaire/mth)	(d) Non-Capacity Energy (¢/kWh)	(e) Capacity Energy (¢/kWh)	(f) Revenue ($000)	(g) Proposed Rate ($/luminaire/mth)	(h) Non-Capacity Energy (¢/kWh)	(i) Capacity Energy (¢/kWh)	(j) Revenue ($000)
65	Underground										
66	Mercury Vapor										
67	100 W	19	Lamps	27.60	4.46	0.00	7	26.75	4.61	0.00	7
68	175 W	18	Lamps	30.35	4.46	0.00	7	29.38	4.61	0.00	7
69	250 W	1	Lamps	35.65	4.46	0.00	0	34.48	4.61	0.00	0
70	400 W	30	Lamps	46.25	4.46	0.00	19	44.70	4.61	0.00	19
71	1,000 W	0	Lamps	86.55	4.46	0.00	0	77.79	4.61	0.00	0
72											
73	High Pressure Sodium Vapor										
74	70 W	66	Lamps	24.09	4.46	0.00	20	23.36	4.61	0.00	20
75	100 W	78	Lamps	24.86	4.46	0.00	25	24.08	4.61	0.00	25
76	150 W	0	Lamps	26.49	4.46	0.00	0	19.20	4.61	0.00	0
77	250 W	2	Lamps	29.75	4.46	0.00	1	28.75	4.61	0.00	1
78	400 W	0	Lamps	34.64	4.46	0.00	0	21.71	4.61	0.00	0
79	1,000 W	0	Lamps	54.21	4.46	0.00	0	27.72	4.61	0.00	0
80											
81	Metal Halide										
82	100 W	0	Lamps	30.54	4.46	0.00	0	10.99	4.61	0.00	0
83	150 W	0	Lamps	34.29	4.46	0.00	0	16.49	4.61	0.00	0
84	175 W	0	Lamps	36.17	4.46	0.00	0	19.24	4.61	0.00	0
85	250 W	0	Lamps	41.79	4.46	0.00	0	27.48	4.61	0.00	0
86	400 W	0	Lamps	53.05	4.46	0.00	0	42.14	4.61	0.00	0
87	1,000 W	2	Lamps	98.08	4.46	0.00	3	96.19	4.61	0.00	3
88											
89	LED										
90	20 - 29 W	29	Lamps	25.22	4.46	0.00	9	24.49	4.61	0.00	9
91	30 - 39 W	1,567	Lamps	25.66	4.46	0.00	493	24.91	4.61	0.00	479
92	40 - 49 W	0	Lamps	26.10	4.46	0.00	0	25.43	4.61	0.00	0
93	50 - 59 W	103	Lamps	26.55	4.46	0.00	34	25.77	4.61	0.00	33
94	60 - 69 W	255	Lamps	27.00	4.46	0.00	86	26.20	4.61	0.00	83
95	70 - 79 W	1,015	Lamps	27.41	4.46	0.00	348	26.59	4.61	0.00	339
96	80 - 89 W	888	Lamps	27.84	4.46	0.00	311	27.00	4.61	0.00	302
97	90 - 99 W	5	Lamps	28.25	4.46	0.00	2	27.40	4.61	0.00	2
98	100 - 109 W	4	Lamps	28.66	4.46	0.00	1	27.79	4.61	0.00	1
99	110 - 119 W	72	Lamps	29.09	4.46	0.00	27	28.20	4.61	0.00	26
100	120 - 129 W	0	Lamps	29.49	4.46	0.00	0	28.46	4.61	0.00	0
101	130 - 139 W	647	Lamps	29.89	4.46	0.00	248	28.97	4.61	0.00	242
102	140 - 149 W	0	Lamps	30.27	4.46	0.00	0	29.22	4.61	0.00	0
103	150 - 159 W	0	Lamps	30.65	4.46	0.00	0	29.59	4.61	0.00	0
104	160 - 169 W	0	Lamps	31.03	4.46	0.00	0	29.97	4.61	0.00	0
105	170 - 179 W	0	Lamps	31.41	4.46	0.00	0	30.35	4.61	0.00	0
106	180 - 189 W	0	Lamps	31.79	4.46	0.00	0	30.73	4.61	0.00	0
107	190 - 199 W	0	Lamps	32.17	4.46	0.00	0	31.11	4.61	0.00	0
108	200 - 209 W	863	Lamps	32.56	4.46	0.00	370	31.53	4.61	0.00	361
109	210 - 219 W	0	Lamps	32.94	4.46	0.00	0	31.86	4.61	0.00	0
110	220 - 229 W	0	Lamps	33.32	4.46	0.00	0	32.24	4.61	0.00	0
111	230 - 239 W	43	Lamps	33.70	4.46	0.00	19	32.62	4.61	0.00	19
112	240 - 249 W	0	Lamps	34.08	4.46	0.00	0	33.00	4.61	0.00	0
113	250 - 259 W	0	Lamps	34.47	4.46	0.00	0	33.38	4.61	0.00	0
114	260 - 269 W	0	Lamps	34.85	4.46	0.00	0	33.76	4.61	0.00	0
115	270 - 279 W	72	Lamps	35.23	4.46	0.00	34	34.09	4.61	0.00	33
116	280 - 289 W	8	Lamps	35.61	4.46	0.00	4	34.45	4.61	0.00	4
117	290 - 299 W	687	Lamps	35.99	4.46	0.00	335	34.81	4.61	0.00	326
118	300 - 309 W	0	Lamps	36.37	4.46	0.00	0	35.27	4.61	0.00	0
119	310 - 319 W	0	Lamps	36.76	4.46	0.00	0	35.65	4.61	0.00	0
120	320 - 329 W	0	Lamps	37.14	4.46	0.00	0	36.03	4.61	0.00	0
121	330 - 339 W	0	Lamps	37.52	4.46	0.00	0	36.40	4.61	0.00	0
122	340 - 349 W	0	Lamps	37.90	4.46	0.00	0	36.78	4.61	0.00	0
123	350 - 359 W	0	Lamps	38.28	4.46	0.00	0	37.16	4.61	0.00	0
124	360 - 369 W	0	Lamps	38.66	4.46	0.00	0	37.54	4.61	0.00	0
125	370 - 379 W	0	Lamps	39.05	4.46	0.00	0	37.92	4.61	0.00	0
126	380 - 389 W	0	Lamps	39.43	4.46	0.00	0	38.30	4.61	0.00	0
127	390 - 399 W	0	Lamps	39.81	4.46	0.00	0	38.67	4.61	0.00	0
128											
129	Lamp Total	30,454	Lamps				9,319				9,555
130											
131	PSCR	27,202	MWh	$ -			0	$ -			0
132											
133	Additional Light Credit	581	Lamps	-97.92			(57)	-97.92			(57)
134	Post Charge	2,789	Posts	82.56			230	84.96			237
135											
136	Other Charges										
137		Number of Poles		$ /Pole/Year				$ /Pole/Year			
138	New Poles	4,156	Poles	24.48			102	24.48			102
139	Subtotal	30,454	Lamps				9,594				9,836
140	IRM	27,202	MWh	0.002988			81	0.002988			81
141	Nuclear Decommissioning			0.000882			24	0.000882			24
142	Subtotal	30,454	Lamps				9,700				9,942
143											
144		Investment		Carrying Charge/Year				Carrying Charge/Year			
145	Special Facilities	101,439		-18%			(18)	-18%			(18)
146	Subtotal	30,454	Lamps				9,681				9,923
147											
148	Energy Waste Reduction	9,057	Meters	$5.50			598	$ 5.50			598
149	REPS	9,057	Meters	0.00%			0	0.00%			0
150	**Total Commercial**	27,202	MWh				**10,279**				**10,521**
151	Increase/Decrease ($)										242

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Municipal Street Lighting - E1 Option I - Company Owned Overhead

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
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Line No.	(a) Description	(b) Billing Determinants		(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
				Present				Proposed			
		Quantity	Units	Rate ($/luminaire/ mth)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)	Rate ($/luminaire/ mth)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)
1	**Overhead**										
2	Mercury Vapor										
3	100 W	97	Lamps	25.34	4.46	0.00	32	26.77	4.61	0.00	33
4	175 W	1,644	Lamps	31.35	4.46	0.00	681	33.14	4.61	0.00	719
5	250 W	0	Lamps	37.52	4.46	0.00	0	40.58	4.61	0.00	0
6	400 W	386	Lamps	49.56	4.46	0.00	261	52.43	4.61	0.00	275
7	1,000 W	0	Lamps	105.40	4.46	0.00	0	100.09	4.61	0.00	0
8											
9	High Pressure Sodium Vapor										
10	70 W	948	Lamps	18.86	4.46	0.00	231	19.93	4.61	0.00	244
11	100 W	5,337	Lamps	21.53	4.46	0.00	1,509	22.76	4.61	0.00	1,593
12	150 W	0	Lamps	25.87	4.46	0.00	0	27.70	4.61	0.00	0
13	250 W	2,049	Lamps	33.61	4.46	0.00	940	35.56	4.61	0.00	991
14	360 W	0	Lamps	42.05	4.46	0.00	0	43.98	4.61	0.00	0
15	400 W	0	Lamps	45.12	4.46	0.00	0	47.49	4.61	0.00	0
16	1,000 W	0	Lamps	82.64	4.46	0.00	0	94.92	4.61	0.00	0
17											
18	Metal Halide										
19	70 W	1	Lamps	24.48	4.46	0.00	0	25.85	4.61	0.00	0
20	100 W	1	Lamps	24.83	4.46	0.00	0	26.23	4.61	0.00	0
21	150 W	0	Lamps	30.17	4.46	0.00	0	32.43	4.61	0.00	0
22	175 W	10	Lamps	32.83	4.46	0.00	4	34.70	4.61	0.00	5
23	250 W	1	Lamps	40.84	4.46	0.00	1	43.18	4.61	0.00	1
24	320 W	0	Lamps	47.70	4.46	0.00	0	51.08	4.61	0.00	0
25	400 W	6	Lamps	55.53	4.46	0.00	4	58.74	4.61	0.00	5
26	1,000 W	1	Lamps	114.64	4.46	0.00	2	121.29	4.61	0.00	2
27											
28	De-Energized										
29	Mercury Vapor										
30	100 W	0	Lamps	16.33	4.46	0.00	0	17.19	4.61	0.00	0.000
31	175 W	1	Lamps	20.78	4.46	0.00	0	21.85	4.61	0.00	0.262
32	250 W	0	Lamps	25.32	4.46	0.00	0	0.00	4.61	0.00	0.000
33	400 W	0	Lamps	33.95	4.46	0.00	0	35.68	4.61	0.00	0.000
34	1,000 W	0	Lamps	78.36	4.46	0.00	0	78.36	4.61	0.00	0.000
35											
36	High Pressure Sodium Vapor										
37	70 W	0	Lamps	12.20	4.46	0.00	0	12.85	4.61	0.00	0.000
38	100 W	4	Lamps	14.18	4.46	0.00	1	14.92	4.61	0.00	0.716
39	150 W	0	Lamps	17.39	4.46	0.00	0	0.00	4.61	0.00	0.000
40	250 W	1	Lamps	23.02	4.46	0.00	0	24.19	4.61	0.00	0.290
41	360 W	0	Lamps	31.20	4.46	0.00	0	31.20	4.61	0.00	0.000
42	400 W	0	Lamps	31.42	4.46	0.00	0	0.00	4.61	0.00	0.000
43	1,000 W	0	Lamps	64.29	4.46	0.00	0	64.29	4.61	0.00	0.000
44											
45	LED										
46	60 - 69 W	0	Lamps	12.16	4.46	0.00	0	12.74	4.61	0.00	0.000
47											
48	Dusk-Midnight										
49	Mercury Vapor										
50	100 W	0	Lamps	24.28	4.46	0.00	0	25.71	4.61	0.00	0.000
51	175 W	0	Lamps	29.50	4.46	0.00	0	31.29	4.61	0.00	0.000
52	250 W	0	Lamps	34.87	4.46	0.00	0	37.93	4.61	0.00	0.000
53	400 W	0	Lamps	45.32	4.46	0.00	0	48.19	4.61	0.00	0.000
54	1,000 W	0	Lamps	103.94	4.46	0.00	0	103.94	4.61	0.00	0.000
55											
56	High Pressure Sodium Vapor										
57	70 W	0	Lamps	18.11	4.46	0.00	0	19.19	4.61	0.00	0.000
58	100 W	0	Lamps	20.47	4.46	0.00	0	21.70	4.61	0.00	0.000
59	150 W	0	Lamps	24.28	4.46	0.00	0	26.11	4.61	0.00	0.000
60	250 W	2	Lamps	30.96	4.46	0.00	1	32.91	4.61	0.00	0.847
61	360 W	0	Lamps	38.23	4.46	0.00	0	40.17	4.61	0.00	0.000
62	400 W	4	Lamps	40.88	4.46	0.00	2	43.25	4.61	0.00	2.250
63	1,000 W	0	Lamps	72.04	4.46	0.00	0	84.32	4.61	0.00	0.000
64											
65	LED										
66	130 - 139 W	5	Lamps	25.97	4.46	0.00	2	26.89	4.61	0.00	1.677
67	280 - 289 W	2	Lamps	36.07	4.46	0.00	1	38.31	4.61	0.00	0.973

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Municipal Street Lighting - E1 Option I - Company Owned Overhead (Cont'd)

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
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Line No.	(a) Description	(b) Billing Determinants		(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
				Present				Proposed			
		Quantity	Units	Rate ($/luminaire/ mth)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)	Rate ($/luminaire/ mth)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)
68	LED										
69	20 - 29 W	0	Lamps	15.91	4.46	0.00	0	15.78	4.61	0.00	0
70	30 - 39 W	3	Lamps	16.65	4.46	0.00	1	16.62	4.61	0.00	1
71	40 - 49 W	73	Lamps	17.39	4.46	0.00	16	17.71	4.61	0.00	16
72	50 - 59 W	22,280	Lamps	18.12	4.46	0.00	5,067	18.96	4.61	0.00	5,299
73	60 - 69 W	36,373	Lamps	19.29	4.46	0.00	8,848	20.22	4.61	0.00	9,269
74	70 - 79 W	607	Lamps	20.46	4.46	0.00	157	21.48	4.61	0.00	165
75	80 - 89 W	1,685	Lamps	21.63	4.46	0.00	463	22.74	4.61	0.00	487
76	90 - 99 W	1,509	Lamps	22.80	4.46	0.00	439	24.00	4.61	0.00	461
77	100 - 109 W	90	Lamps	23.97	4.46	0.00	28	25.26	4.61	0.00	29
78	110 - 119 W	3	Lamps	25.14	4.46	0.00	1	26.52	4.61	0.00	1
79	120 - 129 W	58	Lamps	26.31	4.46	0.00	20	27.78	4.61	0.00	21
80	130 - 139 W	21,218	Lamps	27.40	4.46	0.00	7,496	28.32	4.61	0.00	7,749
81	140 - 149 W	165	Lamps	28.27	4.46	0.00	60	29.38	4.61	0.00	63
82	150 - 159 W	400	Lamps	29.13	4.46	0.00	151	30.44	4.61	0.00	158
83	160 - 169 W	108	Lamps	30.00	4.46	0.00	42	31.49	4.61	0.00	44
84	170 - 179 W	53	Lamps	30.86	4.46	0.00	21	32.55	4.61	0.00	22
85	180 - 189 W	9	Lamps	31.73	4.46	0.00	4	33.54	4.61	0.00	4
86	190 - 199 W	0	Lamps	32.59	4.46	0.00	0	33.41	4.61	0.00	0
87	200 - 209 W	150	Lamps	33.46	4.46	0.00	66	35.37	4.61	0.00	69
88	210 - 219 W	35	Lamps	34.32	4.46	0.00	16	36.28	4.61	0.00	17
89	220 - 229 W	0	Lamps	34.61	4.46	0.00	0	36.29	4.61	0.00	0
90	230 - 239 W	699	Lamps	34.90	4.46	0.00	323	36.90	4.61	0.00	340
91	240 - 249 W	5	Lamps	35.74	4.46	0.00	2	37.79	4.61	0.00	2
92	250 - 259 W	11	Lamps	36.58	4.46	0.00	5	38.68	4.61	0.00	6
93	260 - 269 W	0	Lamps	37.41	4.46	0.00	0	40.11	4.61	0.00	0
94	270 - 279 W	0	Lamps	38.25	4.46	0.00	0	41.07	4.61	0.00	0
95	280 - 289 W	771	Lamps	39.09	4.46	0.00	401	41.33	4.61	0.00	424
96	290 - 299 W	14	Lamps	39.93	4.46	0.00	7	42.22	4.61	0.00	8
97	300 - 309 W	15	Lamps	40.77	4.46	0.00	8	43.11	4.61	0.00	9
98	310 - 319 W	0	Lamps	41.61	4.46	0.00	0	44.90	4.61	0.00	0
99	320 - 329 W	4	Lamps	42.45	4.46	0.00	2	44.89	4.61	0.00	2
100	330 - 339 W	0	Lamps	43.29	4.46	0.00	0	46.81	4.61	0.00	0
101	340 - 349 W	0	Lamps	44.12	4.46	0.00	0	47.77	4.61	0.00	0
102	350 - 359 W	0	Lamps	44.96	4.46	0.00	0	48.73	4.61	0.00	0
103	360 - 369 W	0	Lamps	45.80	4.46	0.00	0	49.69	4.61	0.00	0
104	370 - 379 W	0	Lamps	46.64	4.46	0.00	0	50.64	4.61	0.00	0
105	380 - 389 W	0	Lamps	47.48	4.46	0.00	0	51.60	4.61	0.00	0
106	390 - 399 W	0	Lamps	48.32	4.46	0.00	0	52.56	4.61	0.00	0
107	Subtotal	96,838	Lamps				27,316				28,539
108											
109	PSCR	37,920	MWh	0			0	$ -			0
110											
111	Multiple Lamp Discount	1,445	Lamps	($12.24)			(18)	-12.24			(18)
112	Subtotal	96,838	Lamps				27,298				28,521
113	IRM	37,920	MWh	0.005140			195	0.005140			195
114	Nuclear Decomm.	37,920	MWh	0.000882			33	0.000882			33
115	Subtotal	96,838	Lamps				27,527				28,749
116											
117	Energy Optimization	558	Meters	$5.50			37	$ 5.50			37
118											
119	**Total E1 - Option 1**	**37,920**	**MWh**				**27,564**				**28,786**
120	Increase/Decrease ($)										1,223

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Municipal Street Lighting - E1 Option I - Company Owned Ornamental

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants		(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
				Present				Proposed			
		Quantity	Units	Rate ($/luminaire/ mth)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)	Rate ($/luminaire/ mth)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)
	Co. Owned Ornamental										
1	Mercury Vapor										
2	100 W	10	Lamps	32.48	4.46	0.00	4	32.39	4.61	0.00	4
3	175 W	830	Lamps	37.64	4.46	0.00	406	37.50	4.61	0.00	406
4	250 W	1	Lamps	45.55	4.46	0.00	1	45.36	4.61	0.00	1
5	400 W	418	Lamps	57.87	4.46	0.00	324	58.06	4.61	0.00	326
6	1,000 W	0	Lamps	118.04	4.46	0.00	0	105.87	4.61	0.00	0
7											
8	High Pressure Sodium Vapor										
9	70 W	73	Lamps	24.77	4.46	0.00	23	24.70	4.61	0.00	23
10	100 W	17,584	Lamps	28.06	4.46	0.00	6,351	27.97	4.61	0.00	6,346
11	150 W	445	Lamps	31.04	4.46	0.00	182	30.91	4.61	0.00	182
12	250 W	2,931	Lamps	38.42	4.46	0.00	1,513	38.66	4.61	0.00	1,527
13	360 W	0	Lamps	46.06	4.46	0.00	0	47.63	4.61	0.00	0
14	400 W	961	Lamps	48.83	4.46	0.00	644	49.85	4.61	0.00	659
15	1,000 W	2	Lamps	92.93	4.46	0.00	3	98.40	4.61	0.00	3
16											
17	Metal Halide										
18	70 W	195	Lamps	34.36	4.46	0.00	83	34.29	4.61	0.00	83
19	100 W	83	Lamps	36.37	4.46	0.00	38	36.28	4.61	0.00	38
20	150 W	14	Lamps	40.05	4.46	0.00	7	42.31	4.61	0.00	8
21	175 W	217	Lamps	40.52	4.46	0.00	114	40.38	4.61	0.00	114
22	250 W	264	Lamps	48.13	4.46	0.00	167	47.94	4.61	0.00	167
23	320 W	0	Lamps	53.97	4.46	0.00	0	54.26	4.61	0.00	0
24	400 W	228	Lamps	60.63	4.46	0.00	185	62.51	4.61	0.00	191
25	1,000 W	0	Lamps	110.60	4.46	0.00	0	105.02	4.61	0.00	0
26											
27	De-Energized										
28	Mercury Vapor	0									
29	100 W	0	Lamps	20.61	4.46	0.00	0	20.56	4.61	0.00	0.000
30	175 W	0	Lamps	24.55	4.46	0.00	0	24.47	4.61	0.00	0.000
31	250 W	0	Lamps	30.14	4.46	0.00	0	30.03	4.61	0.00	0.000
32	400 W	0	Lamps	38.93	4.46	0.00	0	39.05	4.61	0.00	0.000
33	1,000 W	0	Lamps	80.75	4.46	0.00	0	73.45	4.61	0.00	0.000
34											
35	LED										
36	60 - 69 W	27	Lamps	14.66	4.46	0.00	5	14.63	4.61	0.00	4.740
37											
38	High Pressure Sodium Vapor										
39	70 W	0	Lamps	15.75	4.46	0.00	0	15.71	4.61	0.00	0.000
40	100 W	0	Lamps	18.10	4.46	0.00	0	18.05	4.61	0.00	0.000
41	150 W	0	Lamps	20.49	4.46	0.00	0	20.42	4.61	0.00	0.000
42	250 W	17	Lamps	25.90	4.46	0.00	5	26.05	4.61	0.00	5.315
43	360 W	0	Lamps	31.55	4.46	0.00	0	32.50	4.61	0.00	0.000
44	400 W	0	Lamps	33.65	4.46	0.00	0	34.27	4.61	0.00	0.000
45	1,000 W	0	Lamps	66.05	4.46	0.00	0	69.35	4.61	0.00	0.000
46											
47	Dusk-Midnight										
48	Mercury Vapor										
49	100 W	0	Lamps	31.42	4.46	0.00	0	31.33	4.61	0.00	0.000
50	175 W	0	Lamps	35.78	4.46	0.00	0	35.65	4.61	0.00	0.000
51	250 W	0	Lamps	42.90	4.46	0.00	0	42.71	4.61	0.00	0.000
52	400 W	0	Lamps	53.63	4.46	0.00	0	53.82	4.61	0.00	0.000
53	1,000 W	0	Lamps	107.44	4.46	0.00	0	95.27	4.61	0.00	0.000
54											
55	High Pressure Sodium Vapor										
56	70 W	0	Lamps	24.03	4.46	0.00	0	23.96	4.61	0.00	0.000
57	100 W	0	Lamps	27.00	4.46	0.00	0	26.91	4.61	0.00	0.000
58	150 W	0	Lamps	29.45	4.46	0.00	0	29.32	4.61	0.00	0.000
59	250 W	0	Lamps	35.77	4.46	0.00	0	36.01	4.61	0.00	0.000
60	360 W	0	Lamps	42.24	4.46	0.00	0	43.82	4.61	0.00	0.000
61	400 W	0	Lamps	44.59	4.46	0.00	0	45.61	4.61	0.00	0.000
62	1,000 W	0	Lamps	82.33	4.46	0.00	0	87.80	4.61	0.00	0.000
	LED										
	130 - 139 W	21	Lamps	27.95	4.46	0.00	7	28.26	4.61	0.00	7.387

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Municipal Street Lighting - E1 Option I - Company Owned Ornamental (Cont'd)

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants		(c) Present	(d)	(e)	(f)	(g) Proposed	(h)	(i)	(j)
		Quantity	Units	Rate ($/luminaire/ mth)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)	Rate ($/luminaire/ mth)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)
63	LED										
64	20 - 29 W	0	Lamps	20.50	4.46	0.00	0	19.95	4.61	0.00	0
65	30 - 39 W	3,345	Lamps	21.23	4.46	0.00	873	21.19	4.61	0.00	873
66	40 - 49 W	1	Lamps	21.97	4.46	0.00	0	21.93	4.61	0.00	0
67	50 - 59 W	9,207	Lamps	22.69	4.46	0.00	2,599	22.64	4.61	0.00	2,597
68	60 - 69 W	9,746	Lamps	23.42	4.46	0.00	2,854	23.37	4.61	0.00	2,852
69	70 - 79 W	1,781	Lamps	24.15	4.46	0.00	540	24.09	4.61	0.00	540
70	80 - 89 W	2,315	Lamps	24.88	4.46	0.00	727	24.85	4.61	0.00	727
71	90 - 99 W	119	Lamps	25.78	4.46	0.00	39	25.82	4.61	0.00	39
72	100 - 109 W	508	Lamps	26.68	4.46	0.00	172	26.79	4.61	0.00	173
73	110 - 119 W	367	Lamps	27.58	4.46	0.00	129	27.75	4.61	0.00	130
74	120 - 129 W	4	Lamps	28.48	4.46	0.00	1	28.72	4.61	0.00	1
75	130 - 139 W	21,534	Lamps	29.38	4.46	0.00	8,119	29.69	4.61	0.00	8,217
76	140 - 149 W	216	Lamps	30.18	4.46	0.00	84	30.56	4.61	0.00	85
77	150 - 159 W	1,016	Lamps	30.99	4.46	0.00	406	31.42	4.61	0.00	413
78	160 - 169 W	23	Lamps	31.79	4.46	0.00	9	32.29	4.61	0.00	10
79	170 - 179 W	639	Lamps	32.59	4.46	0.00	270	33.16	4.61	0.00	275
80	180 - 189 W	39	Lamps	33.40	4.46	0.00	17	34.03	4.61	0.00	17
81	190 - 199 W	0	Lamps	34.20	4.46	0.00	0	34.85	4.61	0.00	0
82	200 - 209 W	604	Lamps	35.01	4.46	0.00	276	35.76	4.61	0.00	282
83	210 - 219 W	9	Lamps	35.81	4.46	0.00	4	36.63	4.61	0.00	4
84	220 - 229 W	0	Lamps	36.61	4.46	0.00	0	37.48	4.61	0.00	0
85	230 - 239 W	939	Lamps	37.42	4.46	0.00	462	38.37	4.61	0.00	474
86	240 - 249 W	88	Lamps	38.22	4.46	0.00	44	39.24	4.61	0.00	45
87	250 - 259 W	28	Lamps	39.02	4.46	0.00	14	40.10	4.61	0.00	15
88	260 - 269 W	18	Lamps	39.83	4.46	0.00	9	40.97	4.61	0.00	10
89	270 - 279 W	0	Lamps	40.63	4.46	0.00	0	41.86	4.61	0.00	0
90	280 - 289 W	1,099	Lamps	41.44	4.46	0.00	603	42.71	4.61	0.00	622
91	290 - 299 W	15	Lamps	42.24	4.46	0.00	8	43.58	4.61	0.00	9
92	300 - 309 W	0	Lamps	43.04	4.46	0.00	0	44.49	4.61	0.00	0
93	310 - 319 W	0	Lamps	43.85	4.46	0.00	0	45.36	4.61	0.00	0
94	320 - 329 W	0	Lamps	44.65	4.46	0.00	0	46.24	4.61	0.00	0
95	330 - 339 W	0	Lamps	45.46	4.46	0.00	0	47.12	4.61	0.00	0
96	340 - 349 W	0	Lamps	46.26	4.46	0.00	0	47.99	4.61	0.00	0
97	350 - 359 W	0	Lamps	47.06	4.46	0.00	0	48.87	4.61	0.00	0
98	360 - 369 W	0	Lamps	47.87	4.46	0.00	0	49.75	4.61	0.00	0
99	370 - 379 W	0	Lamps	48.67	4.46	0.00	0	50.62	4.61	0.00	0
100	380 - 389 W	0	Lamps	49.47	4.46	0.00	0	51.50	4.61	0.00	0
101	390 - 399 W	0	Lamps	50.28	4.46	0.00	0	52.37	4.61	0.00	0
102	Subtotal	77,981	Lamps				28,326				28,504
103											
104	PSCR	40,829	MWh	0			0	$ -			0
105											
106	Post Charge	186		82.56			15	$84.96			16
107	Long Span Charge	47,327		$24.48			1,159	$24.48			1,159
108	Multiple Lamp Discount	3,320		($97.92)			(325)	($97.92)			(325)
109	Multiple Lamp Discount - Long Span	0		($122.40)			0	($122.40)			0
110	Two Municipality Discount - Long Span	3,525		($61.20)			(216)	($61.20)			(216)
111	Semi-Ornamental Discount	639		($21.48)			(14)	($21.48)			(14)
112	Multiple Lamp Discount - Semi-Orn.	18		($76.56)			(1)	($76.56)			(1)
113	Subtotal	77,981	Lamps				28,944				29,123
114	IRM	40,829	MWh	0.005140			210	0.005140			210
115	Nuclear Decomm.	40,829	MWh	0.000882			36	0.000882			36
116	Subtotal	77,981	Lamps				**29,190**				**29,368**
117											
118	Energy Optimization	563	Meters	$ 5.50			37	$ 5.50			37
119											
120	**Total E1 - Option 1**	**40,829**	**MWh**				**29,227**				**29,406**
121	Increase/Decrease ($)										179

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Municipal Street Lighting - E1 Option II - Municipally Owned

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
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Line No.	(a) Description	(b) Billing Determinants		(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
				Present				Proposed			
		Quantity	Units	Rate ($/luminaire/ mth)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)	Rate ($/luminaire/ mth)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)
	Municipally Owned										
1	Mercury Vapor										
2	175 W	0	Lamps	7.86	4.46	0.00	0	10.16	4.61	0.00	0
3	250 W	0	Lamps	11.23	4.46	0.00	0	14.52	4.61	0.00	0
4	400 W	34	Lamps	17.97	4.46	0.00	10	21.77	4.61	0.00	12
5	1,000 W	0	Lamps	44.93	4.46	0.00	0	51.29	4.61	0.00	0
6											
7	High Pressure Sodium Vapor										
8	70 W	0	Lamps	5.36	4.46	0.00	0	5.87	4.61	0.00	0
9	100 W	0	Lamps	6.56	4.46	0.00	0	7.66	4.61	0.00	0
10	250 W	65	Lamps	12.55	4.46	0.00	14	15.28	4.61	0.00	16
11	360 W	0	Lamps	16.94	4.46	0.00	0	20.34	4.61	0.00	0
12	400 W	20	Lamps	18.53	4.46	0.00	6	22.45	4.61	0.00	7
13	1,000 W	0	Lamps	42.47	4.46	0.00	0	50.89	4.61	0.00	0
14											
15	Metal Halide										
16	70 W	0	Lamps	0.00	4.46	0.00	0	0.00	0.00	0.00	0.00
17	100 W	0	Lamps	0.00	4.46	0.00	0	0.00	0.00	0.00	0.00
18	175 W	0	Lamps	0.00	4.46	0.00	0	0.00	0.00	0.00	0.00
19	250 W	0	Lamps	0.00	4.46	0.00	0	0.00	0.00	0.00	0.00
20	400 W	0	Lamps	0.00	4.46	0.00	0	0.00	0.00	0.00	0.00
21	1,000 W	0	Lamps	0.00	4.46	0.00	0	0.00	0.00	0.00	0.00
22											
23	De-Energized										
24	Mercury Vapor										
25	175 W	0	Lamps	6.68	4.46	0.00	0	8.13	4.61	0.00	0.00
26	250 W	0	Lamps	9.55	4.46	0.00	0	11.61	4.61	0.00	0.00
27	400 W	0	Lamps	14.99	4.46	0.00	0	17.42	4.61	0.00	0.00
28	1,000 W	0	Lamps	36.88	4.46	0.00	0	41.04	4.61	0.00	0.00
29		0									
30	High Pressure Sodium Vapor	0									
31	70 W	0	Lamps	4.11	4.46	0.00	0	4.44	4.61	0.00	0.00
32	100 W	0	Lamps	5.20	4.46	0.00	0	5.90	4.61	0.00	0.00
33	250 W	0	Lamps	10.38	4.46	0.00	0	12.12	4.61	0.00	0.00
34	360 W	0	Lamps	14.07	4.46	0.00	0	16.25	4.61	0.00	0.00
35	400 W	0	Lamps	15.47	4.46	0.00	0	17.97	4.61	0.00	0.00
36	1,000 W	0	Lamps	35.78	4.46	0.00	0	41.19	4.61	0.00	0.00
37											
38	Dusk-Midnight										
39	Mercury Vapor										
40	175 W	0	Lamps	6.01	4.46	0.00	0	8.31	4.61	0.00	0.00
41	250 W	0	Lamps	8.58	4.46	0.00	0	11.87	4.61	0.00	0.00
42	400 W	0	Lamps	13.73	4.46	0.00	0	17.53	4.61	0.00	0.00
43	1,000 W	0	Lamps	34.33	4.46	0.00	0	40.69	4.61	0.00	0.00
44											
45	High Pressure Sodium Vapor										
46	70 W	0	Lamps	4.62	4.46	0.00	0	5.13	4.61	0.00	0.00
47	100 W	0	Lamps	5.50	4.46	0.00	0	6.60	4.61	0.00	0.00
48	250 W	0	Lamps	9.90	4.46	0.00	0	12.63	4.61	0.00	0.00
49	360 W	0	Lamps	13.12	4.46	0.00	0	16.52	4.61	0.00	0.00
50	400 W	0	Lamps	14.29	4.46	0.00	0	18.21	4.61	0.00	0.00
51	1,000 W	0	Lamps	31.87	4.46	0.00	0	40.29	4.61	0.00	0.00
52	Subtotal	119	Lamps				29.89				34.79
53											
54	PSCR	187	MWh	0			0	$ -			0
55	Subtotal	119	Lamps								35
56	IRM	187	MWh	0.005140			1	0.005140			1
57	Nuclear Decommissioning	187	MWh	0.000882			0.16	0.000882			0.16
58	Subtotal	119	Lamps				31.01				35.91
59											
60	Energy Optimization	18	Meters	$ 5.50			1.19	$ 5.50			1.19
61											
62	**Total E1 - Option II**	**187**	**MWh**				**32**				**37**
63	Increase/Decrease ($)										5

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Municipal Street Lighting - E1 Option III - Energy Only

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
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Line No.	(a) Description	(b) Billing Determinants		(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
				Present				Proposed			
	Energy Only Service	Quantity	Load (kW)	Dist Energy (¢/kWh)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)	Dist Energy (¢/kWh)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)
1	Mercury Vapor										
2	100 Watt	12	1	10.88	4.46	0.00	1	12.81	4.61	0.00	1
3	175 Watt	167	29	10.88	4.46	0.00	23	12.81	4.61	0.00	26
4	250 Watt	20	5	10.88	4.46	0.00	4	12.81	4.61	0.00	4
5	400 Watt	138	55	10.88	4.46	0.00	40	12.81	4.61	0.00	45
6	1,000 Watt		0	10.88	4.46	0.00	0	12.81	4.61	0.00	0
7											
8	High Pressure Sodium Vapor										
9	70 Watt	293	21	10.88	4.46	0.00	18	12.81	4.61	0.00	20
10	100 Watt	8,829	883	10.88	4.46	0.00	768	12.81	4.61	0.00	872
11	150 Watt	1,669	250	10.88	4.46	0.00	215	12.81	4.61	0.00	244
12	250 Watt	986	247	10.88	4.46	0.00	194	12.81	4.61	0.00	220
13	310 Watt	28	9	10.88	4.46	0.00	7	12.81	4.61	0.00	8
14	360 Watt	0	0	10.88	4.46	0.00	0	12.81	4.61	0.00	0
15	400 Watt	423	169	10.88	4.46	0.00	127	12.81	4.61	0.00	144
16	1,000 Watt	0	0	10.88	4.46	0.00	0	12.81	4.61	0.00	0
17		0									
18	Metal Halide	0									
19	70 Watt	0	0	10.88	4.46	0.00	0	12.81	4.61	0.00	0
20	100 Watt	90	9	10.88	4.46	0.00	7	12.81	4.61	0.00	8
21	150 Watt	0	0	10.88	4.46	0.00	0	12.81	4.61	0.00	0
22	175 Watt	135	24	10.88	4.46	0.00	18	12.81	4.61	0.00	21
23	250 Watt	34	9	10.88	4.46	0.00	7	12.81	4.61	0.00	7
24	320 Watt	0	0	10.88	4.46	0.00	0	12.81	4.61	0.00	0
25	400 Watt	33	13	10.88	4.46	0.00	10	12.81	4.61	0.00	11
26	1,000 Watt	0	0	10.88	4.46	0.00	0	12.81	4.61	0.00	0
27	Energy Subtotal	12,857	1,724				1,437				1,632
28											
29	LED										
30	20 - 29 W	0	0	10.88	4.46	0.00	0	12.81	4.61	0.00	0
31	30 - 39 W	4,585	160	10.88	4.46	0.00	103	12.81	4.61	0.00	117
32	40 - 49 W	155	7	10.88	4.46	0.00	4	12.81	4.61	0.00	5
33	50 - 59 W	1,166	64	10.88	4.46	0.00	41	12.81	4.61	0.00	47
34	60 - 69 W	721	47	10.88	4.46	0.00	30	12.81	4.61	0.00	34
35	70 - 79 W	198	15	10.88	4.46	0.00	10	12.81	4.61	0.00	11
36	80 - 89 W	14,235	1,210	10.88	4.46	0.00	780	12.81	4.61	0.00	885
37	90 - 99 W	205	19	10.88	4.46	0.00	13	12.81	4.61	0.00	14
38	100 - 109 W	14,602	1,533	10.88	4.46	0.00	988	12.81	4.61	0.00	1,122
39	110 - 119 W	14,436	1,660	10.88	4.46	0.00	1,070	12.81	4.61	0.00	1,215
40	120 - 129 W	931	116	10.88	4.46	0.00	75	12.81	4.61	0.00	85
41	130 - 139 W	7,962	1,075	10.88	4.46	0.00	693	12.81	4.61	0.00	787
42	140 - 149 W	4	1	10.88	4.46	0.00	0	12.81	4.61	0.00	0
43	150 - 159 W	1,251	194	10.88	4.46	0.00	125	12.81	4.61	0.00	142
44	160 - 169 W	465	77	10.88	4.46	0.00	49	12.81	4.61	0.00	56
45	170 - 179 W	96	17	10.88	4.46	0.00	11	12.81	4.61	0.00	12
46	180 - 189 W	87	16	10.88	4.46	0.00	10	12.81	4.61	0.00	12
47	190 - 199 W	9	2	10.88	4.46	0.00	1	12.81	4.61	0.00	1
48	200 - 209 W	190	39	10.88	4.46	0.00	25	12.81	4.61	0.00	29
49	210 - 219 W	3,084	663	10.88	4.46	0.00	427	12.81	4.61	0.00	485
50	220 - 229 W	269	61	10.88	4.46	0.00	39	12.81	4.61	0.00	44
51	230 - 239 W	0	0	10.88	4.46	0.00	0	12.81	4.61	0.00	0
52	240 - 249 W	1	0	10.88	4.46	0.00	0	12.81	4.61	0.00	0
53	250 - 259 W	175	45	10.88	4.46	0.00	29	12.81	4.61	0.00	33
54	260 - 269 W	4,438	1,176	10.88	4.46	0.00	758	12.81	4.61	0.00	861
55	270 - 279 W	262	72	10.88	4.46	0.00	46	12.81	4.61	0.00	53

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Municipal Street Lighting - E1 Option III - Energy Only (Cont'd)

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson

Line No.	(a) Description	(b) Billing Determinants		(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
				Present				Proposed			
	Energy Only Service	Quantity	Load (kW)	Dist Energy (¢/kWh)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)	Dist Energy (¢/kWh)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)
56	LED										
57	280 - 289 W	13	4	10.88	4.46	0.00	2	12.81	4.61	0.00	3
58	290 - 299 W	0	0	10.88	4.46	0.00	0	12.81	4.61	0.00	0
59	300 - 309 W	5	2	10.88	4.46	0.00	1	12.81	4.61	0.00	1
60	310 - 319 W	0	0	10.88	4.46	0.00	0	12.81	4.61	0.00	0
61	320 - 329 W	0	0	10.88	4.46	0.00	0	12.81	4.61	0.00	0
62	330 - 339 W	0	0	10.88	4.46	0.00	0	12.81	4.61	0.00	0
63	340 - 349 W	0	0	10.88	4.46	0.00	0	12.81	4.61	0.00	0
64	350 - 359 W	0	0	10.88	4.46	0.00	0	12.81	4.61	0.00	0
65	360 - 369 W	0	0	10.88	4.46	0.00	0	12.81	4.61	0.00	0
66	370 - 379 W	0	0	10.88	4.46	0.00	0	12.81	4.61	0.00	0
67	380 - 389 W	0	0	10.88	4.46	0.00	0	12.81	4.61	0.00	0
68	390 - 399 W	0	0	10.88	4.46	0.00	0	12.81	4.61	0.00	0
69	LED Subtotal	69,545	8,275				5,331				6,054
70											
71	PSCR	44,120	MWh	0			0	$ -			0
72	Subtotal	82,402					6,768				7,687
73	IRM	44,120	MWh	0.005140			227	0.005140			227
74	Nuclear Decommissioning	44,120	MWh	0.000882			39	0.000882			39
75	Subtotal	44,120	MWh				7,034				7,952
76											
77	Energy Optimization	40	Meters	$ 5.50			2.65	$ 5.50			2.65
78											
79	**Total E1 - Option III**	**44,120**	**MWh**				**7,036**				**7,955**
80	Increase/Decrease ($)										919
	Total E1 - Options I, II and III	**123,056**	**MWh**				**63,859**				**66,184**

Michigan Public Service Commission
DTE Electric Company
Staff Present and Proposed Revenue by Rate Schedule
Traffic & Signal Lights - E2

Case No.: U-21534
Exhibit: S-6
Schedule: F3
Witness: D.W. Isakson
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Line No.	(a) Description	(b) Billing Determinants		(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
				Present				Proposed			
		Load kW		Dist Energy (¢/kWh)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)	Dist Energy (¢/kWh)	Non-Capacity Energy (¢/kWh)	Capacity Energy (¢/kWh)	Revenue ($000)
1	Connected Load	81,824									
2	Energy Charge	59,731	MWh	2.63	5.83	0.56	$ 5,388	2.93	5.01	1.44	5,603
3	IRM	59,731	MWh	0.000275			$ 16	0.000275			16
4	Nuclear Decommissioning	59,731	MWh	0.000882			53	0.000882			53
5	Subtotal	59,731	MWh				**5,457**				**5,672**
6											
7	PSCR	59,731	MWh	$ -			0	$ -			0
8	Energy Optimization	166	Meters	$ 5.50			11	$ 5.50			11
9							0				0
10	**Total E2**	**59,731**	**MWh**				**5,468**				**5,683**
11	Increase/Decrease ($)										215

DTE Electric Company
Case No. U-21534
Staff Comparison of Monthly Bills

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Residential Service Non-Transmitting Meter - D1

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges:		Power Supply Charges:	
Non-Capacity Charge	$0.07809	Non-Capacity Charge	$0.05654
Capacity Charges:		Capacity Charges:	
First 17 KWH/Day	$0.01128	First 17 KWH/Day	$0.03118
Excess	$0.01626	Excess	$0.04495
Power Supply Surcharges:	$0.00000	Power Supply Surcharges:	$0.00000
REPS	$0.00	REPS	$0.00
Service Charge	$8.50	Service Charge:	$8.50
Distribution Charge:	$0.08137	Distribution Charge:	$0.08962
Delivery Surcharges:	$0.004375	Delivery Surcharges:	$0.004375
LIEAF	$0.88	LIEAF	$0.88

	(a)	(b)	(c)	(d)	(e)	(f)
Line	Monthly	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	100	$26.89	$27.55	$0.66	2.45%	27.55¢
2	120	$30.39	$31.19	$0.79	2.61%	25.99¢
3	140	$33.90	$34.82	$0.92	2.73%	24.87¢
4	160	$37.40	$38.45	$1.06	2.82%	24.03¢
5	180	$40.90	$42.09	$1.19	2.90%	23.38¢
6	200	$44.40	$45.72	$1.32	2.97%	22.86¢
7	240	$51.41	$52.99	$1.58	3.08%	22.08¢
8	280	$58.41	$60.26	$1.85	3.16%	21.52¢
9	300	$61.91	$63.89	$1.98	3.20%	21.30¢
10	350	$70.67	$72.98	$2.31	3.27%	20.85¢
11	400	$79.43	$82.07	$2.64	3.32%	20.52¢
12	450	$88.18	$91.15	$2.97	3.37%	20.26¢
13	500	$96.94	$100.24	$3.30	3.40%	20.05¢
14	550	$105.89	$109.87	$3.98	3.76%	19.98¢
15	600	$114.90	$119.65	$4.75	4.14%	19.94¢
16	650	$123.90	$129.42	$5.52	4.46%	19.91¢
17	700	$132.91	$139.20	$6.29	4.73%	19.89¢
18	750	$141.91	$148.97	$7.06	4.97%	19.86¢
19	800	$150.92	$158.75	$7.83	5.19%	19.84¢
20	850	$159.92	$168.52	$8.60	5.38%	19.83¢
21	900	$168.93	$178.29	$9.37	5.55%	19.81¢
22	950	$177.93	$188.07	$10.14	5.70%	19.80¢
23	1,000	$186.94	$197.84	$10.91	5.83%	19.78¢
24	1,100	$204.94	$217.39	$12.45	6.07%	19.76¢
25	1,200	$222.95	$236.94	$13.99	6.27%	19.74¢
26	1,300	$240.96	$256.49	$15.52	6.44%	19.73¢
27	1,400	$258.97	$276.04	$17.06	6.59%	19.72¢
28	1,500	$276.98	$295.58	$18.60	6.72%	19.71¢
29	2,000	$367.03	$393.33	$26.30	7.16%	19.67¢
30	2,750	$502.10	$539.94	$37.84	7.54%	19.63¢
31	4,000	$727.22	$784.30	$57.08	7.85%	19.61¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Interruptible Space-Conditioning Service Rate - D1.1 Residential
June thru October

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges:		Power Supply Charges:	
Non Capacity Charge	$0.06085	Non Capacity Charge	$0.04414
Capacity Charge	$0.01089	Capacity Charge	$0.02976
Power Supply Surcharges:	$0.00000	Power Supply Surcharges:	$0.00000
Distribution Charges:		Distribution Charges:	
Service Charge:	$1.95	Service Charge:	$1.95
Distribution Energy	$0.08137	Distribution Energy	$0.08962
Delivery Surcharges:	$0.004375	Delivery Surcharges:	$0.004375

	(a)	(b)	(c)	(d)	(e)	(f)
Line	Monthly	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	100	$17.70	$18.74	$1.04	5.88%	18.74¢
2	120	$20.85	$22.10	$1.25	5.99%	18.41¢
3	140	$24.00	$25.46	$1.46	6.07%	18.18¢
4	160	$27.15	$28.81	$1.67	6.14%	18.01¢
5	180	$30.30	$32.17	$1.87	6.18%	17.87¢
6	200	$33.45	$35.53	$2.08	6.22%	17.76¢
7	240	$39.75	$42.24	$2.50	6.29%	17.60¢
8	280	$46.05	$48.96	$2.91	6.33%	17.49¢
9	300	$49.20	$52.32	$3.12	6.35%	17.44¢
10	350	$57.07	$60.71	$3.64	6.38%	17.35¢
11	400	$64.94	$69.11	$4.16	6.41%	17.28¢
12	450	$72.82	$77.50	$4.68	6.43%	17.22¢
13	500	$80.69	$85.90	$5.21	6.45%	17.18¢
14	550	$88.57	$94.29	$5.73	6.46%	17.14¢
15	600	$96.44	$102.69	$6.25	6.48%	17.11¢
16	650	$104.32	$111.08	$6.77	6.49%	17.09¢
17	700	$112.19	$119.48	$7.29	6.50%	17.07¢
18	750	$120.06	$127.87	$7.81	6.50%	17.05¢
19	800	$127.94	$136.27	$8.33	6.51%	17.03¢
20	850	$135.81	$144.66	$8.85	6.52%	17.02¢
21	900	$143.69	$153.06	$9.37	6.52%	17.01¢
22	950	$151.56	$161.45	$9.89	6.53%	16.99¢
23	1,000	$159.44	$169.85	$10.41	6.53%	16.98¢
24	1,100	$175.18	$186.63	$11.45	6.54%	16.97¢
25	1,200	$190.93	$203.42	$12.49	6.54%	16.95¢
26	1,300	$206.68	$220.21	$13.53	6.55%	16.94¢
27	1,400	$222.43	$237.00	$14.57	6.55%	16.93¢
28	1,500	$238.18	$253.79	$15.62	6.56%	16.92¢
29	2,000	$316.92	$337.74	$20.82	6.57%	16.89¢
30	3,000	$474.41	$505.64	$31.23	6.58%	16.85¢
31	4,000	$631.89	$673.53	$41.64	6.59%	16.84¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Interruptible Space-Conditioning Service Rate - D1.1 Residential
November thru May

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson
Page: 4 of 53

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges:		Power Supply Charges:	
Non Capacity Charge	$0.06085	Non Capacity Charge	$0.04414
Capacity Charge	$0.00270	Capacity Charge	$0.00738
Power Supply Surcharges:	$0.00000	Power Supply Surcharges:	$0.00000
Distribution Charges:		Distribution Charges:	
Service Charge:	$0.00	Service Charge:	$0.00
Distribution Energy	$0.08137	Distribution Energy	$0.08962
Delivery Surcharges:	$0.004375	Delivery Surcharges:	$0.004375

	(a)	(b)	(c)	(d)	(e)	(f)
Line	Monthly	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	100	$14.93	$14.55	-$0.38	-2.53%	14.55¢
2	120	$17.92	$17.46	-$0.45	-2.53%	14.55¢
3	140	$20.90	$20.37	-$0.53	-2.53%	14.55¢
4	160	$23.89	$23.28	-$0.60	-2.53%	14.55¢
5	180	$26.87	$26.19	-$0.68	-2.53%	14.55¢
6	200	$29.86	$29.10	-$0.76	-2.53%	14.55¢
7	240	$35.83	$34.92	-$0.91	-2.53%	14.55¢
8	280	$41.80	$40.74	-$1.06	-2.53%	14.55¢
9	300	$44.79	$43.65	-$1.13	-2.53%	14.55¢
10	350	$52.25	$50.93	-$1.32	-2.53%	14.55¢
11	400	$59.72	$58.21	-$1.51	-2.53%	14.55¢
12	450	$67.18	$65.48	-$1.70	-2.53%	14.55¢
13	500	$74.65	$72.76	-$1.89	-2.53%	14.55¢
14	550	$82.11	$80.03	-$2.08	-2.53%	14.55¢
15	600	$89.58	$87.31	-$2.27	-2.53%	14.55¢
16	650	$97.04	$94.58	-$2.46	-2.53%	14.55¢
17	700	$104.51	$101.86	-$2.65	-2.53%	14.55¢
18	750	$111.97	$109.14	-$2.84	-2.53%	14.55¢
19	800	$119.44	$116.41	-$3.02	-2.53%	14.55¢
20	850	$126.90	$123.69	-$3.21	-2.53%	14.55¢
21	900	$134.37	$130.96	-$3.40	-2.53%	14.55¢
22	950	$141.83	$138.24	-$3.59	-2.53%	14.55¢
23	1,000	$149.30	$145.52	-$3.78	-2.53%	14.55¢
24	1,100	$164.22	$160.07	-$4.16	-2.53%	14.55¢
25	1,200	$179.15	$174.62	-$4.54	-2.53%	14.55¢
26	1,300	$194.08	$189.17	-$4.91	-2.53%	14.55¢
27	1,400	$209.01	$203.72	-$5.29	-2.53%	14.55¢
28	1,500	$223.94	$218.27	-$5.67	-2.53%	14.55¢
29	2,000	$298.59	$291.03	-$7.56	-2.53%	14.55¢
30	3,000	$447.89	$436.55	-$11.34	-2.53%	14.55¢
31	4,000	$597.18	$582.06	-$15.12	-2.53%	14.55¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Residential Service Rate Enhanced TOU - D1.2
June thru October

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges:		Power Supply Charges:	
Non-Capacity Charge		Non-Capacity Charge	
On-Peak Energy Rate:	$0.13949	On-Peak Energy Rate:	$0.11146
Off-Peak Energy Rate:	$0.04696	Off-Peak Energy Rate:	$0.03752
Capacity Charges:		Capacity Charges:	
On-Peak Energy Rate:	$0.01690	On-Peak Energy Rate:	$0.04758
Off-Peak Energy Rate:	$0.00569	Off-Peak Energy Rate:	$0.01602
Power Supply Surcharges:	$0.00000	Power Supply Surcharges:	$0.00000
REPS	$0.00	REPS	$0.00
Distribution Charges:		Distribution Charges:	
Service Charge:	$8.50	Service Charge:	$8.50
Distribution Energy	$0.08137	Distribution Energy	$0.08962
Delivery Surcharges:	$0.004375	Delivery Surcharges:	$0.004375
LIEAF	$0.88	LIEAF	$0.88

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line	Monthly	On-Peak	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	100	20%	$25.29	$26.24	$0.95	3.75%	26.24¢
2	100	25%	$25.81	$26.77	$0.96	3.71%	26.77¢
3	100	30%	$26.33	$27.30	$0.97	3.67%	27.30¢
4							
5	200	20%	$41.21	$43.11	$1.90	4.61%	21.55¢
6	200	25%	$42.25	$44.16	$1.92	4.54%	22.08¢
7	200	30%	$43.28	$45.22	$1.93	4.47%	22.61¢
8							
9	300	20%	$57.12	$59.97	$2.85	4.99%	19.99¢
10	300	25%	$58.68	$61.55	$2.87	4.90%	20.52¢
11	300	30%	$60.24	$63.14	$2.90	4.82%	21.05¢
12							
13	400	20%	$73.04	$76.83	$3.80	5.20%	19.21¢
14	400	25%	$75.11	$78.94	$3.83	5.10%	19.74¢
15	400	30%	$77.19	$81.05	$3.87	5.01%	20.26¢
16							
17	500	20%	$88.95	$93.70	$4.75	5.34%	18.74¢
18	500	25%	$91.55	$96.34	$4.79	5.23%	19.27¢
19	500	30%	$94.14	$98.97	$4.83	5.13%	19.79¢
20							
21	600	20%	$104.87	$110.56	$5.70	5.43%	18.43¢
22	600	25%	$107.98	$113.73	$5.75	5.32%	18.95¢
23	600	30%	$111.09	$116.89	$5.80	5.22%	19.48¢
24							
25	700	20%	$120.78	$127.42	$6.64	5.50%	18.20¢
26	700	25%	$124.41	$131.12	$6.71	5.39%	18.73¢
27	700	30%	$128.04	$134.81	$6.77	5.29%	19.26¢

Michigan Public Service Commission Case No.: U-21534
DTE Electric Company Exhibit: S-6
Staff Comparison of Present and Proposed Monthly Bills Schedule: F4
Residential Service Rate Enhanced TOU - D1.2 Witness: D.W. Isakson
June thru October Page: 6 of 53

Line No.	(a) Monthly kWh Use	(b) On-Peak Use	(c) Present Net Monthly Bill	(d) Proposed Net Monthly Bill	(e) Increase Amount	(f) Increase Percent	(g) Proposed Unit Cost
28	800	20%	$136.69	$144.29	$7.59	5.56%	18.04¢
29	800	25%	$140.84	$148.51	$7.66	5.44%	18.56¢
30	800	30%	$144.99	$152.73	$7.73	5.33%	19.09¢
31							
32	1,000	20%	$168.52	$178.02	$9.49	5.63%	17.80¢
33	1,000	25%	$173.71	$183.29	$9.58	5.51%	18.33¢
34	1,000	30%	$178.90	$188.57	$9.67	5.40%	18.86¢
35							
36	1,100	20%	$184.44	$194.88	$10.44	5.66%	17.72¢
37	1,100	25%	$190.14	$200.68	$10.54	5.54%	18.24¢
38	1,100	30%	$195.85	$206.48	$10.63	5.43%	18.77¢
39							
40	1,200	20%	$200.35	$211.74	$11.39	5.69%	17.65¢
41	1,200	25%	$206.58	$218.07	$11.50	5.57%	18.17¢
42	1,200	30%	$212.80	$224.40	$11.60	5.45%	18.70¢
43							
44	1,300	20%	$216.27	$228.61	$12.34	5.71%	17.59¢
45	1,300	25%	$223.01	$235.46	$12.45	5.58%	18.11¢
46	1,300	30%	$229.75	$242.32	$12.57	5.47%	18.64¢
47							
48	1,400	20%	$232.18	$245.47	$13.29	5.72%	17.53¢
49	1,400	25%	$239.44	$252.85	$13.41	5.60%	18.06¢
50	1,400	30%	$246.70	$260.24	$13.54	5.49%	18.59¢
51							
52	1,500	20%	$248.09	$262.33	$14.24	5.74%	17.49¢
53	1,500	25%	$255.88	$270.25	$14.37	5.62%	18.02¢
54	1,500	30%	$263.66	$278.16	$14.50	5.50%	18.54¢
55							
56	2,000	20%	$327.67	$346.65	$18.98	5.79%	17.33¢
57	2,000	25%	$338.04	$357.20	$19.16	5.67%	17.86¢
58	2,000	30%	$348.41	$367.75	$19.34	5.55%	18.39¢
59							
60	3,000	20%	$486.81	$515.29	$28.48	5.85%	17.18¢
61	3,000	25%	$502.37	$531.11	$28.74	5.72%	17.70¢
62	3,000	30%	$517.93	$546.94	$29.00	5.60%	18.23¢
63							
64	4,000	20%	$645.95	$683.92	$37.97	5.88%	17.10¢
65	4,000	25%	$666.70	$705.02	$38.32	5.75%	17.63¢
66	4,000	30%	$687.45	$726.12	$38.67	5.63%	18.15¢

Michigan Public Service Commission Case No.: U-21534
DTE Electric Company Exhibit: S-6
Staff Comparison of Present and Proposed Monthly Bills Schedule: F4
Residential Service Rate Enhanced TOU - D1.2 Witness: D.W. Isakson
November thru May Page: 7 of 53

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges:		Power Supply Charges:	
Non-Capacity Charge		Non-Capacity Charge	
On-Peak Energy Rate:	$0.11783	On-Peak Energy Rate:	$0.09415
Off-Peak Energy Rate:	$0.04512	Off-Peak Energy Rate:	$0.03606
Capacity Charges:		Capacity Charges:	
On-Peak Energy Rate:	$0.01427	On-Peak Energy Rate:	$0.04019
Off-Peak Energy Rate:	$0.00547	Off-Peak Energy Rate:	$0.01539
Power Supply Surcharges:	$0.00000	Power Supply Surcharges:	$0.00000
REPS	$0.00	REPS	$0.00
Distribution Charges:		Distribution Charges:	
Service Charge:	$8.50	Service Charge:	$8.50
Distribution Energy	$0.08137	Distribution Energy	$0.08962
Delivery Surcharges:	$0.004375	Delivery Surcharges:	$0.004375
LIEAF	$0.88	LIEAF	$0.88

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line	Monthly	On-Peak	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	100	20%	$24.64	$25.58	$0.94	3.81%	25.58¢
2	100	25%	$25.05	$26.00	$0.95	3.77%	26.00¢
3	100	30%	$25.46	$26.41	$0.95	3.74%	26.41¢
4							
5	200	20%	$39.91	$41.78	$1.88	4.70%	20.89¢
6	200	25%	$40.72	$42.61	$1.89	4.64%	21.31¢
7	200	30%	$41.54	$43.44	$1.90	4.59%	21.72¢
8							
9	300	20%	$55.17	$57.99	$2.82	5.10%	19.33¢
10	300	25%	$56.39	$59.23	$2.84	5.03%	19.74¢
11	300	30%	$57.62	$60.47	$2.86	4.96%	20.16¢
12							
13	400	20%	$70.43	$74.19	$3.75	5.33%	18.55¢
14	400	25%	$72.07	$75.85	$3.78	5.25%	18.96¢
15	400	30%	$73.70	$77.50	$3.81	5.17%	19.38¢
16							
17	500	20%	$85.70	$90.39	$4.69	5.48%	18.08¢
18	500	25%	$87.74	$92.46	$4.73	5.39%	18.49¢
19	500	30%	$89.77	$94.54	$4.76	5.30%	18.91¢
20							
21	600	20%	$100.96	$106.59	$5.63	5.58%	17.77¢
22	600	25%	$103.41	$109.08	$5.67	5.49%	18.18¢
23	600	30%	$105.85	$111.57	$5.71	5.40%	18.59¢
24							
25	700	20%	$116.23	$122.80	$6.57	5.65%	17.54¢
26	700	25%	$119.08	$125.70	$6.62	5.56%	17.96¢
27	700	30%	$121.93	$128.60	$6.67	5.47%	18.37¢

Michigan Public Service Commission Case No.: U-21534
DTE Electric Company Exhibit: S-6
Staff Comparison of Present and Proposed Monthly Bills Schedule: F4
Residential Service Rate Enhanced TOU - D1.2 Witness: D.W. Isakson
November thru May Page: 8 of 53

Line No.	(a) Monthly kWh Use	(b) On-Peak Use	(c) Present Net Monthly Bill	(d) Proposed Net Monthly Bill	(e) Increase Amount	(f) Increase Percent	(g) Proposed Unit Cost
28	800	20%	$131.49	$139.00	$7.51	5.71%	17.37¢
29	800	25%	$134.75	$142.31	$7.56	5.61%	17.79¢
30	800	30%	$138.01	$145.63	$7.62	5.52%	18.20¢
31							
32	1,000	20%	$162.02	$171.40	$9.39	5.79%	17.14¢
33	1,000	25%	$166.09	$175.55	$9.45	5.69%	17.55¢
34	1,000	30%	$170.17	$179.69	$9.52	5.60%	17.97¢
35							
36	1,100	20%	$177.28	$187.61	$10.32	5.82%	17.06¢
37	1,100	25%	$181.76	$192.16	$10.40	5.72%	17.47¢
38	1,100	30%	$186.25	$196.72	$10.48	5.63%	17.88¢
39							
40	1,200	20%	$192.54	$203.81	$11.26	5.85%	16.98¢
41	1,200	25%	$197.44	$208.78	$11.35	5.75%	17.40¢
42	1,200	30%	$202.33	$213.75	$11.43	5.65%	17.81¢
43							
44	1,300	20%	$207.81	$220.01	$12.20	5.87%	16.92¢
45	1,300	25%	$213.11	$225.40	$12.29	5.77%	17.34¢
46	1,300	30%	$218.40	$230.79	$12.38	5.67%	17.75¢
47							
48	1,400	20%	$223.07	$236.21	$13.14	5.89%	16.87¢
49	1,400	25%	$228.78	$242.01	$13.24	5.79%	17.29¢
50	1,400	30%	$234.48	$247.82	$13.33	5.69%	17.70¢
51							
52	1,500	20%	$238.34	$252.41	$14.08	5.91%	16.83¢
53	1,500	25%	$244.45	$258.63	$14.18	5.80%	17.24¢
54	1,500	30%	$250.56	$264.85	$14.29	5.70%	17.66¢
55							
56	2,000	20%	$314.65	$333.43	$18.77	5.97%	16.67¢
57	2,000	25%	$322.81	$341.72	$18.91	5.86%	17.09¢
58	2,000	30%	$330.96	$350.00	$19.05	5.76%	17.50¢
59							
60	3,000	20%	$467.29	$495.45	$28.16	6.03%	16.51
61	3,000	25%	$479.52	$507.88	$28.37	5.92%	16.93
62	3,000	30%	$491.74	$520.32	$28.57	5.81%	17.34
63							
64	4,000	20%	$619.93	$657.47	$37.54	6.06%	16.44
65	4,000	25%	$636.23	$674.05	$37.82	5.94%	16.85
66	4,000	30%	$652.53	$690.63	$38.10	5.84%	17.27

Michigan Public Service Commission
DTE Electric Company
Comparison of Present and Proposed Monthly Bills
Residential Service Rate Special Low Income Pilot - D1.6

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges:		Power Supply Charges:	
Non-Capacity Charge:	$0.07809	Non-Capacity Charge:	$0.05654
Capacity Charges:		Capacity Charges:	
First 17 KWH/Day	$0.01128	First 17 KWH/Day	$0.03118
Excess	$0.01626	Excess	$0.04495
Power Supply Surcharges:	$0.00000	Power Supply Surcharges:	$0.00000
REPS	$0.00	REPS	$0.00
Service Charge	$8.50	Service Charge:	$8.50
Distribution Charge:	$0.08137	Distribution Charge:	$0.08962
Income Assistance	($40.00)	Income Assistance	($50.00)
Delivery Surcharges:	$0.004375	Delivery Surcharges:	$0.004375
LIEAF	$0.88	LIEAF	$0.88

	(a)	(b)	(c)	(d)	(e)	(f)
Line	Monthly	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	300	$21.91	$13.89	-$8.02	-36.60%	4.63¢
2	350	$30.67	$22.98	-$7.69	-25.07%	6.57¢
3	400	$39.43	$32.07	-$7.36	-18.67%	8.02¢
4	450	$48.18	$41.15	-$7.03	-14.59%	9.14¢
5	500	$56.94	$50.24	-$6.70	-11.77%	10.05¢
6	550	$65.89	$59.87	-$6.02	-9.13%	10.89¢
7	600	$74.90	$69.65	-$5.25	-7.01%	11.61¢
8	650	$83.90	$79.42	-$4.48	-5.34%	12.22¢
9	700	$92.91	$89.20	-$3.71	-3.99%	12.74¢
10	750	$101.91	$98.97	-$2.94	-2.89%	13.20¢
11	800	$110.92	$108.75	-$2.17	-1.96%	13.59¢
12	850	$119.92	$118.52	-$1.40	-1.17%	13.94¢
13	900	$128.93	$128.29	-$0.63	-0.49%	14.25¢
14	950	$137.93	$138.07	$0.14	0.10%	14.53¢
15	1,000	$146.94	$147.84	$0.91	0.62%	14.78¢
16	1,100	$164.94	$167.39	$2.45	1.48%	15.22¢
17	1,200	$182.95	$186.94	$3.99	2.18%	15.58¢
18	1,300	$200.96	$206.49	$5.52	2.75%	15.88¢
19	1,400	$218.97	$226.04	$7.06	3.23%	16.15¢
20	1,500	$236.98	$245.58	$8.60	3.63%	16.37¢
21	2,000	$327.03	$343.33	$16.30	4.98%	17.17¢
22	2,750	$462.10	$489.94	$27.84	6.02%	17.82¢
23	4,000	$687.22	$734.30	$47.08	6.85%	18.36¢

Michigan Public Service Commission Case No.: U-21534
DTE Electric Company Exhibit: S-6
Staff Comparison of Present and Proposed Monthly Bills Schedule: F4
Geothermal Time of Day Rate - D1.7 Residential Witness: D.W. Isakson
June thru September Page: 10 of 53

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges		Power Supply Charges	
Non-Capacity Charge:	$0.04582	Non-Capacity Charge:	
		On-Peak Energy Rate	$0.08439
		Off-Peak Energy Rate	$0.02795
Capacity Charges:		Capacity Charges:	
On-Peak Energy Rate	$0.04248	On-Peak Energy Rate	$0.05409
Off-Peak Energy Rate	$0.00001	Off-Peak Energy Rate	$0.01792
Power Supply Surcharges	$0.00000	Power Supply Surcharges	$0.00000
Distribution Charges		Distribution Charges	
Service Charge	$2.01	Service Charge	$2.01
Distribution Energy	$0.08137	Distribution Energy	$0.08962
Delivery Surcharges	$0.004375	Delivery Surcharges	$0.004375

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line	Monthly	On-Peak	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	100	20%	$16.02	$17.85	$1.83	11.44%	17.85¢
2	100	25%	$16.23	$18.31	$2.08	12.83%	18.31¢
3	100	30%	$16.44	$18.77	$2.33	14.19%	18.77¢
4							
5	200	20%	$30.02	$33.69	$3.66	12.20%	16.84¢
6	200	25%	$30.45	$34.61	$4.17	13.68%	17.31¢
7	200	30%	$30.87	$35.54	$4.67	15.11%	17.77¢
8							
9	300	20%	$44.03	$49.53	$5.50	12.48%	16.51¢
10	300	25%	$44.67	$50.92	$6.25	13.99%	16.97¢
11	300	30%	$45.30	$52.30	$7.00	15.45%	17.43¢
12							
13	400	20%	$58.04	$65.36	$7.33	12.62%	16.34¢
14	400	25%	$58.89	$67.22	$8.33	14.15%	16.80¢
15	400	30%	$59.74	$69.07	$9.33	15.62%	17.27¢
16							
17	500	20%	$72.04	$81.20	$9.16	12.71%	16.24¢
18	500	25%	$73.11	$83.52	$10.41	14.24%	16.70¢
19	500	30%	$74.17	$85.83	$11.67	15.73%	17.17¢
20							
21	600	20%	$86.05	$97.04	$10.99	12.77%	16.17¢
22	600	25%	$87.33	$99.82	$12.50	14.31%	16.64¢
23	600	30%	$88.60	$102.60	$14.00	15.80%	17.10¢
24							
25	700	20%	$100.06	$112.88	$12.82	12.82%	16.13¢
26	700	25%	$101.54	$116.12	$14.58	14.36%	16.59¢
27	700	30%	$103.03	$119.36	$16.33	15.85%	17.05¢
28							
29	800	20%	$114.07	$128.72	$14.65	12.85%	16.09¢
30	800	25%	$115.76	$132.42	$16.66	14.39%	16.55¢
31	800	30%	$117.46	$136.13	$18.67	15.89%	17.02¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Geothermal Time of Day Rate - D1.7 Residential
June thru September

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Line No.	(a) Monthly kWh Use	(b) On-Peak Use	(c) Present Net Monthly Bill	(d) Proposed Net Monthly Bill	(e) Increase Amount	(f) Increase Percent	(g) Proposed Unit Cost
32	1,000	20%	$142.08	$160.40	$18.32	12.89%	16.04¢
33	1,000	25%	$144.20	$165.03	$20.83	14.44%	16.50¢
34	1,000	30%	$146.33	$169.66	$23.33	15.95%	16.97¢
35							
36	1,100	20%	$156.09	$176.24	$20.15	12.91%	16.02¢
37	1,100	25%	$158.42	$181.33	$22.91	14.46%	16.48¢
38	1,100	30%	$160.76	$186.42	$25.67	15.97%	16.95¢
39							
40	1,200	20%	$170.09	$192.07	$21.98	12.92%	16.01¢
41	1,200	25%	$172.64	$197.63	$24.99	14.48%	16.47¢
42	1,200	30%	$175.19	$203.19	$28.00	15.98%	16.93¢
43							
44	1,300	20%	$184.10	$207.91	$23.81	12.94%	15.99¢
45	1,300	25%	$186.86	$213.93	$27.07	14.49%	16.46¢
46	1,300	30%	$189.62	$219.95	$30.33	16.00%	16.92¢
47							
48	1,400	20%	$198.11	$223.75	$25.65	12.95%	15.98¢
49	1,400	25%	$201.08	$230.23	$29.16	14.50%	16.45¢
50	1,400	30%	$204.05	$236.72	$32.66	16.01%	16.91¢
51							
52	1,500	20%	$212.11	$239.59	$27.48	12.95%	15.97¢
53	1,500	25%	$215.30	$246.54	$31.24	14.51%	16.44¢
54	1,500	30%	$218.48	$253.48	$35.00	16.02%	16.90¢
55							
56	2,000	20%	$282.15	$318.78	$36.64	12.98%	15.94¢
57	2,000	25%	$286.40	$328.05	$41.65	14.54%	16.40¢
58	2,000	30%	$290.64	$337.31	$46.66	16.06%	16.87¢
59							
60	3,000	20%	$422.22	$477.17	$54.95	13.02%	15.91¢
61	3,000	25%	$428.59	$491.06	$62.48	14.58%	16.37¢
62	3,000	30%	$434.96	$504.95	$70.00	16.09%	16.83¢
63							
64	4,000	20%	$562.29	$635.56	$73.27	13.03%	15.89¢
65	4,000	25%	$570.78	$654.08	$83.30	14.59%	16.35¢
66	4,000	30%	$579.27	$672.60	$93.33	16.11%	16.82¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Geothermal Time of Day Rate - D1.7 Residential
October thru May

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson
Page: 12 of 53

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges		Power Supply Charges	
Non-Capacity Charge:	0.04582	Non-Capacity Charge:	
On-Peak Energy Rate		On-Peak Energy Rate	$0.03646
Off-Peak Energy Rate		Off-Peak Energy Rate	$0.02865
Capacity Charges:		Capacity Charges:	
On-Peak Energy Rate	$0.01717	On-Peak Energy Rate	$0.02337
Off-Peak Energy Rate	$0.00369	Off-Peak Energy Rate	$0.01836
Power Supply Surcharges	$0.00000	Power Supply Surcharges	$0.00000
Distribution Charges		Distribution Charges	
Service Charge	$2.01	Service Charge	$2.01
Distribution Energy	$0.08137	Distribution Energy	$0.08962
Delivery Surcharges	$0.004375	Delivery Surcharges	$0.004375

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line	Monthly	On-Peak	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	100	20%	$15.81	$16.37	$0.56	3.55%	16.37¢
2	100	25%	$15.87	$16.43	$0.56	3.52%	16.43¢
3	100	30%	$15.94	$16.50	$0.56	3.48%	16.50¢
4							
5	200	20%	$29.60	$30.72	$1.12	3.80%	15.36¢
6	200	25%	$29.74	$30.85	$1.12	3.76%	15.43¢
7	200	30%	$29.87	$30.98	$1.11	3.72%	15.49¢
8							
9	300	20%	$43.40	$45.08	$1.69	3.88%	15.03¢
10	300	25%	$43.60	$45.27	$1.68	3.84%	15.09¢
11	300	30%	$43.80	$45.47	$1.67	3.80%	15.16¢
12							
13	400	20%	$57.19	$59.44	$2.25	3.93%	14.86¢
14	400	25%	$57.46	$59.69	$2.23	3.89%	14.92¢
15	400	30%	$57.73	$59.95	$2.22	3.85%	14.99¢
16							
17	500	20%	$70.99	$73.79	$2.81	3.96%	14.76¢
18	500	25%	$71.32	$74.12	$2.79	3.92%	14.82¢
19	500	30%	$71.66	$74.44	$2.78	3.87%	14.89¢
20							
21	600	20%	$84.78	$88.15	$3.37	3.98%	14.69¢
22	600	25%	$85.19	$88.54	$3.35	3.93%	14.76¢
23	600	30%	$85.59	$88.92	$3.33	3.89%	14.82¢
24							
25	700	20%	$98.58	$102.51	$3.93	3.99%	14.64¢
26	700	25%	$99.05	$102.96	$3.91	3.95%	14.71¢
27	700	30%	$99.52	$103.41	$3.89	3.91%	14.77¢
28							
29	800	20%	$112.37	$116.87	$4.49	4.00%	14.61¢
30	800	25%	$112.91	$117.38	$4.47	3.96%	14.67¢
31	800	30%	$113.45	$117.89	$4.44	3.92%	14.74¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Geothermal Time of Day Rate - D1.7 Residential
October thru May

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Line No.	(a) Monthly kWh Use	(b) On-Peak Use	(c) Present Net Monthly Bill	(d) Proposed Net Monthly Bill	(e) Increase Amount	(f) Increase Percent	(g) Proposed Unit Cost
32	1,000	20%	$139.96	$145.58	$5.62	4.01%	14.56¢
33	1,000	25%	$140.64	$146.22	$5.59	3.97%	14.62¢
34	1,000	30%	$141.31	$146.86	$5.55	3.93%	14.69¢
35							
36	1,100	20%	$153.76	$159.94	$6.18	4.02%	14.54¢
37	1,100	25%	$154.50	$160.64	$6.14	3.98%	14.60¢
38	1,100	30%	$155.24	$161.35	$6.11	3.93%	14.67¢
39							
40	1,200	20%	$167.55	$174.29	$6.74	4.02%	14.52¢
41	1,200	25%	$168.36	$175.06	$6.70	3.98%	14.59¢
42	1,200	30%	$169.17	$175.83	$6.66	3.94%	14.65¢
43							
44	1,300	20%	$181.35	$188.65	$7.30	4.03%	14.51¢
45	1,300	25%	$182.22	$189.48	$7.26	3.98%	14.58¢
46	1,300	30%	$183.10	$190.32	$7.22	3.94%	14.64¢
47							
48	1,400	20%	$195.14	$203.01	$7.87	4.03%	14.50¢
49	1,400	25%	$196.09	$203.90	$7.82	3.99%	14.56¢
50	1,400	30%	$197.03	$204.80	$7.77	3.95%	14.63¢
51							
52	1,500	20%	$208.94	$217.36	$8.43	4.03%	14.49¢
53	1,500	25%	$209.95	$218.33	$8.38	3.99%	14.56¢
54	1,500	30%	$210.96	$219.29	$8.33	3.95%	14.62¢
55							
56	2,000	20%	$277.91	$289.15	$11.24	4.04%	14.46¢
57	2,000	25%	$279.26	$290.43	$11.17	4.00%	14.52¢
58	2,000	30%	$280.61	$291.71	$11.10	3.96%	14.59¢
59							
60	3,000	20%	$415.86	$432.72	$16.85	4.05%	14.42¢
61	3,000	25%	$417.89	$434.64	$16.76	4.01%	14.49¢
62	3,000	30%	$419.91	$436.56	$16.66	3.97%	14.55¢
63							
64	4,000	20%	$553.81	$576.29	$22.47	4.06%	14.41¢
65	4,000	25%	$556.51	$578.85	$22.34	4.01%	14.47¢
66	4,000	30%	$559.21	$581.41	$22.21	3.97%	14.54¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Residential Service Rate Dynamic Peak Pricing - D1.8

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges		Power Supply Charges	
Non-Capacity Charge:		Non-Capacity Charge:	
Off-Peak Energy Rate	$0.03940	Off-Peak Energy Rate	$0.02808
Mid-Peak Energy Rate	$0.07635	Mid-Peak Energy Rate	$0.05443
On-Peak Energy Rate	$0.14747	On-Peak Energy Rate	$0.10608
Critical Peak Rate	$0.14747	Critical Peak Rate	$0.10608
Capacity Charges:		Capacity Charges:	
Off-Peak Energy Rate	$0.00590	Off-Peak Energy Rate	$0.01786
Mid-Peak Energy Rate	$0.01144	Mid-Peak Energy Rate	$0.03461
On-Peak Energy Rate	$0.02067	On-Peak Energy Rate	$0.06630
Critical Peak Rate	$0.80253	Critical Peak Rate	$0.08439
Power Supply Surcharges	$0.00000	Power Supply Surcharges	$0.00000
REPS	$0.00	REPS	$0.00
Distribution Charges		Distribution Charges	
Service Charge	$8.50	Service Charge	$8.50
Distribution Energy	$0.08137	Distribution Energy	$0.08962
Delivery Surcharges	$0.004375	Delivery Surcharges	$0.004375
LIEAF	$0.88	LIEAF	$0.88

	(a)	(b)	(c)	(d)	(e)	(f)
Line	Monthly	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	100	$25.61	$26.53	$0.92	3.59%	26.53¢
2	120	$28.85	$29.96	$1.10	3.82%	24.96¢
3	160	$35.35	$36.82	$1.47	4.16%	23.01¢
4	180	$38.59	$40.25	$1.65	4.29%	22.36¢
5	200	$41.84	$43.68	$1.84	4.39%	21.84¢
6	240	$48.33	$50.54	$2.21	4.57%	21.06¢
7	280	$54.82	$57.39	$2.57	4.70%	20.50¢
8	300	$58.07	$60.82	$2.76	4.75%	20.27¢
9	350	$66.18	$69.40	$3.22	4.86%	19.83¢
10	400	$74.29	$77.97	$3.68	4.95%	19.49¢
11	450	$82.41	$86.55	$4.14	5.02%	19.23¢
12	500	$90.52	$95.12	$4.60	5.08%	19.02¢
13	550	$98.64	$103.69	$5.06	5.13%	18.85¢
14	600	$106.75	$112.27	$5.52	5.17%	18.71¢
15	650	$114.87	$120.84	$5.98	5.20%	18.59¢
16	700	$122.98	$129.42	$6.44	5.23%	18.49¢
17	750	$131.09	$137.99	$6.89	5.26%	18.40¢
18	800	$139.21	$146.56	$7.35	5.28%	18.32¢
19	850	$147.32	$155.14	$7.81	5.30%	18.25¢
20	900	$155.44	$163.71	$8.27	5.32%	18.19¢
21	950	$163.55	$172.29	$8.73	5.34%	18.14¢
22	1,000	$171.67	$180.86	$9.19	5.36%	18.09¢
23	1,100	$187.89	$198.01	$10.11	5.38%	18.00¢
24	1,200	$204.12	$215.16	$11.03	5.40%	17.93¢
25	1,300	$220.35	$232.30	$11.95	5.42%	17.87¢
26	1,400	$236.58	$249.45	$12.87	5.44%	17.82¢
27	1,500	$252.81	$266.60	$13.79	5.45%	17.77¢
28	2,000	$333.95	$352.34	$18.39	5.51%	17.62¢
29	3,000	$496.24	$523.82	$27.58	5.56%	17.46¢
30	4,000	$658.52	$695.30	$36.77	5.58%	17.38¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Residential Electric Vehicle Rate - D1.9

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges		Power Supply Charges	
Non-Capacity Charges		Non-Capacity Charges	
On-Peak Energy Rate	$0.14635	On-Peak Energy Rate	$0.10606
Off-Peak Energy Rate	$0.03657	Off-Peak Energy Rate	$0.02650
Capacity Charges:		Capacity Charges:	
On-Peak Energy Rate	$0.02470	On-Peak Energy Rate	$0.06793
Off-Peak Energy Rate	$0.00618	Off-Peak Energy Rate	$0.01700
Power Supply Surcharges	$0.00000	Power Supply Surcharges	$0.00000
Distribution Charges		Distribution Charges	
Service Charge	$1.95	Service Charge	$1.95
Distribution Energy	$0.08137	Distribution Energy	$0.08962
Delivery Surcharges	$0.004375	Delivery Surcharges	$0.004375

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line	Monthly	On-Peak	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	100	20%	$17.37	$18.31	$0.94	5.43%	18.31¢
2	100	25%	$18.01	$18.96	$0.95	5.30%	18.96¢
3	100	30%	$18.65	$19.61	$0.97	5.18%	19.61¢
4							
5	200	20%	$32.78	$34.67	$1.89	5.76%	17.33¢
6	200	25%	$34.06	$35.97	$1.91	5.61%	17.99¢
7	200	30%	$35.35	$37.28	$1.93	5.46%	18.64¢
8							
9	300	20%	$48.20	$51.03	$2.83	5.87%	17.01¢
10	300	25%	$50.12	$52.99	$2.86	5.71%	17.66¢
11	300	30%	$52.05	$54.94	$2.90	5.57%	18.31¢
12							
13	400	20%	$63.61	$67.39	$3.78	5.93%	16.85¢
14	400	25%	$66.18	$70.00	$3.82	5.77%	17.50¢
15	400	30%	$68.74	$72.61	$3.86	5.62%	18.15¢
16							
17	500	20%	$79.03	$83.75	$4.72	5.97%	16.75¢
18	500	25%	$82.24	$87.01	$4.77	5.81%	17.40¢
19	500	30%	$85.44	$90.27	$4.83	5.65%	18.05¢
20							
21	600	20%	$94.44	$100.11	$5.66	6.00%	16.68¢
22	600	25%	$98.29	$104.02	$5.73	5.83%	17.34¢
23	600	30%	$102.14	$107.94	$5.79	5.67%	17.99¢
24							
25	700	20%	$109.86	$116.47	$6.61	6.01%	16.64¢
26	700	25%	$114.35	$121.03	$6.68	5.84%	17.29¢
27	700	30%	$118.84	$125.60	$6.76	5.69%	17.94¢
28							
29	800	20%	$125.27	$132.82	$7.55	6.03%	16.60¢
30	800	25%	$130.41	$138.04	$7.64	5.86%	17.26¢
31	800	30%	$135.54	$143.26	$7.73	5.70%	17.91¢
32							
33	1,000	20%	$156.11	$165.54	$9.44	6.05%	16.55¢
34	1,000	25%	$162.52	$172.07	$9.55	5.87%	17.21¢
35	1,000	30%	$168.94	$178.59	$9.66	5.72%	17.86¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Residential Service Rate Standard TOU - D1.11
June Thru September

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson
Page: 16 of 53

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges:		Power Supply Charges:	
Non-Capacity Charge		Non-Capacity Charge	
June-Sept On Peak	$0.12201	June-Sept On Peak	$0.08837
June-Sept Off Peak	$0.07354	June-Sept Off Peak	$0.05324
Capacity Charges:		Capacity Charges:	
June-Sept On Peak	$0.02060	June-Sept On Peak	$0.05664
June-Sept Off Peak	$0.01241	June-Sept Off Peak	$0.03412
Power Supply Surcharges:	$0.00000	Power Supply Surcharges:	$0.00000
REPS	$0.00000	REPS	$0.00
Service Charge:	$8.50	Service Charge:	$8.50
Distribution Charge:	$0.08137	Distribution Charge:	$0.08962
Delivery Surcharges:	$0.004375	Delivery Surcharges:	$0.004375
LIEAF	$0.88	LIEAF	$0.88

	(a)	(b)	(c)	(d)	(e)	(f)
Line No.	Monthly kWh Use	Present Net Monthly Bill	Proposed Net Monthly Bill	Increase Amount	Increase Percent	Proposed Unit Cost
1	100	$27.48	$28.46	$0.98	3.57%	28.46¢
2	120	$31.10	$32.27	$1.18	3.79%	26.90¢
3	140	$34.72	$36.09	$1.38	3.96%	25.78¢
4	160	$38.33	$39.91	$1.57	4.10%	24.94¢
5	180	$41.95	$43.72	$1.77	4.21%	24.29¢
6	200	$45.57	$47.54	$1.96	4.31%	23.77¢
7	240	$52.81	$55.17	$2.36	4.46%	22.99¢
8	280	$60.05	$62.80	$2.75	4.58%	22.43¢
9	300	$63.67	$66.62	$2.95	4.63%	22.21¢
10	350	$72.72	$76.16	$3.44	4.73%	21.76¢
11	400	$81.77	$85.69	$3.93	4.80%	21.42¢
12	450	$90.81	$95.23	$4.42	4.87%	21.16¢
13	500	$99.86	$104.77	$4.91	4.92%	20.95¢
14	550	$108.91	$114.31	$5.40	4.96%	20.78¢
15	600	$117.96	$123.85	$5.89	5.00%	20.64¢
16	650	$127.01	$133.39	$6.38	5.03%	20.52¢
17	700	$136.06	$142.93	$6.88	5.05%	20.42¢
18	750	$145.10	$152.47	$7.37	5.08%	20.33¢
19	800	$154.15	$162.01	$7.86	5.10%	20.25¢
20	850	$163.20	$171.55	$8.35	5.12%	20.18¢
21	900	$172.25	$181.09	$8.84	5.13%	20.12¢
22	950	$181.30	$190.63	$9.33	5.15%	20.07¢
23	1,000	$190.34	$200.17	$9.82	5.16%	20.02¢
24	1,100	$208.44	$219.25	$10.80	5.18%	19.93¢
25	1,200	$226.54	$238.32	$11.79	5.20%	19.86¢
26	1,300	$244.63	$257.40	$12.77	5.22%	19.80¢
27	1,400	$262.73	$276.48	$13.75	5.23%	19.75¢
28	1,500	$280.83	$295.56	$14.73	5.25%	19.70¢
29	2,000	$371.31	$390.95	$19.64	5.29%	19.55¢
30	2,750	$507.03	$534.04	$27.01	5.33%	19.42¢
31	4,000	$733.24	$772.53	$39.29	5.36%	19.31¢

Assumes ~16% of June-September usage is on peak (per rate design billing determinants)

Michigan Public Service Commission Case No.: U-21534
DTE Electric Company Exhibit: S-6
Staff Comparison of Present and Proposed Monthly Bills Schedule: F4
Residential Service Rate Standard TOU - D1.11 Witness: D.W. Isakson
October thru May

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges:		Power Supply Charges:	
Non-Capacity Charge		Non-Capacity Charge	
Oct-May On Peak	$0.08518	Oct-May On Peak	$0.06232
Oct-May Off Peak	$0.07354	Oct-May Off Peak	$0.05324
Capacity Charges:		Capacity Charges:	
Oct-May On Peak	$0.01438	Oct-May On Peak	$0.03994
Oct-May Off Peak	$0.01241	Oct-May Off Peak	$0.03412
Power Supply Surcharges:	$0.00000	Power Supply Surcharges:	$0.00000
REPS	$0.00	REPS	$0.00
Service Charge	$8.50	Service Charge:	$8.50
Distribution Charge:	$0.08137	Distribution Charge:	$0.08962
Delivery Surcharges:	$0.004375	Delivery Surcharges:	$0.004375
LIEAF	$0.88	LIEAF	$0.88

	(a)	(b)	(c)	(d)	(e)	(f)
Line	Monthly	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	100	$26.73	$27.71	$0.98	3.68%	27.71¢
2	120	$30.19	$31.37	$1.18	3.91%	26.15¢
3	140	$33.66	$35.04	$1.38	4.09%	25.03¢
4	160	$37.13	$38.71	$1.57	4.23%	24.19¢
5	180	$40.60	$42.37	$1.77	4.36%	23.54¢
6	200	$44.07	$46.04	$1.97	4.46%	23.02¢
7	240	$51.01	$53.37	$2.36	4.62%	22.24¢
8	280	$57.95	$60.70	$2.75	4.75%	21.68¢
9	300	$61.42	$64.37	$2.95	4.80%	21.46¢
10	350	$70.09	$73.53	$3.44	4.91%	21.01¢
11	400	$78.76	$82.69	$3.93	4.99%	20.67¢
12	450	$87.44	$91.86	$4.42	5.06%	20.41¢
13	500	$96.11	$101.02	$4.91	5.11%	20.20¢
14	550	$104.78	$110.19	$5.40	5.16%	20.03¢
15	600	$113.45	$119.35	$5.90	5.20%	19.89¢
16	650	$122.13	$128.51	$6.39	5.23%	19.77¢
17	700	$130.80	$137.68	$6.88	5.26%	19.67¢
18	750	$139.47	$146.84	$7.37	5.28%	19.58¢
19	800	$148.15	$156.01	$7.86	5.31%	19.50¢
20	850	$156.82	$165.17	$8.35	5.33%	19.43¢
21	900	$165.49	$174.34	$8.84	5.34%	19.37¢
22	950	$174.16	$183.50	$9.34	5.36%	19.32¢
23	1,000	$182.84	$192.66	$9.83	5.37%	19.27¢
24	1,100	$200.18	$210.99	$10.81	5.40%	19.18¢
25	1,200	$217.53	$229.32	$11.79	5.42%	19.11¢
26	1,300	$234.87	$247.65	$12.78	5.44%	19.05¢
27	1,400	$252.22	$265.98	$13.76	5.45%	19.00¢
28	1,500	$269.57	$284.31	$14.74	5.47%	18.95¢
29	2,000	$356.29	$375.95	$19.65	5.52%	18.80¢
30	2,750	$486.39	$513.41	$27.02	5.56%	18.67¢
31	4,000	$703.21	$742.51	$39.31	5.59%	18.56¢

Assumes ~13% of Oct-May usage is on peak (per rate design billing determinants)

Michigan Public Service Commission Case No.: U-21534
DTE Electric Company Exhibit: S-6
Staff Comparison of Present and Proposed Monthly Bills Schedule: F4
Residential Service Rate Overnight Savers - D1.13 Witness: D.W. Isakson
June Thru September Page: 18 of 53

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges:		Power Supply Charges:	
Non-Capacity Charge		Non-Capacity Charge	
June-Sept On Peak	$0.13470	June-Sept On Peak	$0.09832
June-Sept Off Peak	$0.09031	June-Sept Off Peak	$0.06616
June-Sept Super Off Peak	$0.05816	June-Sept Super Off Peak	$0.04178
Capacity Charges:		Capacity Charges:	
June-Sept On Peak	$0.02274	June-Sept On Peak	$0.06301
June-Sept Off Peak	$0.01525	June-Sept Off Peak	$0.04240
June-Sept Super Off Peak	$0.00982	June-Sept Super Off Peak	$0.02678
Power Supply Surcharges:	$0.00000	Power Supply Surcharges:	$0.00000
REPS	$0.00000	REPS	$0.00
Service Charge:	$8.50	Service Charge:	$8.50
Distribution Charge:		Distribution Charge:	
June-Sept On Peak	$0.16298	June-Sept On Peak	$0.18050
June-Sept Off Peak	$0.12224	June-Sept Off Peak	$0.13537
June-Sept Super Off Peak	$0.04075	June-Sept Super Off Peak	$0.04512
Delivery Surcharges:	$0.004375	Delivery Surcharges:	$0.004375
LIEAF	$0.88	LIEAF	$0.88

	(a)	(b)	(c)	(d)	(e)	(f)
Line No.	Monthly kWh Use	Present Net Monthly Bill	Proposed Net Monthly Bill	Increase Amount	Increase Percent	Proposed Unit Cost
1	100	$31.95	$33.45	$1.50	4.68%	33.45¢
2	120	$36.47	$38.26	$1.80	4.93%	31.89¢
3	140	$40.98	$43.08	$2.10	5.11%	30.77¢
4	160	$45.50	$47.89	$2.40	5.26%	29.93¢
5	180	$50.01	$52.71	$2.69	5.39%	29.28¢
6	200	$54.53	$57.52	$2.99	5.49%	28.76¢
7	240	$63.56	$67.15	$3.59	5.65%	27.98¢
8	280	$72.59	$76.78	$4.19	5.77%	27.42¢
9	300	$77.10	$81.59	$4.49	5.82%	27.20¢
10	350	$88.39	$93.63	$5.24	5.93%	26.75¢
11	400	$99.68	$105.66	$5.99	6.01%	26.42¢
12	450	$110.96	$117.70	$6.74	6.07%	26.16¢
13	500	$122.25	$129.73	$7.49	6.12%	25.95¢
14	550	$133.54	$141.77	$8.23	6.17%	25.78¢
15	600	$144.82	$153.80	$8.98	6.20%	25.63¢
16	650	$156.11	$165.84	$9.73	6.23%	25.51¢
17	700	$167.40	$177.88	$10.48	6.26%	25.41¢
18	750	$178.68	$189.91	$11.23	6.28%	25.32¢
19	800	$189.97	$201.95	$11.98	6.30%	25.24¢
20	850	$201.26	$213.98	$12.72	6.32%	25.17¢
21	900	$212.54	$226.02	$13.47	6.34%	25.11¢
22	950	$223.83	$238.05	$14.22	6.35%	25.06¢
23	1,000	$235.12	$250.09	$14.97	6.37%	25.01¢
24	1,100	$257.69	$274.16	$16.47	6.39%	24.92¢
25	1,200	$280.27	$298.23	$17.96	6.41%	24.85¢
26	1,300	$302.84	$322.30	$19.46	6.43%	24.79¢
27	1,400	$325.41	$346.37	$20.96	6.44%	24.74¢
28	1,500	$347.99	$370.44	$22.46	6.45%	24.70¢
29	2,000	$460.86	$490.80	$29.94	6.50%	24.54¢
30	2,750	$630.16	$671.33	$41.17	6.53%	24.41¢
31	4,000	$912.33	$972.21	$59.88	6.56%	24.31¢

Assumes June-Sept is 16% on peak, 66% off peak, and 18% super off peak (per rate design billing determinants)

Michigan Public Service Commission Case No.: U-21534
DTE Electric Company Exhibit: S-6
Staff Comparison of Present and Proposed Monthly Bills Schedule: F4
Residential Service Rate Overnight Savers - D1.13 Witness: D.W. Isakson
October thru May

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges:		Power Supply Charges:	
Non-Capacity Charge		Non-Capacity Charge	
Oct-May On Peak	$0.07692	Oct-May On Peak	$0.05608
Oct-May Off Peak	$0.06967	Oct-May Off Peak	$0.05033
Oct-May Super Off Peak	$0.05816	Oct-May Super Off Peak	$0.04178
Capacity Charges:		Capacity Charges:	
Oct-May On Peak	$0.01298	Oct-May On Peak	$0.03594
Oct-May Off Peak	$0.01176	Oct-May Off Peak	$0.32260
Oct-May Super Off Peak	$0.00982	Oct-May Super Off Peak	$0.02678
Power Supply Surcharges:	$0.00000	Power Supply Surcharges:	$0.00000
REPS	$0.00	REPS	$0.00
Service Charge	$8.50	Service Charge	$8.50
Distribution Charge:		Distribution Charge:	
Oct-May On Peak	$0.08149	Oct-May On Peak	$0.09025
Oct-May Off Peak	$0.06112	Oct-May Off Peak	$0.06769
Oct-May Super Off Peak	$0.04075	Oct-May Super Off Peak	$0.04512
Delivery Surcharges:	$0.004375	Delivery Surcharges:	$0.004375
LIEAF	$0.88	LIEAF	$0.88

	(a)	(b)	(c)	(d)	(e)	(f)
Line No.	Monthly kWh Use	Present Net Monthly Bill	Proposed Net Monthly Bill	Increase Amount	Increase Percent	Proposed Unit Cost
1	100	$23.70	$43.42	$19.72	83.19%	43.42¢
2	120	$26.57	$50.23	$23.66	89.07%	41.86¢
3	140	$29.43	$57.04	$27.61	93.80%	40.74¢
4	160	$32.30	$63.85	$31.55	97.69%	39.91¢
5	180	$35.16	$70.66	$35.50	100.95%	39.25¢
6	200	$38.03	$77.47	$39.44	103.71%	38.73¢
7	240	$43.76	$91.08	$47.33	108.16%	37.95¢
8	280	$49.49	$104.70	$55.22	111.58%	37.39¢
9	300	$52.35	$111.51	$59.16	113.01%	37.17¢
10	350	$59.51	$128.53	$69.02	115.97%	36.72¢
11	400	$66.67	$145.55	$78.88	118.31%	36.39¢
12	450	$73.84	$162.57	$88.74	120.18%	36.13¢
13	500	$81.00	$179.60	$98.60	121.73%	35.92¢
14	550	$88.16	$196.62	$108.46	123.03%	35.75¢
15	600	$95.32	$213.64	$118.32	124.13%	35.61¢
16	650	$102.48	$230.66	$128.18	125.07%	35.49¢
17	700	$109.64	$247.68	$138.04	125.90%	35.38¢
18	750	$116.81	$264.70	$147.90	126.62%	35.29¢
19	800	$123.97	$281.73	$157.76	127.26%	35.22¢
20	850	$131.13	$298.75	$167.62	127.83%	35.15¢
21	900	$138.29	$315.77	$177.48	128.34%	35.09¢
22	950	$145.45	$332.79	$187.34	128.80%	35.03¢
23	1,000	$152.61	$349.81	$197.20	129.21%	34.98¢
24	1,100	$166.94	$383.86	$216.92	129.94%	34.90¢
25	1,200	$181.26	$417.90	$236.64	130.55%	34.82¢
26	1,300	$195.59	$451.94	$256.36	131.07%	34.76¢
27	1,400	$209.91	$485.99	$276.08	131.52%	34.71¢
28	1,500	$224.23	$520.03	$295.80	131.91%	34.67¢
29	2,000	$295.85	$690.24	$394.39	133.31%	34.51¢
30	2,750	$403.28	$945.57	$542.29	134.47%	34.38¢
31	4,000	$582.32	$1,371.11	$788.79	135.46%	34.28¢

Assumes Oct-May is 13% on peak, 65% off peak, and 22% super off peak (per rate design billing determinants)

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Residential Service Rate Space Heating - D2
June thru October

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges:		Power Supply Charges:	
Non-Capacity Charge:	$0.06274	Non-Capacity Charge:	$0.05166
Capacity Charges:		Capacity Charges:	
First 17 KWH/Day	$0.01059	First 17 KWH/Day	$0.02996
Excess	$0.01514	Excess	$0.04283
Power Supply Surcharges	$0.00000	Power Supply Surcharges	$0.00000
REPS	$0.00	REPS	$0.00
Service Charge	$8.50	Service Charge	$8.50
Distribution Charge	$0.08137	Distribution Charge	$0.08962
Delivery Surcharges	$0.004375	Delivery Surcharges	$0.004375
LIEAF	$0.88	LIEAF	$0.88

	(a)	(b)	(c)	(d)	(e)	(f)
Line	Monthly	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	100	$25.29	$26.94	$1.65	6.54%	26.94¢
2	120	$28.47	$30.45	$1.98	6.97%	25.38¢
3	160	$34.83	$37.48	$2.65	7.60%	23.42¢
4	180	$38.01	$40.99	$2.98	7.83%	22.77¢
5	200	$41.20	$44.50	$3.31	8.03%	22.25¢
6	240	$47.56	$51.53	$3.97	8.35%	21.47¢
7	280	$53.92	$58.55	$4.63	8.59%	20.91¢
8	300	$57.10	$62.06	$4.96	8.69%	20.69¢
9	350	$65.06	$70.85	$5.79	8.90%	20.24¢
10	400	$73.01	$79.63	$6.62	9.06%	19.91¢
11	450	$80.96	$88.41	$7.44	9.19%	19.65¢
12	500	$88.92	$97.19	$8.27	9.30%	19.44¢
13	550	$97.05	$106.48	$9.43	9.72%	19.36¢
14	600	$105.23	$115.91	$10.67	10.14%	19.32¢
15	650	$113.42	$125.33	$11.92	10.51%	19.28¢
16	700	$121.60	$134.76	$13.16	10.82%	19.25¢
17	750	$129.78	$144.18	$14.40	11.10%	19.22¢
18	800	$137.96	$153.60	$15.64	11.34%	19.20¢
19	850	$146.14	$163.03	$16.89	11.56%	19.18¢
20	900	$154.32	$172.45	$18.13	11.75%	19.16¢
21	950	$162.50	$181.88	$19.37	11.92%	19.14¢
22	1,000	$170.68	$191.30	$20.62	12.08%	19.13¢
23	1,100	$187.05	$210.15	$23.10	12.35%	19.10¢
24	1,200	$203.41	$229.00	$25.59	12.58%	19.08¢
25	1,300	$219.77	$247.85	$28.07	12.77%	19.07¢
26	1,400	$236.13	$266.70	$30.56	12.94%	19.05¢
27	1,500	$252.50	$285.54	$33.05	13.09%	19.04¢
28	2,000	$334.31	$379.79	$45.48	13.60%	18.99¢
29	3,000	$497.93	$568.27	$70.34	14.13%	18.94¢
30	4,000	$661.56	$756.76	$95.20	14.39%	18.92¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Residential Service Rate Space Heating - D2
November thru May

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson
Page: 21 of 53

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges:		Power Supply Charges:	
Non-Capacity Charge:	$0.06274	Non-Capacity Charge:	$0.05166
Capacity Charges:		Capacity Charges:	
First 20 KWH/Day	$0.00624	First 20 KWH/Day	$0.01765
Second Block:	$0.00244	Excess	$0.00690
Power Supply Surcharges	$0.00000	Power Supply Surcharges	$0.00000
REPS	$0.00	REPS	$0.00
Service Charge	$8.50	Service Charge	$8.50
Distribution Charge	$0.08137	Distribution Charge	$0.08962
Delivery Surcharges	$0.004375	Delivery Surcharges	$0.004375
LIEAF	$0.88	LIEAF	$0.88

	(a)	(b)	(c)	(d)	(e)	(f)
Line	Monthly	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	100	$24.85	$25.71	$0.86	3.45%	25.71¢
2	120	$27.95	$28.98	$1.03	3.68%	24.15¢
3	160	$34.14	$35.51	$1.37	4.02%	22.19¢
4	180	$37.23	$38.77	$1.54	4.15%	21.54¢
5	200	$40.33	$42.04	$1.72	4.26%	21.02¢
6	240	$46.51	$48.57	$2.06	4.43%	20.24¢
7	280	$52.70	$55.11	$2.40	4.56%	19.68¢
8	300	$55.80	$58.37	$2.57	4.61%	19.46¢
9	350	$63.53	$66.54	$3.00	4.73%	19.01¢
10	400	$71.27	$74.70	$3.43	4.82%	18.68¢
11	450	$79.01	$82.87	$3.86	4.89%	18.41¢
12	500	$86.74	$91.03	$4.29	4.95%	18.21¢
13	550	$94.48	$99.20	$4.72	4.99%	18.04¢
14	600	$102.22	$107.36	$5.15	5.04%	17.89¢
15	650	$109.76	$114.99	$5.23	4.76%	17.69¢
16	700	$117.31	$122.62	$5.31	4.53%	17.52¢
17	750	$124.85	$130.25	$5.39	4.32%	17.37¢
18	800	$132.40	$137.87	$5.47	4.13%	17.23¢
19	850	$139.95	$145.50	$5.56	3.97%	17.12¢
20	900	$147.49	$153.13	$5.64	3.82%	17.01¢
21	950	$155.04	$160.76	$5.72	3.69%	16.92¢
22	1,000	$162.59	$168.39	$5.80	3.57%	16.84¢
23	1,100	$177.68	$183.64	$5.96	3.36%	16.69¢
24	1,200	$192.77	$198.90	$6.13	3.18%	16.57¢
25	1,300	$207.86	$214.15	$6.29	3.03%	16.47¢
26	1,400	$222.96	$229.41	$6.45	2.89%	16.39¢
27	1,500	$238.05	$244.66	$6.62	2.78%	16.31¢
28	2,000	$313.51	$320.94	$7.43	2.37%	16.05¢
29	3,000	$464.44	$473.50	$9.06	1.95%	15.78¢
30	4,000	$615.36	$626.05	$10.69	1.74%	15.65¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Water Heating Service Rate - D5 Residential

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges: Power Supply Charges		Proposed Rates and Current Surcharges: Power Supply Charges	
Non-Capacity Charge	$0.04132	Non-Capacity Charge	$0.02994
Capacity Charge	$0.00698	Capacity Charge	$0.01919
Power Supply Surcharges	$0.00000	Power Supply Surcharges	$0.00000
Distribution Charges Service Charge	$1.95	Distribution Charges Service Charge	$1.95
Distribution Energy	$0.08137	Distribution Energy	$0.08962
Delivery Surcharges	$0.004375	Delivery Surcharges	$0.004375

	(a)	(b)	(c)	(d)	(e)	(f)
Line No.	Monthly kWh Use	Present Net Monthly Bill	Proposed Net Monthly Bill	Increase Amount	Increase Percent	Proposed Unit Cost
1	100	$15.35	$16.26	$0.91	5.91%	16.26¢
2	200	$28.76	$30.58	$1.82	6.31%	15.29¢
3	300	$42.16	$44.89	$2.72	6.46%	14.96¢
4	400	$55.57	$59.20	$3.63	6.54%	14.80¢
5	500	$68.97	$73.51	$4.54	6.58%	14.70¢
6	600	$82.38	$87.83	$5.45	6.61%	14.64¢
7	700	$95.78	$102.14	$6.36	6.64%	14.59¢
8	800	$109.19	$116.45	$7.26	6.65%	14.56¢
9	900	$122.59	$130.76	$8.17	6.67%	14.53¢
10	1,000	$136.00	$145.08	$9.08	6.68%	14.51¢
10	1,100	$149.40	$159.39	$9.99	6.69%	14.49¢
10	1,200	$162.80	$173.70	$10.90	6.69%	14.48¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
General Service Rate - D3

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges:		Power Supply Charges:	
Capacity Energy Charge	$0.01010	Capacity Energy Charge	$0.02770
Non-capacity energy charge	$0.07096	Non-capacity energy charge	$0.05413
Power Supply Surcharges:	$0.000000	Power Supply Surcharges:	$0.000000
Distribution Charges:		Distribution Charges:	
Service Charge	$11.25	Service Charge	$11.25
Distribution Energy	$0.05288	Distribution Energy	$0.05917
Distribution Surcharges:	$0.001477	Distribution Surcharges:	$0.001477
Energy Waste Reduction	$5.50	Energy Waste Reduction	$5.50
LIEAF Factor	$0.88	LIEAF Factor	$0.88

	(a)	(b)	(c)	(d)	(e)	(f)
Line	Monthly	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	400	$71.80	$74.62	$2.82	3.93%	18.66¢
2	600	$98.88	$103.12	$4.24	4.28%	17.19¢
3	800	$125.96	$131.61	$5.65	4.48%	16.45¢
4	1,000	$153.05	$160.11	$7.06	4.61%	16.01¢
5	1,200	$180.13	$188.60	$8.47	4.70%	15.72¢
6	1,400	$207.21	$217.10	$9.88	4.77%	15.51¢
7	1,600	$234.30	$245.59	$11.30	4.82%	15.35¢
8	1,800	$261.38	$274.09	$12.71	4.86%	15.23¢
9	2,000	$288.46	$302.58	$14.12	4.89%	15.13¢
10	2,200	$315.55	$331.08	$15.53	4.92%	15.05¢
11	2,400	$342.63	$359.57	$16.94	4.95%	14.98¢
12	2,500	$356.17	$373.82	$17.65	4.96%	14.95¢
13	3,000	$423.88	$445.06	$21.18	5.00%	14.84¢
14	3,500	$491.59	$516.30	$24.71	5.03%	14.75¢
15	4,000	$559.30	$587.54	$28.24	5.05%	14.69¢
16	4,500	$627.01	$658.78	$31.77	5.07%	14.64¢
17	5,000	$694.72	$730.02	$35.30	5.08%	14.60¢
18	5,500	$762.42	$801.25	$38.83	5.09%	14.57¢
19	6,000	$830.13	$872.49	$42.36	5.10%	14.54¢
20	6,500	$897.84	$943.73	$45.89	5.11%	14.52¢
21	7,000	$965.55	$1,014.97	$49.42	5.12%	14.50¢
22	7,500	$1,033.26	$1,086.21	$52.95	5.12%	14.48¢
23	8,000	$1,100.97	$1,157.45	$56.48	5.13%	14.47¢
24	8,500	$1,168.67	$1,228.68	$60.01	5.13%	14.46¢
25	9,000	$1,236.38	$1,299.92	$63.54	5.14%	14.44¢
26	9,500	$1,304.09	$1,371.16	$67.07	5.14%	14.43¢
27	10,000	$1,371.80	$1,442.40	$70.60	5.15%	14.42¢
28	12,000	$1,642.63	$1,727.35	$84.72	5.16%	14.39¢
29	15,000	$2,048.89	$2,154.79	$105.90	5.17%	14.37¢
30	18,000	$2,455.14	$2,582.22	$127.08	5.18%	14.35¢
31	21,000	$2,861.39	$3,009.65	$148.26	5.18%	14.33¢
32	24,000	$3,267.64	$3,437.08	$169.44	5.19%	14.32¢
33	27,000	$3,673.89	$3,864.51	$190.62	5.19%	14.31¢
34	30,000	$4,080.14	$4,291.94	$211.80	5.19%	14.31¢
35	35,000	$4,757.23	$5,004.33	$247.10	5.19%	14.30¢
36	40,000	$5,434.31	$5,716.71	$282.40	5.20%	14.29¢
37	45,000	$6,111.40	$6,429.10	$317.70	5.20%	14.29¢
38	50,000	$6,788.48	$7,141.48	$353.00	5.20%	14.28¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Secondary Educational Institute Rate - D3.2

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges:		Power Supply Charges:	
Capacity Energy Charge	$0.00939	Capacity Energy Charge	$0.02580
Non-capacity energy	$0.06937	Non-capacity energy	$0.05335
Power Supply Surcharges:	$0.000000	Power Supply Surcharges:	$0.000000
Distribution Charges:		Distribution Charges:	
Service Charge	$11.25	Service Charge	$11.25
Distribution Energy	$0.05288	Distribution Energy	$0.05917
Distribution Surcharges:	$0.001477	Distribution Surcharges:	$0.001477
Energy Waste Reduction	$5.50	Energy Waste Reduction	$5.50
LIEAF Factor	$0.88	LIEAF Factor	$0.88

	(a)	(b)	(c)	(d)	(e)	(f)
Line	Monthly	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	400	$70.88	$73.55	$2.67	3.77%	18.39¢
2	600	$97.50	$101.51	$4.01	4.11%	16.92¢
3	800	$124.12	$129.47	$5.34	4.31%	16.18¢
4	1,000	$150.75	$157.43	$6.68	4.43%	15.74¢
5	1,200	$177.37	$185.39	$8.02	4.52%	15.45¢
6	1,400	$203.99	$213.35	$9.35	4.58%	15.24¢
7	1,600	$230.62	$241.31	$10.69	4.63%	15.08¢
8	1,800	$257.24	$269.26	$12.02	4.67%	14.96¢
9	2,000	$283.86	$297.22	$13.36	4.71%	14.86¢
10	2,200	$310.49	$325.18	$14.70	4.73%	14.78¢
11	2,400	$337.11	$353.14	$16.03	4.76%	14.71¢
12	2,500	$350.42	$367.12	$16.70	4.77%	14.68¢
13	3,000	$416.98	$437.02	$20.04	4.81%	14.57¢
14	3,500	$483.54	$506.92	$23.38	4.84%	14.48¢
15	4,000	$550.10	$576.82	$26.72	4.86%	14.42¢
16	4,500	$616.66	$646.72	$30.06	4.87%	14.37¢
17	5,000	$683.22	$716.62	$33.40	4.89%	14.33¢
18	5,500	$749.77	$786.51	$36.74	4.90%	14.30¢
19	6,000	$816.33	$856.41	$40.08	4.91%	14.27¢
20	6,500	$882.89	$926.31	$43.42	4.92%	14.25¢
21	7,000	$949.45	$996.21	$46.76	4.92%	14.23¢
22	7,500	$1,016.01	$1,066.11	$50.10	4.93%	14.21¢
23	8,000	$1,082.57	$1,136.01	$53.44	4.94%	14.20¢
24	8,500	$1,149.12	$1,205.90	$56.78	4.94%	14.19¢
25	9,000	$1,215.68	$1,275.80	$60.12	4.95%	14.18¢
26	9,500	$1,282.24	$1,345.70	$63.46	4.95%	14.17¢
27	10,000	$1,348.80	$1,415.60	$66.80	4.95%	14.16¢
28	12,000	$1,615.03	$1,695.19	$80.16	4.96%	14.13¢
29	15,000	$2,014.39	$2,114.59	$100.20	4.97%	14.10¢
30	18,000	$2,413.74	$2,533.98	$120.24	4.98%	14.08¢
31	21,000	$2,813.09	$2,953.37	$140.28	4.99%	14.06¢
32	24,000	$3,212.44	$3,372.76	$160.32	4.99%	14.05¢
33	27,000	$3,611.79	$3,792.15	$180.36	4.99%	14.04¢
34	30,000	$4,011.14	$4,211.54	$200.40	5.00%	14.04¢
35	35,000	$4,676.73	$4,910.53	$233.80	5.00%	14.03¢
36	40,000	$5,342.31	$5,609.51	$267.20	5.00%	14.02¢
37	45,000	$6,007.90	$6,308.50	$300.60	5.00%	14.02¢
38	50,000	$6,673.48	$7,007.48	$334.00	5.00%	14.01¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Interruptible General Service Rate - D3.3

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges:		Power Supply Charges:	
Capacity Energy Charge	$0.00844	Capacity Energy Charge	$0.02315
Non-capacity energy	$0.05929	Non-capacity energy	$0.05423
Power Supply Surcharges:	$0.000000	Power Supply Surcharges:	$0.000000
Distribution Charges:		Distribution Charges:	
Service Charge	$11.25	Service Charge	$11.25
Distribution Energy	$0.05288	Distribution Energy	$0.05917
Distribution Surcharges:	$0.001477	Distribution Surcharges:	$0.001477
Energy Waste Reduction	$5.50	Energy Waste Reduction	$5.50
LIEAF Factor	$0.88	LIEAF Factor	$0.88

	(a)	(b)	(c)	(d)	(e)	(f)
Line	Monthly	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	400	$66.46	$72.84	$6.38	9.59%	18.21¢
2	600	$90.88	$100.45	$9.56	10.52%	16.74¢
3	800	$115.30	$128.05	$12.75	11.06%	16.01¢
4	1,000	$139.72	$155.66	$15.94	11.41%	15.57¢
5	1,200	$164.13	$183.26	$19.13	11.65%	15.27¢
6	1,400	$188.55	$210.87	$22.32	11.84%	15.06¢
7	1,600	$212.97	$238.47	$25.50	11.98%	14.90¢
8	1,800	$237.39	$266.08	$28.69	12.09%	14.78¢
9	2,000	$261.80	$293.68	$31.88	12.18%	14.68¢
10	2,200	$286.22	$321.29	$35.07	12.25%	14.60¢
11	2,400	$310.64	$348.89	$38.26	12.32%	14.54¢
12	2,500	$322.85	$362.70	$39.85	12.34%	14.51¢
13	3,000	$383.89	$431.71	$47.82	12.46%	14.39¢
14	3,500	$444.93	$500.72	$55.79	12.54%	14.31¢
15	4,000	$505.98	$569.74	$63.76	12.60%	14.24¢
16	4,500	$567.02	$638.75	$71.73	12.65%	14.19¢
17	5,000	$628.07	$707.77	$79.70	12.69%	14.16¢
18	5,500	$689.11	$776.78	$87.67	12.72%	14.12¢
19	6,000	$750.15	$845.79	$95.64	12.75%	14.10¢
20	6,500	$811.20	$914.81	$103.61	12.77%	14.07¢
21	7,000	$872.24	$983.82	$111.58	12.79%	14.05¢
22	7,500	$933.28	$1,052.83	$119.55	12.81%	14.04¢
23	8,000	$994.33	$1,121.85	$127.52	12.82%	14.02¢
24	8,500	$1,055.37	$1,190.86	$135.49	12.84%	14.01¢
25	9,000	$1,116.41	$1,259.87	$143.46	12.85%	14.00¢
26	9,500	$1,177.46	$1,328.89	$151.43	12.86%	13.99¢
27	10,000	$1,238.50	$1,397.90	$159.40	12.87%	13.98¢
28	12,000	$1,482.67	$1,673.95	$191.28	12.90%	13.95¢
29	15,000	$1,848.94	$2,088.04	$239.10	12.93%	13.92¢
30	18,000	$2,215.20	$2,502.12	$286.92	12.95%	13.90¢
31	21,000	$2,581.46	$2,916.20	$334.74	12.97%	13.89¢
32	24,000	$2,947.72	$3,330.28	$382.56	12.98%	13.88¢
33	27,000	$3,313.98	$3,744.36	$430.38	12.99%	13.87¢
34	30,000	$3,680.24	$4,158.44	$478.20	12.99%	13.86¢
35	33,000	$4,046.50	$4,572.52	$526.02	13.00%	13.86¢
36	36,000	$4,412.76	$4,986.60	$573.84	13.00%	13.85¢
37	39,000	$4,779.02	$5,400.68	$621.66	13.01%	13.85¢
38	42,000	$5,145.28	$5,814.76	$669.48	13.01%	13.84¢
39	45,000	$5,511.55	$6,228.85	$717.30	13.01%	13.84¢
40	50,000	$6,121.98	$6,918.98	$797.00	13.02%	13.84¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Large General Service Rate - D4

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges:		Power Supply Charges:	
Capacity Charge:		**Capacity Charges:**	
Demand Charge	$3.57	Demand Charge	$9.76
Non-capacity Charges:		**Non-capacity Charges:**	
Demand Charge	$13.02	Demand Charge	$6.92
Energy Charges:		Energy Charges:	
First 200kWh/kW	$0.04012	First 200kWh/kW	$0.04033
Over 200kWh/kW	$0.03097	Over 200kWh/kW	$0.03113
Power Supply Surcharges:	$0.000000	Power Supply Surcharges:	$0.000000
Distribution Charges:		Distribution Charges:	
Service Charge:	$13.67	Service Charge:	$13.67
Demand Charge:	$21.80	Demand Charge:	$24.23
Distribution Energy:	$0.00000	Distribution Energy:	$0.00000
Distribution Surcharges:	$0.000882	Distribution Surcharges:	$0.000882
Energy Waste Reduction	$140.21	Energy Waste Reduction	$140.21
LIEAF Factor	$0.88	LIEAF Factor	$0.88
IRM	$0.2454	IRM	$0.2454

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line	Monthly	On-Peak	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	5	300	$404.87	$417.76	$12.89	3.18%	27.85¢
2	5	400	$420.79	$433.76	$12.97	3.08%	21.69¢
3	5	500	$436.72	$449.77	$13.05	2.99%	17.99¢
4							
5	10	300	$654.97	$680.75	$25.78	3.94%	22.69¢
6	10	400	$686.82	$712.76	$25.94	3.78%	17.82¢
7	10	500	$718.67	$744.77	$26.10	3.63%	14.90¢
8							
9	25	300	$1,405.29	$1,469.74	$64.45	4.59%	19.60¢
10	25	400	$1,484.92	$1,549.77	$64.85	4.37%	15.50¢
11	25	500	$1,564.55	$1,629.80	$65.25	4.17%	13.04¢
12							
13	50	300	$2,655.81	$2,784.71	$128.90	4.85%	18.56¢
14	50	400	$2,815.07	$2,944.77	$129.70	4.61%	14.72¢
15	50	500	$2,974.33	$3,104.83	$130.50	4.39%	12.42¢
16							
17	75	300	$3,906.34	$4,099.69	$193.35	4.95%	18.22¢
18	75	400	$4,145.23	$4,339.78	$194.55	4.69%	14.47¢
19	75	500	$4,384.12	$4,579.87	$195.75	4.46%	12.21¢
20							
21	100	300	$5,156.86	$5,414.66	$257.80	5.00%	18.05¢
22	100	400	$5,475.38	$5,734.78	$259.40	4.74%	14.34¢
23	100	500	$5,793.90	$6,054.90	$261.00	4.50%	12.11¢
24							
25	200	300	$10,158.96	$10,674.56	$515.60	5.08%	17.79¢
26	200	400	$10,796.00	$11,314.80	$518.80	4.81%	14.14¢
27	200	500	$11,433.04	$11,955.04	$522.00	4.57%	11.96¢
28							
29	300	300	$15,161.06	$15,934.46	$773.40	5.10%	17.70¢
30	300	400	$16,116.62	$16,894.82	$778.20	4.83%	14.08¢
31	300	500	$17,072.18	$17,855.18	$783.00	4.59%	11.90¢
32							
33	400	300	$20,163.16	$21,194.36	$1,031.20	5.11%	17.66¢
34	400	400	$21,437.24	$22,474.84	$1,037.60	4.84%	14.05¢
35	400	500	$22,711.32	$23,755.32	$1,044.00	4.60%	11.88¢
36							
37	500	300	$25,165.26	$26,454.26	$1,289.00	5.12%	17.64¢
38	500	400	$26,757.86	$28,054.86	$1,297.00	4.85%	14.03¢
39	500	500	$28,350.46	$29,655.46	$1,305.00	4.60%	11.86¢
40							
41	750	300	$37,670.51	$39,604.01	$1,933.50	5.13%	17.60¢
42	750	400	$40,059.41	$42,004.91	$1,945.50	4.86%	14.00¢
43	750	500	$42,448.31	$44,405.81	$1,957.50	4.61%	11.84¢
44							
45	1000	300	$50,175.76	$52,753.76	$2,578.00	5.14%	17.58¢
46	1000	400	$53,360.96	$55,954.96	$2,594.00	4.86%	13.99¢
47	1000	500	$56,546.16	$59,156.16	$2,610.00	4.62%	11.83¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Water Heating Service Rate - D5 Commercial

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges:		Power Supply Charges:	
Capacity Energy	$0.00595	Capacity Energy	$0.01631
Non-capacity Energy	$0.04178	Non-capacity Energy	$0.03187
Power Supply Surcharges:	$0.000000	Power Supply Surcharges:	$0.000000
Distribution Charges:		Distribution Charges:	
Service Charge	$1.95	Service Charge	$1.95
Distribution Energy	$0.05288	Distribution Energy	$0.05917
Distribution Surcharges:	$0.001477	Distribution Surcharges:	$0.001477
Energy Waste Reduction	$5.50	Energy Waste Reduction	$5.50
LIEAF Factor	$0.88	LIEAF Factor	$0.88

	(a)	(b)	(c)	(d)	(e)	(f)
Line	Monthly	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	100	$18.54	$19.21	$0.67	3.64%	19.21¢
2	200	$28.75	$30.10	$1.35	4.69%	15.05¢
3	300	$38.96	$40.98	$2.02	5.19%	13.66¢
4	400	$49.16	$51.86	$2.70	5.48%	12.97¢
5	500	$59.37	$62.74	$3.37	5.68%	12.55¢
6	600	$69.58	$73.63	$4.04	5.81%	12.27¢
7	700	$79.79	$84.51	$4.72	5.91%	12.07¢
8	800	$90.00	$95.39	$5.39	5.99%	11.92¢
9	900	$100.21	$106.27	$6.07	6.05%	11.81¢
10	1,000	$110.42	$117.16	$6.74	6.10%	11.72¢
11	1,100	$120.63	$128.04	$7.41	6.15%	11.64¢
12	1,200	$130.83	$138.92	$8.09	6.18%	11.58¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Greenhouse Lighting Service Rate - Standard Contract Rider No. R7

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges:		Power Supply Charges:	
Capacity energy	$0.00577	Capacity energy	$0.01583
Non-capacity energy	$0.04054	Non-capacity energy	$0.03092
Power Supply Surcharges:	$0.000000	Power Supply Surcharges:	$0.000000
Distribution Charges:		Distribution Charges:	
Service Charge:	$1.95	Service Charge:	$1.95
Distribution Energy	$0.05288	Distribution Energy	$0.05917
Distribution Surcharges:	$0.001477	Distribution Surcharges:	$0.001477
Energy Waste Reduction	$5.50	Energy Waste Reduction	$5.50
LIEAF Factor	$0.88	LIEAF Factor	$0.88

	(a)	(b)	(c)	(d)	(e)	(f)
Line	Monthly	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	400	$48.60	$51.29	$2.69	5.54%	12.82¢
2	600	$68.73	$72.77	$4.04	5.88%	12.13¢
3	800	$88.86	$94.25	$5.38	6.06%	11.78¢
4	1,000	$109.00	$115.73	$6.73	6.17%	11.57¢
5	1,200	$129.13	$137.21	$8.08	6.25%	11.43¢
6	1,400	$149.26	$158.69	$9.42	6.31%	11.33¢
7	1,600	$169.40	$180.17	$10.77	6.36%	11.26¢
8	1,800	$189.53	$201.64	$12.11	6.39%	11.20¢
9	2,000	$209.66	$223.12	$13.46	6.42%	11.16¢
10	2,500	$260.00	$276.82	$16.83	6.47%	11.07¢
11	3,000	$310.33	$330.52	$20.19	6.51%	11.02¢
12	4,000	$411.00	$437.92	$26.92	6.55%	10.95¢
13	5,000	$511.67	$545.32	$33.65	6.58%	10.91¢
14	6,000	$612.33	$652.71	$40.38	6.59%	10.88¢
15	7,000	$713.00	$760.11	$47.11	6.61%	10.86¢
16	8,000	$813.67	$867.51	$53.84	6.62%	10.84¢
17	9,000	$914.33	$974.90	$60.57	6.62%	10.83¢
18	10,000	$1,015.00	$1,082.30	$67.30	6.63%	10.82¢
19	12,000	$1,216.33	$1,297.09	$80.76	6.64%	10.81¢
20	15,000	$1,518.34	$1,619.29	$100.95	6.65%	10.80¢

Michigan Public Service Commission Case No.: U-21534
DTE Electric Company Exhibit: S-6
Staff Comparison of Present and Proposed Monthly Bills Schedule: F4
Commercial Space Conditioning Rate - Standard Contract Rider No. R8 Witness: D.W. Isakson
June Thru October Page: 29 of 53

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges:		Power Supply Charges:	
Capacity energy	$0.01539	Capacity energy	$0.04268
Non-capacity energy	$0.06173	Non-capacity energy	$0.04702
Power Supply Surcharges:	$0.000000	Power Supply Surcharges:	$0.000000
Distribution Charges:		Distribution Charges:	
Service Charge:	$11.25	Service Charge:	$11.25
Distribution Energy	$0.05288	Distribution Energy	$0.05917
Distribution Surcharges:	$0.001477	Distribution Surcharges:	$0.001477
Energy Waste Reduction	$5.50	Energy Waste Reduction	$5.50
LIEAF Factor	$0.88	LIEAF Factor	$0.88

	(a)	(b)	(c)	(d)	(e)	(f)
Line	Monthly	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	1,000	$149.11	$167.98	$18.87	12.66%	16.80¢
2	3,000	$412.06	$468.67	$56.61	13.74%	15.62¢
3	5,000	$675.02	$769.37	$94.35	13.98%	15.39¢
4	7,000	$937.97	$1,070.06	$132.09	14.08%	15.29¢
5	8,000	$1,069.45	$1,220.41	$150.96	14.12%	15.26¢
6	9,000	$1,200.92	$1,370.75	$169.83	14.14%	15.23¢
7	10,000	$1,332.40	$1,521.10	$188.70	14.16%	15.21¢
8	12,000	$1,595.35	$1,821.79	$226.44	14.19%	15.18¢
9	13,000	$1,726.83	$1,972.14	$245.31	14.21%	15.17¢
10	15,000	$1,989.79	$2,272.84	$283.05	14.23%	15.15¢
11	17,000	$2,252.74	$2,573.53	$320.79	14.24%	15.14¢
12	20,000	$2,647.17	$3,024.57	$377.40	14.26%	15.12¢
13	28,000	$3,698.99	$4,227.35	$528.36	14.28%	15.10¢
14	30,000	$3,961.94	$4,528.04	$566.10	14.29%	15.09¢
15	35,000	$4,619.33	$5,279.78	$660.45	14.30%	15.09¢
16	40,000	$5,276.71	$6,031.51	$754.80	14.30%	15.08¢

Michigan Public Service Commission Case No.: U-21534
DTE Electric Company Exhibit: S-6
Staff Comparison of Present and Proposed Monthly Bills Schedule: F4
Commercial Space Heating - Standard Contract Rider No. R8 Witness: D.W. Isakson
November Thru May

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply Charges:		Power Supply Charges:	
Capacity energy		Capacity energy	
1st 1,000 kWh	$0.01539	1st 1,000 kWh	$0.04268
Excess	$0.00510	Excess	$0.01414
Non-capacity energy	$0.06173	Non-capacity energy	$0.04702
Power Supply Surcharges:	$0.000000	Power Supply Surcharges:	$0.000000
Distribution Charges:		Distribution Charges:	
Service Charge:	$11.25	Service Charge:	$11.25
Distribution Energy	$0.05288	Distribution Energy	$0.05917
Distribution Surcharges:	$0.001477	Distribution Surcharges:	$0.001477
Energy Waste Reduction	$5.50	Energy Waste Reduction	$5.50
LIEAF Factor	$0.88	LIEAF Factor	$0.88

	(a)	(b)	(c)	(d)	(e)	(f)
Line	Monthly	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	1,000	149.107	$167.98	$18.87	12.66%	16.80¢
2	3,000	$391.48	$411.59	$20.11	5.14%	13.72¢
3	5,000	$633.86	$655.21	$21.35	3.37%	13.10¢
4	7,000	$876.23	$898.82	$22.59	2.58%	12.84¢
5	8,000	$997.42	$1,020.63	$23.21	2.33%	12.76¢
6	9,000	$1,118.60	$1,142.43	$23.83	2.13%	12.69¢
7	10,000	$1,239.79	$1,264.24	$24.45	1.97%	12.64¢
8	12,000	$1,482.16	$1,507.85	$25.69	1.73%	12.57¢
9	13,000	$1,603.35	$1,629.66	$26.31	1.64%	12.54¢
10	15,000	$1,845.73	$1,873.28	$27.55	1.49%	12.49¢
11	17,000	$2,088.10	$2,116.89	$28.79	1.38%	12.45¢
12	20,000	$2,451.66	$2,482.31	$30.65	1.25%	12.41¢
13	28,000	$3,421.16	$3,456.77	$35.61	1.04%	12.35¢
14	30,000	$3,663.53	$3,700.38	$36.85	1.01%	12.33¢
15	35,000	$4,269.47	$4,309.42	$39.95	0.94%	12.31¢
16	40,000	$4,875.40	$4,918.45	$43.05	0.88%	12.30¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Primary Supply Rate - D11
Primary Less Than 24kV

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:			Proposed Rates and Current Surcharges:	
Power Supply			**Power Supply**	
Capacity:			**Capacity:**	
Power Supply Demand		$3.56	Power Supply Demand	$9.77
Voltage Level Discount		$0.00	Voltage Level Adjustment	$0.00
Non-Capacity:			**Non-Capacity:**	
Power Supply Demand		$13.33	Power Supply Demand	$7.24
Voltage Level Discount		$0.00	Voltage Level Discount	$0.00
Energy			Energy	
On-Peak Rate		$0.04257	On-Peak Rate	$0.04278
Off-Peak Rate		$0.03257	Off-Peak Rate	$0.03278
Voltage Discount			Voltage Discount	
Surcharges:			Surcharges:	
PSCR		$0.00000	PSCR	$0.00000
REPS	>41,500kWh	$0.00	REPS	$0.00
	11,501-41,50	$0.00		$0.00
Distribution			**Distribution**	
Service Charge:		$70	Service Charge:	$70
Distribution Charges:			Distribution Charges:	
Demand		$6.15	Demand	$6.36
Energy			Energy	
Substation Credit		$0.00	Substation Credit	$0.00
Surcharges:			Surcharges:	
NDS		$0.000882	NDS	$0.000882
Energy Waste Reduction		$1,238	Energy Waste Reduction	$1,238
IRM		$0.0727	IRM	$0.0727

	(a)	(b)		(c)	(d)	(e)	(f)	(g)	(h)
Line	Monthly	Hours			Present Net	Proposed Net	Increase		Proposed
No.	kW Demand	Use		Percent	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	50	300	@	30%	$3,010	$3,030	$20	0.65%	20.20¢
2	50	400	@	30%	$3,193	$3,213	$21	0.65%	16.07¢
3	50	500	@	25%	$3,362	$3,384	$22	0.65%	13.54¢
4	50	600	@	25%	$3,542	$3,565	$23	0.64%	11.88¢
5	50	650	@	25%	$3,632	$3,655	$23	0.64%	11.25¢
6									
7	100	300	@	30%	$4,713	$4,752	$39	0.83%	15.84¢
8	100	400	@	30%	$5,077	$5,119	$41	0.82%	12.80¢
9	100	500	@	25%	$5,417	$5,460	$43	0.80%	10.92¢
10	100	600	@	25%	$5,776	$5,822	$46	0.79%	9.70¢
11	100	650	@	25%	$5,956	$6,003	$47	0.78%	9.24¢
12									
13	500	300	@	30%	$18,332	$18,529	$197	1.07%	12.35¢
14	500	400	@	30%	$20,155	$20,362	$207	1.03%	10.18¢
15	500	500	@	25%	$21,852	$22,070	$218	1.00%	8.83¢
16	500	600	@	25%	$23,650	$23,878	$228	0.96%	7.96¢
17	500	650	@	25%	$24,549	$24,782	$233	0.95%	7.63¢
18									
19	1,000	300	@	30%	$35,356	$35,749	$393	1.11%	11.92¢
20	1,000	400	@	30%	$39,001	$39,415	$414	1.06%	9.85¢
21	1,000	500	@	25%	$42,397	$42,832	$435	1.03%	8.57¢
22	1,000	600	@	25%	$45,992	$46,448	$456	0.99%	7.74¢
23	1,000	650	@	25%	$47,789	$48,256	$467	0.98%	7.42¢
24									
25	5,000	300	@	30%	$171,549	$173,514	$1,965	1.15%	11.57¢
26	5,000	400	@	30%	$189,775	$191,845	$2,070	1.09%	9.59¢
27	5,000	500	@	25%	$206,751	$208,926	$2,175	1.05%	8.36¢
28	5,000	600	@	25%	$224,727	$227,007	$2,280	1.01%	7.57¢
29	5,000	650	@	25%	$233,715	$236,048	$2,333	1.00%	7.26¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Primary Supply Rate - D11
Subtransmission 24 to 41.6kV

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply		**Power Supply**	
Capacity:		**Capacity:**	
Power Supply Demand	$3.56	Power Supply Demand	$9.77
Voltage Level Discount	($0.07)	Voltage Level Adjustment	($0.20)
Non-Capacity:		**Non-Capacity:**	
Power Supply Demand	$13.33	Power Supply Demand	$7.24
Voltage Level Discount	($0.24)	Voltage Level Discount	($0.15)
Energy		Energy	
On-Peak Rate	$0.04257	On-Peak Rate	$0.04278
Off-Peak Rate	$0.03257	Off-Peak Rate	$0.03278
Voltage Discount	($0.00062)	Voltage Discount	($0.00062)
Surcharges:		Surcharges:	
PSCR	$0.00000	PSCR	$0.00000
REPS >41,500kWh/month	$0.00	REPS	$0.00
11,501-41,500 kWh/month	$0.00		$0.00
Distribution		**Distribution**	
Service Charge:	$375	Service Charge:	$375
Distribution Charges:		Distribution Charges:	
Demand	$1.96	Demand	$1.74
Energy		Energy	
Substation Credit	$0.00	Substation Credit	$0.00
Surcharges:		Surcharges:	
NDS	$0.000882	NDS	$0.000882
Energy Waste Reduction	$1,238	Energy Waste Reduction	$1,238
IRM	$0.0312	IRM	$0.0312

	(a)	(b)		(c)	(d)	(e)	(f)	(g)	(h)
Line	Monthly	Hours			Present Net	Proposed Net	Increase		Proposed
No.	kW Demand	Use		Percent	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	1,000	300	@	30%	$30,934	$30,857	-$77	-0.25%	10.29¢
2	1,000	400	@	30%	$34,517	$34,461	-$56	-0.16%	8.62¢
3	1,000	500	@	25%	$37,850	$37,815	-$35	-0.09%	7.56¢
4	1,000	600	@	25%	$41,383	$41,369	-$14	-0.03%	6.89¢
5	1,000	650	@	25%	$43,150	$43,146	-$4	-0.01%	6.64¢
6									
7	5,000	300	@	30%	$148,217	$147,832	-$385	-0.26%	9.86¢
8	5,000	400	@	30%	$166,133	$165,853	-$280	-0.17%	8.29¢
9	5,000	500	@	25%	$182,799	$182,624	-$175	-0.10%	7.30¢
10	5,000	600	@	25%	$200,465	$200,395	-$70	-0.03%	6.68¢
11	5,000	650	@	25%	$209,298	$209,280	-$18	-0.01%	6.44¢
12									
13	10,000	300	@	30%	$294,821	$294,051	-$770	-0.26%	9.80¢
14	10,000	400	@	30%	$330,653	$330,093	-$560	-0.17%	8.25¢
15	10,000	500	@	25%	$363,985	$363,635	-$350	-0.10%	7.27¢
16	10,000	600	@	25%	$399,317	$399,177	-$140	-0.04%	6.65¢
17	10,000	650	@	25%	$416,983	$416,948	-$35	-0.01%	6.41¢
18									
19	50,000	300	@	30%	$1,467,653	$1,463,803	-$3,850	-0.26%	9.76¢
20	50,000	400	@	30%	$1,646,813	$1,644,013	-$2,800	-0.17%	8.22¢
21	50,000	500	@	25%	$1,813,473	$1,811,723	-$1,750	-0.10%	7.25¢
22	50,000	600	@	25%	$1,990,133	$1,989,433	-$700	-0.04%	6.63¢
23	50,000	650	@	25%	$2,078,463	$2,078,288	-$175	-0.01%	6.39¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Primary Supply Rate - D11
Transmission 120kV and above

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson
Page: 33 of 53

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply		**Power Supply**	
Capacity:		**Capacity:**	
Power Supply Demand	$3.56	Power Supply Demand	$9.77
Voltage Level Discount	($0.15)	Voltage Level Adjustment	($0.41)
Non-Capacity:		**Non-Capacity:**	
Power Supply Demand	$13.33	Power Supply Demand	$7.24
Voltage Level Discount	($0.53)	Voltage Level Discount	($0.31)
Energy		Energy	
On-Peak Rate	$0.04257	On-Peak Rate	$0.04278
Off-Peak Rate	$0.03257	Off-Peak Rate	$0.03278
Voltage Discount	($0.00138)	Voltage Level Adjustment	($0.00139)
Surcharges:		Surcharges:	
PSCR	$0.00000	PSCR	$0.00000
REPS >41,500kWh/month	$0.00	REPS	$0.00
11,501-41,500 kWh/month	$0.00		$0.00
Distribution		**Distribution**	
Service Charge:	$375	Service Charge:	$375
Distribution Charges:		Distribution Charges:	
Demand	$0.86	Demand	$0.94
Energy		Energy	
Substation Credit	$0.00	Substation Credit	$0.00
Surcharges:		Surcharges:	
NDS	$0.000882	NDS	$0.000882
Energy Waste Reduction	$1,238	Energy Waste Reduction	$1,238
IRM	$0.0000	IRM	$0.0000

	(a)	(b)		(c)	(d)	(e)	(f)	(g)	(h)
Line	Monthly	Hours			Present Net	Proposed Net	Increase		Proposed
No.	kW Demand	Use		Percent	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	1,000	300	@	30%	$29,205	$29,425	$220	0.75%	9.81¢
2	1,000	400	@	30%	$32,712	$32,952	$240	0.73%	8.24¢
3	1,000	500	@	25%	$35,969	$36,229	$260	0.72%	7.25¢
4	1,000	600	@	25%	$39,426	$39,706	$280	0.71%	6.62¢
5	1,000	650	@	25%	$41,155	$41,445	$290	0.70%	6.38¢
6									
7	5,000	300	@	30%	$139,571	$140,671	$1,100	0.79%	9.38¢
8	5,000	400	@	30%	$157,107	$158,307	$1,200	0.76%	7.92¢
9	5,000	500	@	25%	$173,393	$174,693	$1,300	0.75%	6.99¢
10	5,000	600	@	25%	$190,679	$192,079	$1,400	0.73%	6.40¢
11	5,000	650	@	25%	$199,322	$200,772	$1,450	0.73%	6.18¢
12									
13	10,000	300	@	30%	$277,529	$279,729	$2,200	0.79%	9.32¢
14	10,000	400	@	30%	$312,601	$315,001	$2,400	0.77%	7.88¢
15	10,000	500	@	25%	$345,173	$347,773	$2,600	0.75%	6.96¢
16	10,000	600	@	25%	$379,745	$382,545	$2,800	0.74%	6.38¢
17	10,000	650	@	25%	$397,031	$399,931	$2,900	0.73%	6.15¢
18									
19	50,000	300	@	30%	$1,381,193	$1,392,193	$11,000	0.80%	9.28¢
20	50,000	400	@	30%	$1,556,553	$1,568,553	$12,000	0.77%	7.84¢
21	50,000	500	@	25%	$1,719,413	$1,732,413	$13,000	0.76%	6.93¢
22	50,000	600	@	25%	$1,892,273	$1,906,273	$14,000	0.74%	6.35¢
23	50,000	650	@	25%	$1,978,703	$1,993,203	$14,500	0.73%	6.13¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Primary Educational Institution Rate - D6.2
Primary Less Than 24kV

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply		**Power Supply**	
Capacity:		**Capacity:**	
Power Supply Demand	$3.58	Power Supply Demand	$11.47
Voltage Level Adjustment		Voltage Level Adjustment	
Non-Capacity:		**Non-Capacity:**	
Power Supply Demand	$10.04	Power Supply Demand	$3.33
Voltage Level Discount		Voltage Level Discount	
Energy		Energy	
On-Peak Rate	$0.04322	On-Peak Rate	$0.04673
Off-Peak Rate	$0.04022	Off-Peak Rate	$0.04373
Voltage Discount	$0.00000	Voltage Discount	$0.00000
Surcharges:		Surcharges:	
PSCR	$0.00000	PSCR	$0.00000
REPS >41,500kWh/month	$0.00	REPS	$0.00
11,501-41,500 kWh/month	$0.00		$0.00
Distribution		**Distribution**	
Service Charge:	$70	Service Charge:	$70
Distribution Charges:		Distribution Charges:	
Demand	$6.15	Demand	$6.36
Energy		Energy	
Substation Credit	$0.00	Substation Credit	$0.00
Surcharges:		Surcharges:	
NDS	$0.000882	NDS	$0.000882
Energy Waste Reduction	$1,238	Energy Waste Reduction	$1,238
IRM	$0.0727		$0.0727

	(a)	(b)		(c)	(d)	(e)	(f)	(g)	(h)
Line	Monthly	Hours			Present Net	Proposed Net	Increase		Proposed
No.	kW Demand	Use		Percent	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	50	300	@	30%	$2,930	$3,052	$122	4.17%	20.35¢
2	50	400	@	30%	$3,140	$3,280	$140	4.45%	16.40¢
3	50	500	@	25%	$3,346	$3,504	$157	4.70%	14.01¢
4	50	600	@	25%	$3,556	$3,730	$175	4.92%	12.43¢
5	50	650	@	25%	$3,660	$3,844	$184	5.02%	11.83¢
6									
7	100	300	@	30%	$4,552	$4,797	$244	5.37%	15.99¢
8	100	400	@	30%	$4,972	$5,252	$279	5.62%	13.13¢
9	100	500	@	25%	$5,385	$5,699	$315	5.84%	11.40¢
10	100	600	@	25%	$5,803	$6,153	$350	6.02%	10.25¢
11	100	650	@	25%	$6,013	$6,380	$367	6.11%	9.82¢
12									
13	500	300	@	30%	$17,530	$18,751	$1,222	6.97%	12.50¢
14	500	400	@	30%	$19,630	$21,027	$1,397	7.12%	10.51¢
15	500	500	@	25%	$21,692	$23,265	$1,573	7.25%	9.31¢
16	500	600	@	25%	$23,785	$25,533	$1,748	7.35%	8.51¢
17	500	650	@	25%	$24,831	$26,667	$1,836	7.39%	8.21¢
18									
19	1,000	300	@	30%	$33,751	$36,194	$2,443	7.24%	12.06¢
20	1,000	400	@	30%	$37,951	$40,745	$2,794	7.36%	10.19¢
21	1,000	500	@	25%	$42,077	$45,222	$3,145	7.47%	9.04¢
22	1,000	600	@	25%	$46,262	$49,758	$3,496	7.56%	8.29¢
23	1,000	650	@	25%	$48,354	$52,026	$3,672	7.59%	8.00¢
24									
25	5,000	300	@	30%	$163,524	$175,739	$12,215	7.47%	11.72¢
26	5,000	400	@	30%	$184,525	$198,495	$13,970	7.57%	9.92¢
27	5,000	500	@	25%	$205,151	$220,876	$15,725	7.67%	8.84¢
28	5,000	600	@	25%	$226,077	$243,557	$17,480	7.73%	8.12¢
29	5,000	650	@	25%	$236,540	$254,898	$18,358	7.76%	7.84¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Primary Educational Institution Rate - D6.2
Subtransmission 24 to 41.6kV

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson
Page: 35 of 53

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply		**Power Supply**	
Capacity:		**Capacity:**	
Power Supply Demand	$3.58	Power Supply Demand	$11.47
Voltage Level Discount	($0.07)	Voltage Level Adjustment	($0.23)
Non-Capacity:		**Non-Capacity:**	
Power Supply Demand	$10.04	Power Supply Demand	$3.33
Voltage Level Discount	($0.18)	Voltage Level Discount	($0.07)
Energy		Energy	
On-Peak Rate	$0.04322	On-Peak Rate	$0.04673
Off-Peak Rate	$0.04022	Off-Peak Rate	$0.04373
Voltage Discount	($0.00073)	Voltage Discount	($0.00079)
Surcharges:		Surcharges:	
PSCR	$0.00000	PSCR	$0.00000
REPS >41,500kWh/month	$0.00	REPS	$0.00
11,501-41,500 kWh/month	$0.00		$0.00
Distribution		**Distribution**	
Service Charge:	$375	Service Charge:	$375
Distribution Charges:		Distribution Charges:	
Demand	$1.96	Demand	$1.74
Energy		Energy	
Substation Credit	$0.00	Substation Credit	$0.00
Surcharges:		Surcharges:	
NDS	$0.000882	NDS	$0.000882
Energy Waste Reduction	$1,238	Energy Waste Reduction	$1,238
IRM	$0.0312		$0.0312

	(a)	(b)		(c)	(d)	(e)	(f)	(g)	(h)
Line No.	Monthly kW Demand	Hours Use		Percent	Present Net Monthly Bill	Proposed Net Monthly Bill	Increase Amount	Increase Percent	Proposed Unit Cost
1	1,000	300	@	30%	$29,356	$31,301	$1,945	6.63%	10.43¢
2	1,000	400	@	30%	$33,483	$35,773	$2,290	6.84%	8.94¢
3	1,000	500	@	25%	$37,535	$40,170	$2,635	7.02%	8.03¢
4	1,000	600	@	25%	$41,647	$44,627	$2,980	7.16%	7.44¢
5	1,000	650	@	25%	$43,703	$46,856	$3,153	7.21%	7.21¢
6									
7	5,000	300	@	30%	$140,327	$150,052	$9,725	6.93%	10.00¢
8	5,000	400	@	30%	$160,963	$172,413	$11,450	7.11%	8.62¢
9	5,000	500	@	25%	$181,224	$194,399	$13,175	7.27%	7.78¢
10	5,000	600	@	25%	$201,785	$216,685	$14,900	7.38%	7.22¢
11	5,000	650	@	25%	$212,065	$227,828	$15,763	7.43%	7.01¢
12									
13	10,000	300	@	30%	$279,041	$298,491	$19,450	6.97%	9.95¢
14	10,000	400	@	30%	$320,313	$343,213	$22,900	7.15%	8.58¢
15	10,000	500	@	25%	$360,835	$387,185	$26,350	7.30%	7.74¢
16	10,000	600	@	25%	$401,957	$431,757	$29,800	7.41%	7.20¢
17	10,000	650	@	25%	$422,518	$454,043	$31,525	7.46%	6.99¢
18									
19	50,000	300	@	30%	$1,388,753	$1,486,003	$97,250	7.00%	9.91¢
20	50,000	400	@	30%	$1,595,113	$1,709,613	$114,500	7.18%	8.55¢
21	50,000	500	@	25%	$1,797,723	$1,929,473	$131,750	7.33%	7.72¢
22	50,000	600	@	25%	$2,003,333	$2,152,333	$149,000	7.44%	7.17¢
23	50,000	650	@	25%	$2,106,138	$2,263,763	$157,625	7.48%	6.97¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Primary Educational Institution Rate - D6.2
Transmission 120kV and above

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson
Page: 36 of 53

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply		**Power Supply**	
Capacity:		**Capacity:**	
Power Supply Demand	$3.58	Power Supply Demand	$11.47
Voltage Level Discount	($0.15)	Voltage Level Adjustment	($0.48)
Non-Capacity:		**Non-Capacity:**	
Power Supply Demand	$10.04	Power Supply Demand	$3.33
Voltage Level Discount	($0.40)	Voltage Level Discount	($0.14)
Energy		Energy	
On-Peak Rate	$0.04322	On-Peak Rate	$0.04673
Off-Peak Rate	$0.04022	Off-Peak Rate	$0.04373
Voltage Discount	($0.00162)	Voltage Discount	($0.00176)
Surcharges:		Surcharges:	
PSCR	$0.00000	PSCR	$0.00000
REPS >41,500kWh/month	$0.00	REPS	$0.00
11,501-41,500 kWh/month	$0.00		$0.00
Distribution		**Distribution**	
Service Charge:	$375	Service Charge:	$375
Distribution Charges:		Distribution Charges:	
Demand	$0.86	Demand	$0.94
Energy		Energy	
Substation Credit	$0.00	Substation Credit	$0.00
Surcharges:		Surcharges:	
NDS	$0.000882	NDS	$0.000882
Energy Waste Reduction	$1,238	Energy Waste Reduction	$1,238
IRM	$0.0000	IRM	$0.0000

	(a)	(b)		(c)	(d)	(e)	(f)	(g)	(h)
Line	Monthly	Hours			Present Net	Proposed Net	Increase		Proposed
No.	kW Demand	Use		Percent	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	1,000	300	@	30%	$27,658	$29,859	$2,201	7.96%	9.95¢
2	1,000	400	@	30%	$31,696	$34,234	$2,538	8.01%	8.56¢
3	1,000	500	@	25%	$35,659	$38,534	$2,875	8.06%	7.71¢
4	1,000	600	@	25%	$39,682	$42,894	$3,212	8.09%	7.15¢
5	1,000	650	@	25%	$41,694	$45,074	$3,381	8.11%	6.93¢
6									
7	5,000	300	@	30%	$131,836	$142,841	$11,005	8.35%	9.52¢
8	5,000	400	@	30%	$152,027	$164,717	$12,690	8.35%	8.24¢
9	5,000	500	@	25%	$171,843	$186,218	$14,375	8.37%	7.45¢
10	5,000	600	@	25%	$191,959	$208,019	$16,060	8.37%	6.93¢
11	5,000	650	@	25%	$202,017	$218,919	$16,903	8.37%	6.74¢
12									
13	10,000	300	@	30%	$262,059	$284,069	$22,010	8.40%	9.47¢
14	10,000	400	@	30%	$302,441	$327,821	$25,380	8.39%	8.20¢
15	10,000	500	@	25%	$342,073	$370,823	$28,750	8.40%	7.42¢
16	10,000	600	@	25%	$382,305	$414,425	$32,120	8.40%	6.91¢
17	10,000	650	@	25%	$402,421	$436,226	$33,805	8.40%	6.71¢
18									
19	50,000	300	@	30%	$1,303,843	$1,413,893	$110,050	8.44%	9.43¢
20	50,000	400	@	30%	$1,505,753	$1,632,653	$126,900	8.43%	8.16¢
21	50,000	500	@	25%	$1,703,913	$1,847,663	$143,750	8.44%	7.39¢
22	50,000	600	@	25%	$1,905,073	$2,065,673	$160,600	8.43%	6.89¢
23	50,000	650	@	25%	$2,005,653	$2,174,678	$169,025	8.43%	6.69¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Interruptible Supply Rate - D8
Primary Less Than 24kV

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply		**Power Supply**	
Capacity:		**Capacity:**	
Power Supply Demand	$1.62	Power Supply Demand	$4.51
Voltage Level Discount	$0.00	Voltage Level Adjustment	$0.00
Product Protection	$3.56	Product Protection	$9.77
Voltage Level Discount	$0.00	Voltage Level Adjustment	$0.00
Non-Capacity:		**Non-Capacity:**	
Power Supply Demand	$8.50	Power Supply Demand	$5.62
Voltage Level Discount	$0.00	Voltage Level Adjustment	$0.00
Product Protection	$13.33	Product Protection	$7.24
Voltage Level Discount	$0.00	Voltage Level Adjustment	$0.00
Energy		Energy	
On-Peak Rate	$0.04257	On-Peak Rate	$0.04278
Off-Peak Rate	$0.03257	Off-Peak Rate	$0.03278
Voltage Discount	$0.00000	Voltage Discount	$0.00000
Surcharges:		Surcharges:	
PSCR	$0.00000	PSCR	$0.00000
REPS >41,500kWh/month	$0.00	REPS	$0.00
11,501-41,500 kWh/month	$0.00		$0.00
Distribution		**Distribution**	
Service Charge:	$70	Service Charge:	$70
Distribution Charges:		Distribution Charges:	
Demand	$6.15	Demand	$6.36
Substation Credit	$0.00	Substation Credit	$0.00
Surcharges:		Surcharges:	
NDS	$0.000882	NDS	$0.000882
Energy Waste Reduction	$1,238	Energy Waste Reduction	$1,238
IRM	$0.0727	IRM	$0.0727

	(a)	(b)		(c)	(d)	(e)	(f)	(g)	(h)
Line	Monthly	Hours			Present Net	Proposed Net	Increase		Proposed
No.	kW Demand	Use		Percent	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	50	300	@	30%	$2,740	$2,755	$15	0.56%	18.37¢
2	50	400	@	25%	$2,912	$2,928	$16	0.56%	14.64¢
3	50	500	@	25%	$3,092	$3,109	$17	0.56%	12.44¢
4	50	600	@	25%	$3,271	$3,290	$18	0.56%	10.97¢
5									
6	100	300	@	30%	$4,171	$4,202	$30	0.73%	14.01¢
7	100	400	@	25%	$4,516	$4,548	$33	0.72%	11.37¢
8	100	500	@	25%	$4,875	$4,910	$35	0.71%	9.82¢
9	100	600	@	25%	$5,235	$5,272	$37	0.70%	8.79¢
10									
11	500	300	@	30%	$15,624	$15,777	$152	0.98%	10.52¢
12	500	400	@	25%	$17,347	$17,510	$163	0.94%	8.75¢
13	500	500	@	25%	$19,144	$19,318	$173	0.91%	7.73¢
14	500	600	@	25%	$20,942	$21,126	$184	0.88%	7.04¢
15									
16	1,000	300	@	30%	$29,940	$30,245	$305	1.02%	10.08¢
17	1,000	400	@	25%	$33,385	$33,711	$326	0.98%	8.43¢
18	1,000	500	@	25%	$36,981	$37,328	$347	0.94%	7.47¢
19	1,000	600	@	25%	$40,576	$40,944	$368	0.91%	6.82¢
20									
21	5,000	300	@	30%	$144,469	$145,994	$1,525	1.06%	9.73¢
22	5,000	400	@	25%	$161,695	$163,325	$1,630	1.01%	8.17¢
23	5,000	500	@	25%	$179,671	$181,406	$1,735	0.97%	7.26¢
24	5,000	600	@	25%	$197,647	$199,487	$1,840	0.93%	6.65¢

1. The above bill comparison includes 20% product protection to better represent the total site bill versus only the interruptible portion.
2. The Hours-Use catagories were changed to better reflect actual load characteristics

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Interruptible Supply Rate - D8
Subtransmission 24 to 41.6kV

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson
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Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply		**Power Supply**	
Capacity:		**Capacity:**	
Power Supply Demand	$1.62	Power Supply Demand	$4.51
Voltage Level Discount	($0.03)	Voltage Level Adjustment	($0.09)
Product Protection	$3.56	Product Protection	$9.77
Voltage Level Discount	($0.07)	Voltage Level Adjustment	($0.20)
Non-Capacity:		**Non-Capacity:**	
Power Supply Demand	$8.50	Power Supply Demand	$5.62
Voltage Level Discount	($0.15)	Voltage Level Adjustment	($0.11)
Product Protection	$13.33	Product Protection	$7.24
Voltage Level Discount	($0.24)	Voltage Level Adjustment	($0.15)
Energy		Energy	
On-Peak Rate	$0.04257	On-Peak Rate	$0.04278
Off-Peak Rate	$0.03257	Off-Peak Rate	$0.03278
Voltage Discount	($0.00062)	Voltage Discount	($0.00062)
Surcharges:		Surcharges:	
PSCR	$0.00000	PSCR	$0.00000
REPS >41,500kWh/month	$0.00	REPS	$0.00
11,501-41,500 kWh/	$0.00		$0.00
Distribution		**Distribution**	
Service Charge:	$375	Service Charge:	$375
Distribution Charges:		Distribution Charges:	
Demand	$1.96	Demand	$1.74
Substation Credit	$0.00	Substation Credit	$0.00
Surcharges:		Surcharges:	
NDS	$0.000882	NDS	$0.000882
Energy Waste Reduction	$1,238	Energy Waste Reduction	$1,238
IRM	$0.0312	IRM	$0.0312

	(a)	(b)		(c)	(d)	(e)	(f)	(g)	(h)
Line	Monthly	Hours			Present Net	Proposed Net	Increase		Proposed
No.	kW Demand	Use		Percent	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	1,000	300	@	30%	$25,622	$25,473	-$149	-0.58%	8.49¢
2	1,000	400	@	25%	$29,005	$28,877	-$128	-0.44%	7.22¢
3	1,000	500	@	25%	$32,538	$32,431	-$107	-0.33%	6.49¢
4	1,000	600	@	25%	$36,071	$35,985	-$86	-0.24%	6.00¢
5									
6	5,000	300	@	30%	$121,657	$120,912	-$745	-0.61%	8.06¢
7	5,000	400	@	25%	$138,573	$137,933	-$640	-0.46%	6.90¢
8	5,000	500	@	25%	$156,239	$155,704	-$535	-0.34%	6.23¢
9	5,000	600	@	25%	$173,905	$173,475	-$430	-0.25%	5.78¢
10									
11	10,000	300	@	30%	$241,701	$240,211	-$1,490	-0.62%	8.01¢
12	10,000	400	@	25%	$275,533	$274,253	-$1,280	-0.46%	6.86¢
13	10,000	500	@	25%	$310,865	$309,795	-$1,070	-0.34%	6.20¢
14	10,000	600	@	25%	$346,197	$345,337	-$860	-0.25%	5.76¢
15									
16	50,000	300	@	30%	$1,202,053	$1,194,603	-$7,450	-0.62%	7.96¢
17	50,000	400	@	25%	$1,371,213	$1,364,813	-$6,400	-0.47%	6.82¢
18	50,000	500	@	25%	$1,547,873	$1,542,523	-$5,350	-0.35%	6.17¢
19	50,000	600	@	25%	$1,724,533	$1,720,233	-$4,300	-0.25%	5.73¢

1. The above bill comparison includes 20% product protection to better represent the total site bill versus only the interruptible portion.
2. The Hours-Use catagories were changed to better reflect actual load characteristics

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Interruptible Supply Rate - D8
Transmission 120kV and above

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson
Page: 39 of 53

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply		**Power Supply**	
Capacity:		**Capacity:**	
Power Supply Demand	$1.62	Power Supply Demand	$4.51
Voltage Level Discount	($0.07)	Voltage Level Adjustment	($0.19)
Product Protection	$3.56	Product Protection	$9.77
Voltage Level Discount	($0.15)	Voltage Level Adjustment	($0.41)
Non-Capacity:		**Non-Capacity:**	
Power Supply Demand	$8.50	Power Supply Demand	$5.62
Voltage Level Discount	($0.33)	Voltage Level Adjustment	($0.24)
Product Protection	$13.33	Product Protection	$7.24
Voltage Level Discount	($0.53)	Voltage Level Adjustment	($0.31)
Energy		Energy	
On-Peak Rate	$0.04257	On-Peak Rate	$0.04278
Off-Peak Rate	$0.03257	Off-Peak Rate	$0.03278
Voltage Discount	($0.00138)	Voltage Discount	($0.00139)
Surcharges:		Surcharges:	
PSCR	$0.00000	PSCR	$0.00000
REPS >41,500kWh/month	$0.00	REPS	$0.00
11,501-41,500 kWh	$0.00		$0.00
Distribution		**Distribution**	
Service Charge:	$375	Service Charge:	$375
Distribution Charges:		Distribution Charges:	
Demand	$0.86	Demand	$0.94
Substation Credit	$0.00	Substation Credit	$0.00
Surcharges:		Surcharges:	
NDS	$0.000882	NDS	$0.000882
Energy Waste Reduction	$1,238	Energy Waste Reduction	$1,238
IRM	$0.0000	IRM	$0.0000

	(a)	(b)		(c)	(d)	(e)	(f)	(g)	(h)
Line	Monthly	Hours			Present Net	Proposed Net	Increase		Proposed
No.	kW Demand	Use		Percent	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	1,000	300	@	30%	$24,013	$24,153	$140	0.58%	8.05¢
2	1,000	400	@	25%	$27,320	$27,480	$160	0.59%	6.87¢
3	1,000	500	@	25%	$30,777	$30,957	$180	0.58%	6.19¢
4	1,000	600	@	25%	$34,234	$34,434	$200	0.58%	5.74¢
5									
6	5,000	300	@	30%	$113,611	$114,311	$700	0.62%	7.62¢
7	5,000	400	@	25%	$130,147	$130,947	$800	0.61%	6.55¢
8	5,000	500	@	25%	$147,433	$148,333	$900	0.61%	5.93¢
9	5,000	600	@	25%	$164,719	$165,719	$1,000	0.61%	5.52¢
10									
11	10,000	300	@	30%	$225,609	$227,009	$1,400	0.62%	7.57¢
12	10,000	400	@	25%	$258,681	$260,281	$1,600	0.62%	6.51¢
13	10,000	500	@	25%	$293,253	$295,053	$1,800	0.61%	5.90¢
14	10,000	600	@	25%	$327,825	$329,825	$2,000	0.61%	5.50¢
15									
16	50,000	300	@	30%	$1,121,593	$1,128,593	$7,000	0.62%	7.52¢
17	50,000	400	@	25%	$1,286,953	$1,294,953	$8,000	0.62%	6.47¢
18	50,000	500	@	25%	$1,459,813	$1,468,813	$9,000	0.62%	5.88¢
19	50,000	600	@	25%	$1,632,673	$1,642,673	$10,000	0.61%	5.48¢

1. The above bill comparison includes 20% product protection to better represent the total site bill versus only the interruptible portion.
2. The Hours-Use catagories were changed to better reflect actual load characteristics

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
All Electric School Buildings Rate - D10
November Thru May

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:			Proposed Rates and Current Surcharges:		
Power Supply			**Power Supply**		
Capacity:			**Capacity:**		
Energy Charge		$0.00094	Energy Charge		$0.01579
Non-Capacity:			**Non-Capacity:**		
Energy Charge		$0.07430	Energy Charge		$0.05994
Surcharges:			Surcharges:		
PSCR		$0.00000	PSCR		$0.00000
REPS	>41,500kWh/month	$0.00	REPS		$0.00
	11,501-41,500 kWh/month	$0.00			$0.00
Distribution			**Distribution**		
Service Charge		$70	Service Charge		$70
Distribution Energy Charge		$0.01968	Distribution Energy Charge		$0.01884
Surcharges:			Surcharges:		
NDS		$0.000882	NDS		$0.000882
Energy Waste Reduction		$1,238	Energy Waste Reduction		$1,238
IRM		$0.000233	IRM		$0.000233

	(a)	(b)	(c)	(d)	(e)	(f)
Line	Monthly	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	40,000	$5,149	$5,135	-$14.00	-0.27%	12.84¢
2	50,000	$6,110	$6,092	-$17.50	-0.29%	12.18¢
3	60,000	$7,070	$7,049	-$21.00	-0.30%	11.75¢
4	70,000	$8,030	$8,006	-$24.50	-0.31%	11.44¢
5	80,000	$8,991	$8,963	-$28.00	-0.31%	11.20¢
6	90,000	$9,951	$9,920	-$31.50	-0.32%	11.02¢
7	100,000	$10,911	$10,876	-$35.00	-0.32%	10.88¢
8	110,000	$11,872	$11,833	-$38.50	-0.32%	10.76¢
9	120,000	$12,832	$12,790	-$42.00	-0.33%	10.66¢
10	130,000	$13,793	$13,747	-$45.50	-0.33%	10.57¢
11	140,000	$14,753	$14,704	-$49.00	-0.33%	10.50¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
All Electric School Buildings Rate - D10
June Thru October

Present Rates and Current Surcharges:			Proposed Rates and Current Surcharges:	
Power Supply			**Power Supply**	
Capacity:			**Capacity:**	
Energy Charge		$0.02107	Energy Charge	$0.03592
Non-Capacity:			**Non-Capacity:**	
Energy Charge		$0.07430	Energy Charge	$0.05994
Surcharges:			Surcharges:	
PSCR		$0.00000	PSCR	$0.00000
REPS	>41,500kWh/month	$0.00	REPS	$0.00
	11,501-41,500 kWh/month	$0.00		$0.00
Distribution			**Distribution**	
Service Charge		$70	Service Charge	$70
Distribution Energy Charge		$0.01968	Distribution Energy Charge	$0.01884
Surcharges:			Surcharges:	
NDS		$0.000882	NDS	$0.000882
Energy Waste Reduction		$1,238	Energy Waste Reduction	$1,238
IRM		$0.000233		$0.000233

	(a)	(b)	(c)	(d)	(e)	(f)
Line	Monthly	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	40,000	$5,955	$5,941	-$14.00	-0.24%	14.85¢
2	60,000	$8,278	$8,257	-$21.00	-0.25%	13.76¢
3	80,000	$10,601	$10,573	-$28.00	-0.26%	13.22¢
4	100,000	$12,924	$12,889	-$35.00	-0.27%	12.89¢
5	120,000	$15,248	$15,206	-$42.00	-0.28%	12.67¢
6	140,000	$17,571	$17,522	-$49.00	-0.28%	12.52¢
7	160,000	$19,894	$19,838	-$56.00	-0.28%	12.40¢
8	180,000	$22,218	$22,155	-$63.00	-0.28%	12.31¢
9	200,000	$24,541	$24,471	-$70.00	-0.29%	12.24¢
10	220,000	$26,864	$26,787	-$77.00	-0.29%	12.18¢
11	240,000	$29,188	$29,104	-$84.00	-0.29%	12.13¢
12	260,000	$31,511	$31,420	-$91.00	-0.29%	12.08¢
13	280,000	$33,834	$33,736	-$98.00	-0.29%	12.05¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
XL High Load Factor Rate - D13
Primary

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply		**Power Supply**	
Capacity:		**Capacity:**	
Energy Charge	$0.01514	Energy Charge	$0.01514
Non-Capacity:		**Non-Capacity:**	
Energy Charge	$0.03430	Energy Charge	$0.03287
Transmission Charge	$0.00304	Transmission Charge	$0.00308
Surcharges:		Surcharges:	
REPS	$0.00	REPS	$0.00
Distribution		**Distribution**	
Service Charge	$70	Service Charge	$70
Distribution Energy Charge	$0.00936	Distribution Energy Charge	$0.00968
Administration Charge	$0.00015	Administration Charge	$0.00015
Surcharges:		Surcharges:	
Energy Waste Reduction	$1,237.99	Energy Waste Reduction	$1,237.99
IRM	$0.000133	IRM	$0.000133

	(a)	(b)	(c)	(d)	(e)	(f)
Line No.	Monthly kWh Use	Present Net Monthly Bill	Proposed Net Monthly Bill	Increase Amount	Increase Percent	Proposed Unit Cost
1	27,000,000	$1,678,629	$1,649,739	-$28,890	-1.72%	6.11¢
2	29,000,000	$1,802,875	$1,771,845	-$31,030	-1.72%	6.11¢
3	31,000,000	$1,927,121	$1,893,951	-$33,170	-1.72%	6.11¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
XL High Load Factor Rate - D13
Subtransmission

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply		**Power Supply**	
Capacity:		**Capacity:**	
Energy Charge	$0.01514	Energy Charge	$0.01514
Non-Capacity:		**Non-Capacity:**	
Energy Charge	$0.03430	Energy Charge	$0.03287
Transmission Charge	$0.00304	Transmission Charge	$0.00308
Surcharges:		Surcharges:	
REPS	$0.00	REPS	$0.00
Distribution		**Distribution**	
Service Charge	$375	Service Charge	$375
Distribution Energy Charge	$0.00298	Distribution Energy Charge	$0.00265
Administration Charge	$0.00015	Administration Charge	$0.00015
Surcharges:		Surcharges:	
Energy Waste Reduction	$1,237.99	Energy Waste Reduction	$1,237.99
IRM	$0.000057	IRM	$0.000057

	(a)	(b)	(c)	(d)	(e)	(f)
Line	Monthly	Present Net	Proposed Net	Increase		Proposed
No.	kWh Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	27,000,000	$1,504,622	$1,458,182	-$46,440	-3.09%	5.40¢
2	29,000,000	$1,615,956	$1,566,076	-$49,880	-3.09%	5.40¢
3	31,000,000	$1,727,290	$1,673,970	-$53,320	-3.09%	5.40¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
XL High Load Factor Rate - D13
Transmission

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson
Page: 44 of 53

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply		**Power Supply**	
Capacity:		**Capacity:**	
Energy Charge	$0.01514	Energy Charge	$0.01514
Non-Capacity:		**Non-Capacity:**	
Energy Charge	$0.03430	Energy Charge	$0.03287
Transmission Charge	$0.00304	Transmission Charge	$0.00308
Surcharges:		Surcharges:	
REPS	$0.00	REPS	$0.00
Distribution		**Distribution**	
Service Charge	$375	Service Charge	$375
Distribution Energy Charge	$0.00131	Distribution Energy Charge	$0.00144
Administration Charge	$0.00015	Administration Charge	$0.00015
Surcharges:		Surcharges:	
Energy Waste Reduction	$1,237.99	Energy Waste Reduction	$1,237.99
IRM	$0.000000	IRM	$0.000000

	(a)	(b)	(c)	(d)	(e)	(f)
Line No.	Monthly kWh Use	Present Net Monthly Bill	Proposed Net Monthly Bill	Increase Amount	Increase Percent	Proposed Unit Cost
1	27,000,000	$1,457,993	$1,423,973	-$34,020	-2.33%	5.27¢
2	29,000,000	$1,565,873	$1,529,333	-$36,540	-2.33%	5.27¢
3	31,000,000	$1,673,753	$1,634,693	-$39,060	-2.33%	5.27¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Alternative Metal Melting - Standard Contract Rider No. R1.1
Secondary Voltage Level

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply		**Power Supply**	
Capacity:		**Capacity:**	
Energy		Energy	
1st 100 Hrs. Use	$0.00706	1st 100 Hrs. Use	$0.01902
Excess Hrs. Use	$0.00267	Excess Hrs. Use	$0.00719
Non-Capacity:		**Non-Capacity:**	
Energy	$0.05251	Energy	$0.04723
Surcharges:		Surcharges:	
PSCR	$0.00000	PSCR	$0.00000
REPS	$0.00	REPS	$0.00
Distribution		**Distribution**	
Distribution Charges:		Distribution Charges:	
1st 100 Hrs. Use	$0.05288	1st 100 Hrs. Use	$0.05917
Excess Hrs. Use	$0.05288	Excess Hrs. Use	$0.05917
Surcharges:		Surcharges:	
NDS	$0.000882	NDS	$0.000882
Energy Waste Reduction	$1,238	Energy Waste Reduction	$1,238
IRM	$0.000555		$0.000555

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line	Monthly	Hours	Present Net	Proposed Net	Increase		Proposed
No.	kW Demand	Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	50	100	$1,807	$1,872	$64.85	3.59%	37.45¢
2	50	200	$2,355	$2,447	$92.50	3.93%	24.47¢
3	50	300	$2,902	$3,023	$120.15	4.14%	20.15¢
4	50	400	$3,450	$3,598	$147.80	4.28%	17.99¢
5	50	500	$3,997	$4,173	$175.45	4.39%	16.69¢
6	50	600	$4,545	$4,748	$203.10	4.47%	15.83¢
7	50	700	$5,092	$5,323	$230.75	4.53%	15.21¢
8							
9	500	100	$6,932	$7,581	$648.50	9.35%	15.16¢
10	500	200	$12,407	$13,332	$925.00	7.46%	13.33¢
11	500	300	$17,882	$19,084	$1,201.50	6.72%	12.72¢
12	500	400	$23,357	$24,835	$1,478.00	6.33%	12.42¢
13	500	500	$28,832	$30,586	$1,754.50	6.09%	12.23¢
14	500	600	$34,307	$36,338	$2,031.00	5.92%	12.11¢
15	500	700	$39,781	$42,089	$2,307.50	5.80%	12.03¢
16							
17	1000	100	$12,627	$13,924	$1,297.00	10.27%	13.92¢
18	1,000	200	$23,576	$25,426	$1,850.00	7.85%	12.71¢
19	1,000	300	$34,526	$36,929	$2,403.00	6.96%	12.31¢
20	1,000	400	$45,476	$48,432	$2,956.00	6.50%	12.11¢
21	1,000	500	$56,425	$59,934	$3,509.00	6.22%	11.99¢
22	1,000	600	$67,375	$71,437	$4,062.00	6.03%	11.91¢
23	1,000	700	$78,325	$82,940	$4,615.00	5.89%	11.85¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Alternative Metal Melting - Standard Contract Rider No. R1.1
Primary Less Than 24kV

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply		**Power Supply**	
Capacity:		**Capacity:**	
Energy		Energy	
1st 100 Hrs. Use	$0.00525	1st 100 Hrs. Use	$0.01415
Excess Hrs. Use	$0.00191	Excess Hrs. Use	$0.00515
Non-Capacity:		**Non-Capacity:**	
Energy	$0.05251	Energy	$0.04723
Surcharges:		Surcharges:	
PSCR	$0.00000	PSCR	$0.00000
REPS	$0.00	REPS	$0.00
Distribution		**Distribution**	
Distribution Charges:		Distribution Charges:	
1st 100 Hrs. Use	$0.01832	1st 100 Hrs. Use	$0.01926
Excess Hrs. Use	$0.01832	Excess Hrs. Use	$0.01926
Surcharges:		Surcharges:	
NDS	$0.000882	NDS	$0.000882
Energy Waste Reduction	$1,238	Energy Waste Reduction	$1,238
IRM	$0.000229	IRM	$0.000229

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line	Monthly	Hours	Present Net	Proposed Net	Increase		Proposed
No.	kW Demand	Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	50	100	$1,624	$1,647	$22.80	1.40%	32.93¢
2	50	200	$1,993	$2,011	$17.30	0.87%	20.11¢
3	50	300	$2,362	$2,374	$11.80	0.50%	15.83¢
4	50	400	$2,732	$2,738	$6.30	0.23%	13.69¢
5	50	500	$3,101	$3,102	$0.80	0.03%	12.41¢
6	50	600	$3,470	$3,466	-$4.70	-0.14%	11.55¢
7	50	700	$3,839	$3,829	-$10.20	-0.27%	10.94¢
8							
9	500	100	$5,098	$5,326	$228.00	4.47%	10.65¢
10	500	200	$8,790	$8,963	$173.00	1.97%	8.96¢
11	500	300	$12,483	$12,601	$118.00	0.95%	8.40¢
12	500	400	$16,175	$16,238	$63.00	0.39%	8.12¢
13	500	500	$19,868	$19,876	$8.00	0.04%	7.95¢
14	500	600	$23,560	$23,513	-$47.00	-0.20%	7.84¢
15	500	700	$27,253	$27,151	-$102.00	-0.37%	7.76¢
16							
17	1,000	100	$8,957	$9,413	$456.00	5.09%	9.41¢
18	1,000	200	$16,342	$16,688	$346.00	2.12%	8.34¢
19	1,000	300	$23,727	$23,963	$236.00	0.99%	7.99¢
20	1,000	400	$31,112	$31,238	$126.00	0.40%	7.81¢
21	1,000	500	$38,497	$38,513	$16.00	0.04%	7.70¢
22	1,000	600	$45,883	$45,789	-$94.00	-0.20%	7.63¢
23	1,000	700	$53,268	$53,064	-$204.00	-0.38%	7.58¢
24							
25	5,000	100	$39,833	$42,113	$2,280.00	5.72%	8.42¢
26	5,000	200	$76,759	$78,489	$1,730.00	2.25%	7.85¢
27	5,000	300	$113,684	$114,864	$1,180.00	1.04%	7.66¢
28	5,000	400	$150,610	$151,240	$630.00	0.42%	7.56¢
29	5,000	500	$187,535	$187,615	$80.00	0.04%	7.50¢
30	5,000	600	$224,461	$223,991	-$470.00	-0.21%	7.47¢
31	5,000	700	$261,386	$260,366	-$1,020.00	-0.39%	7.44¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Alternative Metal Melting - Standard Contract Rider No. R1.1
Subtransmission 24 to 41.6kV

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply		**Power Supply**	
Capacity:		**Capacity:**	
Energy		Energy	
1st 100 Hrs. Use	$0.00512	1st 100 Hrs. Use	$0.01380
Excess Hrs. Use	$0.00178	Excess Hrs. Use	$0.00480
Non-Capacity:		**Non-Capacity:**	
Energy	$0.05251	Energy	$0.04723
Surcharges:		Surcharges:	
PSCR	$0.00000	PSCR	$0.00000
REPS	$0.00	REPS	$0.00
Distribution		**Distribution**	
Distribution Charges:		Distribution Charges:	
1st 100 Hrs. Use	$0.00677	1st 100 Hrs. Use	$0.00510
Excess Hrs. Use	$0.00677	Excess Hrs. Use	$0.00510
Surcharges:		Surcharges:	
NDS	$0.000882	NDS	$0.000882
Energy Waste Reduction	$1,238	Energy Waste Reduction	$1,238
IRM	$0.000104	IRM	$0.000104

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line	Monthly	Hours	Present Net	Proposed Net	Increase		Proposed
No.	kW Demand	Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	50	100	$1,565	$1,574	$8.65	0.55%	31.47¢
2	50	200	$1,875	$1,864	-$11.00	-0.59%	18.64¢
3	50	300	$2,185	$2,155	-$30.65	-1.40%	14.36¢
4	50	400	$2,496	$2,445	-$50.30	-2.02%	12.23¢
5	50	500	$2,806	$2,736	-$69.95	-2.49%	10.94¢
6	50	600	$3,116	$3,026	-$89.60	-2.88%	10.09¢
7	50	700	$3,426	$3,317	-$109.25	-3.19%	9.48¢
8							
9	500	100	$4,507	$4,594	$86.50	1.92%	9.19¢
10	500	200	$7,610	$7,500	-$110.00	-1.45%	7.50¢
11	500	300	$10,712	$10,405	-$306.50	-2.86%	6.94¢
12	500	400	$13,814	$13,311	-$503.00	-3.64%	6.66¢
13	500	500	$16,916	$16,217	-$699.50	-4.14%	6.49¢
14	500	600	$20,019	$19,123	-$896.00	-4.48%	6.37¢
15	500	700	$23,121	$22,029	-$1,092.50	-4.73%	6.29¢
16							
17	1,000	100	$7,777	$7,950	$173.00	2.22%	7.95¢
18	1,000	200	$13,981	$13,761	-$220.00	-1.57%	6.88¢
19	1,000	300	$20,186	$19,573	-$613.00	-3.04%	6.52¢
20	1,000	400	$26,390	$25,384	-$1,006.00	-3.81%	6.35¢
21	1,000	500	$32,595	$31,196	-$1,399.00	-4.29%	6.24¢
22	1,000	600	$38,800	$37,008	-$1,792.00	-4.62%	6.17¢
23	1,000	700	$45,004	$42,819	-$2,185.00	-4.86%	6.12¢
24							
25	5,000	100	$33,931	$34,796	$865.00	2.55%	6.96¢
26	5,000	200	$64,954	$63,854	-$1,100.00	-1.69%	6.39¢
27	5,000	300	$95,977	$92,912	-$3,065.00	-3.19%	6.19¢
28	5,000	400	$127,000	$121,970	-$5,030.00	-3.96%	6.10¢
29	5,000	500	$158,023	$151,028	-$6,995.00	-4.43%	6.04¢
30	5,000	600	$189,046	$180,086	-$8,960.00	-4.74%	6.00¢
31	5,000	700	$220,069	$209,144	-$10,925.00	-4.96%	5.98¢
32							
33	10,000	100	$66,624	$68,354	$1,730.00	2.60%	6.84¢
34	10,000	200	$128,670	$126,470	-$2,200.00	-1.71%	6.32¢
35	10,000	300	$190,716	$184,586	-$6,130.00	-3.21%	6.15¢
36	10,000	400	$252,762	$242,702	-$10,060.00	-3.98%	6.07¢
37	10,000	500	$314,808	$300,818	-$13,990.00	-4.44%	6.02¢
38	10,000	600	$376,854	$358,934	-$17,920.00	-4.76%	5.98¢
39	10,000	700	$438,900	$417,050	-$21,850.00	-4.98%	5.96¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Alternative Metal Melting - Standard Contract Rider No. R1.1
Transmission 120kV and above

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson
Page: 48 of 53

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply		**Power Supply**	
Capacity:		**Capacity:**	
Energy		Energy	
1st 100 Hrs. Use	$0.00434	1st 100 Hrs. Use	$0.01169
Excess Hrs. Use	$0.00144	Excess Hrs. Use	$0.00388
Non-Capacity:		**Non-Capacity:**	
Energy	$0.05251	Energy	$0.04723
Surcharges:		Surcharges:	
PSCR	$0.00000	PSCR	$0.00000
REPS	$0.00	REPS	$0.00
Distribution		**Distribution**	
Distribution Charges:		Distribution Charges:	
1st 100 Hrs. Use	$0.00274	1st 100 Hrs. Use	$0.00571
Excess Hrs. Use	$0.00274	Excess Hrs. Use	$0.00571
Surcharges:		Surcharges:	
NDS	$0.000882	NDS	$0.000882
Energy Waste Reduction	$1,238	Energy Waste Reduction	$1,238
IRM	$0.000000	IRM	$0.000000

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line	Monthly	Hours	Present Net	Proposed Net	Increase		Proposed
No.	kW Demand	Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	50	100	$1,540	$1,566	$25.20	1.64%	31.31¢
2	50	200	$1,828	$1,854	$25.85	1.41%	18.54¢
3	50	300	$2,116	$2,143	$26.50	1.25%	14.28¢
4	50	400	$2,404	$2,431	$27.15	1.13%	12.16¢
5	50	500	$2,692	$2,720	$27.80	1.03%	10.88¢
6	50	600	$2,980	$3,008	$28.45	0.95%	10.03¢
7	50	700	$3,268	$3,297	$29.10	0.89%	9.42¢
8							
9	500	100	$4,262	$4,514	$252.00	5.91%	9.03¢
10	500	200	$7,140	$7,399	$258.50	3.62%	7.40¢
11	500	300	$10,019	$10,284	$265.00	2.65%	6.86¢
12	500	400	$12,897	$13,169	$271.50	2.11%	6.58¢
13	500	500	$15,776	$16,054	$278.00	1.76%	6.42¢
14	500	600	$18,655	$18,939	$284.50	1.53%	6.31¢
15	500	700	$21,533	$21,824	$291.00	1.35%	6.24¢
16							
17	1,000	100	$7,285	$7,789	$504.00	6.92%	7.79¢
18	1,000	200	$13,042	$13,559	$517.00	3.96%	6.78¢
19	1,000	300	$18,800	$19,330	$530.00	2.82%	6.44¢
20	1,000	400	$24,557	$25,100	$543.00	2.21%	6.27¢
21	1,000	500	$30,314	$30,870	$556.00	1.83%	6.17¢
22	1,000	600	$36,071	$36,640	$569.00	1.58%	6.11¢
23	1,000	700	$41,828	$42,410	$582.00	1.39%	6.06¢
24							
25	5,000	100	$31,474	$33,994	$2,520.00	8.01%	6.80¢
26	5,000	200	$60,260	$62,845	$2,585.00	4.29%	6.28¢
27	5,000	300	$89,046	$91,696	$2,650.00	2.98%	6.11¢
28	5,000	400	$117,832	$120,547	$2,715.00	2.30%	6.03¢
29	5,000	500	$146,618	$149,398	$2,780.00	1.90%	5.98¢
30	5,000	600	$175,404	$178,249	$2,845.00	1.62%	5.94¢
31	5,000	700	$204,190	$207,100	$2,910.00	1.43%	5.92¢
32							
33	10,000	100	$61,710	$66,750	$5,040.00	8.17%	6.67¢
34	10,000	200	$119,282	$124,452	$5,170.00	4.33%	6.22¢
35	10,000	300	$176,854	$182,154	$5,300.00	3.00%	6.07¢
36	10,000	400	$234,426	$239,856	$5,430.00	2.32%	6.00¢
37	10,000	500	$291,998	$297,558	$5,560.00	1.90%	5.95¢
38	10,000	600	$349,570	$355,260	$5,690.00	1.63%	5.92¢
39	10,000	700	$407,142	$412,962	$5,820.00	1.43%	5.90¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Electric Process Heat - Standard Contract Rider No. R1.2
Secondary Voltage Level

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply		**Power Supply**	
Capacity:		**Capacity:**	
Energy		Energy	
1st 100 Hrs. Use	$0.00706	1st 100 Hrs. Use	$0.01902
Excess Hrs. Use	$0.00267	Excess Hrs. Use	$0.00719
Non-Capacity:		**Non-Capacity:**	
Energy	$0.05251	Energy	$0.04723
Surcharges:		Surcharges:	
PSCR	$0.00000	PSCR	$0.00000
REPS	$0.00	REPS	$0.00
Distribution		**Distribution**	
Distribution Charges:		Distribution Charges:	
1st 100 Hrs. Use	$0.05288	1st 100 Hrs. Use	$0.05917
Excess Hrs. Use	$0.05288	Excess Hrs. Use	$0.05917
Surcharges:		Surcharges:	
NDS	$0.000882	NDS	$0.000882
Energy Waste Reduction	$1,238	Energy Waste Reduction	$1,238
IRM	$0.000555	IRM	$0.000555

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line	Monthly	Hours	Present Net	Proposed Net	Increase		Proposed
No.	kW Demand	Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	50	100	$1,807	$1,872	$64.85	3.59%	37.45¢
2	50	200	$2,355	$2,447	$92.50	3.93%	24.47¢
3	50	300	$2,902	$3,023	$120.15	4.14%	20.15¢
4	50	400	$3,450	$3,598	$147.80	4.28%	17.99¢
5	50	500	$3,997	$4,173	$175.45	4.39%	16.69¢
6	50	600	$4,545	$4,748	$203.10	4.47%	15.83¢
7	50	700	$5,092	$5,323	$230.75	4.53%	15.21¢
8							
9	500	100	$6,932	$7,581	$648.50	9.35%	15.16¢
10	500	200	$12,407	$13,332	$925.00	7.46%	13.33¢
11	500	300	$17,882	$19,084	$1,201.50	6.72%	12.72¢
12	500	400	$23,357	$24,835	$1,478.00	6.33%	12.42¢
13	500	500	$28,832	$30,586	$1,754.50	6.09%	12.23¢
14	500	600	$34,307	$36,338	$2,031.00	5.92%	12.11¢
15	500	700	$39,781	$42,089	$2,307.50	5.80%	12.03¢
16							
17	1000	100	$12,627	$13,924	$1,297.00	10.27%	13.92¢
18	1,000	200	$23,576	$25,426	$1,850.00	7.85%	12.71¢
19	1,000	300	$34,526	$36,929	$2,403.00	6.96%	12.31¢
20	1,000	400	$45,476	$48,432	$2,956.00	6.50%	12.11¢
21	1,000	500	$56,425	$59,934	$3,509.00	6.22%	11.99¢
22	1,000	600	$67,375	$71,437	$4,062.00	6.03%	11.91¢
23	1,000	700	$78,325	$82,940	$4,615.00	5.89%	11.85¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Electric Process Heat - Standard Contract Rider No. R1.2
Primary Less Than 24kV

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply		**Power Supply**	
Capacity:		**Capacity:**	
Energy		Energy	
1st 100 Hrs. Use	$0.00525	1st 100 Hrs. Use	$0.01415
Excess Hrs. Use	$0.00191	Excess Hrs. Use	$0.00515
Non-Capacity:		**Non-Capacity:**	
Energy	$0.05251	Energy	$0.04723
Surcharges:		Surcharges:	
PSCR	$0.00000	PSCR	$0.00000
REPS	$0.00	REPS	$0.00
Distribution		**Distribution**	
Distribution Charges:		Distribution Charges:	
1st 100 Hrs. Use	$0.01832	1st 100 Hrs. Use	$0.01926
Excess Hrs. Use	$0.01832	Excess Hrs. Use	$0.01926
Surcharges:		Surcharges:	
NDS	$0.000882	NDS	$0.000882
Energy Waste Reduction	$1,238	Energy Waste Reduction	$1,238
IRM	$0.000229	IRM	$0.000229

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line	Monthly	Hours	Present Net	Proposed Net	Increase		Proposed
No.	kW Demand	Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	50	100	$1,624	$1,647	$22.80	1.40%	32.93¢
2	50	200	$1,993	$2,011	$17.30	0.87%	20.11¢
3	50	300	$2,362	$2,374	$11.80	0.50%	15.83¢
4	50	400	$2,732	$2,738	$6.30	0.23%	13.69¢
5	50	500	$3,101	$3,102	$0.80	0.03%	12.41¢
6	50	600	$3,470	$3,466	-$4.70	-0.14%	11.55¢
7	50	700	$3,839	$3,829	-$10.20	-0.27%	10.94¢
8							
9	500	100	$5,098	$5,326	$228.00	4.47%	10.65¢
10	500	200	$8,790	$8,963	$173.00	1.97%	8.96¢
11	500	300	$12,483	$12,601	$118.00	0.95%	8.40¢
12	500	400	$16,175	$16,238	$63.00	0.39%	8.12¢
13	500	500	$19,868	$19,876	$8.00	0.04%	7.95¢
14	500	600	$23,560	$23,513	-$47.00	-0.20%	7.84¢
15	500	700	$27,253	$27,151	-$102.00	-0.37%	7.76¢
16							
17	1,000	100	$8,957	$9,413	$456.00	5.09%	9.41¢
18	1,000	200	$16,342	$16,688	$346.00	2.12%	8.34¢
19	1,000	300	$23,727	$23,963	$236.00	0.99%	7.99¢
20	1,000	400	$31,112	$31,238	$126.00	0.40%	7.81¢
21	1,000	500	$38,497	$38,513	$16.00	0.04%	7.70¢
22	1,000	600	$45,883	$45,789	-$94.00	-0.20%	7.63¢
23	1,000	700	$53,268	$53,064	-$204.00	-0.38%	7.58¢
24							
25	5,000	100	$39,833	$42,113	$2,280.00	5.72%	8.42¢
26	5,000	200	$76,759	$78,489	$1,730.00	2.25%	7.85¢
27	5,000	300	$113,684	$114,864	$1,180.00	1.04%	7.66¢
28	5,000	400	$150,610	$151,240	$630.00	0.42%	7.56¢
29	5,000	500	$187,535	$187,615	$80.00	0.04%	7.50¢
30	5,000	600	$224,461	$223,991	-$470.00	-0.21%	7.47¢
31	5,000	700	$261,386	$260,366	-$1,020.00	-0.39%	7.44¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Electric Process Heat - Standard Contract Rider No. R1.2
Subtransmission 24 to 41.6kV

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply		**Power Supply**	
Capacity:		**Capacity:**	
Energy		Energy	
1st 100 Hrs. Use	$0.00512	1st 100 Hrs. Use	$0.01380
Excess Hrs. Use	$0.00178	Excess Hrs. Use	$0.00480
Non-Capacity:		**Non-Capacity:**	
Energy	$0.05251	Energy	$0.04723
Surcharges:		Surcharges:	
PSCR	$0.00000	PSCR	$0.00000
REPS	$0.00	REPS	$0.00
Distribution		**Distribution**	
Distribution Charges:		Distribution Charges:	
1st 100 Hrs. Use	$0.00677	1st 100 Hrs. Use	$0.00510
Excess Hrs. Use	$0.00677	Excess Hrs. Use	$0.00510
Surcharges:		Surcharges:	
NDS	$0.000882	NDS	$0.000882
Energy Waste Reduction	$1,238	Energy Waste Reduction	$1,238
IRM	$0.000104	IRM	$0.000104

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line	Monthly	Hours	Present Net	Proposed Net	Increase		Proposed
No.	kW Demand	Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	50	100	$1,565	$1,574	$8.65	0.55%	31.47¢
2	50	200	$1,875	$1,864	-$11.00	-0.59%	18.64¢
3	50	300	$2,185	$2,155	-$30.65	-1.40%	14.36¢
4	50	400	$2,496	$2,445	-$50.30	-2.02%	12.23¢
5	50	500	$2,806	$2,736	-$69.95	-2.49%	10.94¢
6	50	600	$3,116	$3,026	-$89.60	-2.88%	10.09¢
7	50	700	$3,426	$3,317	-$109.25	-3.19%	9.48¢
8							
9	500	100	$4,507	$4,594	$86.50	1.92%	9.19¢
10	500	200	$7,610	$7,500	-$110.00	-1.45%	7.50¢
11	500	300	$10,712	$10,405	-$306.50	-2.86%	6.94¢
12	500	400	$13,814	$13,311	-$503.00	-3.64%	6.66¢
13	500	500	$16,916	$16,217	-$699.50	-4.14%	6.49¢
14	500	600	$20,019	$19,123	-$896.00	-4.48%	6.37¢
15	500	700	$23,121	$22,029	-$1,092.50	-4.73%	6.29¢
16							
17	1,000	100	$7,777	$7,950	$173.00	2.22%	7.95¢
18	1,000	200	$13,981	$13,761	-$220.00	-1.57%	6.88¢
19	1,000	300	$20,186	$19,573	-$613.00	-3.04%	6.52¢
20	1,000	400	$26,390	$25,384	-$1,006.00	-3.81%	6.35¢
21	1,000	500	$32,595	$31,196	-$1,399.00	-4.29%	6.24¢
22	1,000	600	$38,800	$37,008	-$1,792.00	-4.62%	6.17¢
23	1,000	700	$45,004	$42,819	-$2,185.00	-4.86%	6.12¢
24							
25	5,000	100	$33,931	$34,796	$865.00	2.55%	6.96¢
26	5,000	200	$64,954	$63,854	-$1,100.00	-1.69%	6.39¢
27	5,000	300	$95,977	$92,912	-$3,065.00	-3.19%	6.19¢
28	5,000	400	$127,000	$121,970	-$5,030.00	-3.96%	6.10¢
29	5,000	500	$158,023	$151,028	-$6,995.00	-4.43%	6.04¢
30	5,000	600	$189,046	$180,086	-$8,960.00	-4.74%	6.00¢
31	5,000	700	$220,069	$209,144	-$10,925.00	-4.96%	5.98¢
32							
33	10,000	100	$66,624	$68,354	$1,730.00	2.60%	6.84¢
34	10,000	200	$128,670	$126,470	-$2,200.00	-1.71%	6.32¢
35	10,000	300	$190,716	$184,586	-$6,130.00	-3.21%	6.15¢
36	10,000	400	$252,762	$242,702	-$10,060.00	-3.98%	6.07¢
37	10,000	500	$314,808	$300,818	-$13,990.00	-4.44%	6.02¢
38	10,000	600	$376,854	$358,934	-$17,920.00	-4.76%	5.98¢
39	10,000	700	$438,900	$417,050	-$21,850.00	-4.98%	5.96¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Electric Process Heat - Standard Contract Rider No. R1.2
Transmission 120kV and above

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isaksor
Page: 52 of 53

Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply		**Power Supply**	
Capacity:		**Capacity:**	
Energy		Energy	
1st 100 Hrs. Use	$0.00434	1st 100 Hrs. Use	$0.01169
Excess Hrs. Use	$0.00144	Excess Hrs. Use	$0.00388
Non-Capacity:		**Non-Capacity:**	
Energy	$0.05251	Energy	$0.04723
Surcharges:		Surcharges:	
PSCR	$0.00000	PSCR	$0.00000
REPS	$0.00	REPS	$0.00
Distribution		**Distribution**	
Distribution Charges:		Distribution Charges:	
1st 100 Hrs. Use	$0.00274	1st 100 Hrs. Use	$0.00571
Excess Hrs. Use	$0.00274	Excess Hrs. Use	$0.00571
Surcharges:		Surcharges:	
NDS	$0.000882	NDS	$0.000882
Energy Waste Reduction	$1,238	Energy Waste Reduction	$1,238
IRM	$0.000000	IRM	$0.000000

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line	Monthly	Hours	Present Net	Proposed Net	Increase		Proposed
No.	kW Demand	Use	Monthly Bill	Monthly Bill	Amount	Percent	Unit Cost
1	50	100	$1,540	$1,566	$25.20	1.64%	31.31¢
2	50	200	$1,828	$1,854	$25.85	1.41%	18.54¢
3	50	300	$2,116	$2,143	$26.50	1.25%	14.28¢
4	50	400	$2,404	$2,431	$27.15	1.13%	12.16¢
5	50	500	$2,692	$2,720	$27.80	1.03%	10.88¢
6	50	600	$2,980	$3,008	$28.45	0.95%	10.03¢
7	50	700	$3,268	$3,297	$29.10	0.89%	9.42¢
8							
9	500	100	$4,262	$4,514	$252.00	5.91%	9.03¢
10	500	200	$7,140	$7,399	$258.50	3.62%	7.40¢
11	500	300	$10,019	$10,284	$265.00	2.65%	6.86¢
12	500	400	$12,897	$13,169	$271.50	2.11%	6.58¢
13	500	500	$15,776	$16,054	$278.00	1.76%	6.42¢
14	500	600	$18,655	$18,939	$284.50	1.53%	6.31¢
15	500	700	$21,533	$21,824	$291.00	1.35%	6.24¢
16							
17	1,000	100	$7,285	$7,789	$504.00	6.92%	7.79¢
18	1,000	200	$13,042	$13,559	$517.00	3.96%	6.78¢
19	1,000	300	$18,800	$19,330	$530.00	2.82%	6.44¢
20	1,000	400	$24,557	$25,100	$543.00	2.21%	6.27¢
21	1,000	500	$30,314	$30,870	$556.00	1.83%	6.17¢
22	1,000	600	$36,071	$36,640	$569.00	1.58%	6.11¢
23	1,000	700	$41,828	$42,410	$582.00	1.39%	6.06¢
24							
25	5,000	100	$31,474	$33,994	$2,520.00	8.01%	6.80¢
26	5,000	200	$60,260	$62,845	$2,585.00	4.29%	6.28¢
27	5,000	300	$89,046	$91,696	$2,650.00	2.98%	6.11¢
28	5,000	400	$117,832	$120,547	$2,715.00	2.30%	6.03¢
29	5,000	500	$146,618	$149,398	$2,780.00	1.90%	5.98¢
30	5,000	600	$175,404	$178,249	$2,845.00	1.62%	5.94¢
31	5,000	700	$204,190	$207,100	$2,910.00	1.43%	5.92¢
32							
33	10,000	100	$61,710	$66,750	$5,040.00	8.17%	6.67¢
34	10,000	200	$119,282	$124,452	$5,170.00	4.33%	6.22¢
35	10,000	300	$176,854	$182,154	$5,300.00	3.00%	6.07¢
36	10,000	400	$234,426	$239,856	$5,430.00	2.32%	6.00¢
37	10,000	500	$291,998	$297,558	$5,560.00	1.90%	5.95¢
38	10,000	600	$349,570	$355,260	$5,690.00	1.63%	5.92¢
39	10,000	700	$407,142	$412,962	$5,820.00	1.43%	5.90¢

Michigan Public Service Commission
DTE Electric Company
Staff Comparison of Present and Proposed Monthly Bills
Interruptible Supply Rider - Standard Contract Rider No. R10

Case No.: U-21534
Exhibit: S-6
Schedule: F4
Witness: D.W. Isakson
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Present Rates and Current Surcharges:		Proposed Rates and Current Surcharges:	
Power Supply		**Power Supply**	
Non-Capacity:		**Non-Capacity:**	
Administrative Charge	$0.00000	Administrative Charge	$0.00000
MISO Energy Charge	$0.03935	MISO Energy Charge	$0.03935
Net Trans MISO Mkt	$0.00767	Net Trans MISO Mkt	$0.00769
Voltage Level Service Adder:		Voltage Level Service Adder:	
Primary - 5.50% of HPSC	$0.00259	Primary - 5.50% of HPSC	$0.00259
Subtransmission - 3.73% of HPSC	$0.00175	Subtransmission - 3.73% of HPSC	$0.00175
Transmission - 1.56% of HPSC	$0.00073	Transmission - 1.56% of HPSC	$0.00073
Surcharges:		Surcharges:	
REPS	$0.00	REPS	$0.00
Distribution		**Distribution**	
Service Charge PV:	$70	Service Charge:	$70
Service Charge SV:	$375	Service Charge SV:	$375
Service Charge TV:	$375	Service Charge TV:	$375
Distribution Charges:		Distribution Charges:	
Primary	$6.15	Demand	$6.36
Subtransmission	$1.96	Demand	$1.74
Transmission	$0.86	Demand	$0.94
Surcharges:		Surcharges:	
NDS	$0.000882	NDS	$0.000882
Energy Waste Reduction	$1,238	Energy Waste Reduction	$1,238
IRM		IRM	
Primary	$0.0727		$0.0727
Subtrans	$0.0312		$0.0312
Transmission	$0.0000		$0.0000

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line No.	Monthly kW Demand	Hours Use	Present Net Monthly Bill	Proposed Net Monthly Bill	Increase Amount	Increase Percent	Proposed Unit Cost
Primary Less Than 24kV							
1	10,000	200	$164,511	$166,653	$2,142	1.30%	8.33¢
2	10,000	300	$214,999	$217,163	$2,163	1.01%	7.24¢
3	10,000	400	$265,487	$267,672	$2,184	0.82%	6.69¢
4	10,000	500	$315,975	$318,181	$2,206	0.70%	6.36¢
Subtransmission 24 to 41.6kV							
5	10,000	200	$120,837	$118,678	-$2,159	-1.79%	5.93¢
6	10,000	300	$170,493	$168,355	-$2,138	-1.25%	5.61¢
7	10,000	400	$220,148	$218,031	-$2,117	-0.96%	5.45¢
8	10,000	500	$269,804	$267,708	-$2,096	-0.78%	5.35¢
Transmission 120kV and Up							
9	10,000	200	$107,484	$108,325	$841	0.78%	5.42¢
10	10,000	300	$156,120	$156,980	$861	0.55%	5.23¢
11	10,000	400	$204,755	$205,636	$881	0.43%	5.14¢
12	10,000	500	$253,391	$254,292	$902	0.36%	5.09¢

Michigan Public Service Commission
DTE Electric Company
Staff Calculation of Voltage Level Distribution Charges

Case No.: U-21534
Exhibit: S-6
Schedule: F5
Witness: D.W. Isakson
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Line No.		(a) Present Base Delivery Revenue ($000)	(b) Exh A-16, Sch F-1.2 Line 28 Revenue Def/(Suf) ($000)	(c) (a) + (b) Target Base Revenue ($000)	(d) Proposed Service Charge Revenue ($000)	(e) Substation Credit ($000)	(f) (c) - (d) - (e) Target Distribution Demand Rev ($000)	(g) Distribution Demand kW	(h) (f) ÷ (g) Primary Voltage Distribution Charge $/kW
1	**Primary Voltage**								
2	Rate								
3	D11	129,470						20,713,457	
4	D6.2	16,557						2,655,419	
5	D8	6,913						1,106,505	
6	D10	701						101,535	
7	R1.1/R1.2	5,771						937,466	
8	R3	492						78,089	
9	R10	1,110						178,736	
10	Primary Voltage Total	161,015	5,528	166,542	2,567	0	163,975	25,771,207	6.36
11									
12		**Present Base Delivery Revenue**	**Revenue Def/(Suf)**	**Target Base Revenue**	**Service Charge Revenue**	**Substation Credit**	**Target Distribution Demand Rev**	**Distribution Demand**	**Subtransmission Voltage Distribution Charge**
13		($000)	($000)	($000)	($000)	($000)	($000)	kW	$/kW
14	**Subtransmission Voltage**								
15	Rate								
16	D11	7,200						3,677,382	
17	D6.2	1,983						999,979	
18	D8	409						196,004	
19	R1.1/R1.2	520						219,761	
20	R3	968						483,801	
21	R10	149						65,584	
22	Subtransmission Voltage Total	11,229	(1,313)	9,916	526	(439)	9,829	5,642,510	1.74
23									
24		**Present Base Delivery Revenue**	**Revenue Def/(Suf)**	**Target Base Revenue**	**Service Charge Revenue**	**Substation Credit**	**Target Distribution Demand Rev**	**Distribution Demand**	**Transmission Voltage Distribution Charge**
25		($000)	($000)	($000)	($000)	($000)	($000)	kW	$/kW
26	**Transmission Voltage**								
27	Rate								
28	D11	7,993						10,297,494	
29	D6.2	0						0	
30	D8	170						277,821	
31	R1.1/R1.2	174						379,377	
32	R3	84						92,427	
33	R10	2,991						3,790,403	
34	Transmission Voltage Total	11,411	1,386	12,797	471	(1,663)	13,989	14,837,522	0.94

Staff Proposed Tariff Sheet Corrections

1. Sheet No. D-14.03:
    a. Issue: “In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, three-wire service may be taken” (missing period at end of the sentence.)
    b. Correction: “In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, three-wire service may be taken.”
2. Sheet No. D-40.00:
    a. Issue: “…Midwest ISO energy market are abovet he D8 energy rate…”
    b. Correction: “Midwest ISO energy market are above the D8 energy rate…”
3. Sheet No. D-48.02:
    a. Issue: Under Delivery Charges “Subtrassmission” (“subtransmission” is spelled incorrectly.)
    b. Correction: “Subtransmission.”
4. Sheet No. D-48.12 (Company proposed tariff):
    a. Issue: Under Delivery Charges “Subtrassmission” (“subtransmission” is spelled incorrectly.)
    b. Correction: “Subtransmission.”
5. Sheet No. D-57.00:
    a. Issue: Extra period after Notice of Interruption paragraph.
    b. Correction: remove period.
6. Sheet No. D-67.00:
    a. Issue: “Modeling standby and supplemental rate impacts is dependant on several factors including customer load profile and type of generator(s) and other considerations.” (“dependent” is spelled incorrectly.)
    b. Correction: “Modeling standby and supplemental rate impacts is dependent on several factors including customer load profile and type of generator(s) and other considerations.”

Michigan Public Service Commission
DTE Electric Company
Staff's Projected 2025 Capacity-Related Generation Cost & Energy Sales Revenue Net of Fuel Cost
(in $000's)

Case No.: U-21534
Exhibit: S-6
Schedule: P3
Witness: M. J. Pung
Page: 1 of 1

Line No.	(a) Description		(b)
1	**Capacity-Related Generation Cost**		
2	PURPA/PA2 Contracts	$	8,892
3	PA295/342 Renewable - Company Owned	$	95,126
4	PA295/342 Renewable - PPA Wind	$	30,503
5	PA295/342 Renewable - PPA LFG/Biomass	$	4,840
6	Capacity Purchases	$	(1,308)
7	**Total 2025 Projected Capacity-Related Generation Costs in PSCR**	**$**	**138,054**
8			
9			
10	**Energy Sales Revenue**		
11	Projected 2025 Energy Market Sales	$	2,180,036
12	Projected 2025 Off-System Energy Sales	$	-
13	Projected 2025 Unit Specific Bilateral Energy Sales	$	-
14	Projected 2025 Regulation, Spinning, and Supplemental Ancillary Services Sales	$	4,343
15	Projected 2025 Schedule 2 Reactive Ancillary Services Revenue	$	-
16	Total Projected 2025 Energy Sales Revenue	$	2,184,379
17			
18			
19	**Fuel Cost**		
20	Fuel	$	1,201,032
21	Total Projected 2025 Fuel Generation Expense	$	1,201,032
22			
23	**Projected 2025 Energy Sales Revenue Net of Fuel Costs**	**$**	**983,347**
24	2023 Reconciliation of Net Sales Benefit Difference	$	(168,073)
25	**Projected 2025 Energy Sales Revenue Net of Fuel Related Costs including 2023 Reconciliation**	**$**	**815,274**

Michigan Public Service Commission
DTE Electric Company
Staff's 2023 Energy Sales Revenue Net of Fuel Cost
(in $000's)

Case No.: U-21534
Exhibit: S-6
Schedule: P4
Witness: M.J. Pung
Page: 1 of 1

Line No.	(a) Description	(b) Order U-20836	(c) 2023 Actual	(d) Variance
	Energy Sales Revenue			
1	Energy Market Sales	$ 1,680,882	$ 1,184,410	$ (496,473)
2	Off-System Energy Sales	$ -	$ -	$ -
3	Unit Specific Bilateral Energy Sales	$ -	$ -	$ -
4	Regulation, Spinning, and Supplemental Ancillary Services Sales	$ 915	$ 3,282	$ 2,367
5	Schedule 2 Reactive Ancillary Services Revenue	$ 10,776	$ 704	$ (10,072)
6	Total Energy Sales Revenue	$ 1,692,573	$ 1,188,395	$ (504,178)
7				
8				
9	**Fuel Related Generation Cost**			
10	Total Fuel & Fuel-Related Generation Expense	$ 1,004,837	$ 1,020,096	$ 15,260
11	2020 Reconciliation of Net Sales Benefit Difference	$ (351,365)		
12	**Energy Sales Revenue Net of Fuel Related Costs**	**$ 336,372**	**$ 168,299**	**$ (168,073)**

Michigan Public Service Commission
DTE Electric Company
Infrastructure Recovery Mechanism
Staff's Incremental Revenue Requirement - Distribution Operations
($000)

Case No.: U-21534
Exhibit: S-6
Schedule: X4
Witness: M. J. Pung
Page: 1 of 2

Line No.	(a) Description	(b) Source	(c) 13 mos. ending 12/31/2024	(d) 12 mos. ending 12/31/2025	(e) 12 mos. ending 12/31/2026	(f) 12 mos. ending 12/31/2027	(g) Total
1	**PLANT IN SERVICE**		(1) *(prev. approved)*	(1) *(prev. approved)*	*(proposed)*	*(proposed)*	
2							
3	Conversions	Exh A-33, Sch X1, Line 10	$ 1,206	$ 139,761	$ 188,953	$ 227,500	$ 557,420
4	Subtransmission Redesign & Rebuild	Exh A-33, Sch X1, Line 11	4,159	41,750	54,705	62,500	163,114
5	Breaker Replacement Program	Exh A-33, Sch X1, Line 12	13,680	12,628	15,000	15,000	56,309
6	URD Replacement Program	Exh A-33, Sch X1, Line 13	14,625	13,500	15,000	20,000	63,125
7	Distribution Automation (2)	Exh A-33, Sch X1, Line 14	26,406	24,375	105,000	180,000	335,781
8	Pole and Pole Top Maintenance & Modernization	Exh A-33, Sch X1, Line 15	-	-	150,000	200,000	350,000
9	**Total Plant In Service**		**$ 60,077**	**$ 232,015**	**$ 528,658**	**$ 705,000**	**$ 1,525,749**
10							
11	**Net Rate Base**						
12	Cumulative Plant In Service	Prior Yr plus L9	$ 60,077	$ 292,092	$ 820,749	$ 1,525,749	
13	Accumulated Depreciation	Prior Yr less L20	(1,227)	(8,417)	(31,140)	(79,052)	
14	Accum. Deferred Taxes	P2, L7	(266)	(1,781)	(6,409)	(15,708)	
15	Ending Net Rate Base	Sum of L12 thru L14	$ 58,584	$ 281,893	$ 783,201	$ 1,430,989	
16	Average Net Rate Base	L15 (PY+CY)/2	29,292	170,239	532,547	1,107,095	
17							
18	**Total Cost of Service**						
19	Return on Net Rate Base	L16 * Pre-tax rate of return (3)	2,551	14,825	46,812	97,315	161,503
20	Depreciation (1/2 yr conv.)	(4)	1,227	7,191	22,723	47,912	79,052
21	Property Taxes	P2, L30 + P2, L47	-	1,684	8,871	22,623	33,178
22	Total Cost of Service (COS) Requirement	L19 thru L21	$ 3,778	$ 23,700	$ 78,405	$ 167,851	$ 273,733

(1) 2024 and 2025 revenue requirement calculations utilize the same plant in service amounts, rate of return, depreciation rates, and property tax millage rates as those approved in the IRM for DTE Electric Rate Case No. U-21297

(2) Previously known as 4.8 kV Circuit Automation

(3) Staff's Pre-tax rate of return for 2026
From Staff Exhibit S-4, Schedule D1

	Staff's Weighted Cost	Pre-tax Multiplier	Staff's Pre-tax Rate of Return	
Long-Term Debt	2.11%	1.00000	2.11%	
Common Equity	4.95%	1.34964	6.68%	
Total	7.06%		8.79%	Staff's Projected

(4) 2026 depreciation rate for Distribution Plant is 4.11% per Witness Uzenski Exhibit A-13, Schedule C6. Page 2, Line 9

Michigan Public Service Commission
DTE Electric Company
Infrastructure Recovery Mechanism
Staff's Incremental Revenue Requirement - Distribution Operations
($000)

Case No.: U-21534
Exhibit: S-6
Schedule: X4
Witness: M. J. Pung
Page: 2 of 2

Line No.	(a) Description	(b) Source	(c) 13 mos. ending 12/31/2024	(d) 12 mos. ending 12/31/2025	(e) 12 mos. ending 12/31/2026	(f) 12 mos. ending 12/31/2027
			(1) *(prev. approved)*	(1) *(prev. approved)*	*(extension)*	*(extension)*
1	**Deferred Tax Expense**					
2	Tax Depreciation	Line 17	2,253	13,037	40,585	83,804
3	Book Depreciation	P1, L20	1,227	7,191	22,723	47,912
4	Timing Difference	Line 2 - Line 3	1,026	5,846	17,862	35,892
5	Deferred Tax Expense	Line 4 X 25.91%	$ 266	$ 1,515	$ 4,628	$ 9,300
6						
7	Accum. Deferred Tax Expense	Prior Yr plus L5	$ 266	$ 1,781	$ 6,409	$ 15,708
8						
9	**Tax Depreciation**		Year 1	Year 2	Year 3	Year 4
10	MACRS Tax Depr Rate (20 Year)		3.750%	7.219%	6.677%	6.177%
11						
12	Year 1 Additions	P1, L9 x P2, L10	2,253	4,337	4,011	3,711
13	Year 2 Additions	P1, L9 x P2, L10		8,701	16,749	15,492
14	Year 3 Additions	P1, L9 x P2, L10			19,825	38,164
15	Year 4 Additions	P1, L9 x P2, L10				26,438
16	Year 5 Additions	P1, L9 x P2, L10	-	-	-	-
17	Total Tax Depreciation	Sum of L12 thru L16	$ 2,253	$ 13,037	$ 40,585	$ 83,804
18						
19	**Property Tax - Plant In Service**		Year 1	Year 2	Year 3	Year 4
20	Factor	WP-SLW-1	0.96	0.93	0.90	0.86
21						
22	Year 1 Taxable Value	P1, L9 x P2, L20 x 50%	28,837	27,936	27,034	25,833
23	Year 2 Taxable Value	P1, L9 x P2, L20 x 50%		111,367	107,887	104,407
24	Year 3 Taxable Value	P1, L9 x P2, L20 x 50%			253,756	245,826
25	Year 4 Taxable Value	P1, L9 x P2, L20 x 50%				338,400
26	Year 5 Taxable Value	P1, L9 x P2, L20 x 50%	-	-	-	-
27	Total Taxable Value	Sum of L22 thru L26	$ 28,837	$ 139,303	$ 388,677	$ 714,466
28	Millage	Exh. A-13, Sch C7.1 (5)	57.500	57.500	56.000	56.000
29	Property Tax Assessed	L27 x L28	$ 1,658	$ 8,010	$ 21,766	$ 40,010
30	Property Tax Expense (Year lag)			$ 1,658	$ 8,010	$ 21,766
31						
32	**Property Tax - CWIP**		Year 1	Year 2	Year 3	Year 4
33	Cumulative Capital Investment	Prior Yr plus Exh A-33, Sch X1, L8	$ 61,865	$ 351,999	$ 881,999	$ 1,601,999
34	Cumulative Plant in Service	P1, L12	60,077	292,092	820,749	1,525,749
35	Cumulative CWIP	Line 33 - Line 34	1,788	59,908	61,250	76,250
36						
37	Factor	Exh. A-13, Sch C7.1	0.50	0.50	0.50	0.50
38						
39	Year 1 Taxable Value	P2, L35 x P2, L37 x 50%	447			
40	Year 2 Taxable Value	P2, L35 x P2, L37 x 50%		14,977		
41	Year 3 Taxable Value	P2, L35 x P2, L37 x 50%			15,313	
42	Year 4 Taxable Value	P2, L35 x P2, L37 x 50%				19,063
43	Year 5 Taxable Value	P2, L35 x P2, L37 x 50%	-	-	-	-
44	Total Taxable Value	Sum of L39 thru L43	$ 447	$ 14,977	$ 15,313	$ 19,063
45	Millage	Exh. A-13, Sch C7.1 (1)	57.500	57.500	56.000	56.000
46	Property Tax Assessed	L44 x L45	$ 26	$ 861	$ 858	$ 1,068
47	Property Tax Expense (Year lag)			$ 26	$ 861	$ 858

(1) 2024 and 2025 revenue requirement calculations utilize the same plant in service amounts, rate of return, depreciation rates, and property tax millage rates as those approved in the IRM for DTE Electric Rate Case No. U-21297

Michigan Public Service Commission
DTE Electric Company
Infrastructure Recovery Mechanism
Staff's Incremental Revenue Requirement - Distribution Operations
Example of $1.0 MM Under Investment
($000)

Case No.: U-21534
Exhibit: S-6
Schedule: X5
Witness: M. J. Pung
Page: 1 of 2

Line No.	(a) Description	(b) Source	(c) Year 1
1	**PLANT IN SERVICE**		
2	Capital Under Investment		$ (1,000)
3	**Total Plant In Service**		**$ (1,000)**
4			
5	**Net Rate Base**		
6	Cumulative Plant In Service	Prior Yr plus L3	$ (1,000)
7	Accumulated Depreciation	Prior Yr less L14	21
8	Accum. Deferred Taxes	P2, L7	5
9	Ending Net Rate Base	Sum of L6 thru L8	$ (975)
10	Average Net Rate Base	L9 (PY+CY)/2	(487)
11			
12	**Total Cost of Service**		
13	Return on Net Rate Base	(1)	(43)
14	Depreciation (1/2 yr conv.)	(2)	(21)
15	Property Taxes	(3)	-
16	Total Cost of Service (COS) Requirement	L13 thru L15	$ (63)

(1) The return on net rate base is determined using a permanent capital per-tax rate of return as calculated on Exhibit S-6, Schedule X4
(2) Depreciation rate for Distribution Plant is 4.11% per Witness Uzenski Exhibit A-13, Schedule C6. Page 2, Line 9
(3) Property tax epense is assessed based on asset balances at end of year. As such, there is no associated property tax in a one year view.

Michigan Public Service Commission
DTE Electric Company
Infrastructure Recovery Mechanism
Staff's Incremental Revenue Requirement - Distribution Operations
Example of $1.0 MM Under Investment
($000)

Case No.: U-21534
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Schedule: X5
Witness: M. J. Pung
Page: 2 of 2

Line No.	(a) Description	(b) Source	(c) Year 1
1	**Deferred Tax Expense**		
2	Tax Depreciation	Line 19	(38)
3	Book Depreciation	P1, L14	(21)
4	Timing Difference	Line 2 - Line 3	(17)
5	Deferred Tax Expense	Line 4 X 25.91%	$ (5)
6			
7	Accum. Deferred Tax Expense	Prior Yr plus L5	$ (5)
8			
9			
10			
11	**Tax Depreciation**		
12	MACRS Tax Depr Rate (20 Year)		3.750%
13			
14	Year 1 Additions	P1, L3 x P2, L12	(38)
15	Year 2 Additions	P1, L3 x P2, L12	
16	Year 3 Additions	P1, L3 x P2, L12	
17	Year 4 Additions	P1, L3 x P2, L12	
18	Year 5 Additions	P1, L3 x P2, L12	-
19	Total Tax Depreciation	Sum of L14 thru L18	$ (38)

DTE Electric Company
Infrastructure Recovery Mechanism - Distribution Operations
Staff's Incremental Revenue Requirement by Voltage Class
(thousands of dollars)

IRM REVENUE REQUIREMENT

Cost of Service Study

DISTRIBUTION COSTS

Case No.: U-21534
Exhibit: S-6
Schedule: X6
Witness: M. J. Pung
Page: 1 of 1

		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
		Total Electric	Residential Secondary	Commercial Secondary	Primary	Subtransmission	Transmission	D-9 OPL Residential	D-9 OPL Commercial	E-1 St Lght	E-2 Signals
	2024 - 13 mos. Ending 12/31/2024 /1	3,778									
1	IRM Revenue Requirement (Previously Approved)	3,778	2,311	1,008	301	29	-	6	13	107	3
	2025 - 12 mos. Ending 12/31/2025 /1	23,700									
2	IRM Revenue Requirement (Previously Approved)	23,700	14,502	6,323	1,886	184	-	35	79	673	16
	Allocation Factors										
3	PIS - Dist Direct 521T (521 excl Transmission)	100.000%	61.123%	27.471%	7.588%	0.621%	0.000%	0.142%	0.329%	2.657%	0.071%
	2026 - 12 mos. Ending 12/31/2026 /2	78,405									
4	IRM Revenue Requirement (Proposed)	78,405	47,924	21,538	5,949	487	-	111	258	2,083	55
	2027 - 12 mos. Ending 12/31/2027 /3	167,851									
5	IRM Revenue Requirement (Proposed)	167,851	102,596	46,110	12,736	1,043	-	238	552	4,459	119

1/- Amounts match the IRM Revenue Requirement by Class approved in the December 1, 2023 Order in Case No. U-21297
2/- Per Exhibit A-33, Schedule X4 page 1, line 22, col. (e)
3/- Per Exhibit A-33, Schedule X4 page 1, line 22, col. (f)

MPSC Case No: U-21534

Requester: Staff

Question No.: TMS-1.1a

Respondent: M. Cooper

Page: 1 of 1

Question: Relating to incentive compensation for the projected test year:

a. If no financial metrics are achieved, and all non-financial (Operational) metrics are achieved at target, what would the total office and non-officer payout be that would be reflected in the Revenue Requirement? Please list both separately.

Answer: If all financial measures are below Threshold performance (i.e., no payouts) and Target performance is achieved for all non-financial measures (i.e., Operating measures), the expense included in the revenue requirements would be as reflected in the table below.

Employee Classification	**Operating Measures** ($000's)
Non-Officers	17,867
Officers	2,404
Total	20,271

Attachment: None

Table 3

	LTIP	AIP	REP	Total
		(000's Omitted)		
Financial				
DTE Electric	$5,858	$615	$7,029	$13,502
Nuclear Gen	1,395	92	839	2,326
DTE LLC	13,154	3,509	6,741	23,404
	20,408	4,215	14,609	39,232
Operating				
DTE Electric	0	504	5,758	6,262
Nuclear Gen	0	200	2,527	2,727
DTE LLC	0	3,862	7,420	11,281
	0	4,566	15,705	20,271
Total				
DTE Electric	5,858	1,119	12,787	19,764
Nuclear Gen	1,395	292	3,367	5,054
DTE LLC	13,154	7,370	14,161	34,686
	$20,408	$8,781	$30,315	$59,504

DTE Energy®

Case No.: U-21534
Exhibit No.: S-7.2
Witness: Theresa McMillan-Sepkoski
Page: 1of 8



Climbing Together

Toward Our Goals

DTE Energy Company

Long-Term Incentive Plan

Restricted Stock and Performance Shares

What's Inside

Building Value Together 2
Your LTIP Award 3
A Closer Look: Restricted Stock 4
A Closer Look: Performance Shares 5
If You Terminate Employment 6
Additional Information 7

Building Value Together

As the energy industry changes, your role as a leader is more critical than ever to drive performance and deliver results that will contribute to our continued business success.

Our Long-Term Incentive Plan (LTIP) is designed to strengthen the link between meaningful, profitable growth for the company and financial rewards for you. The LTIP gives you an ownership stake in our company with an opportunity to build personal wealth.

In return, DTE Energy (Company) expects you to focus on creating long-term value for the organization in your role as a company leader.

When we succeed, both you and the Company benefit.



Long-Term Incentive Plan Objectives

The plan is intended to:

- Enable you to share in the value created for shareholders
- Reward you for sustaining the Company's profitable growth
- Link your rewards to long-term financial results
- Attract, motivate and retain high-performing talent
- Offer competitive long-term incentive opportunities

Nothing in this Plan Summary is intended to be interpreted as a promise or guarantee of future or continued benefits or employment or as stating provisions or terms of employment. The Company and its employees recognize their mutual right to end their employment relationship at any time and acknowledge that such relationship is one of employment at will. Except with respect to employment at will, the Company reserves the right to change (including, but not limited to, the right to amend, suspend or terminate) its Human Resources policies, procedures, and benefits, including those for retirees, at its discretion, at any time without notice. The vice president of Human Resources is the only officer authorized to communicate such changes.

Portions of this document constitute part of a prospectus covering shares that have been registered under the Securities Act of 1933.

Your Long-Term Incentive Plan (LTIP) Award

The LTIP rewards you for making decisions and taking actions that will bring the Company long-term success.

Your LTIP grant may be delivered in the form of two components:



- **Restricted Stock** is a grant of ownership rights to DTE Energy Company stock that typically will vest three years from the date of grant, but may vest differently in special situations, (subject to continued employment).
- **Performance Shares** give you the opportunity to receive a range of shares of DTE Energy Company stock after three years, subject to continued employment and achievement of performance targets.

When you own shares in the Company, you benefit financially when DTE Energy Company stock increases as well as when the Board authorizes a dividend. As a leader, you have the ability to make decisions that result in meeting or exceeding both short-term and long-term goals. When we achieve our goals, we are more likely to see our stock price increase.

Determining Your LTIP Award Target

Your LTIP award target is based on your job level, scope and responsibilities, as well as a review of market competitiveness. The number of restricted stock shares and the target number of performance shares you receive at the time of the grant are based on:



- The target value of your LTIP award; and,
- The DTE Energy Company stock price used at the time of the grant.

Let's look at a very simple example.

Assume your base pay is $200,000, your LTIP target is 50% and the stock price is $100. This would result in 1,000 shares granted as your LTIP award.

This example is just to illustrate the formula. It is not intended to represent an actual LTIP target award or the current DTE Energy Company stock price. In addition, there can be separate special ad hoc grants that are not based on this formula.

$200,000 × 50% = $100,000

$100,000 ÷ $100 = 1,000

The actual number of units you receive is detailed in your Grant Agreement, which is provided separately.

To qualify for an LTIP grant, you must be designated by the Organization & Compensation Committee, the CEO, or the President as eligible to receive a grant.

A Closer Look: Restricted Stock

This is a grant of ownership rights to DTE Energy Company stock that will vest as long as you are employed with the Company and its subsidiaries through the vesting date, which is typically three years from the date of grant. After this date, you have full ownership of the shares and can sell or hold them. Although the number of shares you receive is fixed at the grant date, the price per share can increase or decrease based on the Company's performance and the overall stock market.

At-a-Glance

Restricted stock provides greater value when the stock price increases—and the higher it climbs, the larger your potential return.



These basic principles explain how restricted stock works:

Grant Date:

In most cases, the date your award is approved by the CEO, President or Organization & Compensation Committee of the Board. Awards are officially given to you each year you are eligible and typically occur in the first quarter.

Vesting:

Time period over which you'll earn the right to receive your award. As long as you remain employed with DTE Energy and its subsidiaries, your award will vest in accordance with the vesting terms set forth in your Grant Agreement.

Ownership:

Holders of restricted stock (even prior to your vesting date) have nearly all the rights of a shareholder, including the right to vote the shares and receive cash dividends (when authorized by the Board of Directors). You have these rights at the grant date.



A Closer Look: Performance Shares

Performance shares give you the opportunity to receive a range of shares of DTE Energy Company stock, cash or a combination of the two after the completion of the performance period, subject to your continued employment and the achievement of the performance targets. Superior Company results lead to higher rewards—up to two times the sum of your target number of shares plus reinvested stock dividend equivalents.

At-a-Glance

The number of performance shares you earn increases if the Company meets or exceeds target performance on specific metrics. If your shares are paid in DTE Energy Company stock, you benefit when the stock price increases and when the Board issues dividends—and the higher it climbs, the larger your potential return.



These basic principles explain how performance shares work:

Grant Date:

The day your performance share grant is approved by the CEO, President or Organization & Compensation Committee of the Board.

Awards are officially given to you each year you are eligible and typically occur in the first quarter.

Performance Metrics:

The number of shares earned is determined based on the level of achievement against performance targets of the company you are assigned on the grant date. The performance objectives, weightings and payout percentages established with respect to the grant are available at **www.dteltip.com**.

Performance Period:

Begins on the first day of the calendar year in which the grant is made and lasts three consecutive calendar years. The number of shares earned is based on Company performance during the three-year performance period. As long as you remain employed, your right to payment vests on the payment date subsequent to the end of the three-year performance period. Your performance share awards may be settled in the form of cash, DTE Energy Company stock or some combination of the two.

Payout Range:

Based on actual performance of the Company during the three-year performance period, you may earn up to two times the sum of your target number of shares plus reinvested stock dividend equivalents.

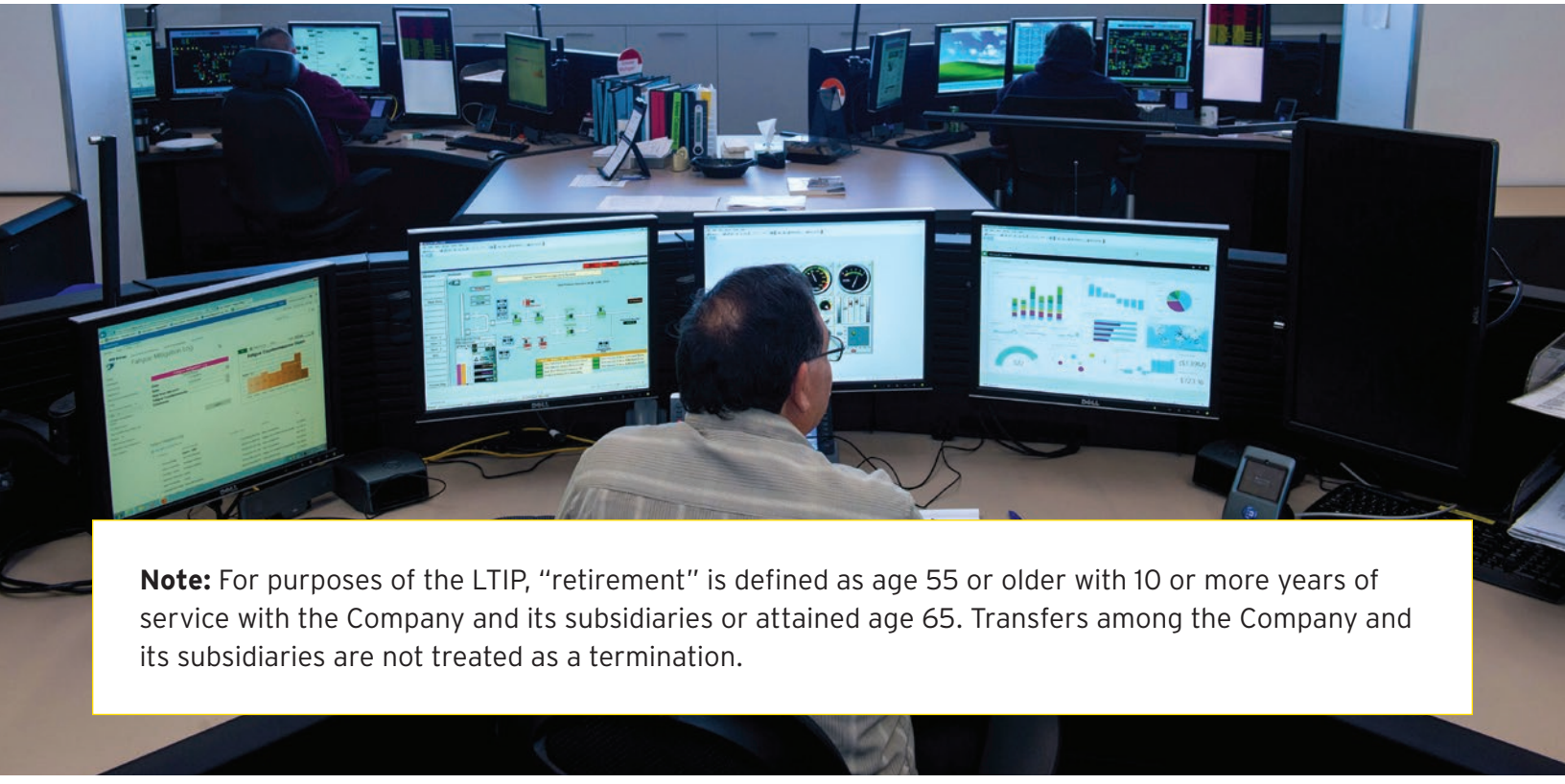
Ownership:

Holders of performance shares do not have voting rights. Dividend equivalents will be credited as additional shares during the three-year performance period.

What Happens If I Terminate Employment?

Generally, if your employment terminates before your stock grants have vested, the following guidelines will apply. However, the LTIP Plan Administrator retains the authority to take any other action it deems appropriate in its sole discretion.

	Restricted Stock	Performance Shares
Retirement, Death or Disability	You, or your designated beneficiary, will retain the rights to a pro-rated number of shares of restricted stock based on the actual number of days worked during the vesting period. Restrictions are lifted and stock is distributed after retirement, death or disability.	You, or your designated beneficiary, will retain the rights to a pro-rated number of performance shares based on the actual number of days worked during the performance period. Final payment, if any, will occur at the same time as for all other participants based on the pro-rated number of shares and actual results during the entire performance period.
Other Termination	Your rights to any unvested shares will be forfeited on the date of your termination.	Your rights to any future dividends and final payment will be forfeited on the date of your termination.



Note: For purposes of the LTIP, "retirement" is defined as age 55 or older with 10 or more years of service with the Company and its subsidiaries or attained age 65. Transfers among the Company and its subsidiaries are not treated as a termination.

Additional Information

Beneficiary Designation

You may name any beneficiary to inherit the right to these grants, according to the applicable terms. Beneficiaries may be designated at **www.dteltip.com** and each designation will revoke all prior designations.

Disability

Disability means you meet the definition of "Disability" or "Disabled" as defined in the current DTE Energy Company Long-Term Disability Plan certificate of coverage.

Transferability

These grants are nontransferable and are subject to risk of forfeiture. You may not sell, transfer, pledge, exchange or otherwise dispose of these grants or the right to receive cash or DTE Energy Company stock thereunder, except in the event of your death. If you have a valid beneficiary designation at **www.dteltip.com**, your rights under these grants will pass to your designated beneficiary. Otherwise, your rights under these grants will pass to the beneficiary designated in your will or, if your will does not designate a beneficiary or you do not have a will, your rights under these grants will pass to your estate. The LTIP Plan Administrator, in its sole discretion, may waive the restrictions on transferability with respect to all or a portion of the shares subject to these grants.

Hedging

You may not hedge or be involved in any similar transaction involving DTE Energy Company stock which has the effect of limiting or eliminating the full risks and rewards of ownership of DTE Energy Company stock.

No Right to Continued Employment

Neither the Grant Agreement, nor this Plan Summary, confers upon you any right with respect to continuance of employment by the Company or a subsidiary; nor shall it interfere in any way with the right of the Company or a subsidiary to terminate your employment at any time.

Participant Bound by Plan

You acknowledge that a copy of the DTE Energy Company Long-Term Incentive Plan has been made available to you, and you agree to be bound by all the terms and provisions thereof. All references herein to the Long-Term Incentive Plan and LTIP shall mean the equity plan as in effect on the date of grant.

Relation to Other Benefits

Grants under the Long-Term Incentive Plan are not considered compensation for purposes of the Company's qualified and non-qualified savings plans, the Company's qualified and non-qualified retirement plans, insurance or any other Company-sponsored qualified or non-qualified employee benefit programs.

Taxes

The Company is required to withhold any applicable federal, state, local or FICA tax in connection with the vesting and payment of your long-term grants. It shall be a condition to such vesting or payment that you pay all such taxes.

The value of restricted stock on the vesting date and the value of payment under a performance share award are taxed as compensation at ordinary income tax rates.

DTE Energy®

This Plan Summary provides information related to the DTE Energy Long-Term Incentive Plan. It does not contain all of the rules and governing terms included in the incentive programs' documents that may be applicable to you. If there are any differences between the information in this booklet and the program's documents, the program documents will govern.

H000186447

MPSC Case No: U-21534

Requester: Staff

Question No.: TMS-2.1a

Respondent: M. Cooper

Page: 1 of 1

Question: Is there any Restricted Stock included in the Revenue Requirement for the current case?

a. If so, please provide the amount included

Answer: Yes. The amount of Restricted Stock expense for the projected test year is $8.960 million.

Attachment: None

Michigan Public Service Commission
Projected Operation and Maintenance Expenses
Regulated Marketing
($000)

Case No.: U-21534
Exhibit: S-7.4
Witness: Theresa McMillan-Sepkoski
Page: 1 of 1

Line No.	(a) Description	(b) Account	(c) 1/1/22 - 12/31/22 Historical Test Period	(d) Rate Case Adjustments	(e) Adjusted Historical Test Period	(f) Adjusted Historical 1/23-12/23	Projected Adjustments (g) 1/1/24 - 12/31/24 Inflation 3/	(h) 1/1/25 - 12/31/25 Inflation 3/	(i) Other Adjustments 4/	(j) Total Projected Adjustments	(k) Projected Test Period
1	**Customer Service and Informational Expenses**				sum (c) thru (d)					sum (f) thru (i)	(e) + (j)
2	**Operation**										
3	Supervision	907	713	-	713	678	20	20	-	40	718
4	Customer Assistance Expenses	908	6,927	-	6,927	6,715	195	200	-	395	7,110
5	Total Customer Service (Major Account Services)		7,640	-	7,640	7,393	214	221	-	435	7,828
6	**Sales Expenses**										
7	**Operation**										
8	Supervision	911	1,891	-	1,891	1,825	53	54	-	107	1,932
9	Demonstrating and Selling Expenses-DR	912	2,701		2,701	2,395	69	71	2,961	3,102	5,497
10	Demonstrating and Selling Expenses-Other	912	8,178	-	8,178	8,178	237	244	3,252	3,733	11,911
11	Miscellaneous Sales-Charging Forward Amort	912	126		126	1,181	-	-	3,512	3,512	4,693
12	Advertising Expenses	913	-	-	-	-	-	-	-	-	-
13	Miscellaneous Sales-Other	916	-	-	-	-	-	-	-	-	-
14	Total Sales Expenses		12,897	-	12,897	13,579	360	370	9,725	10,455	24,034
15	Total Marketing Expense		20,536	-	20,536	20,972	574	591	9,725	10,890	31,862

			Co Exh.	***32,154***
				(292)

	1/1/24 - 12/31/24	1/1/25 - 12/31/25
3/ Annual Inflation Rate	2.90%	2.90%
No. of Months in Period	12	12
Pro-rated Inflation Rate	2.90%	2.90%

4/ Projection Adjustments:	Account	Amount
Smart Savers (sponsored by Witness Farrell)	912	1,724
SmartCurrents (sponsored by Witness Farrell)	912	(496)
SmartCharge (sponsored by Witness Farrell)	912	767
Pilots and other projects (sponsored by Witness Farrell)	912	966
Subtotal Demand Response		2,961
Charging Forward Expansion (Sponsored by Witness Bennett Exh. A-12 B5.9)	912	3,252
Charging Forward Reg Asset Amort (sponsored by Witness Uzenski Exh. A-13 C5.9.1)	912	3,512
		9,725

Michigan Public Service Commission
Projected Operation and Maintenance Expenses
Customer Service - Credit/Debit Card Merchant Fees
Projected Test Period - 12 Months Ending December 31, 2025
($000)

Case No.: U-21534
Exhibit: S-7.5
Witness: Theresa McMillan-Sepkoski
Page: 1 of 1

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
			Historic Actuals				Forecast		
Line No.	Description	2019	2020	2021	2022	2023	2 year Growth	2024	2025	Projected Test Period
1	**Merchant Fees**									
2	Merchant Fees Residential	$ 6,992	$ 9,437	$ 9,977	$ 7,541	$ 7,540	0.5%	$ 7,578	$ 7,616	7,616
3	Merchant Fees Non-Residential	5,427	4,240	3,880	4,242	3,410	0.5%	$ 3,427	$ 3,444	3,444
4	**Total Merchant Fees**	$ 12,418	$ 13,677	$ 13,857	$ 11,783	$ 10,950		$ 11,005	$ 11,060	$ 11,060
	Company Projection Exh. A-13 Schedule C5.7.1									$ 12,296
	Staff Adjustment using 2023 Actuals									**$ (1,236)**
						Months in Test Period		-	12	

MPSC Case No: U-21534

Requester: Staff

Question No.: STDE-3.11g

Respondent: K. Farrell

Page: 1 of 1

Question: 11. Concerning the C&I Battery Energy Storage Pilot detailed in Exhibit A-12, Sch.B5.6.1:

g. Referring to the Company's discovery response STDE-3.2i from Case No. U-21297, is the Company still planning to not charge fees for participation in the pilot, and has the Company done any calculations to determine the customer savings and battery performance?

Answer: The Company has performed calculations to estimate the bill savings a potential customer would receive. However, due to the upfront costs associated with the installation of the battery that are the customer's responsibility, the Company does not plan to charge a fee for participation. Since battery performance is dependent on unique usage characteristics, no additional battery performance calculations have been performed.

Attachment: *None*

MPSC Case No: U-21534

Requester: Staff

Question No.: STDE-3.11i

Respondent: K. Farrell

Page: 1 of 1

Question: 11. Concerning the C&I Battery Energy Storage Pilot detailed in Exhibit A-12, Sch.B5.6.1:

i. What is the Company planning to do with the battery after pilot has concluded? Has the Company considered a longer-term agreement to ensure use for the full life of the battery and installation equipment?

Answer: At the conclusion of the pilot, the customer can purchase the battery outright, lease to own, rent the equipment or have the battery removed. Dependent upon the customer's decision, a further term agreement would be necessary.

Attachment: *None*

MPSC Case No: U-21534

Requester: Staff

Question No.: STDE-3.11h

Respondent: K. Farrell

Page: 1 of 1

Question: 11. Concerning the C&I Battery Energy Storage Pilot detailed in Exhibit A-12, Sch.B5.6.1:

h. Has the Company developed any commercial arrangements that will balance the different control and use possibilities split between the Company and customer?

Answer: No, a commercial arrangement has not yet been developed.

Attachment: *None*

MPSC Case No: U-21534

Requester: Staff

Question No.: LF-1.1a

Respondent: T. Uzenski

Page: 1 of 1

Question: The following questions pertain to Exhibit A-12 Schedule B5.8 line 5:

1. On page 66 of Company witness Theresa M. Uzenski's testimony it is stated that line 5 of Exhibit A-12 Schedule B5.8 contains approximately $1.7 million for environmental management to evaluate and develop technologies and controls to provide cost effective solutions in meeting environmental compliance and energy requirements.

a. Audit request HH-1.1 page 2 indicates that there is projected spend of $0.256 million in 2024 and $1.742 million in 2025 for planned and emergent environmental capital projects. Please provide a breakdown of what is planned and what is emergent.

Answer: Audit request HH-1.1 page 2 indicates that there is projected spend of $0.256 million in 2023 (not 2024) for planned and emergent environmental capital projects. In addition, there is projected spend of $1.742 million in 2024 and in 2025 for planned and emergent environmental capital projects.

Below is a breakdown of planned and emergent spend in 2023 – 2025:

- 2 Environmental Technical Assessments (planned spend)

2023	2024	2025
$200,000	$200,000	$300,000

- Equipment (planned spend)

2023	2024	2025
$30,000	$300,000	$250,000

- Underground Storage Tank Removal and Cleanup (~40% planned and ~60% emergent spend)

2023	2024	2025
$20,000	$1,200,000	$1,200,000

Attachment: *None.*

DTE

ENERGY SUPPLY PAT REVIEW REQUEST FORM

PAT-AT Agenda Date:	[redacted]		Scope Change	X	New Revision
PMP Project ID:	10570		Schedule Change		Realized Risk
PAT LVL/REV:	[redacted]				

Project Site:	[redacted]	Project Complexity:	[redacted]
Unit:	[redacted]	Project Start Date:	[redacted]
Outage Related?	[redacted]	Constr. Start Date:	[redacted]
Current IRR:	[redacted]	Project I/S Date:	[redacted]
SAP Profit Center #:	[redacted]	Investment Reason:	[redacted]
WBS Element:	[redacted]		
Project Type/Systems:	[redacted]		
Reconciliation Category:	[redacted]		

Project Title: [redacted]

PMP Problem Description & Project Objective *(Project deliverables* Sum benefits-attach extra sheets if required)*:

[redacted]

Brief Project Scope Summary *(Summarize products & services provided)*

[redacted]

Reason for Submittal *(State reason for submittal, categorize requested dollar amount changes, and explain any estimate at completion (EAC) benefits or IRR changes)*:

[redacted]

SAP Budget Approval	Prior Years	2022	2023	2024
Previously Approved PAT:	$210,781	$20,742,740	-$17,696,356	$1,549,580
PAT Change Request:	$0	$0	-$798,289	$693,835
Current PAT Request:	$210,781	$20,742,740	-$18,494,645	$2,243,415
Total PAT Request:	$4,702,291	Total PAT Change:		-$104,454

Forecast Charge Categories	Current Approved PAT Form				Forecast Changes				Revised PAT Forecast				
	Prior Years	2022	2023	2024	Prior Years	2022	2023	2024	Prior Years	2022	2023	2024	Project Total (EAC)
DTE Labor (Direct)	$71,576	$173,094	-$62,670	$21,532	$0	$0	-$87,244	$2	$71,576	$173,094	-$149,914	$21,534	$116,290
Contract Labor (Direct)	$75,290	$1,530,954	$362,697	$45,000	$0	$0	-$458,344	$1,930,100	$75,290	$1,530,954	-$95,647	$1,975,100	$3,485,697
Material (Direct)	$0	$18,125,254	$1,776,075	$1,271,727	$0	$0	-$199,644	-$1,250,000	$0	$18,125,254	$1,576,431	$21,727	$19,723,412
Other (Direct)	$171	$2,325	-$19,927,426	$0	$0	$0	-$1,715,781	-$456	$171	$2,325	-$21,643,207	-$456	-$21,641,167
Shared Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Indirects	$63,744	$911,113	$154,968	$211,321	$0	$0	$1,662,724	$14,189	$63,744	$911,113	$1,817,692	$225,510	$3,018,059
Sub-Total	$210,781	$20,742,740	-$17,696,356	$1,549,580	$0	$0	-$798,289	$693,835	$210,781	$20,742,740	-$18,494,645	$2,243,415	$4,702,291
Calculated Risk	$0	$0	$250,000	$500,000	$0	$0	$0	$1,250,000	$0	$0	$250,000	$1,750,000	$2,000,000
TOTAL	$210,781	$20,742,740	-$17,446,356	$2,049,580	$0	$0	-$798,289	$1,943,835	$210,781	$20,742,740	-$18,244,645	$3,993,415	$6,702,291
							Change in Total EAC:	$1,145,546					

Project Developer:	Avani Saraiya	APPROVAL DISPOSITION:				
Project Engineer:	Sunith George	Without Risk:				
Project Manager:	Paul Duran	With Risk:	X	Approved by:	Ryan Randazzo	Date: 10/24/2023

See SWI (Standard Work Instruction) ALLPP-SWI-03-004-011-0643 for instructions on filling out this form

Form: ALLPP-FM-0013 Rev: 8 Date: 01/25/2022

DTE

ENERGY SUPPLY PAT REVIEW REQUEST FORM

PAT-AT Agenda Date:	[redacted]		Scope Change	X	New Revision
PMP Project ID:	20255		Schedule Change		Realized Risk
PAT LVL/REV:	[redacted]				

Cancel

Project Title: [redacted]

Project Site:	[redacted]	Project Complexity:	[redacted]
Unit:	[redacted]	Project Start Date:	[redacted]
Outage Related?	[redacted]	Constr. Start Date:	[redacted]
Current IRR:	[redacted]	Project I/S Date:	[redacted]
SAP Profit Center #:	[redacted]	Investment Reason:	[redacted]
WBS Element:	[redacted]		
Project Type/Systems:	[redacted]		
Reconciliation Category:	[redacted]		

PMP Problem Description & Project Objective *(Project deliverables* Sum benefits-attach extra sheets if required):*

[redacted]

Brief Project Scope Summary *(Summarize products & services provided)*

[redacted]

Reason for Submittal *(State reason for submittal, categorize requested dollar amount changes, and explain any estimate at completion (EAC) benefits or IRR changes):*

[redacted]

SAP Budget Approval	2023	2024	2025	2026
Previously Approved PAT:	$29,173,678	$0	$0	$0
PAT Change Request:	-$100,184	$0	$0	$0
Current PAT Request:	$29,073,494	$0	$0	$0
Total PAT Request:	$29,073,494	Total PAT Change:		-$100,184

Forecast Charge Categories	Current Approved PAT Form				Forecast Changes				Revised PAT Forecast				
	2023	2024	2025	2026	2023	2024	2025	2026	2023	2024	2025	2026	Project Total (EAC)
DTE Labor (Direct)	$249,599	$0	$0	$0	$1	$0	$0	$0	$249,600	$0	$0	$0	$249,600
Contract Labor (Direct)	$1,370,729	$0	$0	$0	$0	$0	$0	$0	$1,370,729	$0	$0	$0	$1,370,729
Material (Direct)	$178,064	$0	$0	$0	$0	$0	$0	$0	$178,064	$0	$0	$0	$178,064
Other (Direct)	$27,096,556	$0	$0	$0	-$614,551	$0	$0	$0	$26,482,005	$0	$0	$0	$26,482,005
Shared Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Indirects	$278,730	$0	$0	$0	$514,366	$0	$0	$0	$793,096	$0	$0	$0	$793,096
Sub-Total	$29,173,678	$0	$0	$0	-$100,184	$0	$0	$0	$29,073,494	$0	$0	$0	$29,073,494
Calculated Risk	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL	$29,173,678	$0	$0	$0	-$100,184	$0	$0	$0	$29,073,494	$0	$0	$0	$29,073,494
						Change in Total EAC:		-$100,184					

Project Developer:	A. Saraiya	APPROVAL DISPOSITION:				
Project Engineer:	S. George	Without Risk:				
Project Manager:	P. Duran	With Risk:	X	Approved by:	Ryan Randazzo	Date: 12/27/2023

See SWI (Standard Work Instruction) ALLPP-SWI-03-004-011-0643 for instructions on filling out this form

Form: ALLPP-FM-0013 Rev: 8 Date: 01/25/2022

DTE

ENERGY SUPPLY PAT REVIEW REQUEST FORM

PAT-AT Agenda Date:	[redacted]		Scope Change	X	New Revision
PMP Project ID:	17611		Schedule Change	X	Realized Risk
PAT LVL/REV:	[redacted]				

Cancel

Project Title: [redacted]

Project Site:	[redacted]	Project Complexity:	[redacted]
Unit:	[redacted]	Project Start Date:	[redacted]
Outage Related?	[redacted]	Constr. Start Date:	[redacted]
Current IRR:	[redacted]	Project I/S Date:	[redacted]
SAP Profit Center #:	[redacted]	Investment Reason:	[redacted]
WBS Element:	[redacted]		
Project Type/Systems:	[redacted]		
Reconciliation Category:	[redacted]		

PMP Problem Description & Project Objective *(Project deliverables? Sum benefits-attach extra sheets if required):*

[redacted]

Brief Project Scope Summary *(Summarize products & services provided)*

[redacted]

Reason for Submittal *(State reason for submittal, categorize requested dollar amount changes, and explain any estimate at completion (EAC) benefits or IRR changes):*

[redacted]

SAP Budget Approval	2022	2023	2024	2025
Previously Approved PAT:	$52,772	$1,417,349	$3,900,000	$0
PAT Change Request:	$0	$588,165	-$588,165	$0
Current PAT Request:	$52,772	$2,005,514	$3,311,835	$0
Total PAT Request:	$5,370,121	Total PAT Change:		$0

Forecast Charge Categories	Current Approved PAT Form				Forecast Changes				Revised PAT Forecast				
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	Project Total (EAC)
DTE Labor (Direct)	$14,850	$17,817	$498,796	$0	$0	$3,883	-$95,130	$0	$14,850	$21,700	$403,666	$0	$440,216
Contract Labor (Direct)	$24,050	$500,000	$1,324,000	$0	$0	-$403,806	$583,456	$0	$24,050	$96,194	$1,907,456	$0	$2,027,700
Material (Direct)	$0	$736,838	$3,455,660	$0	$0	$928,829	-$928,829	$0	$0	$1,665,667	$2,526,831	$0	$4,192,498
Other (Direct)	$0	$0	$6,178	$0	$0	$0	$0	$0	$0	$0	$6,178	$0	$6,178
Shared Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Indirects	$13,872	$162,694	$1,368,428	$2,739	$0	$59,259	-$116,387	-$2,739	$13,872	$221,953	$1,252,041	$0	$1,487,866
Sub-Total	$52,772	$1,417,349	$6,653,062	$2,739	$0	$588,165	-$556,890	-$2,739	$52,772	$2,005,514	$6,096,172	$0	$8,154,458
Calculated Risk	$0	$0	$1,752,946	$0	$0	$0	-$28,536	$0	$0	$0	$1,724,410	$0	$1,724,410
TOTAL	$52,772	$1,417,349	$8,406,008	$2,739	$0	$588,165	-$585,426	-$2,739	$52,772	$2,005,514	$7,820,582	$0	$9,878,868
						Change in Total EAC:		$0					

Project Developer:	H. Mueller	APPROVAL DISPOSITION:				
Project Engineer:	T. Lutze	Without Risk:				
Project Manager:	D. Martino	With Risk:	X	Approved by:	Date:	11/21/2023

See SWI (Standard Work Instruction) ALLPP-SWI-03-004-011-0643 for instructions on filling out this form

Form: ALLPP-FM-0013 Rev: 8 Date: 01/25/2022

DTE

ENERGY SUPPLY PAT REVIEW REQUEST FORM

PAT-AT Agenda Date:	[redacted]		Scope Change	X	New Revision
PMP Project ID:	18320	X	Schedule Change		Realized Risk
PAT LVL/REV:	[redacted]				

Project Title: [redacted]

Project Site:	[redacted]	Project Complexity:	[redacted]
Unit:	[redacted]	Project Start Date:	[redacted]
Outage Related?		Constr. Start Date:	[redacted]
Current IRR:		Project I/S Date:	[redacted]
SAP Profit Center #:	[redacted]	Investment Reason:	[redacted]
WBS Element:	[redacted]		
Project Type/Systems:	[redacted]		
Reconciliation Category:	[redacted]		

PMP Problem Description & Project Objective *(Project deliverables? Sum benefits-attach extra sheets if required):*

[redacted]

Brief Project Scope Summary *(Summarize products & services provided)*

[redacted]

Reason for Submittal *(State reason for submittal, categorize requested dollar amount changes, and explain any estimate at completion (EAC) benefits or IRR changes):*

[redacted]

SAP Budget Approval	2021	2022	2023	2024
Previously Approved PAT:	$2,910	$1,062,644	$6,433,823	$0
PAT Change Request:	$0	$0	-$2,433,484	$445,149
Current PAT Request:	$2,910	$1,062,644	$4,000,339	$445,149
Total PAT Request:	$5,511,042	Total PAT Change:		-$1,988,335

Forecast Charge Categories	Current Approved PAT Form				Forecast Changes				Revised PAT Forecast				
	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	Project Total (EAC)
DTE Labor (Direct)	$1,270	$61,894	$55,388	$0	$0	$0	-$345	$0	$1,270	$61,894	$55,043	$0	$118,207
Contract Labor (Direct)	$0	$154,248	$4,371,808	$0	$0	$0	-$1,717,657	$153,254	$0	$154,248	$2,654,151	$153,254	$2,961,653
Material (Direct)	$0	$685,773	$1,240,090	$0	$0	$0	-$425,075	$215,100	$0	$685,773	$815,015	$215,100	$1,715,888
Other (Direct)	$0	$646	$249	$0	$0	$0	$447	$0	$0	$646	$696	$0	$1,342
Shared Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Indirects	$1,640	$160,083	$766,288	$0	$0	$0	-$290,854	$76,795	$1,640	$160,083	$475,434	$76,795	$713,952
Sub-Total	$2,910	$1,062,644	$6,433,823	$0	$0	$0	-$2,433,484	$445,149	$2,910	$1,062,644	$4,000,339	$445,149	$5,511,042
Calculated Risk	$0	$0	$8,368,220	$0	$0	$0	-$7,868,220	$5,356,555	$0	$0	$500,000	$5,356,555	$5,856,555
TOTAL	$2,910	$1,062,644	$14,802,043	$0	$0	$0	-$10,301,704	$5,801,704	$2,910	$1,062,644	$4,500,339	$5,801,704	$11,367,597
							Change in Total EAC:	-$4,500,000					

Project Developer:	A. Saraiya	APPROVAL DISPOSITION:				
Project Engineer:	T. Lutze	Without Risk:				
Project Manager:	P. Duran	With Risk:	X	Approved by:	Date:	11/22/2023

See SWI (Standard Work Instruction) ALLPP-SWI-03-004-011-0643 for instructions on filling out this form

Form: ALLPP-FM-0013 Rev: 8 Date: 01/25/2022

Case No.: U-21534
Requestor: Staff
Question No.: STDE-3.3
Respondent: M. Guillaumin

U-21297 A-12 B5.1 Page 2 Requested Capital Expenditures
Steam, Hydraulic, and
Other Power Generation -- Non-Routine
($000)

Line No.	(a) Description	(b) Requested	(c) Approved	(d) Actual	(e) Requested to Actual	(f) Approved to Actual	(g) Requested Percent Error	(h) Requested	(i) Approved	(j) Actual	(k) Requested to Actual	(l) Approved to Actual	(m) Requested Percent Error
		Projected Bridge Period											
		12 mos. ending 12/31/2022	12 mos. ending 12/31/2022	12 mos. ending 12/31/2022	12 mos. ending 12/31/2022	12 mos. ending 12/31/2022	12 mos. ending 12/31/2022	11 mos. ending 11/30/2023	11 mos. ending 11/30/2023	11 mos. ending 11/30/2023	11 mos. ending 11/30/2023	11 mos. ending 11/30/2023	11 mos. ending 11/30/2023
44	**Other Power Generation - Non-Routine:**												
45	Blue Water Energy Center (CCGT)	11,632	11,632	11,777	(145)	(145)	-1%	6,822	22	(4,667)	11,489	4,689	-246%
46	Benton Harbor Transformer	-	-	5,506	(5,506)	(5,506)	-100%	-	-	(4,819)	4,819	4,819	-100%
47	Blackstart Project 1	21,082	20,743	20,743	339	(0)	2%	4,859	3,230	9,747	(4,888)	(6,517)	-50%
48	Blackstart Project 2	55	55	53	2	2	4%	1,010	761	808	202	(47)	25%
49	Blackstart Project 3	1,035	1,035	1,063	(27)	(27)	-3%	11,095	8,518	2,828	8,267	5,690	292%
50	Site Security Project 9	-	-	-	-	-		-	-	-	-	-	
51	Slocum Battery Pilot	8,494	7,562	7,562	932	0	12%	9,752	8,777	9,561	191	(784)	2%
52	2025/2026 Battery	-	-	0	(0)	(0)	-100%	24,098	9,000	5,195	18,903	3,805	364%
53	Other Power Generation - Non-Routine - TOTAL	42,298	41,027	46,703	(4,405)	(5,676)	-9%	57,636	30,308	18,653	38,982	11,654	209%
54	**TOTAL NON-ROUTINE**	154,546	149,772	160,212	(5,666)	(10,439)	-4%	248,972	109,660	161,274	87,697	(51,614)	54%

Case No.: U-21534
Requestor: Staff
Question No.: STDE-3.3
Respondent: M. Guillaumin

U-21297 A-12 B5.1 Page 2 Requested Capital Expenditures
Steam, Hydraulic, and
Other Power Generation -- Non-Routine
($000)

Line No.	(a) Description	(n) Requested 23 mos. ending 11/30/2023	(o) Approved 23 mos. ending 11/30/2023	(p) Actual 23 mos. ending 11/30/2023	(q) Requested to Actual 23 mos. ending 11/30/2023	(r) Approved to Actual 23 mos. ending 11/30/2023	(s) Requested Percent Error 23 mos. ending 11/30/2023
44	**Other Power Generation - Non-Routine:**						
45	Blue Water Energy Center (CCGT)	18,454	11,654	7,110	11,344	4,544	160%
46	Benton Harbor Transformer	-	-	687	(687)	(687)	-100%
47	Blackstart Project 1	25,941	23,973	30,490	(4,549)	(6,517)	-15%
48	Blackstart Project 2	1,065	816	861	204	(45)	24%
49	Blackstart Project 3	12,130	9,553	3,891	8,239	5,662	212%
50	Site Security Project 9	-	-	-	-	-	-
51	Slocum Battery Pilot	18,246	16,339	17,122	1,123	(784)	7%
52	2025/2026 Battery	24,098	9,000	5,195	18,903	3,805	364%
53	Other Power Generation - Non-Routine - TOTAL	99,933	71,334	65,356	34,577	5,978	53%
54	**TOTAL NON-ROUTINE**	403,517	259,433	321,486	82,031	(62,053)	26%

Michigan Public Service Commission
DTE Electric Company
Actual 2022 - 2023 Capital Expenditures
Steam, Hydraulic, and
Other Power Generation -- Non-Routine
($000)

MPSC Case No.: U-21534
Requestor: Staff
Question No.: STDE-2.1a
Respondent: M. Guillaumin

Line No.	(a) Description	(b) Actual Bridge Jan-23	(c) Actual Bridge Feb-23	(d) Actual Bridge Mar-23	(e) Actual Bridge Apr-23	(f) Actual Bridge May-23	(g) Actual Bridge Jun-23	(h) Actual Bridge Jul-23	(i) Actual Bridge Aug-23	(j) Actual Bridge Sep-23	(k) Actual Bridge Oct-23	(l) Actual Bridge Nov-23	(m) Actual Bridge Dec-23	(n) Actuals 2023	(o) U-21534 Projected 2023	(p) U-21297 Projected 2023	(q) U-21534 Overestimation/ (Underestimation) 2023	(r) U-21534 Percent Difference 2023	(s) U-21297 Overestimation/ (Underestimation) 2023	(t) U-21297 Percent Difference 2023
34	**Other Power Generation - Non-Routine:**																			
35	Blue Water Energy Center (CCGT)	81	91	(1,429)	52	56	(3,163)	29	(341)	26	26	(95)	45	(4,622)	(4,512)	6,822	110	2%	11,444	248%
36	BWEC Transmission Upgrades	-	-	-	-	-	-	-	-	(4,819)	-	-	-	(4,819)	(4,819)	-	(0)	0%	4,819	100%
37	Blackstart Project 10570 & 20255	1,596	(61)	1,420	1,189	1,385	1,851	321	313	2,333	(659)	59	347	10,094	10,390	4,888	297	3%	(5,206)	52%
38	Blackstart Project 17611	2	21	4	19	2	22	21	418	237	36	26	1,151	1,959	2,013	1,489	54	3%	(470)	24%
39	Blackstart Project 18320	37	168	644	28	22	18	171	73	244	702	722	156	2,985	4,000	11,168	1,015	34%	8,183	274%
40	Slocum Battery Pilot	773	4,399	293	145	162	869	267	249	1,179	452	771	556	10,117	10,111	10,367	(6)	0%	250	2%
41	Trenton Channel Energy Center BESS	-	-	-	6	581	1,750	1,192	65	97	622	882	65	5,260	5,253	26,431	(7)	0%	21,171	402%
42	Northeast 11-1 Decommissioning	-	-	-	-	0	-	-	2	5	-	40	113	159	294	-	134	84%	(159)	100%
43	Other Power Generation - Non-Routine - TOTALS	2,489	4,618	931	1,440	2,209	1,346	2,001	779	(698)	1,179	2,405	2,433	21,133	22,730	61,165	1,598	8%	40,032	189%

MPSC Case No: U-21534
Requester: Staff
Question No.: STDE-3.8
Respondent: M. Guillaumin
Page: 1 of 1

Question: 8. Referencing the Slocum Battery pilot, in Case No. U-21297, the total costs for the Slocum pilot were estimated at $34.7 million, which has increased to $44.7 million in this case. Please provide a detailed comparison of project cost estimates for Slocum between these two cases, including a breakout into project cost categories with as much detail as possible. For any cost categories with a significant change from previous estimates (10% or >$1 million), please explain the cause of this difference, including any supporting data if available.

Answer: Please see table below:

Description	U-21297	U-21534	Variance	Reason for Variance
Battery Materials	$15.0	$20.0	$5.0	Raw lithium prices increased
Demo & Installation Labor	$5.4	$7.4	$2.0	Labor escalation based on actual competitive bids received
Electrical Infrastructure	$8.5	$8.5	$0.0	
Engineering & Permits	$1.0	$1.9	$0.9	
Overheads (Indirects)	$4.8	$6.9	$2.1	Adjustment based on cost increases for material and labor
Total	**$34.7**	**$44.7**	**$10.0**	

Attachment: None.

MPSC Case No: U-21534
Requester: Staff
Question No.: STDE-11.1a
Respondent: M. Guillaumin
Page: 1 of 1

Question: 1. Referencing the discovery response STDE 3-8:
a. What, if any, portion of project work did the Company contract out for this pilot?

Answer: The Company utilized contract support for engineering, permitting, site preparation, installation, quality assurance, startup, and commissioning.

Attachment: None.

MPSC Case No: U-21534
Requester: Staff
Question No.: STDE-11.1b
Respondent: M. Guillaumin
Page: 1 of 1

Question: 1. Referencing the discovery response STDE 3-8:
b. Regarding the increase in costs for battery materials, what portion of the 25% cost increase is due to the rising price of raw lithium?

Answer: The entire $5 million cost increase shown in discovery response STDE-3.8 was due to the rising price of raw lithium.

Attachment: None.

MPSC Case No: U-21534
Requester: Staff
Question No.: STDE-11.1c
Respondent: M. Guillaumin
Page: 1 of 1

Question: 1. Referencing the discovery response STDE 3-8:
c. When did the Company execute a contract/purchase order for the battery materials?

Answer: The Company issued the purchase order for the materials in December 2022.

Attachment: None.

MPSC Case No: U-21534
Requester: Staff
Question No.: STDE-11.1d
Respondent: M. Guillaumin
Page: 1 of 1

Question: 1. Referencing the discovery response STDE 3-8:
d. What specific cost increases to materials and labor resulted in project overheads being underestimated by $2.1 million in the previous rate case? Why were these costs not able to be identified prior to this point in the project development?

Answer: Overheads proportionately vary based on changes to material and labor costs, and therefore are not fixed. The $2.1 million increase is a result of cost increases in labor and materials on the project.

Attachment: None.

ENERGY SUPPLY PAT REVIEW REQUEST FORM

PAT-AT Agenda Date:	12/20/2023		
PMP Project ID:	17986		
PAT LVL/REV:	PAT 2	REV 0	

	Scope Change	X New Revision	Cancel
	Schedule Change	X Realized Risk	

Project Title: Slocum Lithium-Ion Battery Energy Storage System

Project Site:	PKRS	Project Complexity:	High
Unit:	Slocum	Project Start Date:	7/14/2021
Outage Related?	Yes	Constr. Start Date:	9/11/2023
Current IRR:	N/A	Project I/S Date:	11/15/2024
SAP Profit Center #:	0202R293	Investment Reason:	9 Environmental
WBS Element:	I-000023-0112		
Project Type/Systems:	22 Peakers		
Reconciliation Category:	Engineering & Long Lead for Future Projects		

PMP Problem Description & Project Objective *(Project deliverables? Sum benefits-attach extra sheets if required):*

PROBLEM DESCRIPTION: As River Rouge Power Plant (RRGPP-retired May 31, 2021), St. Clair Power Plant (STCPP), and Trenton Channel Power Plant (TCHPP) take steps to cease coal-fired operation over the next year, DTE is looking into reliable clean energy technologies for the capacity market.
Slocum (located on the TCHPP property) has been selected for a 14MW lithium-ion (Li-ion) battery energy storage system (BESS) with an intended discharge duration of 4 hours. Upon retirement of the Slocum Diesel Generators (DGs), a utility scale Li-ion BESS would be installed at the existing peaking generator point of interconnection.

PROJECT OBJECTIVE: To have a lithium-ion battery energy storage system to store excess energy generated (from the grid) during non-peak hours and for consumption during peak hours.

Brief Project Scope Summary *(Summarize products & services provided)*

This project includes:
1. Engineering to determine the optimal Li-ion BESS utilizing the existing peaking generator point of interconnection.
2. Installation of a utility scale lithium-ion battery storage system.

Reason for Submittal *(State reason for submittal, categorize requested dollar amount changes, and explain any estimate at completion (EAC) benefits or IRR changes):*

Request $5.38M in previously approved but unreleased funding, release $1.19M in Calculated Risk and provide an $10M to construct and close out project. Total PAT Change based on the following:

DTE Labor: Increased $431K based on current assumptions for project team and DO Sub-Station labor.
Contract Labor: Increased $7.63M. $5.34M Site Demolition/Construction labor bids/POs higher than original estimate (Bids with C/O allocations = $8.43M vs initial allocation $3.1M), $900K additional A/E costs, $690K raw material (Lithium) price increase from previous BESS estimate, $315K DO A/E, $175K Current estimates for ancillary services, $110K Demolition support. Year over year adjustments were made to pull additional A/E work into 2023.
Material: Increased $803K driven by additional PDC cost $500K, increased DO Estimate $150K, IT/Security material not in previous request $60K, PDC automation $50K, Temp Aux Power Transformer $41K, and other misc materials.
Other: Increased $77K. Additional system impact studies not captured in original estimate.
Shared Cost: N/A.
Indirects: Increased $2.19M based on above changes and current indirect rates.
Calculated Risk: Decreased $1.19M

P2R0 211123	2021A	2022A
DTE Labor (Direct)	3,723	79,564
Contract Labor (Direct)	61,429	6,639,135
Material (Direct)	-	400,804
Indirects	5,016	442,165
Sub-Total	70,168	7,561,668
Calculated Risk	-	-
Total	70,168	7,561,668

SAP Budget Approval	Prior Years	2023	2024	2025
Previously Approved PAT:	$7,631,836	$8,500,000	$12,000,000	$0
PAT Change Request:	$0	$1,611,298	$14,831,603	$129,104
Current PAT Request:	$7,631,836	$10,111,298	$26,831,603	$129,104
Total PAT Request:	$44,703,841	Total PAT Change:		$16,572,005

Forecast Charge Categories	Current Approved PAT Form				Forecast Changes				Revised PAT Forecast				
	Prior Years	2023	2024	2025	Prior Years	2023	2024	2025	Prior Years	2023	2024	2025	Project Total (EAC)
DTE Labor (Direct)	$83,288	$200,145	$158,319	$0	$0	-$61,572	$482,516	$10,746	$83,288	$138,573	$640,835	$10,746	$873,442
Contract Labor (Direct)	$6,700,564	$5,436,838	$12,538,319	$0	$0	$535,212	$6,997,080	$100,000	$6,700,564	$5,972,050	$19,535,399	$100,000	$32,308,013
Material (Direct)	$400,804	$2,265,952	$909,840	$0	$0	-$172,869	$975,879	$0	$400,804	$2,093,083	$1,885,719	$0	$4,379,606
Other (Direct)	$0	$65,000	$5,000	$0	$0	$78,921	$62,067	$0	$0	$143,921	$67,067	$0	$210,988
Shared Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Indirects	$447,180	$1,775,070	$2,524,711	$0	$0	-$11,399	$2,177,871	$18,358	$447,180	$1,763,671	$4,702,582	$18,358	$6,931,792
Sub-Total	$7,631,836	$9,743,005	$16,136,189	$0	$0	$368,293	$10,695,414	$129,104	$7,631,836	$10,111,298	$26,831,603	$129,104	$44,703,841
Calculated Risk	$0	$2,000,000	$2,488,970	$0	$0	-$2,000,000	$807,189	$0	$0	$0	$3,296,159	$0	$3,296,159
TOTAL	$7,631,836	$11,743,005	$18,625,159	$0	$0	-$1,631,707	$11,502,603	$129,104	$7,631,836	$10,111,298	$30,127,762	$129,104	$48,000,000
						Change in Total EAC:		$10,000,000					

Project Developer:	Avani Saraiya	APPROVAL DISPOSITION:	
Project Engineer:	Sunith George	Without Risk:	
Project Manager:	William Casey	With Risk:	

3/4/24

Approved by: Date:

See SWI (Standard Work Instruction) ALLPP-SWI-03-004-011-0643 for instructions on filling out this form

Form: ALLPP-FM-0013 Rev: 8 Date: 01/25/2022

MPSC Case No: U-21534
Requester: Staff
Question No.: STDE-3.9a
Respondent: M. Guillaumin
Page: 1 of 1

Question: 9. The Company references $334 million in capital expenditures for the Trenton Channel BESS which was approved by the Commission in Case No. U-21566. For the remaining $89 million in projected capital expenditures, please:

a. Identify any work that the Company will contract with a third party to complete.

Answer: For the remaining $89 million, the Company will have MISO-related transmission interconnection expenses and will contract with Black & Veatch for Owner's Engineer services.

BESS commodities, environmental, site stabilization, and an auxiliary transformer are also expected to be contracted as a subcontract through the EPC contract.

Attachment: None.

MPSC Case No: U-21534
Requester: Staff
Question No.: STDE-3.9b
Respondent: M. Guillaumin
Page: 1 of 1

Question: 9. The Company references $334 million in capital expenditures for the Trenton Channel BESS which was approved by the Commission in Case No. U-21566. For the remaining $89 million in projected capital expenditures, please:

b. For any work items identified in part (a), please identify whether the Company has or intends to issue an RFP for this work and the expected timing of the solicitation process.

Answer: Transmission costs are determined by MISO through their interconnection process. Black & Veatch was selected as an owner's engineer through an RFP process in 2023.

To the best of my knowledge and belief, there are no other 3rd party RFPs that are expected to be issued by the Company for this project.

Attachment: None.

MPSC Case No: U-21534
Requester: Staff
Question No.: STDE-3.10
Respondent: M. Guillaumin
Page: 1 of 1

Question: 10. For the capital expenditures requested on line 41 of page 2 of Exhibit A-12, Sch.B5.1, please breakout requested costs, in each time-period, for the Trenton Channel battery into those included in the EPC and battery vendor contracts approved in Case No. U-21566, and those for the remainder of project work.

Answer: Please see table below:

$ millions	Historical	Projected Bridge Period			Projected Test Year
	12 mos. ended	12 mos. ending	12 mos. ending	24 mos. ending	12 mos. ending
Description	12/31/2022	12/31/2023	12/31/2024	12/31/2024	12/31/2025
TCEC EPC Contract	0	0.5	26.0	26.5	27.6
TCEC BESS Contract	0	1.1	49.0	50.1	219.5
TCEC Transformer	0	1.8	2.6	4.4	0
TCEC other costs	0	1.9	43.1	44.9	44.7

Attachment: None.

Michigan Public Service Commission
DTE Electric Company
Trenton Channel Energy Center "Other Costs" Breakdown
($ millions)

MPSC Case No.: U-21534
Requestor: Staff
Question No.: STDE-11.2a
Respondent: M. Guillaumin

Line No.	(a) Cost Category	(b) Historical 12 mos. ended 12/31/2022	(c) Projected Bridge Period 12 mos. ending 12/31/2023	(d) Projected Bridge Period 12 mos. ending 12/31/2024	(e) Projected Bridge Period 24 mos. ending 12/31/2024		(f) Projected Test Year 12 mos. ending 12/31/2025	(g) Contracting Strategy	
1	Interconnection Costs & Permits	$ -	$ 0.1	$ 5.0	$ 5.1		$ 12.4	N/A	
2	BESS Commodities and Environmental Remediatior	$ -	$ -	$ 8.0	$ 8.0		$ 2.0	Supplied by Powin. Contract executed.	
3	Subgrade Stabilization and Fire Suppression	$ -	$ 0.1	$ 5.0	$ 5.1		$ 5.0	Supplied by Motor City Electric under EPC contract. Contract executed.	
4	Auxiliary Transformer	$ -	$ -	$ 0.3	$ 0.3		$ 1.2	Supplied by Motor City Electric under EPC contract. Contract executed.	
5	Insurance	$ -	$ -	$ 1.5	$ 1.5		$ -	N/A	
6	Disposal Costs	$ -	$ -	$ 5.0	$ 5.0		$ -	Supplied by Motor City Electric under EPC contract. Contract executed.	
7	DTE Labor	$ -	$ 0.9	$ 1.1	$ 2.0		$ 1.0	N/A	
8	Owners Engineer and Expert Support	$ -	$ 0.5	$ 2.0	$ 2.5		$ 0.7	Services by Black & Veatch. Contract executed.	
9	Project Overheads	$ -	$ 0.3	$ 3.7	$ 4.0		$ 11.4	N/A	
10	AFUDC	$ -	$ -	$ 2.8	$ 2.8		$ 16.0	N/A	
11	All Non-Contracts	$ -	$ 1.9	$ 34.4	$ 36.2		$ 49.7	$	86.0
			$ 1.75	$ 16.12	$ 17.87	#	$ 41.49	$	59.36

MPSC Case No: U-21534
Requester: Staff
Question No.: STDE-3.17
Respondent: S. Hartwick
Page: 1 of 1

Question: 17. Please provide the latest update on any negotiations between the Company and the DOE for grant funding for the Adaptive Networked Microgrids pilot, including the most recent correspondence between Company and DOE, any planned or scheduled future meetings, and the results of any negotiations so far such as preliminary funding agreements

Answer: The Company objects to this request because it is vague as the reference to "most recent correspondence" is unclear. Without waiving this objection, but subject to it, the Company responds as follows:

The Company received the Selection for Notice of Negotiation. DTE Electric is having weekly meetings with the DOE to track the status of required deliverables for the grant award package.

The status of the required documentation is as follows:

- SF424 – Budget Justification Form – awaiting approval by DOE;
- NEPA (National Environmental Protection Agency) Form – awaiting approval by DOE;
- Community Benefits Outcomes and Objectives (CBOO) – Approved by DOE and being added to the award package;
- Technical Evaluation of Budget (TEB) – to be provided by DOE;
- Statement of Project Objectives (SOPO) – awaiting approval by DOE;

Once the documentation is approved by the DOE, the funding agreement negotiations will begin.

Attachment: None

Co-respondent: Legal

MPSC Case No: U-21534
Requester: Staff
Question No.: STDE-3.18
Respondent: S. Hartwick
Page: 1 of 2

Question: 18. Please provide the Company's grant application to the DOE for the Adaptive Networked Microgrids project or provide a summary of the filing including all relevant details such that Staff can understand the amounts sought in grant funding, any required matching, estimated grant timeline, and any specific parameters or requirements necessary for this pilot to qualify for grant funding.

Answer: Project Scope: Two Adaptative Networked Microgrids (ANMs) will be created at existing NWA project sites in our service area

- Detroit –O'Shea Energy Park
  - New solar site combined with a current project to install one battery
  - ANM Project will install one additional battery and establish two networked microgrids
- Port Austin
  - Existing project underway to install solar site with one battery and a microgrid
  - ANM Project will install an additional solar site, two additional batteries and establish two more networked Microgrids

Amounts sought in grant funding: For a breakdown of the project costs, see U-21534 STDE-3.19a.

Cost Match/Share Requirement: The cost share must be at least 50% of the total project costs. The cost share must come from non-federal sources unless otherwise allowed by law. (DE-FOA-0002740[1], Amendment 7, page 44)

Estimated Grant Timeline:

Engineering Phase – 2024

- Specifications will be developed for the individual components and overall system
- Software (CYME and PSCAD) simulations will be completed

[1] https://www.fedconnect.net/FedConnect/default.aspx?doc=DE-FOA-0002740&agency=DOE

Co-respondent: Legal

MPSC Case No: U-21534
Requester: Staff
Question No.: STDE-3.18
Respondent: S. Hartwick
Page: 2 of 2

- The engineering needed for the Port Austin and O'Shea deployments will be finalized

Development Phase – 2025

- The specifications developed in phase 1 will be implemented by the team in phase 2
- Grid-edge and ADMS software will be developed, tested, and refined
- Hardware-in-the-loop testing will be completed
- Westland Equipment Yard testing will start
- Initial drafts of standards will be developed
- Initial testing, operating and maintenance procedures will be completed

Deployment Phase – 2026

- After the successful completion of development work and engineering due diligence in phases 1 and 2,
- ANMs will be deployed in the field on two distribution circuits

Assessment Phase – 2027

- With ANM deployments completed at Port Austin and O'Shea, the team will focus on monitoring the performance and benefits of the new technology

Parameters or requirements to qualify: To qualify for grant funding, see U-21534 STDE-3.17 for a list of deliverables for the grant award package along with meeting the grant requirements included in DE-FOA-0002740

Attachment: None

Co-respondent: Legal

MPSC Case No: U-21534
Requester: Staff
Question No.: STDE-3.19a
Respondent: S. Hartwick
Page: 1 of 1

Question: 19. For the cost estimate provided for the Adaptive Networked Microgrids pilot, please provide:

a. A breakdown of these costs into different cost categories including engineering/site selection, site preparation & development, equipment costs (broken out by major equipment categories such as solar array, battery, and balance of plant), construction, labor, and any overhead or contingencies, in addition to a general breakout of costs into the four different project phases;

Answer: Please see the attached file.

Attachment: U-21534 STDE3.19a-01 ANM Investment Estimate

U-21534 STDE3.19a-01 ANM Investment Estimate

Grant Program, Function or Activity	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Total
a. Personnel						
Project Manager	$ 162,760	$ 173,826	$ 184,891	$ 195,957	$ -	
Engineer	$ 1,367,184	$ 1,460,135	$ 1,553,086	$ 548,679	$ -	
Operator	$ -	$ 49,607	$ 73,125	$ 7,095	$ -	
Facilitator	$ -	$ 3,839	$ 5,619	$ 591	$ -	
Cable Tester	$ -	$ 1,476	$ 5,936	$ 422	$ -	
Relay Technician	$ -	$ 22,441	$ 90,220	$ 6,419	$ -	
Journeyman electrician	$ -	$ 20,670	$ 30,469	$ 2,956	$ -	
Power Equipment Relay Testing Technician	$ -	$ 11,811	$ 47,484	$ 3,378	$ -	
SCADA Technician	$ -	$ 2,362	$ 9,497	$ 676	$ -	
Communications Technician	$ -	$ 2,362	$ 9,497	$ 676	$ -	
SOC Technician	$ -	$ 1,535	$ 6,252	$ 507	$ -	
Splicer	$ -	$ 7,087	$ 10,526	$ 1,014	$ -	
Overhead Lineman	$ -	$ 5,906	$ 8,697	$ 845	$ -	
Cable Puller	$ -	$ 7,825	$ 11,475	$ 1,182	$ -	
Community Benefit Lead	$ 43,680	$ 44,720	$ 49,920	$ 52,000	$ -	
Corporate Strategy Support	$ 17,125	$ 18,455	$ 19,785	$ 21,115	$ -	
a. Personnel	$ 1,590,749	$ 1,834,057	$ 2,116,479	$ 843,511	$ -	$ 6,384,796
b. Fringe Benefits	$ 604,485	$ 696,942	$ 804,262	$ 320,534	$ -	$ 2,426,223
c. Travel	$ 4,100	$ 4,100	$ 4,100	$ 4,100	$ -	$ 16,400

U-21534 STDE3.19a-01 ANM Investment Estimate

Grant Program, Function or Activity	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Total
d. Equipment						
Substation Relay Panel	$ -	$ 360,400	$ -	$ -	$ -	
House Service Transformer	$ -	$ 8,600	$ -	$ -	$ -	
SCADA Cabinet (RTU)	$ -	$ 79,500	$ -	$ -	$ -	
Telecommunication Equipment	$ -	$ 53,000	$ -	$ -	$ -	
Pole (Pine)	$ -	$ 84,028	$ -	$ -	$ -	
Site Foundation	$ -	$ 2,595	$ -	$ -	$ -	
Pole Top	$ -	$ 30,528	$ -	$ -	$ -	
Down Guy/Anchor Cable	$ -	$ 1,060	$ -	$ -	$ -	
Pole Grounding Conductor	$ -	$ 7,632	$ -	$ -	$ -	
Pole Top Arrestor	$ -	$ 3,053	$ -	$ -	$ -	
Regulator	$ -	$ 100,535	$ -	$ -	$ -	
Smart Monitor	$ -	$ 76,320	$ -	$ -	$ -	
636 ACSR Conductor	$ -	$ 39,442	$ -	$ -	$ -	
Shield Wire / Neutral Wire	$ -	$ 4,435	$ -	$ -	$ -	
Pole (Cedar)	$ -	$ 38,828	$ -	$ -	$ -	
Viper Recloser	$ -	$ 559,680	$ -	$ -	$ -	
Relay Protection	$ -	$ 18,444	$ -	$ -	$ -	
500KCMIL CU EPR Cable	$ -	$ 54,164	$ -	$ -	$ -	
Cable Joints	$ -	$ 13,356	$ -	$ -	$ -	
Cable Pole Terminations	$ -	$ 8,268	$ -	$ -	$ -	
PV Solar Meter	$ -	$ 21,200	$ -	$ -	$ -	
5" PVC Conduit	$ -	$ 56,000	$ -	$ -	$ -	
Communication Gateway	$ -	$ 477,000	$ -	$ -	$ -	
1MW x 4MWh Battery Systems	$ -	$ 6,760,320	$ -	$ -	$ -	
Switchgear	$ -	$ 165,990	$ -	$ -	$ -	

U-21534 STDE3.19a-01 ANM Investment Estimate

Grant Program, Function or Activity	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Total
Grounding Transformer	$ -	$ 407,430	$ -	$ -	$ -	
Battery Control Cable	$ -	$ 33,920	$ -	$ -	$ -	
500kW AC PV modules	$ -	$ 246,280	$ -	$ -	$ -	
Hardware Testing	$ -	$ 200,000	$ -	$ -	$ -	
ADMS Testbed hardware	$ -	$ 100,000	$ -	$ -	$ -	
HIL Upgrades	$ -	$ 200,000	$ -	$ -	$ -	
Pole Top Device Automation Controllers	$ -	$ 110,000	$ -	$ -	$ -	
d. Equipment	$ -	$ 10,322,007	$ -	$ -	$ -	$ 10,322,007
e. Supplies	$ 8,000	$ 10,250	$ 4,000	$ 4,000	$ -	$ 26,250
f. Contractual	$ 1,657,338	$ 6,167,625	$ 8,030,863	$ 1,351,871	$ -	$ 17,207,697
g. Construction	$ -	$ -	$ -	$ -	$ -	$ -
h. Other (inlcuding site acq	$ 110,669	$ 1,134,518	$ 34,516	$ 36,066	$ -	$ 1,315,769
i. Total Direct Charges	$ 3,975,341	$ 20,169,498	$ 10,994,219	$ 2,560,083	$ -	$ 37,699,141
j. Indirect Charges	$ 412,505	$ 2,886,772	$ 1,431,408	$ 288,678	$ -	$ 5,019,363
k. **Totals**	$ 4,387,846	$ 23,056,270	$ 12,425,627	$ 2,848,760	$ -	$ 42,718,503

MPSC Case No: U-21534
Requester: Staff
Question No.: STDE-11.7a
Respondent: S. Hartwick
Page: 1 of 1

Question: Referencing the grant application process for the Adaptive Networked Microgrids pilot detailed in discovery response STDE-3.17:
a. Does the Company have any indication on the status of the DOE's review process for its grant application, such as an anticipated time for a formal response or any kind of deadlines for these grants to be awarded?

Answer: The Company has no further update to what was provided in STDE-3.17.

Attachment: None

MPSC Case No: U-21534
Requester: Staff
Question No.: STDE-11.7b
Respondent: S. Hartwick
Page: 1 of 1

Question: Referencing the grant application process for the Adaptive Networked Microgrids pilot detailed in discovery response STDE-3.17:
b. If the Company does not receive its full anticipated grant funding for this pilot from the DOE, does the Company still plan to continue to develop this pilot?

Answer: If an agreement on scope and funding level cannot be reached during award negotiations, it is not anticipated the Company will continue development of the Adaptive Networked Microgrids project.

Attachment: None

Line No.	(a)	(b)	(c)	(d)	(e)	(f)
	Technology & Automation					
	Category	**2025 DGP**	**2025 Rate Case**	**Variance**	**Variance %**	**Commentary**
1	Grid Automation	163	151	-12	-7%	
2	Grid Automation Telecommunications	15	15	0	0%	
3	CVR/VVO	5	3	-3	-50%	Reduced to support increased investments in other Technology and Automation projects
4	Capacitor Replacement and Control Program	6	6	0	-7%	
5	NWA Projects	1	17	16	1623%	DTE received DOE grant for Adapative Networked Microgrids that requires a matching investment from the Company.
6	Grid Edge Enablement program	4	5	1	18%	In the Rate Case, the New Technology Evaluation Program is grouped with Grid Edge Enablement program. As such, there is no variance.
7	Vehicle Electrification Projects	1	3	2	150%	Timing of funding shifted due to external customer needs
8	Line Sensors	0	0	0	0%	
9	URD Fault Indicators	3	0	-3	-100%	In the Rate Case, this project is grouped with Grid Automation; however, it is now $1M of spend, not $3M.
10	Large/Medium Sized DER Monitoring and Control	0	0	0	-3%	
11	New Technology Evaluation Program	1	0	-1	-100%	In the Rate Case, the New Technology Evaluation Program is grouped with Grid Edge Enablement program. As such, there is no variance.
12	Grid Management	26	36	10	39%	Addition of Customer Power Status Visibility Project
13	Distribution Planning	13	13	0	-2%	
14	Work Management and Scheduling	14	6	-8	-54%	Reduced to support increased investments in other Technology and Automation projects
15	Asset Management	3	1	-2	-80%	Reduced to support increased investments in other Technology and Automation projects
16	Mobile Technology	6	5	-1	-10%	Reduced to support increased investments in other Technology and Automation projects
17	**Total Technology & Automation**	**261**	**260**	**-1**	**0%**	
18	**Total Strategic Capital**	**995**	**1,117**	**123**	**12%**	

MPSC Case No: U-21534

Requester: Staff

Question No.: JJH-1.1

Respondent: T. Uzenski

Page: 1 of 1

Question: Confirm the portion of the test year 13-mth average for line 11, Other Accounts Receivable, on Company Exhibit A-12, Schedule B4, that is related to the Company's Natural Account 100820 - "Accounts Receivable NonUtility/NonCore" and Natural Account 100835 - "Accounts Receivable SD Other (Non Core)".

Answer:

Natural Account	Description	13 mo. average
100820	Accounts Receivable NonUtility/Non Core	$ 14,408,264
100835	Accounts Receivable SD Other (Non Core)	847,509
	Total 100820 and 100835	$ 15,255,773

Attachment: *None.*

MPSC Case No: U-21534

Requester: Staff

Question No.: JJH-1.2

Respondent: T. Uzenski

Page: 1 of 1

Question: Does the Company agree that a portion of the balance for the accounts in question one above should be removed from the Company's test year working capital since the balances are the result of transactions not necessary for DTE Electric to provide core utility services to its ratepayers? If the Company does agree, please provide the breakdown separating the Non-Utility Related service. If the Company does not agree, please provide an explanation why.

Answer: Yes. Although these balances are not due from utility customers, a substantial portion relates to amounts due from others related to providing utility service. Unfortunately, these sub-accounts do not distinguish amounts related to utility service versus non-utility service.

The Company asserts that only $6,110,720 of the balance within the accounts in question should be considered non-recoverable. As shown below, $9,145,053 relates to utility service and should remain in working capital.

Other Accounts Receivable - Accounts 100820 and 100835		
Electric property damage claims due from customers	$	2,172,043
Home heating credit due from State of Michigan	$	518,288
Medco rebates related to prescription drugs	$	675,254
Retiree co-payments for healthcare	$	143,279
Affordable Care Act - reinsurance fee reimbursement	$	33,355
Michigan Energy Assistance Program (MEAP)	$	990,692
Nuclear Department of Energy Reimbursement	$	1,248,070
Refundable taxes on fuel purchases	$	3,076,278
Fuel Railcar transportation and leases	$	287,794
Subtotal - Utility Related	$	9,145,053
Non-Utility Related		6,110,720
Total 100820 and 100835	$	15,255,773

Attachment: *None*

Michigan Public Service Commission
DTE Electric Company
U-21534 Fleet Capital Purchases

DTE Fleet Spending - Capital Purchases

Year	Rate Case	Amount
2021	21297	$46,346,506
2022	21297	$43,820,948
2023	21534	$29,347,214
2024	21534	$35,391,032
2025	21534	$42,595,010

DTE Fleet Capital Purchases Plan

Year	# of Purchases (Approximate)	Amount
2023	570	$29,347,214
2024	360	$35,391,032
2024	260	$42,595,010

Michigan Public Service Commission
DTE Electric Company
U-21534 Fleet Repair Expenses

DTE Fleet Spending - Capital Repair Expenses

Year	Rate Case	Amount
2020	21297	$407,844
2021	21297	$455,190
2022	21297	$891,585
2023	21534	$948,104
2024	21534	$975,599
2025	21534	$1,003,892

DTE Fleet Spending - O&M Repair Expenses

Year	Rate Case	Amount
2020	21297	$10,150,289
2021	21297	$9,739,263
2022	21297	$8,912,952
2023	21534	$10,023,219
2024	21534	$10,313,892
2025	21534	$10,612,995

MPSC Case No: U-21534
Requester: Staff
Question No.: STDE-4.4
Respondent: T. Uzenski
Page: 1 of 1

Question: 4. Who provides O&M work to Company fleet vehicles, such as oil changes, tire rotations, and brake replacements?

Answer: Approximately 92% of O&M work for Company vehicles is completed in-house. The remaining work is completed by various external service providers. Typical outsourced repairs include body work, warranty/recalls, glass work, vehicle alignments, and heavy-duty suspensions.

Attachment: *None.*

MPSC Case No: U-21534
Requester: Staff
Question No.: STDE-4.5
Respondent: T. Uzenski
Page: 1 of 1

Question: 5. Who provides emergent capital work to Company fleet vehicles, such as engine or transmission repairs or other emergency repairs?

Answer: Approximately 91% of capital work is completed in-house. The remaining work is completed by various external service providers. Outsourced capital work includes warranty/recalls, engines and transmissions.

Attachment: *None.*

U-21534 STDE-1.3-01 Pages 4-9

Michigan Public Service Commission
DTE Electric Company
Projected Capital Expenditures
Distribution Plant - Connections, Relocations and Other
($000)

Line No.	Description	Actual 2018	Actual 2019	Actual 2023
1	**Connections and New Load**			
2	Small Load Growth Projects (Blanket)	$ 12,613	$ 15,856	$ 18,283
3	Customer Connections	84,777	91,418	123,234
4	Customer Connections CIAC	(14,161)	(12,746)	(18,857)
5	Customer Connections (Net of CIAC)	70,616	78,672	104,377
6	New Business Projects	37,842	35,231	73,236
7	New Business Projects CIAC	(12,814)	(8,849)	(6,303)
8	Subtotal New Business Projects (net of CIAC)	25,028	26,382	66,933
9	**Total Connections and New Load**	**135,232**	**142,504**	**214,753**
10	**Total Connections and New Load CIAC**	(26,975)	(21,594)	(25,160)
11	**Total Connections and New Load (Net of CIAC)**	108,257	120,910	189,593
12	**Relocations**			
13	Small Relocation Projects (Blanket)	7,607	8,316	7,098
14	Major Infrastructure Relocation Project			
15	Gordie Howe International Bridge	10,915	5,351	-
	I-375 Electric Relocations			6,334
16	Relocation Projects (excl.Major Infrastructure Projects)	7,661	3,662	24,650
17	Relocation Projects CIAC	(3,648)	-	(466)
18	Subtotal Relocation Projects (Net of CIAC)	4,013	3,662	24,184
19	**Total Relocations**	**26,183**	**17,328**	**38,082**
20	**Total Relocations CIAC**	(3,648)	-	(466)
21	**Total Relocations (Net of CIAC)**	22,535	17,328	37,615
22	**Electric System Equipment**			
23	Distribution Transformers & Regulators	25,827	27,693	816
24	Major Equipment	14,945	11,759	11,470
25	Meters	11,196	10,801	15,384
26	**Total Electric System Equipment**	**51,967**	**50,253**	**27,670**
27	**NRUC and Improvement Blankets**			
28	System Improvements	8,887	10,166	8,020
29	Normal Retirement Unit Changeouts (NRUC)	3,782	7,220	3,888
30	Operational Technologies	2,955	2,800	7,834
31	Batteries and Chargers	2,221	1,400	-
32	Animal Mitigation	35	4	-
33	**Total NRUC and Improvement Blankets**	**17,879**	**21,589**	**19,742**
34	**General Plant, Tools & Equipment and Miscellaneous**			
35	Substation Physical Security	-	704	88
36	Warren SC Transformer Yard Reorganization	-	-	-
37	General Plant, Tools & Equipment and Miscellaneous	5,887	4,815	6,002
38	**Total General Plant, Tools & Equipment and Miscellaneous**	**5,887**	**5,519**	**6,090**
39	**Public Lighting Department Project**			2,186
40	**Total Customer Connections, Relocations & Other**	237,147	237,193	308,523
41	**Total Cust Connections, Relocations & Other CIAC**	(30,623)	(21,594)	(25,626)
42	**Total Cust Connections, Relocations & Other Net of CIAC**	**$ 206,525**	**$ 215,599**	**$ 282,897**

MPSC Case No: U-21534

Requester: STAFF

Question No.: STDE-12.1a

Respondent: B. Hill

Page: 1 of 1

Question: 1. Referring to page 6 of Exhibit A-12, Schedule B5.4, prepared by witness Hill, attached, please provide explanation for the actual reported expenditure in category 'Relocation Projects (excl. Major Infrastructure Projects)' for 2023 of $24.65 million in comparison to the 3-year historical average of $13.02 million. This actual expenditure amount of $24.65 million was reported in document 'U-21534 STDE 1.3-01 Pages 4-9', provided by DTE as part of a response to Staff's first discovery request in this case.

a. How many projects in this category for 2023 were at the request of a state agency, such as MDOT?

Answer: Please see table below for details of Relocation Projects (excl. Major Infrastructures Projects) in 2023:

Customer	Projects	Capital Investment ($ thousands)
State Agency	10	$ 8,448
County Agency	8	$ 10,891
City Agency	6	$ 1,007
Ordinary Customer	10	$ 4,304
Total	**34**	**$ 24,650**

Attachment: *N/A*

Michigan Public Service Commission
DTE Electric Company
U-21534 Fleet Capital Actuals 2023

Vehicle and equipment purchases for 2023

Make	Model	Cap Ex
CATERPILLAR	260T	102,727.00
ALTEC	AT48PW	111,640.50
ALTEC	AT48PW	111,640.50
CROWN	C5 1050-50	56,191.72
CROWN	C5 1050-50	56,191.72
CUSTOM	CABLE PULLING TRAILER	186,299.00
EZ STAK	CARGO TRAILER	137,977.84
EZ STAK	CARGO TRAILER	18,640.00
CROWN	CG35S	72,850.11
CROWN	CG35S	72,850.11
CROWN	CG35S	72,850.11
CROWN	CG35S	72,850.11
Ford	E350 CUTAWAY	58,752.45
JLG	E400AJPN	59,400.00
YALE	ERP050VL	74,070.30
YALE	ERP050VL	74,070.30
PETERBILT	EV220	30,654.14
Ford	EXPLORER XLT	42,671.22
Ford	EXPLORER XLT	42,671.22
Ford	EXPLORER XLT	42,671.22
Ford	EXPLORER XLT	42,671.22
Ford	EXPLORER XLT	42,671.22
Ford	EXPLORER XLT	42,671.22
Ford	EXPLORER XLT	39,498.16
Ford	EXPLORER XLT	39,498.16
Ford	EXT LIGHTNING	74,462.58
Ford	F 350	52,673.08
Ford	F 350	52,673.08
Ford	F 350	52,673.08
Ford	F 350	52,673.08
Ford	F 350	52,673.08
Ford	F 350	52,673.08
Ford	F 350	52,673.08
Ford	F 350	52,673.08
Ford	F 350	52,673.08
Ford	F 350	52,673.08
Ford	F 350	52,673.08
Ford	F 350	52,673.08
Ford	F 350	52,673.08
Ford	F 350	52,673.08
Ford	F 350	52,673.08
Ford	F 350	52,673.08
Ford	F 350	52,673.08
Ford	F 350	52,673.08
Ford	F 350	52,673.08
Ford	F150	16,473.05
Ford	F150	16,473.05
Ford	F150	29,847.77
Ford	F150	29,847.77
Ford	F150	29,847.77
Ford	F150	29,847.77
Ford	F150	29,847.77
Ford	F150	11,781.44

Ford	F150	11,781.44
Ford	F150	11,781.44
Ford	F150	55,763.51
Ford	F150	55,763.51
Ford	F150	37,723.00
Ford	F150	37,723.00
Ford	F150	36,723.00
Ford	F150	34,355.00
Ford	F150	34,355.00
Ford	F150	39,276.34
Ford	F150	39,276.34
Ford	F150	39,276.34
Ford	F150	39,276.34
Ford	F150 CREW	11,646.90
Ford	F150 CREW	11,646.90
Ford	F150 CREW	11,646.90
Ford	F150 HYBRID	11,712.90
Ford	F150 HYBRID	11,665.47
Ford	F150 HYBRID	64,105.88
Ford	F150 HYBRID	64,105.88
Ford	F150 HYBRID	64,105.88
Ford	F150 HYBRID	64,105.88
Ford	F150 HYBRID	64,105.88
Ford	F150 HYBRID	64,105.88
Ford	F150 HYBRID	64,105.88
Ford	F150 HYBRID	64,105.88
Ford	F150 HYBRID	64,105.88
Ford	F150 HYBRID	64,105.88
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Ford	F150 HYBRID	64,105.88
Ford	F150 HYBRID	64,105.88
Ford	F150 HYBRID	64,105.88
Ford	F150 HYBRID	64,105.88
Ford	F150 HYBRID	64,105.88
Ford	F150 HYBRID	64,105.88
Ford	F150 HYBRID	64,105.88
Ford	F150 HYBRID	64,105.88
Ford	F150 HYBRID	49,043.04
Ford	F250	54,285.61
Ford	F250	54,285.61
Ford	F250	54,285.61
Ford	F250	54,285.61
Ford	F250	54,285.61
Ford	F250	54,285.61
Ford	F250	54,285.61
Ford	F250	54,285.61
Ford	F250	73,268.67
Ford	F250	73,268.67
Ford	F250	73,268.67
Ford	F250	73,268.67
Ford	F250	73,268.67
Ford	F250	73,268.67
Ford	F250	73,268.67
Ford	F250	73,268.67
Ford	F250	73,268.67
Ford	F250	73,268.67
Ford	F250	73,268.67
Ford	F250	73,268.67

Ford	F250	73,268.67
Ford	F250	73,268.67
Ford	F350	39,770.70
Ford	F350	39,770.70
Ford	F350	39,770.70
Ford	F350	39,770.70
Ford	F350	39,770.70
Ford	F350	47,902.27
Ford	F350	47,902.27
Ford	F350	47,902.27
Ford	F350	47,902.27
Ford	F350	47,902.27
Ford	F350	47,657.66
Ford	F350	47,657.66
Ford	F350	47,657.66
Ford	F350	47,657.66
Ford	F350	50,909.37
Ford	F350	50,859.37
Ford	F350	51,275.49
Ford	F350	50,915.81
Ford	F350	50,909.37
Ford	F350	50,859.37
Ford	F350	51,275.49
Ford	F350	50,915.81
Ford	F350	15,464.40
Ford	F350	44,235.12
Ford	F350	15,464.40
Ford	F350	44,235.12
Ford	F350	15,464.40
Ford	F350	44,235.12
Ford	F350	15,464.40
Ford	F350	44,235.12
Ford	F350	15,464.40
Ford	F350	44,235.12
Ford	F350	44,235.12
Ford	F350	44,235.12
Ford	F350	20,371.57
Ford	F350	20,371.57
Ford	F350	20,371.57
Ford	F350	20,371.57
Ford	F350	20,371.57
Ford	F350	20,371.57
Ford	F350	20,371.57
Ford	F350	20,371.57
Ford	F350	20,371.57
Ford	F350	20,371.57
Ford	F350	47,571.11
Ford	F350	47,571.11
Ford	F350	47,571.11
Ford	F350	47,571.11
Ford	F350	47,571.11
Ford	F350	37,895.54
Ford	F350	56,835.82
Ford	F350	56,835.82
Ford	F450	100,711.76
Ford	F450	100,711.76
Ford	F450	100,711.76
Ford	F450	100,711.76

Ford	F550	97,302.00
FORD / ALTEC	F550 / AT48 (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48 (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48 (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48 (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48 (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48 (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48 (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48 (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48 (JEMS)	208,495.62
FORD / ALTEC	F550 / AT48 (JEMS)	208,495.62
FORD / ALTEC	F550 / AT48 (JEMS)	208,495.62
FORD / ALTEC	F550 / AT48 (JEMS)	208,495.62
FORD / ALTEC	F550 / AT48 (JEMS)	278,115.36
FORD / ALTEC	F550 / AT48 (JEMS)	277,965.36
FORD / ALTEC	F550 / AT48PE (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48PE (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48PE (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48PE (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48PE (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48PE (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48PE (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48PE (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48PE (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48PE (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48PE (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48PE (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48PE (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48PE (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48PE (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48PE (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48PE (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48PE (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48PE (JEMS)	30,584.81
FORD / ALTEC	F550 / AT48PE (JEMS)	210,747.67
FORD / ALTEC	F550 / AT48PE (JEMS)	210,747.67
FORD / ALTEC	F550 / AT48PE (JEMS)	210,747.67
FORD / ALTEC	F550 / AT48PE (JEMS)	210,747.67
FORD / ALTEC	F550 / AT48PE (JEMS)	210,747.67
FORD / ALTEC	F550 / AT48PE (JEMS)	212,319.98
FORD / ALTEC	F550 / AT48PE (JEMS)	210,679.34
FORD / ALTEC	F550 / AT48PE (JEMS)	212,319.98
FORD / ALTEC	F550 / AT48PE (JEMS)	210,679.34
FORD / ALTEC	F550 / AT48PE (JEMS)	212,319.98
FORD / ALTEC	F550 / AT48PE (JEMS)	210,679.34
FORD / ALTEC	F550 / AT48PE (JEMS)	212,319.98
FORD / ALTEC	F550 / AT48PE (JEMS)	210,679.34
FORD / ALTEC	F550 / AT48PE (JEMS)	212,319.98
FORD / ALTEC	F550 / AT48PE (JEMS)	210,679.34
FORD / ALTEC	F550 / AT48PE (JEMS)	210,683.67
FORD / ALTEC	F550 / AT48PE (JEMS)	210,683.67
FORD / ALTEC	F550 / AT48PE (JEMS)	210,683.67
FORD / ALTEC	F550 / AT48PE (JEMS)	210,683.67

FORD / ALTEC	F550 / AT48PE (JEMS)	210,683.67
FELLING	FT-12-OT	25,930.60
Grove Crane	GRT8100	990,000.00
CM Welding	Jumbo 7 Tube Nitrogen	261,331.00
Ford	LIGHTNING	10,393.07
Ford	LIGHTNING	10,435.35
Ford	LIGHTNING	10,393.07
Ford	LIGHTNING	10,435.35
Ford	LIGHTNING	10,393.07
Ford	LIGHTNING	10,435.35
Ford	LIGHTNING	10,393.07
Ford	LIGHTNING	10,435.35
Ford	LIGHTNING	10,393.07
Ford	LIGHTNING	10,435.35
Ford	LIGHTNING	68,435.90
Ford	LIGHTNING	68,435.90
Ford	LIGHTNING	68,435.90
Ford	LIGHTNING	68,435.90
Ford	LIGHTNING	68,435.90
Ford	LIGHTNING	68,435.90
Ford	LIGHTNING	68,435.90
Ford	LIGHTNING	68,435.90
Ford	LIGHTNING	68,435.90
Ford	LIGHTNING	68,435.90
Ford	LIGHTNING	68,435.90
FREIGHTLINER/ALTEC	M2106 / AA55E (JEMS)	239,191.36
FREIGHTLINER/ALTEC	M2106 / AA55E (JEMS)	239,191.36
FREIGHTLINER/ALTEC	M2106 / AA55E (JEMS)	239,191.36
FREIGHTLINER/ALTEC	M2106 / AA55E (JEMS)	159,460.91
FREIGHTLINER/ALTEC	M2106 / AA55E (JEMS)	240,930.03
FREIGHTLINER/ALTEC	M2106 / AA55E (JEMS)	159,460.91
FREIGHTLINER/ALTEC	M2106 / AA55E (JEMS)	240,930.03
FREIGHTLINER/ALTEC	M2106 / AA55E (JEMS)	159,460.91
FREIGHTLINER/ALTEC	M2106 / AA55E (JEMS)	240,930.03
FREIGHTLINER/ALTEC	M2106 / AA55E (JEMS)	181,043.76
FREIGHTLINER/ALTEC	M2106 / AA55E (JEMS)	181,043.76
FREIGHTLINER/ALTEC	M2106 / DM47B (JEMS)	216,592.96
FREIGHTLINER/ALTEC	M2106 / DM47B (JEMS)	216,592.96
FREIGHTLINER/ALTEC	M2106 / AN46E-OC (JEMS)	257,953.00
FREIGHTLINER/ALTEC	M2-106/AT41PE	189,117.76
Ford	Maverick	29,066.48
Ford	Maverick	29,066.48
Ford	Maverick	29,066.48
Ford	Maverick	29,066.48
Ford	MAVERICK (GAS AWD)	29,018.30
Ford	MAVERICK (GAS AWD)	29,018.30
Ford	MAVERICK (GAS AWD)	29,018.30
Ford	MAVERICK (GAS AWD)	29,018.30
Ford	MAVERICK (GAS AWD)	29,018.30
Ford	MAVERICK (GAS AWD)	29,018.30
Ford	MAVERICK (GAS AWD)	29,018.30
Ford	MAVERICK (GAS AWD)	29,018.30
Ford	MAVERICK (GAS AWD)	29,018.30
Ford	MAVERICK (GAS AWD)	29,018.30
Ford	MAVERICK (GAS AWD)	29,018.30
Ford	MAVERICK (GAS AWD)	29,018.30

Ford	MAVERICK (GAS AWD)	29,018.30
Ford	MAVERICK (GAS AWD)	29,018.30
Ford	MAVERICK (GAS AWD)	29,018.30
MOTREC	MP-250	12,961.77
MOTREC	MP-250	12,961.77
MOTREC	MP-250	12,961.77
MOTREC	MP-250	12,961.77
MOTREC	MP-250	12,961.77
MOTREC	MP-480	17,690.32
MOTREC	MP-480	17,690.32
MOTREC	MP-480	17,690.32
FREIGHTLINER	MT55	253,591.63
FREIGHTLINER	MT55	253,591.63
FREIGHTLINER	MT55	253,591.63
FREIGHTLINER	MT55	253,591.63
POLARIS	PROXD 2000D	30,536.00
POLARIS	PROXD 2000D	30,536.00
POLARIS	PROXD 2000D	30,536.00
SALISBURY	PT122-8ke	31,884.80
SALISBURY	PT122-8ke	31,884.80
SALISBURY	PT122-8ke	31,884.80
KUBOTA	RTVX1100CWLH	32,766.00
KUBOTA	RTVX1100CWLH	36,211.00
KUBOTA	RTVX1100CWLH	38,807.00
KUBOTA	RTX1140WLH	10,121.84
TENNANT	S30	44,225.91
CHEVROLET	Silverado 1500 Double Cab	53,382.31
CHEVROLET	Silverado 1500 Double Cab	53,380.07
CHEVROLET	Silverado 1500 Double Cab	53,364.30
CHEVROLET	Silverado 1500 Double Cab	53,380.07
CHEVROLET	Silverado 1500 Double Cab	53,359.26
CHEVROLET	Silverado 1500 Double Cab	53,378.39
CHEVROLET	Silverado 1500 Double Cab	53,369.43
CHEVROLET	Silverado 1500 Double Cab	51,910.74
CHEVROLET	Silverado 1500 Double Cab	53,358.14
CHEVROLET	Silverado 1500 Double Cab	53,134.13
CHEVROLET	Silverado 1500 Double Cab	53,364.30
CHEVROLET	Silverado 1500 Double Cab	53,227.65
CHEVROLET	Silverado 1500 Double Cab	53,297.50
CHEVROLET	Silverado 1500 Double Cab	53,134.13
CHEVROLET	Silverado 1500 Double Cab	53,364.30
CHEVROLET	Silverado 1500 Double Cab	53,227.65
CHEVROLET	Silverado 1500 Double Cab	53,297.50
CHEVROLET	Silverado 1500 Double Cab	53,369.77
CHEVROLET	Silverado 1500 Double Cab	53,369.77
CHEVROLET	Silverado 1500 Double Cab	53,369.77
CHEVROLET	SILVERADO EV	77,763.45
CHEVROLET	SILVERADO EV	77,763.45
CHEVROLET	SILVERADO EV	77,763.45
CHEVROLET	SILVERADO EV	77,763.45
CHEVROLET	SILVERADO EV	77,763.45
CHEVROLET	SILVERADO EV	77,763.45
CHEVROLET	SILVERADO EV	77,763.45
CHEVROLET	SILVERADO EV	77,763.45
CHEVROLET	SILVERADO EV	77,763.45
CHEVROLET	SILVERADO EV	77,763.45
CHEVROLET	SILVERADO EV	77,763.45

CHEVROLET	SILVERADO EV	77,763.45
CHEVROLET	SILVERADO EV	77,763.45
CHEVROLET	SILVERADO EV	77,763.45
CHEVROLET	SILVERADO EV	77,763.45
CHEVROLET	SILVERADO EV	77,763.45
CHEVROLET	SILVERADO EV	77,763.45
CHEVROLET	SILVERADO EV	77,763.45
CHEVROLET	SILVERADO EV	77,763.45
CHEVROLET	SILVERADO EV	82,824.84
CHEVROLET	SILVERADO EV	82,824.84
CHEVROLET	SILVERADO EV	82,824.84
CHEVROLET	SILVERADO EV	82,824.84
CHEVROLET	SILVERADO EV	82,824.84
CM Welding	Small 6 Tube Nitrogen	118,087.00
CM Welding	Small 6 Tube Nitrogen	118,087.00
TENNANT	T300	15,013.24
Ford	T350	55,166.06
Ford	T350	25,704.97
Ford	T350	27,281.56
Ford	T350	27,281.56
Ford	T350	27,281.56
Ford	T350	27,281.56
Ford	T350	21,753.51
Ford	T350	21,753.51
Ford	T350	21,753.51
Ford	T350	21,753.51
Ford	T350	21,753.51
Ford	T350	12,080.93
Ford	T350	12,080.93
Ford	T350	12,080.93
Ford	T350	12,080.93
Ford	T350	12,080.93
Ford	T350	58,724.58
Ford	T350 (MILLWRIGHT)	59,208.67
Ford	T350 (MILLWRIGHT)	59,208.67
Ford	T350 (MILLWRIGHT)	59,208.67
Ford	T350 148WB	58,996.48
Tennant	T500 WALK BEHIND	14,062.80
ALTEC	Tandem Digger (AWD) (JEMS)	120,695.84
ALTEC	Tandem Digger (AWD) (JEMS)	120,695.84
ALTEC	Tandem Digger (AWD) (JEMS)	120,695.84
ALTEC	Tandem Digger (AWD) (JEMS)	120,695.84
ALTEC	Tandem Digger (AWD) (JEMS)	120,695.84
ALTEC	Tandem Digger (FWD) (JEMS)	120,695.84
ALTEC	Tandem Digger (FWD) (JEMS)	120,695.84
ALTEC	Tandem Digger (FWD) (JEMS)	120,695.84
ALTEC	Tandem Digger (FWD) (JEMS)	120,695.84
TOWMASTER	TC-12HD	20,587.00
NORAMP	U-14	16,207.00
POLARIS	XP 1000 NorthStar	37,317.29
2022 Electric Tools	0000204565-SHELVING INC	22,886.43
2023 Electric Tools	0000200186-ALLIED INC	85,116.00
2023 Electric Tools	0000201767-CDW DIRECT LLC	19,748.40
2023 Electric Tools	0000203306-IDSC HOLDINGS LLC	47,178.41
2023 Electric Tools	0000205352-EXPERT AUTO ACCENTS INC	11,850.00
2023 Electric Tools	0000211104-CUMMINS INC	25,264.52
2023 Electric Tools	0000230744-APH STORES INC	19,493.88

2023 Electric Tools	0000231898-AUTO WARES LLC	28,344.27	
		$ 28,629,291.66	**Total**
		$ 717,922.62	**Total of Items Less than $10K**
		$ 29,347,214.28	Grand Total 2023

Forecasted vehicle and equipment purchases from 5/1/2024 until 12/31/2024 (actuals purhcases from 1/1/2024 to 4/30/2024 included on STDE-4.3c tab)

Make	Model	Forecasted Cap Ex
FREIGHTLINER	AA55E 6x4 (JEMS)	391,166.00
FREIGHTLINER	AA55E 6x4 (JEMS)	391,166.00
FREIGHTLINER	AA55E 6x4 (JEMS)	391,166.00
FREIGHTLINER	AA55E 6x4 (JEMS)	391,166.00
FREIGHTLINER	AA55E 6x4 (JEMS)	391,166.00
FREIGHTLINER	AA55E 6x4 (JEMS)	391,166.00
FREIGHTLINER	AA55E 6x6(AWD) (JEMS)	417,063.00
FREIGHTLINER	AA55E 6x6(AWD) (JEMS)	417,063.00
FREIGHTLINER	AA55E 6x6(AWD) (JEMS)	417,063.00
FREIGHTLINER	AA55E 6x6(AWD) (JEMS)	417,063.00
INTERNATIONAL	AA55E 6x6(AWD) (JEMS)	417,063.00
FREIGHTLINER	AA55E 6x6(AWD) (JEMS)	417,063.00
FREIGHTLINER	AA55E 6x6(AWD) (JEMS)	417,063.00
FREIGHTLINER	AA55E 6x6(AWD) (JEMS)	417,063.00
FREIGHTLINER	AA55E 6x6(AWD) (JEMS)	417,063.00
FREIGHTLINER	AA55E 6x6(AWD) (JEMS)	417,063.00
FREIGHTLINER	AA55E 6x6(AWD) (JEMS)	417,063.00
FREIGHTLINER	AA55E 6x6(AWD) (JEMS)	400,000.00
FREIGHTLINER	AA55E 6x6(AWD) (JEMS)	400,000.00
FREIGHTLINER	AA55E 6x6(AWD) (JEMS)	400,000.00
FREIGHTLINER	AA55E 6x6(AWD) (JEMS)	400,000.00
FREIGHTLINER	AA55E 6x6(AWD) (JEMS)	400,000.00
FREIGHTLINER	AN46 (JEMS)	400,375.00
FREIGHTLINER	AN46 (JEMS)	400,375.00
FREIGHTLINER	AN46 (JEMS)	400,375.00
ALTEC	AN46 (JEMS)	400,375.00
FREIGHTLINER	AN46 (JEMS)	400,375.00
FREIGHTLINER	AN46 (JEMS)	400,375.00
FREIGHTLINER	AN46 (JEMS)	400,375.00
ALTEC	AT48PW	266,237.00
ALTEC	DB41B	262,052.00
ALTEC	DB41B	262,052.00
YALE	ERC045VG	61,606.40
YALE	ERP035VT	72,432.00
INTERNATIONAL	EV MV 607	520,410.00
Ford	F 350	125,658.97
Ford	F 350	125,658.97
Ford	F 350	125,658.97
Ford	F 350	125,658.97
Ford	F 350	125,658.97
Ford	F 350	125,658.97
Ford	F 350	125,658.97
Ford	F 350	125,658.97
Ford	F 350	125,658.97
Ford	F 350	125,658.97
Ford	F 350	120,536.28
Ford	F 350	120,536.28
Ford	F 350	120,536.28
Ford	F 350	120,536.28
Ford	F150	69,840.72
Ford	F150	69,840.72
Ford	F150	60,866.76
Ford	F150	60,866.76
Ford	F150	60,866.76
Ford	F150	60,866.76
Ford	F150	59,724.12
Ford	F150	59,640.34
Ford	F150	59,640.34
Ford	F150	59,640.34
Ford	F150	59,640.34
Ford	F150	59,640.34
Ford	F150	59,640.34

Ford	F150	59,640.34
Ford	F150	59,640.34
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Ford	F150	59,640.34
Ford	F150	59,640.34
Ford	F150	59,640.34
Ford	F150	59,640.34
Ford	F150	59,640.34
Ford	F150	59,640.34
Ford	F150	59,640.34
Ford	F150	59,640.34
Ford	F150	45,000.00
Ford	F150	45,000.00
Ford	F150 HYBRID	85,083.52
Ford	F150 HYBRID	85,083.52
Ford	F150 HYBRID	85,083.52
Ford	F150 HYBRID	85,083.52
Ford	F150 HYBRID	85,083.52
Ford	F150 HYBRID	85,083.52
Ford	F150 HYBRID	85,083.52
Ford	F150 HYBRID	85,083.52
Ford	F150 HYBRID	85,083.52
Ford	F150 HYBRID	85,083.52
Ford	F150 HYBRID	85,083.52
Ford	F150 HYBRID	73,438.08
Ford	F150 HYBRID	69,840.72
Ford	F250	86,374.60
Ford	F350	117,337.00
Ford	F350	117,337.00
Ford	F350	117,337.00
Ford	F350	117,337.00
Ford	F350	117,337.00
Ford	F350	117,337.00
Ford	F350	117,337.00
Ford	F350	117,337.00
Ford	F350	117,337.00
Ford	F350	117,337.00
Ford	F350_GB5-108D-S	115,225.39
Ford	F350_GB5-108D-S	115,225.39
Ford	F350_GB5-108D-S	115,225.39
FORD / ALTEC	F550 / AT37G	168,951.28
YALE	GP60N	61,378.70
YALE	GP60N	61,378.70
YALE	GP60N	61,378.70
INTERNATIONAL	HV607	504,011.26
INTERNATIONAL	HV607	504,011.26
EZ STAK	Material Trailer	50,000.00
EZ STAK	Material Trailer	50,000.00
EZ STAK	Material Trailer	50,000.00
EZ STAK	Material Trailer	50,000.00
MOTREC	MC-480	25,923.34
KUBATO	RTVX1100CWLH	32,766.00
KUBATO	RTVX1100CWLH	32,766.00
KUBATO	RTVX1100CWLH	32,766.00
TOWMASTER	T-12 HD	20,885.00
Ford	T350	103,084.80
Ford	Transit 350 MR 148 WB	93,699.20
Ford	TRANSIT 350 MR 148WB	115,405.88
Ford	TRANSIT 350 MR 148WB	93,699.20
Ford	TRANSIT 350 MR 148WB	93,699.20
Ford	TRANSIT 350 MR 148WB	93,699.20
Ford	TRANSIT 350 MR 148WB	93,699.20
Ford	TRANSIT 350 MR 148WB	93,699.20
Ford	TRANSIT 350 MR 148WB	93,699.20
Ford	TRANSIT 350 MR 148WB	93,058.96

Ford	TRANSIT 350 MR 148WB	93,058.96
Ford	TRANSIT 350 MR 148WB	93,058.96
GENIE	Z-45 XC	105,000.00
FORD		504,011.26
GREAT DANE		210,331.20
GREAT DANE		210,331.20
GREAT DANE		210,331.20
FORD		80,000.00
FORD		80,000.00
JLG		75,000.00
FORD		59,640.34
Ford	F 350	55,000.00
Ford	F 350	55,000.00
Ford	F 350	30,000.00
Ford	F 350	30,000.00
Ford	F 350	55,000.00
Ford	F 350	55,000.00
Ford	F 350	45,000.00
Ford	F 350	45,000.00
Ford	F 350	30,000.00
Ford	F 350	45,000.00
Ford	F 350	30,000.00
Ford	F 350	30,000.00
Ford	F 350	45,000.00
Ford	F 350	45,000.00
Ford	F 350	45,000.00
Ford	F 350	45,000.00
Ford	F 350	30,000.00
Ford	F 350	30,000.00
Ford	F 350	55,000.00
Ford	F 350	30,000.00
Ford	F150	35,000.00
Ford	F150	15,000.00
Ford	F150 HYBRID	15,000.00
Ford	F150 HYBRID	10,000.00
Ford	F250	45,000.00
Ford	F250	45,000.00
Ford	F250	55,000.00
Ford	F250	55,000.00
Ford	F250	55,000.00
Ford	F250	55,000.00
Ford	F250	55,000.00
Ford	F250	55,000.00
Ford	F250	55,000.00
Ford	F250	55,000.00
Ford	F350	50,551.00
Ford	F450	95,000.00
Ford	F550	44,056.20
Ford	LIGHTNING	30,000.00
Ford	LIGHTNING	15,000.00
Ford	LIGHTNING	15,000.00
Ford	LIGHTNING	15,000.00
Ford	LIGHTNING	15,000.00
Ford	LIGHTNING	15,000.00
Ford	LIGHTNING	30,000.00
Ford	LIGHTNING	15,000.00
Ford	LIGHTNING	15,000.00
Ford	LIGHTNING	15,000.00
FREIGHTLINER/ALTEC	M2106 / AA55E (JEMS)	225,000.00
CHEVROLET	SILVERADO 2500	28,000.00
CHEVROLET	SILVERADO 2500	28,000.00
CHEVROLET	SILVERADO 2500	28,000.00
CHEVROLET	SILVERADO 2500	28,000.00
CHEVROLET	SILVERADO 2500	28,000.00
CHEVROLET	SILVERADO 2500	28,000.00
CHEVROLET	SILVERADO 2500	28,000.00

CHEVROLET	SILVERADO 2500	28,000.00	
CHEVROLET	SILVERADO 3500	50,000.00	
CHEVROLET	SILVERADO 3500	50,000.00	
CHEVROLET	SILVERADO 3500	50,000.00	
CHEVROLET	SILVERADO 3500	50,000.00	
CHEVROLET	SILVERADO 3500	50,000.00	
CHEVROLET	SILVERADO 3500	50,000.00	
CHEVROLET	SILVERADO 3500	50,000.00	
CHEVROLET	SILVERADO 3500	50,000.00	
CHEVROLET	SILVERADO 3500	50,000.00	
CHEVROLET	SILVERADO 3500	50,000.00	
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CHEVROLET	SILVERADO 3500	50,000.00	
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CHEVROLET	SILVERADO 3500	50,000.00	
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CHEVROLET	SILVERADO 3500	50,000.00	
CHEVROLET	SILVERADO 3500	50,000.00	
CHEVROLET	SILVERADO 3500	50,000.00	
CHEVROLET	SILVERADO 3500	50,000.00	
CHEVROLET	SILVERADO 3500	50,000.00	
CHEVROLET	SILVERADO 3500	50,000.00	
Ford	T350	30,000.00	
Ford	T350	95,800.89	
Ford	T350 (MILLWRIGHT)	25,245.78	
Ford	T350 130WB	33,030.42	
Ford	T350 148WB	45,000.00	
ALTEC	Tandem Digger (AWD) (JEMS)	225,000.00	
ALTEC	Tandem Digger (AWD) (JEMS)	225,000.00	
ALTEC	Tandem Digger (AWD) (JEMS)	225,000.00	
ALTEC	Tandem Digger (AWD) (JEMS)	225,000.00	
ALTEC	Tandem Digger (FWD) (JEMS)	225,000.00	
ALTEC	Tandem Digger (FWD) (JEMS)	225,000.00	
ALTEC	Tandem Digger (FWD) (JEMS)	225,000.00	
ALTEC	Tandem Digger (FWD) (JEMS)	225,000.00	
ALTEC	Tandem Digger (FWD) (JEMS)	225,000.00	
Ford	TRANSIT 350	33,164.22	
Ford	TRANSIT 350	33,164.22	
Ford	TRANSIT 350	33,164.22	
Ford	TRANSIT 350	33,164.22	
Ford	TRANSIT 350 MR 148WB	30,000.00	
Ford	TRANSIT 350 MR 148WB	30,000.00	
		$ 30,447,121.95	**Total**
	Actual January - April 2024	$ 4,943,910.48	from Tab STDE-4.3c
		$ 35,391,032.43	Total 2024 Forecast

Actual Vehicle and Equipment purchases year-to-date (1/1/2024 through 4/30/2024)

Make	Model	Cap Ex
CROWN	C5P1050-65	68,230.67
CROWN	C5P1050-65	68,230.67
YALE	ERC065VG	65,487.33
YALE	ERC065VG	65,487.33
JLG	ES1932	17,500.00
JLG	ES1932	17,500.00
JLG	ES1932	17,500.00
JLG	ES1932	17,500.00
JLG	ES2632	26,182.00
Ford	F150 HYBRID	22,535.00
Ford	F250	10,539.62
Ford	F250	10,539.62
Ford	F250	10,539.62
Ford	F250	10,539.62
Ford	F250	10,539.62
Ford	F250	10,539.62
Ford	F250	10,539.62
Ford	F250	10,539.62
Ford	F250	10,539.62
Ford	F250	10,539.62
Ford	F250	10,539.62
Ford	F250	10,539.62
Ford	F250	10,539.62
Ford	F250	10,539.62
FORD	F250	17,515.92
FORD	F250	17,515.92
FORD	F250	17,515.92
Ford	F350	28,314.87
Ford	F350	28,314.87
Ford	F450	97,518.36
YALE	GP060VX	67,821.45
YALE	GP060VX	67,821.45
HOT	HOT Trailblazer	16,436.84
FREIGHTLINER/ALTEC	M2106 / AA55E (JEMS)	428,512.04
FREIGHTLINER/ALTEC	M2106 / AA55E (JEMS)	428,512.04
EZ STAK	Material Trailer	50,167.68
FORD	MAVERICK AWD	23,879.96
FORD	MAVERICK AWD	23,879.96
FORD	MAVERICK AWD	23,879.96
FORD	MAVERICK AWD	23,879.96
ALLMAND	NightLite GR3	13,250.00
ALLMAND	NightLite GR3	13,250.00
ALLMAND	NightLite GR3	13,250.00

ALLMAND	NightLite GR3	13,250.00
KUBOTA	RTVX1100CWLH	48,665.66
KUBOTA	RTVX1100CWLH	48,665.66
CHEVROLET	SILVERADO 2500	53,514.90
CHEVROLET	SILVERADO 2500	53,514.90
CHEVROLET	SILVERADO 2500	53,514.90
CHEVROLET	SILVERADO 2500	53,514.90
CHEVROLET	SILVERADO 2500	53,514.90
CHEVROLET	SILVERADO 2500	53,514.90
CHEVROLET	SILVERADO 2500	53,514.90
CHEVROLET	SILVERADO 2500	53,514.90
CHEVROLET	SILVERADO 3500	49,892.91
CHEVROLET	SILVERADO 3500	49,892.91
CHEVROLET	SILVERADO 3500	49,892.91
CHEVROLET	SILVERADO 3500	49,892.91
CHEVROLET	SILVERADO 3500	49,892.91
CHEVROLET	SILVERADO 3500	49,892.91
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CHEVROLET	SILVERADO 3500	49,892.91
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CHEVROLET	SILVERADO 3500	49,892.91
CHEVROLET	SILVERADO 3500	49,892.91
CHEVROLET	SILVERADO 3500	49,892.91
CHEVROLET	SILVERADO 3500	49,892.91
CHEVROLET	SILVERADO 3500	49,892.91
CHEVROLET	SILVERADO 3500	49,892.91
CHEVROLET	SILVERADO 3500	49,892.91
CHEVROLET	SILVERADO 3500	49,892.91
CHEVROLET	SILVERADO EV	21,321.78
CHEVROLET	SILVERADO EV	21,321.78
CHEVROLET	SILVERADO EV	21,321.78
CHEVROLET	SILVERADO EV	21,321.78
CHEVROLET	SILVERADO EV	21,321.78
DREXEL	SL40AC	122,127.90
Ford	T350	19,987.00
Ford	T350	51,084.16

Ford	T350		19,987.00	
Ford	T350 (MILLWRIGHT)		25,345.67	
Ford	T350 (MILLWRIGHT)		25,345.67	
Ford	T350 (MILLWRIGHT)		25,345.67	
Ford	T350 130WB		34,699.60	
TENNANT	T600		21,135.41	
FORD	TRANSIT 350 MR 148WB		52,551.04	
CROWN	WAVE60-118		28,401.64	
KARCHER	BR 75/110 R		26,404.60	
2023 Electric Tools	0000200000-BAKERS GAS AND WELDING SUPPLIES		15,206.76	
2023 Electric Tools	0000200186-ALLIED INC		148,849.44	
2023 Electric Tools	0000201508-VESCO OIL CORP		38,419.61	
2023 Electric Tools	0000203306-IDSC HOLDINGS LLC		141,474.69	
2023 Electric Tools	0000205498-BETTER BOLTING INC		112,360.00	
2023 Electric Tools	0000211104-CUMMINS INC		13,282.21	
2023 Electric Tools	0000226238-MYERS TIRE SUPPLY DISTRIBUTION IN		34,107.03	
		$	**4,943,910.48**	**Total**

MPSC Case No: U-21534

Requester: Staff

Question No.: JEU-1.4

Respondent: T. Lepczyk

Page: 1 of 1

Question: On Exhibit A-14 Schedule D2, please update bond issuance “2024 Series A” with the actual figures determined upon its issuance.

Answer: See attachment labeled “U-21534 JEU-1.4-01 Exhibit A-14 Schedule D2 updated”

Attachment: U-21534 JEU-1.4-01 Exhibit A-14 Schedule D2 updated

Michigan Public Service Commission
DTE Electric Company
Projected Cost of Long-Term Debt
Projected 12 Month Period Ending December 31, 2025

Case No.: U-21534
Exhibit: A-14
Schedule: D2
Witness: T. J. Lepczyk
Page: 1 of 1

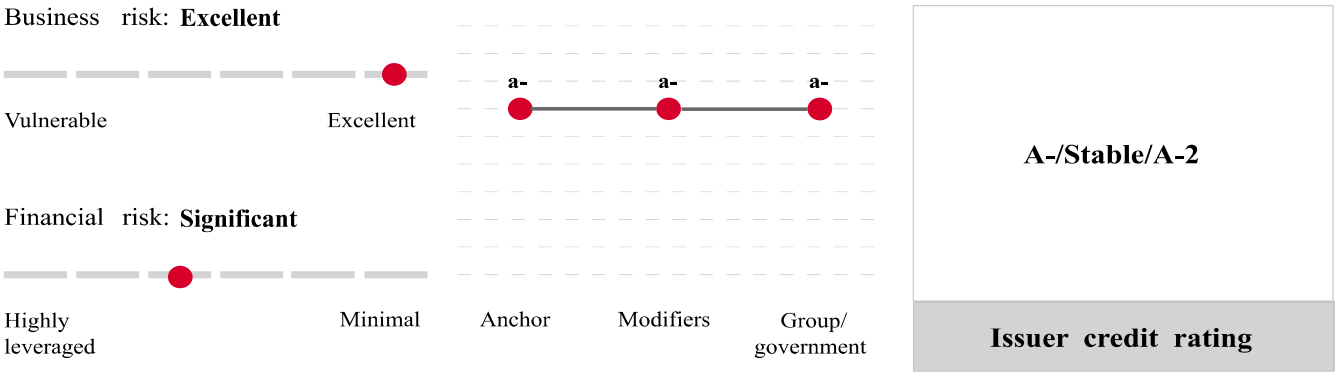
Line No.	(a) Issue Name	(b) Original Issue Date	(c) Stated Maturity	(d) Interest Rate %	(e) Amount of Offering ($000)	(f) Price to Public %	(g) Expenses of Financing %	(h) Net Proceeds to the Company %	(i) Cost Based on Net Proceeds %	(j) 12/31/2025 Amount Outstanding ($000)	(k) Annual Cost ($000)
1	2002 Series B	10/23/02	10/15/32	6.350%	225,000	99.33%	1.0%	98.369%	6.47%	225,000	14,566
2	2005 Series BR	02/07/05	02/15/35	5.450%	200,000	99.59%	1.0%	98.562%	5.55%	200,000	11,098
3	2005 Series E	10/06/05	10/01/37	5.700%	250,000	99.40%	1.0%	98.420%	5.81%	250,000	14,523
4	2006 Series A	06/01/06	06/01/36	6.625%	250,000	99.95%	1.0%	98.954%	6.71%	250,000	16,766
5	2007 Series A	12/18/07	03/15/38	6.470%	50,000	100.00%	0.8%	99.168%	6.53%	50,000	3,266
6	2011 Series E	09/01/11	09/01/26	4.460%	77,000	100.00%	0.6%	99.411%	4.51%	77,000	3,476
7	2011 Series F	09/01/11	09/01/41	5.670%	46,000	100.00%	0.6%	99.411%	5.71%	46,000	2,627
8	2011 Series H	09/20/11	09/01/41	4.500%	140,000	98.87%	1.1%	97.814%	4.64%	140,000	6,490
9	2012 Series B	06/22/12	06/15/42	3.950%	250,000	99.57%	1.0%	98.541%	4.03%	250,000	10,086
10	2013 Series A	03/27/13	04/01/43	4.000%	375,000	99.55%	1.0%	98.500%	4.09%	375,000	15,327
11	2014 Series A	06/04/14	06/01/26	3.770%	100,000	100.00%	0.6%	99.392%	3.83%	100,000	3,834
12	2014 Series B	06/04/14	06/01/44	4.600%	150,000	100.00%	0.6%	99.392%	4.64%	150,000	6,957
13	2014 Series E	07/02/14	07/01/44	4.300%	350,000	99.85%	1.0%	98.832%	4.37%	350,000	15,296
14	2015 Series A	03/11/15	03/15/45	3.700%	500,000	99.77%	1.0%	98.735%	3.77%	500,000	18,854
15	2016 Series A	05/17/16	06/01/46	3.700%	300,000	99.93%	1.1%	98.824%	3.77%	300,000	11,297
16	2017 Series B	08/09/17	08/15/47	3.750%	440,000	99.95%	1.1%	98.850%	3.81%	440,000	16,784
17	2018 Series A	05/07/18	05/15/48	4.050%	525,000	99.55%	1.1%	98.456%	4.14%	525,000	21,736
18	2019 Series A	02/15/19	03/01/49	3.950%	650,000	99.20%	1.1%	98.111%	4.06%	650,000	26,385
19	2020 Series A	02/26/20	03/01/30	2.250%	600,000	99.88%	0.8%	99.042%	2.36%	600,000	14,148
20	2020 Series B	02/26/20	03/01/50	2.950%	500,000	99.96%	1.1%	98.893%	3.01%	500,000	15,031
21	2020 Series C	04/06/20	03/01/31	2.625%	600,000	99.83%	0.8%	99.004%	2.73%	600,000	16,387
22	2021 Green Series A 110	03/29/21	04/01/28	1.900%	575,000	99.92%	0.9%	99.062%	2.04%	575,000	11,756
23	2021 Green Series B 110	03/29/21	04/01/51	3.250%	425,000	99.17%	1.1%	98.062%	3.35%	425,000	14,250
24	1995CC 2021 Remarketir	09/01/21	09/01/30	1.450%	82,350	100.00%	0.7%	99.317%	1.53%	82,350	1,261
25	2008ET2 2021 Remarketi	09/01/21	08/01/29	1.350%	59,175	100.00%	0.7%	99.310%	1.44%	59,175	854
26	2022 Series A 110091	02/24/22	03/01/32	3.000%	500,000	99.60%	0.9%	98.696%	3.15%	500,000	15,764
27	2022 Green Series B 110	02/24/22	03/01/52	3.650%	400,000	99.39%	1.1%	98.260%	3.75%	400,000	14,988
28	2023 Series A 110093	03/03/23	04/01/33	5.200%	600,000	99.79%	0.9%	98.908%	5.34%	600,000	32,045
29	2023 Series B 110094	03/03/23	04/01/53	5.400%	600,000	99.82%	1.1%	98.707%	5.49%	600,000	32,928
30	2023DT Series 110095	06/01/23	06/03/30	3.875%	100,000	100.00%	1.3%	98.730%	4.09%	100,000	4,085
31	2024 Series B	02/29/24	12/01/26	4.850%	500,000	99.98%	0.5%	99.455%	5.06%	500,000	25,308
32	2024 Series C	02/29/24	03/01/34	5.200%	500,000	99.95%	0.8%	99.124%	5.31%	500,000	26,570
33	2025 Series A	03/01/25	03/01/55	5.620%	800,000	100.00%	1.0%	99.00%	5.69%	800,000	45,519
34	2025 Series B	07/01/25	07/01/55	5.620%	500,000	100.00%	1.0%	99.00%	5.69%	500,000	28,449
									4.24%	12,219,525	518,710

DTE Electric Co.

Aug 18, 2023

Current Ratings | View Analyst Contact Information | Table of Contents | Rate This Article

Ratings Score Snapshot



Credit Highlights

Download Table

Overview	
Key strengths	Key risks
Lower-risk, rate-regulated, vertically integrated electric utility.	Lack of regulatory diversity makes the company dependent on the Michigan Public Service Commission (MPSC) to sustain credit quality.
Effective management of regulatory risk in a credit-supportive regulatory environment.	Predominantly fossil-based generation exposes the company to environmental risk, partially mitigated by recently approved integrated resource plan (IRP), which signals a manageable path to address energy transition risk.
Generates most of its cash flows from residential customers, providing a measure of stability to its cash flows.	Capital spending remains elevated, and negative discretionary cash flow is likely to persist, which indicates external funding needs.
Insulating measures in place support an issuer credit rating that is one-notch above the parent.	Service territory is susceptible to severe weather, including high winds, floods, tornados, and ice storms.

On July 26, 2023, the Michigan Public Service Commission (MPSC) approved an integrated resources plan (IRP) for DTE Electric (DTEE).

Provisions include:

- Converting the Belle River coal generation facility to natural gas by 2026.
- Retiring two coal-units at the Monroe generating facility by 2028, with the remaining two units retired by 2032.
- Developing 6,500 megawatts (MW) of solar power and 8,900 MW of wind power by 2042.
- Accelerating the development of energy storge, with a target of 780 MW through 2030 and 1,830 through 2042.

Overall, the approved IRP is favorable for DTEE's credit quality. We think MPSC's approval is constructive because it indicates a possible path for DTEE to transition away from coal-fired generation in a manner that supports credit quality. Key reasons include pre-approval of $125 million of capital to convert the Belle River coal generation facility to gas, and favorable regulatory treatment for the remaining net-book value of affected coal-fired assets to be retired. Specifically, MPSC authorizes DTEE to securitize approximately $1 billion in certain investments related to its Belle River and Monroe assets after these plants are closed. Furthermore, we expect DTEE to receive recovery of the remaining net book value of its Monroe generation assets over 15 years, with an authorized return on equity of 9%, beginning with the company's next rate order.

DTEE's rate case is pending. On Feb. 10, 2023, DTEE filed a rate case requesting a base rate increase of about $622 million based on a 10.25% requested return on equity (ROE). The company expects a final MPSC order by year-end 2023. This follows a November 2022 decision, where the MPSC issued an order for DTEE authorizing a $31 million rate increase, compared with the company's initial rate increase request of $388 million. Given this development, we will continue to monitor the outcome of this pending rate case.

Outlook

Our stable outlook on DTEE reflects our base-case assumption that the company will generate sufficient cash flow to maintain financial measures that support an adjusted FFO-to-debt ratio of 19%-20% through 2024. The stable outlook also reflects our expectation that parent DTE Energy Co. (DTE) will focus growth on its lower-risk, regulated utility strategy. We expect the utility businesses will account for about 90% of the consolidated company. We expect DTE's financial measures will generally remain in line with expectations, including FFO to debt of about 14%-16%

Downside scenario

We could lower our rating on DTEE within the next 24 months if we lower our rating on DTE, or if DTEE's stand-alone financial measures weaken such that its FFO to debt remains consistently below 15%.

Upside scenario

We could raise our rating on DTEE within the next 24 months if we raise our rating on DTE and DTEE's stand-alone FFO to debt consistently exceeds 21%.

Our Base-Case Scenario

Assumptions

- Modest customer growth;
- Continued use of regulatory mechanisms and rate riders;
- Capital expenditure averaging about $3.6 billion annually through 2025;
- Annual dividend payments on average that range from $760 million to $875 million;
- Continued negative discretionary cash flow; and
- All debt maturities are refinanced.

Key metrics

Download Table

DTE Electric Co.--Forecast summary

Period ending	Dec-31-2019	Dec-31-2020	Dec-31-2021	Dec-31-2022	Dec-31-2023	Dec-31-2024	Dec-31-2025
(Mil. $)	2019a	2020a	2021a	2022a	2023f	2024f	2025f
Revenue	5,224	5,506	5,809	6,353	6,134	6,670	6,645
Gross profit	3,834	4,109	4,268	4,363	4,541	4,989	4,982
EBITDA (reported)	2,059	2,267	2,378	2,523	2,691	3,107	3,065
Plus: Operating lease adjustment (OLA) rent	41	14	14	12	12	12	12
Plus/(less): Other	197	226	204	180	151	127	124
EBITDA	2,297	2,507	2,596	2,715	2,854	3,246	3,201
Less: Cash interest paid	309	329	335	359	(494)	(568)	(640)
Less: Cash taxes paid	46	14	5	(33)	(16)	12	20
Plus/(less): Other	--	--	--	--	--	--	--
Funds from operations (FFO)	1,943	2,165	2,256	2,389	2,345	2,690	2,581
EBIT	1,284	1,365	1,454	1,523	1,560	1,873	1,745
Interest expense	465	490	504	551	666	740	812
Cash flow from operations (CFO)	1,740	1,909	1,273	1,654	2,290	2,402	2,338
Capital expenditure (capex)	2,192	2,666	3,008	2,617	3,306	3,693	3,707
Free operating cash flow (FOCF)	(453)	(757)	(1,735)	(964)	(1,016)	(1,291)	(1,369)
Dividends	494	539	588	763	1,003	773	847
Share repurchases (reported)	--	--	--	--	--	--	--
Discretionary cash flow (DCF)	(947)	(1,296)	(2,323)	(1,727)	(2,019)	(2,064)	(2,216)

Debt (reported)	7,632	8,337	9,113	10,291	11,750	12,937	14,474
Plus: Lease liabilities debt	86	86	69	55	55	55	55
Plus: Pension and other postretirement debt	(725)	(454)	(228)	(270)	270	270	270
Less: Accessible cash and liquid Investments	12	16	9	15	--	--	(0)
Plus/(less): Other	656	629	715	927	357	428	502
Debt	9,087	9,490	10,115	11,528	12,432	13,690	15,300
Equity	7,195	8,070	8,903	9,695	9,956	10,923	11,404
FOCF (adjusted for lease capex)	(480)	(771)	(1,737)	(967)	(1,033)	(1,308)	(1,386)
Interest expense (reported)	313	331	335	370	473	543	617
Capex (reported)	2,200	2,674	3,017	2,626	3,315	3,698	3,711
Cash and short-term investments (reported)	12	16	9	15	--	--	0
Adjusted ratios							
Debt/EBITDA (x)	4.0	3.8	3.9	4.2	4.4	4.2	4.8
FFO/debt (%)	21.4	22.8	22.3	20.7	18.9	19.7	16.9
FFO cash interest coverage (x)	7.3	7.6	7.7	7.6	5.8	5.7	5.0
EBITDA interest coverage (x)	4.9	5.1	5.1	4.9	4.3	4.4	3.9
CFO/debt (%)	19.1	20.1	12.6	14.3	18.4	17.5	15.3
FOCF/debt (%)	(5.0)	(8.0)	(17.2)	(8.4)	(8.2)	(9.4)	(8.9)
DCF/debt (%)	(10.4)	(13.7)	(23.0)	(15.0)	(16.2)	(15.1)	(14.5)
Lease capex-adjusted FOCF/debt (%)	(5.3)	(8.1)	(17.2)	(8.4)	(8.3)	(9.6)	(9.1)
Annual revenue growth (%)	(1.4)	5.4	5.5	9.4	(3.5)	8.7	(0.4)
Gross margin (%)	73.4	74.6	73.5	68.7	74.0	74.8	75.0
EBITDA margin (%)	44.0	45.5	44.7	42.7	46.5	48.7	48.2
Return on capital (%)	8.2	8.1	8.0	7.6	7.2	8.0	6.8
Return on total assets (%)	5.4	5.3	5.3	5.2	5.0	5.6	4.9
EBITDA/cash interest (x)	7.4	7.6	7.7	7.6	5.8	5.7	5.0
EBIT interest coverage (x)	2.8	2.8	2.9	2.8	2.3	2.5	2.1
Debt/debt and equity (%)	55.8	54.0	53.2	54.3	55.5	55.6	57.3
Debt fixed-charge coverage (x)	4.9	5.1	5.1	4.9	4.3	4.4	3.9
Debt/debt and undepreciated equity (%)	39.5	38.6	53.2	54.3	55.5	55.6	57.3

Company Description

DTEE generates and distributes electricity to about 2.3 million residential, commercial, and industrial customers in southeastern Michigan. The electric utility has around 12,000 megawatts of generation capacity.

Peer Comparison

Download Table

DTE Electric Co.--Peer Comparisons

	DTE Electric Co.	CenterPoint Energy Inc.	CMS Energy Corp.	NiSource Inc.	Southwestern Public Service Co.
Foreign currency issuer credit rating	A-/Stable/A-2	BBB+/Stable/A-2	BBB+/Stable/A-2	BBB+/Stable/A-2	A-/Stable/A-2
Local currency issuer credit rating	A-/Stable/A-2	BBB+/Stable/A-2	BBB+/Stable/A-2	BBB+/Stable/A-2	A-/Stable/A-2
Period	Annual	Annual	Annual	Annual	Annual
Period ending	2022-12-31	2022-12-31	2022-12-31	2022-12-31	2022-12-31
Mil.	$	$	$	$	$
Revenue	6,353	9,088	8,562	5,851	2,426
EBITDA	2,715	2,699	2,428	2,029	886
Funds from operations (FFO)	2,389	1,706	1,917	1,641	808
Interest	551	600	506	415	168
Cash interest paid	359	572	509	381	159
Operating cash flow (OCF)	1,654	1,491	859	1,383	710
Capital expenditure	2,617	4,375	2,410	2,175	576
Free operating cash flow (FOCF)	(964)	(2,884)	(1,550)	(792)	134

Discretionary cash flow (DCF)	(1,727)	(3,349)	(2,148)	(1,227)		(185)
Cash and short-term investments	15	509	164	41		2
Gross available cash	15	509	164	41		2
Debt	11,528	17,659	13,926	11,806		3,793
Equity	9,695	9,645	8,600	7,462		3,850
EBITDA margin (%)	42.7	29.7	28.4	34.7		36.5
Return on capital (%)	7.6	6.4	5.9	6.6		6.1
EBITDA interest coverage (x)	4.9	4.5	4.8	4.9		5.3
FFO cash interest coverage (x)	7.6	4.0	4.8	5.3		6.1
Debt/EBITDA (x)	4.2	6.5	5.7	5.8		4.3
FFO/debt (%)	20.7	9.7	13.8	13.9		21.3
OCF/debt (%)	14.3	8.4	6.2	11.7		18.7
FOCF/debt (%)	(8.4)	(16.3)	(11.1)	(6.7)		3.5
DCF/debt (%)	(15.0)	(19.0)	(15.4)	(10.4)		(4.9)

Business Risk

Our assessment of DTEE's stand-alone business risk profile reflects the very low risk of the regulated utility business, operations under a credit-supportive regulatory environment in Michigan, effective management of regulatory risk, and large customer base of 2.3 million customers in Michigan. DTEE benefits from a constructive and supportive regulatory framework in Michigan that supports forward-looking rate cases and various riders that enhance cash flow predictability. In addition, the predominance of residential and commercial customers restricts susceptibility to economic cyclicality and provides more stable operating cash flow. These business strengths are partially offset by its lack of geographic and regulatory diversity with operations focus in southeastern Michigan.

DTEE generates a significant proportion of power through coal plants, which exposes it to large carbon emissions. To comply with the environment regulations and renewable energy requirements, DTEE has retired six coal-fired generation units at the Trenton Channel, River Rouge, and St. Clair facilities and plans to retire its remaining 11 coal-fired generating units by 2032. As part of its earlier coal exit, DTE now expects to achieve an 85% reduction in CO2 emissions by 2032, a 90% reduction by 2040, and net-zero carbon emissions by 2050. DTEE will continue to replace the retired facilities with a combination of renewables, energy waste reduction, demand response, and natural gas-fueled generation, including the Blue Water Energy Center, which commenced operations in June 2022.

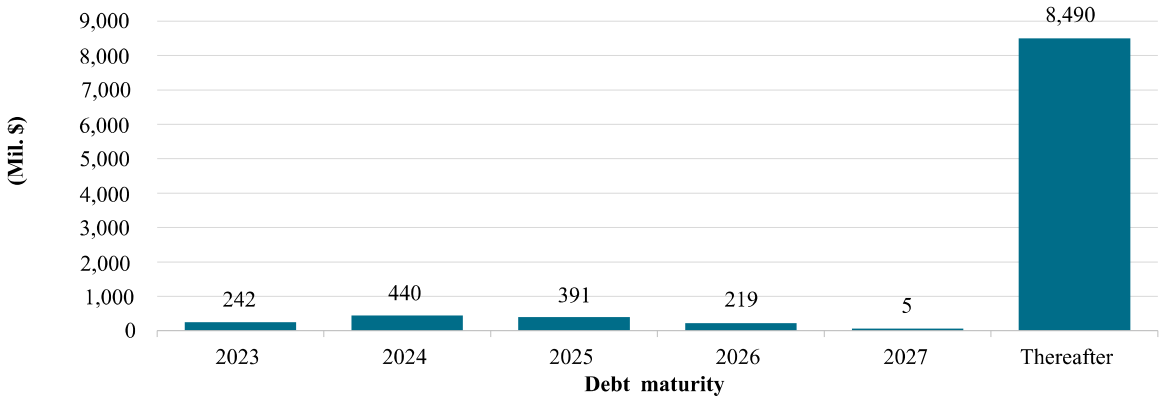
Financial Risk

We assess DTEE's financial measures using our medial volatility table. This reflects the company's regulated electric utility operation and its effective management of regulatory risk in Michigan. Under our base-case scenario, we expect the company’s financial measures to remain in the significant range of financial risk profile. Specifically, we expect FFO to debt of about 19%-20% through 2024. Our base-case scenario assumes effective management of regulatory risk through use of the existing constructive regulatory mechanisms in Michigan, capital spending averaging about $3.6 billion annually, dividends averaging about $875 million annually, and continued negative discretionary cash flow primarily driven by robust capital spending. We also expect DTEE will continue to fund its investments in a manner that preserves credit quality.

Debt maturities

Download Chart Data

DTE Electric Co.--Debt maturities
As of December 2022



Source. DTE Electric Co. Annual Report 2022

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Download Table

DTE Electric Co.--Financial Summary

Period ending	Dec-31-2017	Dec-31-2018	Dec-31-2019	Dec-31-2020	Dec-31-2021	Dec-31-2022
Reporting period	2017a	2018a	2019a	2020a	2021a	2022a
Display currency (mil.)	$	$	$	$	$	$
Revenues	5,102	5,298	5,224	5,506	5,809	6,353
EBITDA	2,137	2,157	2,297	2,507	2,596	2,715
Funds from operations (FFO)	1,885	1,858	1,943	2,165	2,256	2,389
Interest expense	409	428	465	490	504	551
Cash interest paid	267	299	309	329	335	359
Operating cash flow (OCF)	1,590	1,725	1,740	1,909	1,273	1,654
Capital expenditure	1,568	1,982	2,192	2,666	3,008	2,617
Free operating cash flow (FOCF)	22	(257)	(453)	(757)	(1,735)	(964)
Discretionary cash flow (DCF)	(410)	(718)	(947)	(1,296)	(2,323)	(1,727)
Cash and short-term investments	15	18	12	16	9	15
Gross available cash	15	18	12	16	9	15
Debt	7,762	8,219	9,087	9,490	10,115	11,528
Common equity	6,265	6,793	7,195	8,070	8,903	9,695
Adjusted ratios						
EBITDA margin (%)	41.9	40.7	44.0	45.5	44.7	42.7
Return on capital (%)	9.9	8.7	8.2	8.1	8.0	7.6
EBITDA interest coverage (x)	5.2	5.0	4.9	5.1	5.1	4.9
FFO cash interest coverage (x)	8.1	7.2	7.3	7.6	7.7	7.6
Debt/EBITDA (x)	3.6	3.8	4.0	3.8	3.9	4.2
FFO/debt (%)	24.3	22.6	21.4	22.8	22.3	20.7
OCF/debt (%)	20.5	21.0	19.1	20.1	12.6	14.3
FOCF/debt (%)	0.3	(3.1)	(5.0)	(8.0)	(17.2)	(8.4)
DCF/debt (%)	(5.3)	(8.7)	(10.4)	(13.7)	(23.0)	(15.0)

Download Table

Reconciliation Of DTE Electric Co. Reported Amounts With S&P Global Adjusted Amounts (Mil. $)

	Debt	Shareholder Equity	Revenue	EBITDA	Operating income	Interest expense	S&PGR adjustedEBITDA	Operating cash flow	Dividends	Capital expenditure
Financial year	Dec-31-2022									

Company reported amounts	10,291	9,695	6,397	2,523	1,319	370	2,715	1,690	763	2,626
Cash taxes paid	-	-	-	-	-	-	33	-	-	-
Cash interestpaid	-	-	-	-	-	-	(350)	-	-	-
Lease liabilities	55	-	-	-	-	-	-	-	-	-
Operating leases	-	-	-	12	2	2	(2)	10	-	-
Postretirement benefit obligations/deferred compensation	270	-	-	-	-	-	-	-	-	-
Accessible cash and liquid investments	(15)	-	-	-	-	-	-	-	-	-
Capitalized interest	-	-	-	-	-	11	(11)	(11)	-	(11)
Share-based compensation expense	-	-	-	40	-	-	-	-	-	-
Securitized stranded costs	(211)	-	(44)	(44)	(5)	(5)	5	(39)	-	-
Power purchase agreements	35	-	-	3	1	1	(1)	2	-	2
Asset-retirement obligations	1,103	-	-	172	172	172	-	-	-	-
Nonoperating income (expense)	-	-	-	-	26	-	-	-	-	-
U.S. decommissioning fund contributions	-	-	-	-	-	-	-	1	-	-
EBITDA - Gain/(loss) on disposals of PP&E	-	-	-	8	8	-	-	-	-	-
Total adjustments	1,237	-	(44)	192	204	181	(326)	(36)	-	(9)
S&P Global Ratings adjusted	**Debt**	**Equity**	**Revenue**	**EBITDA**	**EBIT**	**Interest expense**	**Funds from Operations**	**Operating cash flow**	**Dividends**	**Capital expenditure**
	11,528	9,695	6,353	2,715	1,523	551	2,389	1,654	763	2,617

Liquidity

As of June 30, 2023, we assess DTEE's liquidity as adequate, with sources covering uses by 1.1x over the coming 12 months, and that its sources cover uses even if forecasted consolidated EBITDA declines by 10%. We believe the supportive regulatory framework provides a manageable level of cash flow stability for the company even in times of economic stress, supporting our use of slightly lower thresholds to assess liquidity. In addition, DTEE has the ability to absorb high-impact, low-probability events, reflecting that the company maintains about $800 million in committed credit facilities through 2027, and our belief the company can lower its capital spending (averaging about $3.6 billion annually) during stressful periods, indicative of a limited need for refinancing under such conditions. Furthermore, our assessment reflects the company's prudent risk management and sound relationship with its banking group. Overall, we believe the company should be able to withstand adverse market circumstances over the next 12 months with sufficient liquidity to meet its obligations. The company has around $440 million of debt maturities coming up in 2024 and we expect it to proactively address these maturities well in advance of their scheduled due dates.

Principal liquidity sources	Principal liquidity uses
• Cash and liquid investments of about $8 million; • Credit facility availability of about $800 million; and • Estimated cash FFO of about $2.4 billion over the next 12 months.	• Debt maturities of about $867 million including current portion of long-term debt and short-term borrowings; • Assumed maintenance capital spending of about $1.1 billion; and • Dividends of about $875 million.

Environmental, Social, And Governance

Environmental factors are a negative consideration in our credit rating analysis of DTEE. The company has substantial exposure to environmental risks compared with peers given its heavy dependence on coal-fired generation and exposure to nuclear generation. Coal-fired generation contributed about 54% of DTEE's net generation portfolio in 2021, a significant carbon footprint relative to its peers. The company is trying to reduce its carbon footprint by retiring its coal-fired generation and replacing that capacity with clean energy sources. We expect coal to approximate 45% of its generation mix by the end of 2023. The recently approved IRP in Michigan signals a manageable path for the company to address energy-transition

risk. Additionally, the company's nuclear generation (10% of net generation capacity) features higher operating and nuclear waste risks and exposes it to potential health and safety risks.

Group Influence

Under our group rating methodology, we assess DTEE as a core subsidiary of DTE, reflecting our view that DTEE benefits from a strong, long-term commitment from senior management, is integral to the group strategy, and is highly unlikely to be sold. DTEE is insulated from parent DTE. This means we expect that any significant credit stress at DTE would have a minimally adverse effect on DTEE's creditworthiness. We rate DTEE one notch higher than the 'bbb+' group credit profile because of the strength of its stand-alone credit profile and our view of its separateness from the group in terms of financial performance, funding arrangements, and operational independence. DTEE maintains its own records and funding arrangements and does not commingle funds, assets, or cash flow. In addition, because it is an independent regulated utility, we believe there is a strong economic incentive for parent DTE to preserve its credit strength, and we do not expect that a default by either DTE or another entity in the group would lead the company to default.

Issue Ratings--Subordination Risk Analysis

Capital structure

DTEE has close to $12 billion of debt in its capital structure, including a mix of senior unsecured debt and first-mortgage bonds.

Analytical conclusions

We rate DTEE's senior unsecured debt the same as the issuer credit rating because it is the debt of a qualified investment-grade utility. Our short-term and commercial paper rating on DTEE is based on the company's issuer-credit rating.

Issue Ratings--Recovery Analysis

Key analytical factors

DTEE's first-mortgage bonds benefit from a first-priority lien on substantially all of the utility's real property owned or subsequently acquired. Collateral coverage of more than 1.5x supports a recovery rating of '1+' and an issue rating one notch above the issuer credit rating.

Download Table

Rating Component Scores

Foreign currency issuer credit rating	**A-/Stable/A-2**
Local currency issuer credit rating	**A-/Stable/A-2**
Business risk	**Excellent**
Country risk	Very Low
Industry risk	Very Low
Competitive position	Excellent
Financial risk	**Significant**
Cash flow/leverage	Significant
Anchor	**a-**
Diversification/portfolio effect	Neutral (no impact)
Capital structure	Neutral (no impact)
Financial policy	Neutral (no impact)
Liquidity	Adequate (no impact)
Management and governance	Satisfactory (no impact)
Comparable rating analysis	Neutral (no impact)
Stand-alone credit profile	**a-**

Related Criteria

- **General Criteria: Group Rating Methodology**, July 1, 2019
- **ARCHIVE | General Criteria: Hybrid Capital: Methodology And Assumptions**, July 1, 2019
- **Criteria | Corporates | General: Corporate Methodology: Ratios And Adjustments**, April 1, 2019
- **Criteria | Corporates | General: Reflecting Subordination Risk In Corporate Issue Ratings**, March 28, 2018
- **General Criteria: Methodology For Linking Long-Term And Short-Term Ratings**, April 7, 2017
- **Criteria | Corporates | General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers**, Dec. 16, 2014
- **Criteria | Corporates | Industrials: Key Credit Factors For The Unregulated Power And Gas Industry**, March 28, 2014
- **ARCHIVE | Criteria | Corporates | Industrials: Key Credit Factors For The Midstream Energy Industry**, Dec. 19, 2013

- **Criteria | Corporates | General: Corporate Methodology**, Nov. 19, 2013
- **General Criteria: Country Risk Assessment Methodology And Assumptions**, Nov. 19, 2013
- **General Criteria: Methodology: Industry Risk**, Nov. 19, 2013
- **Criteria | Corporates | Utilities: Key Credit Factors For The Regulated Utilities Industry**, Nov. 19, 2013
- **Criteria | Corporates | Utilities: Collateral Coverage And Issue Notching Rules For '1+' And '1' Recovery Ratings On Senior Bonds Secured By Utility Real Property**, Feb. 14, 2013
- **General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities**, Nov. 13, 2012
- **General Criteria: Principles Of Credit Ratings**, Feb. 16, 2011

Download Table

Ratings Detail (as of August 16, 2023)*

DTE Electric Co.

Issuer Credit Rating	A-/Stable/A-2
Commercial Paper	
Local Currency	A-2
Senior Secured	A
Senior Secured	A/A-2
Issuer Credit Ratings History	
27-Aug-2019	A-/Stable/A-2
21-Aug-2015	BBB+/Stable/A-2
19-Aug-2013	BBB+/Positive/A-2

*Unless otherwise noted, all ratings in this report are global scale ratings. S&P Global Ratings credit ratings on the global scale are comparable across countries. S&P Global Ratings credit ratings on a national scale are relative to obligors or obligations within that specific country. Issue and debt ratings could include debt guaranteed by another entity, and rated debt that an entity guarantees.

Primary Contact: Obioma Ugboaja, New York 1-212-438-7406;
obioma.ugboaja@spglobal.com

Research Contributor: Dhananjay Gaikwad, CRISIL Global Analytical Center, an S&P Global Ratings affiliate, Pune ;

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MOODY'S
INVESTORS SERVICE

CREDIT OPINION
6 July 2023

Update

Send Your Feedback

RATINGS

DTE Electric Company

Domicile	Detroit, Michigan, United States
Long Term Rating	A2
Type	LT Issuer Rating
Outlook	Stable

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

Contacts

Jairo Chung +1.212.553.5123
VP-Sr Credit Officer
jairo.chung@moodys.com

Tang Zheng +1.212.553.0300
Associate Analyst
tang.zheng@moodys.com

Michael G. Haggarty +1.212.553.7172
Associate Managing Director
michael.haggarty@moodys.com

Jim Hempstead +1.212.553.4318
MD - Global Infrastructure & Cyber Risk
james.hempstead@moodys.com

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
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DTE Electric Company

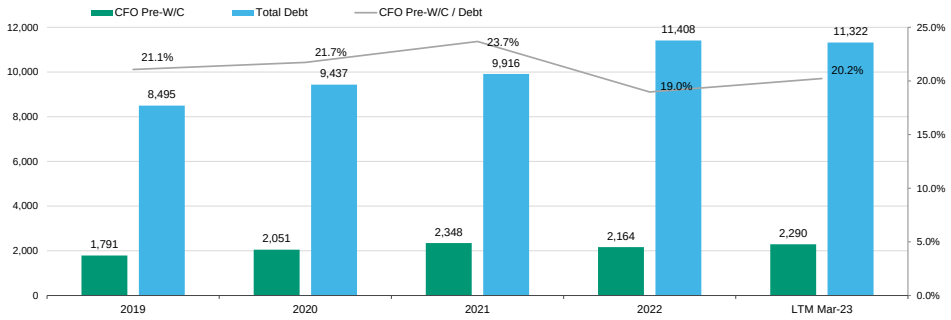
Update to credit analysis

Summary

DTE Electric Company's (DTE Electric) credit quality reflects its operating profile as a vertically integrated utility in a credit supportive regulatory environment in Michigan that provides steady and predictable cash flow. This is offset by capital investments that will remain elevated in order to maintain operational reliability, and to transform DTE Electric's predominantly coal-fired generation fleet into a more balanced portfolio with natural gas fuel and renewable technologies.

Over the next couple of years, we expect DTE Electric to produce cash flow from operations before changes in working capital (CFO pre-WC) to debt between 21% and 23% compared to 23.7% and 19% in 2021 and 2022, respectively. The decline in 2022 was primarily due to the company's robust capital investment program, the mismatched timing of the commodity cost recovery and the outcome of its last electric rate case. We anticipate that DTE Electric's leverage will be maintained at an elevated level to fund its capital investment program. However, the company should maintain a relatively steady credit profile supported by regulatory mechanisms for cost recovery available in Michigan.

Exhibit 1
Historical CFO pre-WC, Total Debt and CFO pre-WC to Debt
$MM



For analytical purpose, we exclude securitization bonds and the underfunded portion of NDT in the credit metric calculations. DTE Electric's CFO pre-WC to debt ratio in 2021, 2022 and LTM 1Q23 would be 24.5%, 20.6% and 21.9%, respectively, when we make these adjustments.
Source: Moody's Financial Metrics

Credit strengths

» Stable financial profile with predictable cash flow

» Supportive regulatory environment

» Timely cost recovery mechanisms

Credit challenges

» Maintaining regulatory support for significant capital expenditure program

» Elevated leverage and slightly lower metrics compared to historical levels

» High, albeit moderating, exposure to coal-fired generation

Rating outlook

DTE Electric's stable outlook reflects our expectation that the Michigan legislative and regulatory environments will remain credit supportive and enable the utility to recover the cost of, and earn a reasonable return on, prudently incurred capital investments and maintain a consistent financial profile.

Factors that could lead to an upgrade

A rating upgrade could be considered if the ratio of CFO pre-WC to debt is consistently above 24%. Also, if the Michigan regulatory environment became even more formulaic, transparent or timely with its suite of recovery mechanisms, an upgrade could be considered.

Factors that could lead to a downgrade

DTE Electric's rating could be downgraded if there is an adverse change in Michigan's regulatory environment, leading to an increase in recovery lag, less transparency, more contentiousness or insufficient cost recovery and returns. Also, if capital investments are higher than expected or there are uncertain recovery prospects, or if its credit metrics deteriorate such that the ratio of CFO pre-WC to debt remains below 21% for a sustained period of time, a downgrade could be possible.

Key indicators [1] [2]

Exhibit 2

DTE Electric Company

	Dec-19	Dec-20	Dec-21	Dec-22	LTM Mar-23
CFO Pre-W/C + Interest / Interest	6.3x	6.8x	7.5x	6.5x	6.6x
CFO Pre-W/C / Debt	21.1%	21.7%	23.7%	19.0%	20.2%
CFO Pre-W/C – Dividends / Debt	15.3%	16.0%	17.8%	12.3%	14.3%
Debt / Capitalization	47.2%	47.1%	46.0%	47.4%	47.3%

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.
[2] For our analytical purposes, we exclude securitization bonds and the underfunded portion of NDT in the credit metric calculations. DTE Electric's CFO pre-WC to debt ratio in 2021, 2022 and LTM 1Q23 were 24.5%, 20.6% and 21.9%, respectively, excluding these factors.
Source: Moody's Financial Metrics

Profile

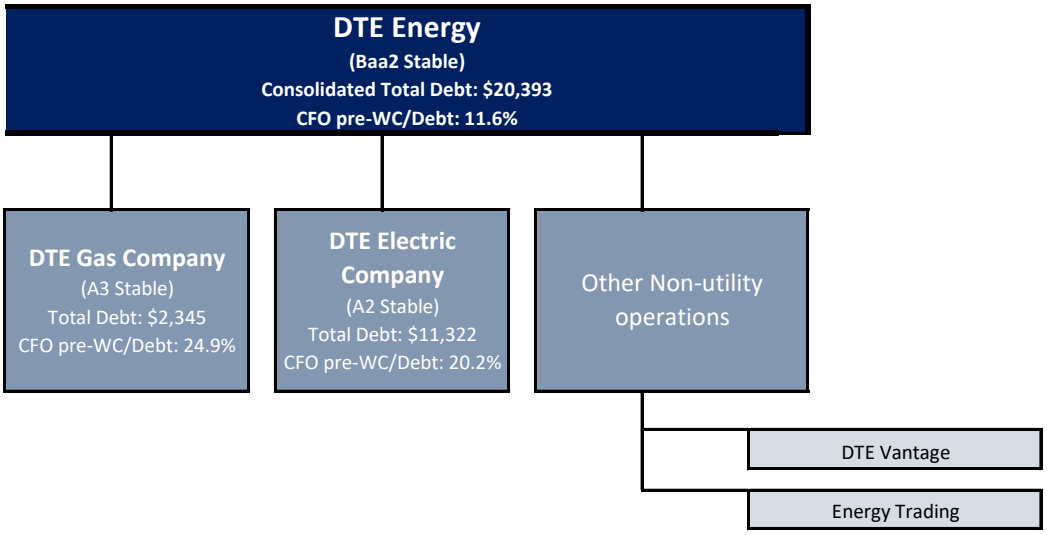
DTE Electric is a vertically integrated electric utility regulated by the Michigan Public Service Commission (MPSC) and is the largest subsidiary of DTE Energy Company (DTE, Baa2 stable). The company serves approximately 2.3 million customers in southeastern Michigan, with approximately $22 billion in rate base.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on https://ratings.moodys.com for the most updated credit rating action information and rating history.

Exhibit 3

Organizational Chart

Amounts including Moody's Standard Adjustments, as of 3/31/2023



Source: Moody's Financial Metrics, company presentation

Detailed credit considerations

Generally credit supportive Michigan regulatory environment

DTE Electric benefits from a credit supportive regulatory environment in Michigan, which helps sustain the utility's long-term credit quality. As a result of energy legislation passed in both 2008 and 2016, the regulatory framework and rate case process have been streamlined and the timeliness of cost recovery has improved. Also, Michigan continues to provide credit positive financial support for utility investments. The 2016 legislation provided additional assurance of utility investment recovery by expanding the certificate of necessity (CON) process, which already included pre-construction approval for large generating resources, into an integrated resource planning (IRP) process. The IRP process considers a wide range of factors including fuel cost, demand forecasts, resource adequacy, competitive pricing, environmental mandates and transmission options, before constructing major projects.

In November 2022, DTE Electric filed its request for approval of its latest IRP. In its proposed plan, DTE Electric is seeking to accelerate the retirements of its two coal-fired power plants: Belle River to 2026 from 2028 and Monroe to 2028 and 2035 from 2040. Also, the proposal included converting Belle River to natural gas generation, and the addition of 15 GW of solar and wind generation sources along with 1,800 MW of storage. Based on the proposed IRP, DTE is targeting to achieve carbon reduction of 85% in 2035, 90% by 2040 and net zero by 2050.

Prescriptive suite of cost recovery mechanisms

Michigan utilities benefit from several formulaic rate adjustment mechanisms that provide a high degree of cash flow stability and assurance of cost recovery and have allowed DTE Electric to consistently earn its allowed return. For example, DTE Electric has a forward-looking power supply cost recovery (PSCR) mechanism intended to ensure that it can recover prudently incurred power supply costs. The PSCR covers fuel and purchased power costs as well as transmission and emission allowance costs. Differences between actual and forecast costs are deferred for recovery or refunded in the following year. DTE Electric also has a forward-looking 20-year levelized renewable energy plan surcharge (RPS), structured to recover the cost of complying with the utility's renewable energy requirements. We view these automatic adjustment mechanisms as positive for credit quality.

In February 2023, DTE Electric filed its latest rate case, requesting a $622 million base rate increase. The requested increase was based on a forward looking test year ending 30 November 2024 and an allowed return on equity (ROE) of 10.25%. The Staff of the MPSC filed its recommendation for a $383.2 million revenue increase based on a 9.8% ROE in June 2023. Although the staff's recommendation was below the company's request, we expect a constructive outcome of the rate case. A final order from the MPSC is expected in December 2023.

DTE Electric's prior rate case was not consistent with its rate case outcome historical trends and our expectation. In its case filed in January 2022, a discrepancy regarding its sales forecast resulted in a significant difference in the company's requested rate increase of $388 million and the $31 million increase authorized by the MPSC. Given that the primary reason for the difference was the sales forecast, which is addressed in the current rate case as actual sales, we view that the outcome of the prior rate case was not an indication of any material change in Michigan's regulatory environment.

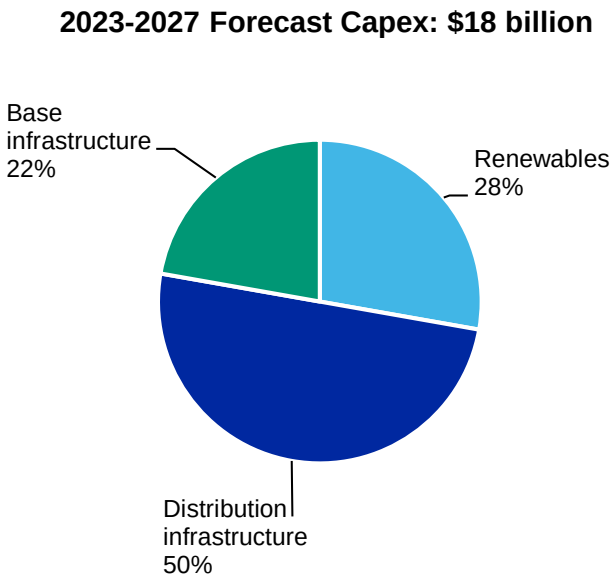
Overall stable financial profile through elevated capital investment cycle

Over the last three years, DTE Electric has averaged CFO pre-WC to debt of around 21% with its metric as of latest twelve month (LTM) period ending 31 March 2023 at 20.2%, including new securitization debt and the underfunded portion of its nuclear decommissioning obligations. Excluding these items, we estimate the ratio to be 21.9% at the same period. We expect the utility's CFO pre-WC to debt, excluding securitization debt and underfunded NDT, to be in the 21%-23% range over the next two years. Capital expenditures will continue to be relatively robust as a result of increased investment in distribution infrastructure and renewable generation. However, DTE Electric should continue to benefit from the credit supportive regulatory framework, recovering its investment costs on a timely basis.

DTE Electric's investment plan through 2027 is approximately $18 billion. Approximately $9 billion of these investments will be related to improving its distribution infrastructure. About $4 billion is earmarked for base infrastructure improvements and $5 billion is for cleaner generation sources including renewables. DTE Electric has retired eleven coal-fired generation units. In its latest proposed IRP, the company described its plan to accelerate the retirement of the Monroe and Belle River plants. DTE Electric has been authorized to issue securitization bonds to recover the remaining book value of its retired coal power plants thus far and we expect the utility to receive constructive regulatory treatment for the remaining planned retirements.

On 3 April 2023, DTE Electric filed an application with the MPSC seeking approval for the securitization of $496 million related to the net book value of the St. Clair and Trenton Channel power plants. On 22 June 2023, the company received a MPSC order authorizing a securitization of $602 million related to the net book value of the St. Clair and Trenton Channel power plants. A securitization financing is expected by the fourth quarter of 2023.

Exhibit 4
DTE Electric's capex guidance through 2027 aggregates around $18 billion

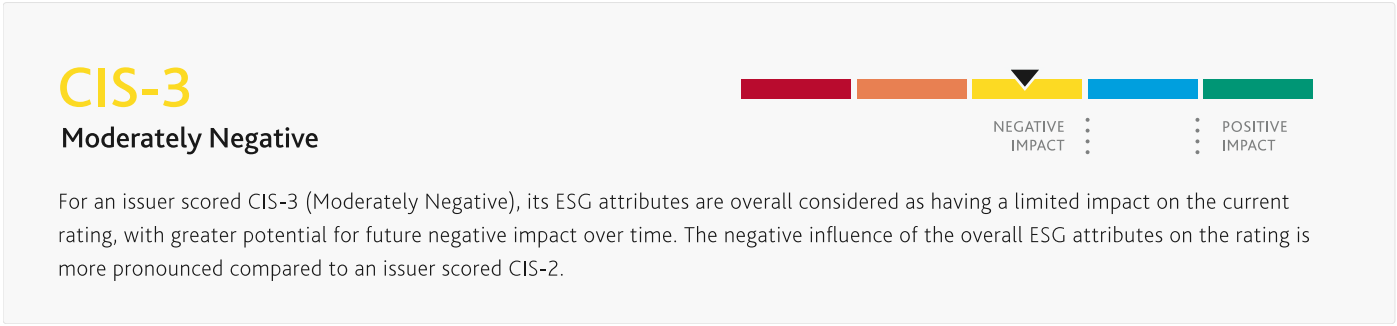


Source: Company presentation

ESG considerations

DTE Electric's ESG Credit Impact Score is CIS-3

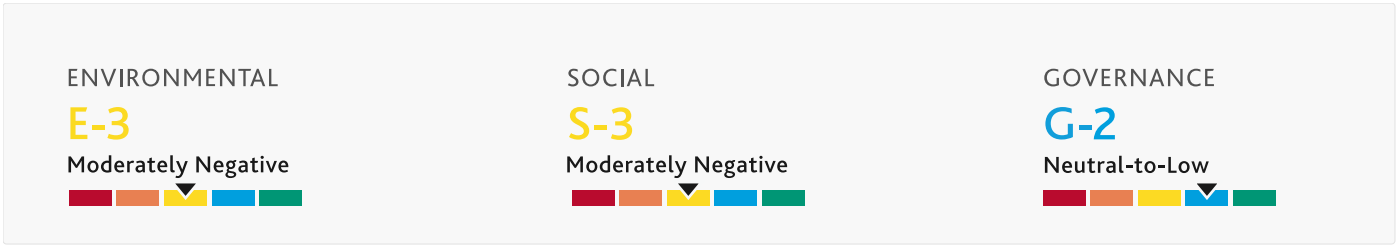
Exhibit 5
ESG Credit Impact Score



Source: Moody's Investors Service

DTE Electric's ESG Credit Impact Score **of CIS-3** reflects the company's current high exposure to coal-fired generation that is reducing over time; and inherent social risk for regulated utilities tied to demographic and societal trends; and governance attributes that pose no particular risk to the company.

Exhibit 6
ESG Issuer Profile Scores



Source: Moody's Investors Service

Environmental

DTE Electric's environmental risks (**E-3** issuer profile score) reflect its current high exposure to coal-fired generation that is reducing over the medium term, decreasing its overall carbon transition risk. The company is currently undergoing a transition plan to phase out coal-fired generation. Its carbon transition efforts are supported by Michigan legislation and regulatory framework, which allow DTE Electric to phase out coal while providing timely cost recovery, and is articulated in its integrated resource planning.

Social

Social risk for DTE Electric (**S-3** issuer profile score) is primarily related to the utility's customer and regulatory relations as well as demographic and societal trends that could increase public concerns over affordability and the utility's reputation. These pressures could turn into an adverse political intervention or regulatory response.

Governance

DTE Electric's governance does not pose a particular risk (**G-2** issuer profile score) as its financing strategy and risk management, as well as management credibility and track record, are considered to be neutral to low risk.

Liquidity analysis

We expect DTE Electric's liquidity to be adequate over the next 12-18 months.

DTE Electric has access to an $800 million revolving credit facility expiring in October 2027 and, as of 31 March 2023, there were no borrowings outstanding. The credit facility has one financial covenant that requires a maximum debt to capital ratio of 65%; as of 31 March 2023, the ratio was reported to be 53%.

Given its large capital investment program, DTE Electric is reliant on external capital sources in addition to internally generated cash flow. For the LTM ended 31 March 2023, DTE Electric generated $1.9 billion of cash from operations, invested $2.8 billion in capital investments and upstreamed $668 million in dividend payments to DTE, resulting in negative free cash flow of $1.6 billion.

We note that DTE Electric has received equity contributions from the parent every year, albeit in varying amounts. In 2021 and 2022, capital contributions from the parent were $555 million and $600 million, respectively. We expect parent equity contributions to continue over the next 2-3 years.

In addition, cash shortfalls were partly funded by incremental long-term debt at the DTE Electric level. Given DTE Electric's significant capital plans, we anticipate a continued need for external financing and regulatory support. Through 31 March 2023, DTE Electric issued $1.2 billion of First Mortgage Bonds (FMB). In June, the company issued $100 million of tax-exempt bonds related to conversion and disposal to dry ask at St. Clair and Monroe power plants.

As of 31 March 2023, DTE has a $1.5 billion revolving credit facility expiring in October 2027, a $150 million letter of credit facility expiring in February 2025, and an unsecured letter of credit facility of $50 million. DTE retired the $81 million revolving credit facility which expired in May 2023 with commercial paper issuance and extended and decreased the $375 million letter of credit facility matured in June 2023 for $275 million to June 2024. In addition in June 2023, DTE increased the above unsecured letter of credit from $50 million to $100 million, and added another $100 million unsecured letter of credit facility for $100 million which can be utilized by DTE Energy or DTE Electric.

As of 31 March 2023, DTE had $80 million of revolver borrowings, $315 million of letters of credit and $50 million of commercial paper issuances outstanding, leaving $1.7 billion of net availability. None of the DTE credit facilities have a MAC clause for new borrowings and all maintain a single financial covenant test requiring DTE to maintain a total funded debt to capitalization ratio of no more than 70% and DTE was in compliance with 63%.

Rating methodology and scorecard factors

As a vertically integrated utility that has generation, DTE Electric is scored under the standard risk Regulated Electric and Gas Utilities methodology financial metric grid.

Exhibit 7

Methodology Scorecard Factors

DTE Electric Company

Regulated Electric and Gas Utilities Industry [1][2]	Current LTM 3/31/2023		Moody's 12-18 Month Forward View As of Date Published [3]	
Factor 1 : Regulatory Framework (25%)	**Measure**	**Score**	**Measure**	**Score**
a) Legislative and Judicial Underpinnings of the Regulatory Framework	A	A	A	A
b) Consistency and Predictability of Regulation	Aa	Aa	Aa	Aa
Factor 2 : Ability to Recover Costs and Earn Returns (25%)				
a) Timeliness of Recovery of Operating and Capital Costs	Aa	Aa	Aa	Aa
b) Sufficiency of Rates and Returns	A	A	A	A
Factor 3 : Diversification (10%)				
a) Market Position	Ba	Ba	Ba	Ba
b) Generation and Fuel Diversity	Ba	Ba	Ba	Ba
Factor 4 : Financial Strength (40%)				
a) CFO pre-WC + Interest / Interest (3 Year Avg)	6.9x	Aa	6.5x - 6.7x	Aa
b) CFO pre-WC / Debt (3 Year Avg)	20.9%	Baa	21% - 23%	A
c) CFO pre-WC – Dividends / Debt (3 Year Avg)	14.8%	Baa	13% - 15%	Baa
d) Debt / Capitalization (3 Year Avg)	47.6%	Baa	45% - 48%	Baa
Rating:				
Scorecard-Indicated Outcome Before Notching Adjustment		A2		A2
HoldCo Structural Subordination Notching			0	0
a) Scorecard-Indicated Outcome		A2		A2
b) Actual Rating Assigned				A2

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.
[2] A of 3/31/2023.
[3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures
Source: Moody's Investors Service

Appendix

Exhibit 8

Stable Cash Flow and Credit Metrics [1]

CF Metrics	Dec-19	Dec-20	Dec-21	Dec-22	LTM Mar-23
As Adjusted					
FFO	**1,819**	**1,972**	**2,138**	**2,213**	**2,165**
+/- Other	-29	79	210	-49	125
CFO Pre-WC	**1,791**	**2,051**	**2,348**	**2,164**	**2,290**
+/- ΔWC	-57	-134	-20	-464	-398
CFO	**1,734**	**1,917**	**2,328**	**1,700**	**1,892**
- Div	494	539	588	763	668
- Capex	2,218	2,690	3,035	2,642	2,776
FCF	**-979**	**-1,312**	**-1,295**	**-1,705**	**-1,552**
(CFO Pre-W/C) / Debt	21.1%	21.7%	23.7%	19.0%	20.2%
(CFO Pre-W/C - Dividends) / Debt	15.3%	16.0%	17.8%	12.3%	14.3%
FFO / Debt	21.4%	20.9%	21.6%	19.4%	19.1%
RCF / Debt	15.6%	15.2%	15.6%	12.7%	13.2%
Revenue	5,224	5,506	5,809	6,397	6,286
Interest Expense	338	355	359	390	406
Net Income	533	708	751	857	755
Total Assets	24,588	26,513	28,405	30,236	30,755
Total Liabilities	17,453	18,443	19,502	20,541	21,142
Total Equity	7,135	8,070	8,903	9,695	9,613

[1] All figures and ratios are calculated using Moody's estimates and standard adjustments. Periods are Financial Year-End unless indicated. LTM = Last Twelve Months
Source: Moody's Financial Metrics

Exhibit 9

Peer Comparison [1]

	DTE Electric Company A2 (Stable)			Consumers Energy Company (P)A3 (Stable)			Wisconsin Power and Light Company A3 (Negative)			Arizona Public Service Company A3 (Negative)			Northern States Power Company (Minnesota) A2 (Stable)		
(In US millions)	FYE Dec-21	FYE Dec-22	LTM Mar-23	FYE Dec-21	FYE Dec-22	LTM Mar-23	FYE Dec-21	FYE Dec-22	LTM Mar-23	FYE Dec-22	FYE Dec-22	LTM Mar-23	FYE Dec-21	FYE Dec-22	LTM Mar-23
Revenue	5,809	6,397	6,286	7,021	8,151	8,078	1,523	1,856	1,866	3,909	4,462	4,623	5,756	6,684	6,652
CFO Pre-W/C	2,348	2,164	2,290	2,041	2,114	2,045	377	339	341	1,170	1,365	1,426	1,054	2,034	2,091
Total Debt	9,916	11,408	11,322	9,018	10,472	10,487	2,819	3,323	3,390	7,455	7,901	8,639	6,832	7,292	7,505
CFO Pre-W/C + Interest / Interest	7.5x	6.5x	6.6x	7.5x	7.2x	6.6x	4.9x	4.8x	4.7x	5.4x	5.8x	5.9x	5.0x	8.2x	8.2x
CFO Pre-W/C / Debt	23.7%	19.0%	20.2%	22.6%	20.2%	19.5%	13.4%	10.2%	10.1%	15.7%	17.3%	16.5%	15.4%	27.9%	27.9%
CFO Pre-W/C – Dividends / Debt	17.8%	12.3%	14.3%	14.6%	12.8%	12.0%	7.4%	4.9%	4.8%	10.4%	12.1%	11.8%	9.1%	20.2%	20.7%
Debt / Capitalization	46.0%	47.4%	47.3%	43.7%	45.1%	45.0%	44.1%	43.8%	43.0%	45.1%	45.6%	47.4%	41.8%	43.4%	43.8%

[1] All figures & ratios calculated using Moody's estimates & standard adjustments. FYE = Financial Year-End. LTM = Last Twelve Months. RUR* = Ratings under Review, where UPG = for upgrade and DNG = for downgrade
Source: Moody's Financial Metrics

Ratings

Exhibit 10

Category	Moody's Rating
DTE ELECTRIC COMPANY	
Outlook	Stable
Issuer Rating	A2
First Mortgage Bonds	Aa3
Senior Secured	Aa3
Commercial Paper	P-1
PARENT: DTE ENERGY COMPANY	
Outlook	Stable
Sr Unsec Bank Credit Facility	Baa2
Senior Unsecured	Baa2
Jr Subordinate	Baa3
Commercial Paper	P-2

Source: Moody's Investors Service

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DTE Electric Company

DTE Electric Company's (DTEE) rating reflects Fitch Ratings' expectations of stable credit metrics at the low-risk regulated electric utility with a predominately constructive regulatory environment in Michigan. Fitch's assessment of parent DTE Energy Company's (DTE; BBB/Stable) group structure allows up to a two-notch differential between the Long-Term Issuer Default Ratings of DTE and DTEE.

Key Rating Drivers

Supportive Regulatory Environment: Fitch views the regulatory environment for electric utilities in Michigan as mostly constructive from a credit perspective. The regulatory framework allows full pass-through of fuel costs, forward-looking test years and a timely 10-month review period for general rate case resolution. DTEE's authorized ROE of 9.9% compares favorably with industry averages.

Rate Case Resolution: Fitch believes the rate order issued in December is credit-supportive and reflects a constructive regulatory environment in Michigan. The approved revenue requirement increase of $368 million is based on the 9.9% ROE and 50% equity ratio on a rate base of $22.15 billion.

The Michigan Public Service Commission also approved a two-year investment recovery mechanism for recovery of a $350 million investment in the distribution grid to improve reliability and resilience over 2024–2025. The increase in base rates is partially offset by a $300 million reduction in fuel costs, resulting in an average customer bill increase of about $2.50 per month.

DTEE filed its last rate case in February 2023, for a $619 million rate increase effective Dec. 1, 2023. DTEE requested an ROE of 10.25% based on a 50% equity ratio on a rate base of $22.6 billion. About 50% of the requested rate increase was related to the rate base growth and $102 million was related to the expected lower residential sales margins, reflecting the post-pandemic hybrid work environment. Residential sales declined about 3% in 2022 on a weather-normalized basis and continue to decline in 2023 but remain above pre-pandemic levels.

2022 Rate Case: Fitch believes December 2022 rate order was modestly negative from a credit rating point of view. The approved revenue requirement increase was lower than Fitch's estimate, driven primarily by the differences in residential sales forecasts. DTEE was be able to offset most near-term pressures with cost reductions.

In November 2022, the commission authorized a $30.6 million increase in base rates, with ROE maintained at 9.9% and a 50% equity ratio. This compares with the company's request of $367 million. DTEE's residential sales forecast, which projected a further decline and return of residential sale to pre-pandemic levels in 2023, was supported by the commission staff and the administrative law judge. The commission adopted a higher residential sales forecast in its final decision, resulting in approximately $100 million of lower revenue requirement than the company requested.

Elevated Capex Driven by Decarbonization: DTEE plans to invest approximately $20 billion in 2024–2028, with $7 billion for clean generation and other projects, $9 billion for distribution infrastructure and $4 billion for base infrastructure. This is a $2 billion increase compared with the previous plan for 2023–2027. The increase is driven by additional investments in cleaner generation. The investments will result in FCF negative in the intermediate term. Fitch expects the capital program will be funded with internal cash flow, debt and equity support to maintain DTEE's balanced capital structure.

Ratings

Long-Term IDR	A–
Short-Term IDR	F2
Senior Secured Debt — Long-Term Rating	A+
Outlook	
Long-Term Foreign-Currency IDR	Stable

Click here for the full list of ratings

2035 Climate Vulnerability Signal: 60

Applicable Criteria

Parent and Subsidiary Linkage Rating Criteria (June 2023)

Corporate Rating Criteria – Effective from 28 October 2022 to 3 November 2023 (October 2022)

Corporates Recovery Ratings and Instrument Ratings Criteria – Effective from 9 April 2021 to 13 October 2023 (April 2021)

Corporate Hybrids Treatment and Notching Criteria (November 2020)

Related Research

Global Corporates Macro and Sector Forecasts

North American Utilities, Power & Gas Outlook 2024 (December 2023)

North American Utilities, Power & Gas Dashboard: Third-Quarter 2023 (October 2023)

Analysts

Ivana Ergovic
+1 212 908-0354
ivana.ergovic@fitchratings.com

Simar Jolly
+1 647 556-8268
simar.jolly@fitchratings.com

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IRP's Decarbonization Path: DTEE is retiring coal-fired generation and replacing it with a mix of natural gas and renewable resources to meet its environmental targets. The 2022 integrated resource plan (IRP), approved in 2023, aims for a carbon dioxide (CO2) emissions reduction of 85% in 2032, 90% by 2040 and net-zero emissions by 2050. At DTEE, 15.4 gigawatts (GW) of renewables and 1.8GW of storage are expected to be added to the current 3GW and 1.1GW, respectively, by 2042.

Belle River coal plant will be retired two years ahead of plan by 2026, and converted to a natural gas peaker plant. The Monroe unit retirement is also being accelerated, with two units retiring in 2028 and the remainder in 2032, compared with a previous retirement date of 2035. All other coal units have been retired. DTE retired 11 of its 17 coal-fired units. The additional investment plans are supported by the recent passage of the Inflation Reduction Act.

Solid Financial Profile: Fitch believes DTEE's credit metrics are consistent with its rating. Debt maturities are manageable, and DTEE is expected to have continued access to capital markets. Fitch calculated FFO leverage at 3.6x in 2022, which is supportive of the ratings. FFO leverage is expected to modestly increase in 2023 above the negative sensitivity threshold due to the lower than expected rate case outcomes from a 2021 rate filing and storm costs. Following a recent supportive rate case decision, FFO leverage is expected to improve and average 4.0x through 2025.

Parent-Subsidiary Linkage: There is parent-subsidiary linkage between DTE and its rated subsidiaries. Fitch determines DTE's Standalone Credit Profile (SCP) based on consolidated metrics. Fitch considers DTEE to have a stronger SCP than DTE. As such, Fitch has followed the stronger subsidiary path. Emphasis is placed on DTEE's status as a regulated entity. Legal ring-fencing is considered porous, given the general protections afforded by economic regulation. Access and control are evaluated as porous.

DTE centrally manages the treasury function for all of its entities and is the sole source of equity. However, DTEE issues its own short- and long-term debt. Due to the linkage considerations, Fitch will limit the difference between ratings at DTE and DTEE to two notches.

Financial Summary

($ mil.)	2019	2020	2021	2022
Gross revenue	5,224	5,506	5,809	6,397
EBITDA	2,128	2,341	2,431	2,567
Cash flow from operations (Fitch-defined)	1,705	1,901	2,310	1,684
Debt	7,691	8,409	9,200	10,173
FFO interest coverage (x)	6.0	6.7	6.5	8.0
FFO leverage (x)	4.2	3.9	4.2	3.6

Sources: Fitch Ratings, Fitch Solutions

Rating Derivation Relative to Peers

DTEE compares favorably with regulated single-state peers Consumers Energy Company (A–/Stable) and Northern States Power Company-Wisconsin (NSP; A–/Stable). All three operate in supportive regulatory environments with favorable recovery mechanisms. DTEE and Consumers operate in Michigan and are similarly sized, while NSP is smaller and based in Wisconsin. However, Consumers also operates a gas utility, while DTE and NSP are both electric utilities. DTEE's financial profile compares favorably with Consumers' but less so with NSP's. Fitch forecasts FFO leverage to average 4.0x at DTEE through 2025, largely in line with 4.1x at Consumers and modestly worse than a projected 3.9x through 2026 at NSP.

Rating Sensitivities

Factors that Could, Individually or Collectively, Lead to Positive Rating Action/Upgrade

- Sustained FFO leverage of 3.5x or better.

Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade

- A one-notch downgrade at DTE;
- An adverse change in Michigan's regulatory environment;
- Sustained FFO leverage greater than 4.5x.

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Liquidity and Debt Structure

Adequate Liquidity: DTEE's liquidity position remains adequate. It had approximately $234 million of available liquidity at Sept. 30, 2023, consisting of cash and amounts available under revolving credit facilities. DTEE's $800 million revolver matures in October 2028. DTEE was in compliance with the covenant of 65% debt/capitalization, as defined under the credit agreement, at 54% at Sept. 30, 2023. Debt maturities remain manageable, given the history of successful refinancing, and Fitch expects DTEE to have continued access to capital markets.

ESG Considerations

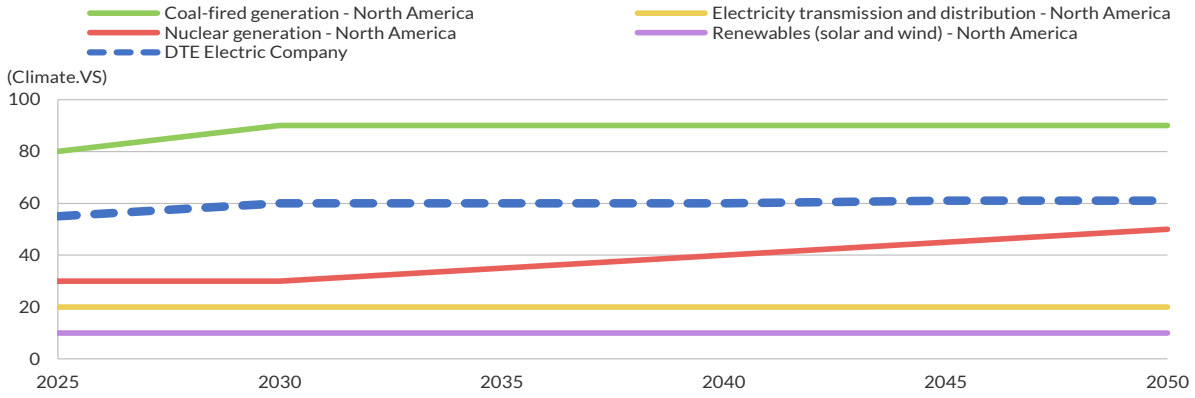
The highest level of ESG credit relevance is a score of '3', unless otherwise disclosed in this section. A score of '3' means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. Fitch's ESG Relevance Scores are not inputs in the rating process; they are an observation on the relevance and materiality of ESG factors in the rating decision. For more information on Fitch's ESG Relevance Scores, visit https://www.fitchratings.com/topics/esg/products#esg-relevance-scores.

Climate Vulnerability Considerations

Fitch uses Climate Vulnerability Signals (Climate.VS) as a screening tool to identify sectors and Fitch-rated issuers that are potentially most exposed to credit-relevant climate transition risks and, therefore, require additional consideration of these risks in rating reviews. Climate.VS range from 0 (lowest risk) to 100 (highest risk). For more information on Climate.VS, see Fitch's *Corporate Rating Criteria*.

DTEE's Electric's Climate.VS in 2035 is high at 60, based on the 2021 rate base composition. It reflects DTEE's ownership of its coal and gas generation fleet, partially offset by transmission and distribution operations and nuclear generation. Most of the coal generation will be retired and replaced with renewable resources and the company expects to retire all of its coal generation by 2025. For further information on how Fitch perceives climate-related risks in the utilities sector, see *Utilities - Long-Term Climate Vulnerability Signals Update*.

Climate.VS Evolution
As of Dec. 31, 2022



Source: Fitch Ratings

Liquidity and Debt Maturities

Liquidity Analysis

($ mil.)	12/31/21	12/31/22
Total cash and cash equivalents	9	24
Short-term investments	0	0
Less not readily available cash and cash equivalents	0	9
Fitch-defined readily available cash and cash equivalents	**9**	**15**
Availability under committed lines of credit	347	232
Total liquidity	**356**	**247**
LTM EBITDA after associates and minorities	2,431	2,567
LTM FCF	-1,295	-1,705

Source: Fitch Ratings, Fitch Solutions, DTE Electric Company

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Scheduled Debt Maturities

($ mil.)	12/31/22
2023	837
2024	440
2025	391
2026	219
2027	5
Thereafter	8,490
Total	**10,382**

Note: Includes securitization bonds of $215 million.
Source: Fitch Ratings, Fitch Solutions, DTE Electric Company

Key Assumptions

Fitch's Key Assumptions Within Our Rating Case for the Issuer Include

- A constructive regulatory environment in Michigan with ROEs for DTEE in line with those currently approved;
- Capital program in line with management projections;
- A rate case filing in 2024;
- Securitization debt and revenue are excluded from the FFO and debt calculations;
- Capital structure commensurate with regulatory structure.

Financial Data

($ mil.)	2019	2020	2021	2022
Summary income statement				
Gross revenue	5,224	5,506	5,809	6,397
Revenue growth (%)	-1.4	5.4	5.5	10.1
EBITDA before income from associates	2,128	2,341	2,431	2,567
EBITDA margin (%)	40.7	42.5	41.8	40.1
EBITDA after associates and minorities	2,128	2,341	2,431	2,567
EBITDAR	2,149	2,359	2,431	2,567
EBITDAR margin (%)	41.1	42.8	41.8	40.1
EBIT	1,126	1,265	1,270	1,327
EBIT margin (%)	21.6	23.0	21.9	20.7
Gross interest expense	-323	-341	-346	-381
Pretax income including associate income/loss	854	887	970	981
Summary balance sheet				
Readily available cash and equivalents	12	16	9	15
Debt	7,691	8,409	9,200	10,173
Lease-adjusted debt	7,859	8,553	9,200	10,173
Net debt	7,679	8,393	9,191	10,158
Summary cash flow statement				
EBITDA	2,128	2,341	2,431	2,567
Cash interest paid	-305	-325	-332	-350
Cash tax	-46	-14	-5	33
Dividends received less dividends paid to minorities (inflow/outflow)	—	—	—	—
Other items before FFO	-247	-155	-252	205
FFO	1,532	1,849	1,842	2,463
FFO margin (%)	29.3	33.6	31.7	38.5

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($ mil.)	2019	2020	2021	2022
Change in working capital	173	52	468	-779
CFO (Fitch-defined)	1,705	1,901	2,310	1,684
Total non-operating/nonrecurring cash flow	—	—	—	—
Capex	-2,200	-2,674	-3,017	-2,626
Capital intensity (capex/revenue) (%)	42.1	48.6	51.9	41.1
Common dividends	-494	-539	-588	-763
FCF	-989	-1,312	-1,295	-1,705
FCF margin (%)	-18.9	-23.8	-22.3	-26.7
Net acquisitions and divestitures	—	—	—	4
Other investing and financing cash flow items	-41	-21	-36	-63
Net debt proceeds	844	701	769	1,170
Net equity proceeds	180	636	555	600
Total change in cash	-6	4	-7	6
Leverage ratios (x)				
EBITDA leverage	3.6	3.6	3.8	4.0
EBITDA net leverage	3.6	3.6	3.8	4.0
EBITDAR leverage	3.7	3.6	3.8	4.0
EBITDAR net leverage	3.7	3.6	3.8	4.0
EBITDAR net fixed-charge coverage	6.6	6.9	7.3	7.5
FFO adjusted leverage	4.2	3.9	4.2	3.6
FFO adjusted net leverage	4.2	3.9	4.2	3.6
FFO leverage	4.2	3.9	4.2	3.6
FFO net leverage	4.2	3.9	4.2	3.6
Calculations for forecast publication				
Capex, dividends, acquisitions and other items before FCF	-2,694	-3,213	-3,605	-3,385
FCF after acquisitions and divestitures	-989	-1,312	-1,295	-1,701
FCF margin after net acquisitions (%)	-18.9	-23.8	-22.3	-26.6
Coverage ratios (x)				
FFO interest coverage	6.0	6.7	6.5	8.0
FFO fixed-charge coverage	5.7	6.4	6.5	8.0
EBITDAR fixed-charge coverage	6.6	6.9	7.3	7.3
EBITDA interest coverage	7.0	7.2	7.3	7.3
Additional metrics (%)				
CFO-capex/debt	-6.4	-9.2	-7.7	-9.3
CFO-capex/net debt	-6.4	-9.2	-7.7	-9.3
CFO/capex	77.5	71.1	76.6	64.1

CFO – Cash flow from operations
Source: Fitch Ratings, Fitch Solutions

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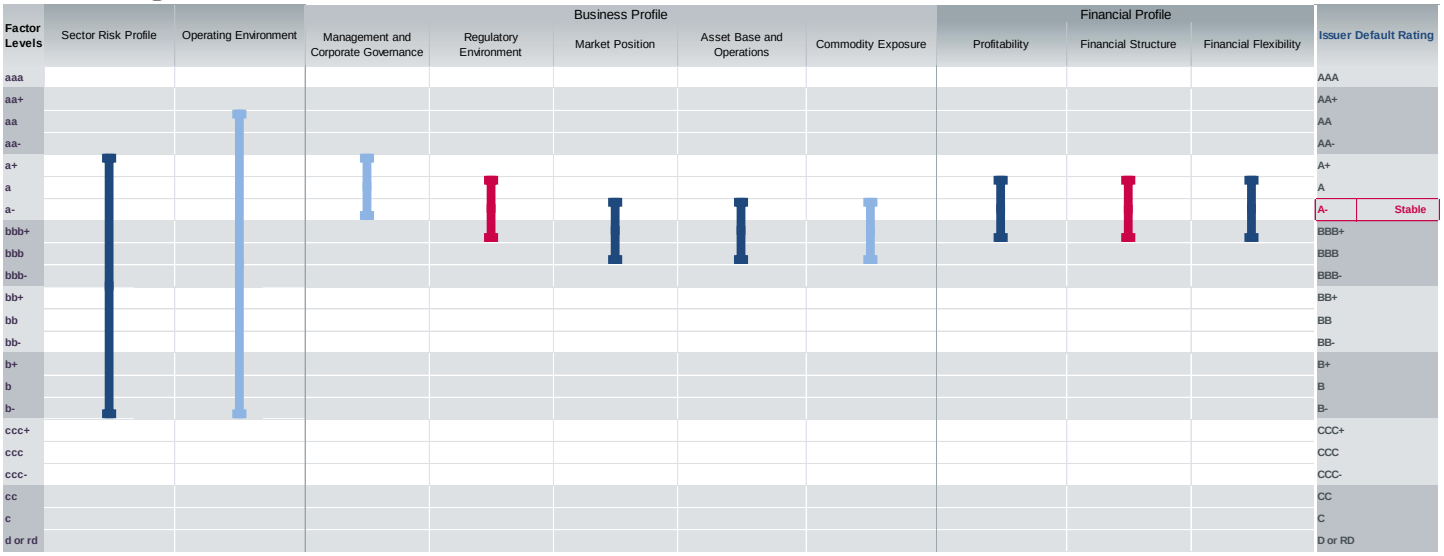
Ratings Navigator

FitchRatings

DTE Electric Company

ESG Relevance:

Corporates Ratings Navigator
North American Utilities



Bar Chart Legend:	
Vertical Bars = Range of Rating Factor	Bar Arrows = Rating Factor Outlook
Bar Colors = Relative Importance	⇧ Positive
Higher Importance	⇩ Negative
Average Importance	⇳ Evolving
Lower Importance	▭ Stable

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FitchRatings

DTE Electric Company

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North American Utilities

Operating Environment

aa+	Economic Environment	aa	Very strong combination of countries w here economic value is created and w here assets are located.
aa	Financial Access	aa	Very strong combination of issuer specific funding characteristics and of the strength of the relevant local financial market.
	Systemic Governance	aa	Systemic governance (eg rule of law , corruption; government effectiveness) of the issuer's country of incorporation consistent w ith 'aa'.
b-			
ccc+			

Management and Corporate Governance

aa-	Management Strategy	a	Coherent strategy and good track record in implementation.
a+	Governance Structure	aa	No record of governance failing. Experienced board exercising effective check and balance to management. No ow nership concentration.
a	Group Structure	a	Group structure show s some complexity but mitigated by transparent reporting.
a-	Financial Transparency	a	High quality and timely financial reporting.
bbb+			

Regulatory Environment

a+	Degree of Transparency and Predictability	a	Track record of transparent and predictable regulation.
a	Timeliness of Cost Recovery	a	Minimal lag to recover capital and operating costs.
a-	Trend in Authorized ROEs	a	Above-average authorized ROE.
bbb+	Mechanisms Available to Stabilize Cash Flows	bbb	Revenues partially insulated from variability in consumption.
bbb	Mechanisms Supportive of Creditworthiness	bbb	Effective regulatory ring-fencing or minimum creditw orthiness requirements.

Market Position

a	Market Structure	a	Well-established market structure w ith complete transparency in price-setting mechanisms.
a-	Consumption Growth Trend	bbb	Customer and usage grow th in line w ith industry averages.
bbb+	Customer Mix	a	Favorable customer mix.
bbb	Geographic Location	bbb	Beneficial location or reasonable locational diversity.
bbb-	Supply Demand Dynamics	bbb	Moderately favorable outlook for prices/rates.

Asset Base and Operations

a	Diversity of Assets	bbb	Good quality and/or reasonable scale diversified assets.
a-	Operations Reliability and Cost Competitiveness	a	Track record of reliable, low -cost operations.
bbb+	Exposure to Environmental Regulations	bbb	Limited or manageable exposure to environmental regulations.
bbb	Capital and Technological Intensity of Capex	bbb	Moderate reinvestments requirements in established technologies.
bbb-			

Commodity Exposure

a	Ability to Pass Through Changes in Fuel	bbb	Limited exposure to changes in commodity costs.
a-	Underlying Supply Mix	bbb	Low variable costs and moderate flexibility of supply.
bbb+	Hedging Strategy	a	Highly captive supply and customer base.
bbb			
bbb-			

Profitability

a+	Free Cash Flow	bbb	Structurally neutral to negative FCF across the investment cycle.
a	Volatility of Profitability	a	Higher stability and predictability of profits relative to utility peers.
a-			
bbb+			
bbb			

Financial Structure

a+	EBITDA Leverage	bbb	3.75x
a	FFO Leverage	a	3.5x
a-			
bbb+			
bbb			

Financial Flexibility

a+	Financial Discipline	a	Clear commitment to maintain a conservative policy w ith only modest deviations allow ed.
a	Liquidity	bbb	One-year liquidity ratio above 1.25x. Well-spread maturity schedule of debt but funding may be less diversified.
a-	FFO Interest Coverage	a	5.5x
bbb+			
bbb			

How to Read This Page: The left column shows the three-notch band assessment for the overall Factor, illustrated by a bar. The right column breaks down the Factor into Sub-Factors, with a description appropriate for each Sub-Factor and its corresponding category.

Credit-Relevant ESG Derivation

Overall ESG

DTE Electric Company has 12 ESG potential rating drivers

Emissions from operations	key driver	0	issues	5	
Fuel use to generate energy and serve load	driver	0	issues	4	
Impact of waste from operations	potential driver	12	issues	3	
Plants' and networks' exposure to extreme weather					
Product affordability and access	not a rating driver	2	issues	2	
Quality and safety of products and services; data security		0	issues	1	

Show ing top 6 issues

For further details on Credit-Relevant ESG scoring, see page 3.

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FitchRatings

DTE Electric Company

Corporates Ratings Navigator
North American Utilities

Credit-Relevant ESG Derivation

DTE Electric Company has 12 ESG potential rating drivers

- DTE Electric Company has exposure to emissions regulatory risk but this has very low impact on the rating.
- DTE Electric Company has exposure to energy productivity risk but this has very low impact on the rating.
- DTE Electric Company has exposure to waste & impact management risk but this has very low impact on the rating.
- DTE Electric Company has exposure to extreme weather events but this has very low impact on the rating.
- DTE Electric Company has exposure to access/affordability risk but this has very low impact on the rating.
- DTE Electric Company has exposure to customer accountability risk but this has very low impact on the rating.

Showing top 6 issues

key driver	0	issues	5
driver	0	issues	4
potential driver	12	issues	3
not a rating driver	2	issues	2
	0	issues	1

ESG Relevance to Credit Rating

Environmental (E) Relevance Scores

General Issues	E Score	Sector-Specific Issues	Reference
GHG Emissions & Air Quality	3	Emissions from operations	Asset Base and Operations; Commodity Exposure; Regulation; Profitability
Energy Management	3	Fuel use to generate energy and serve load	Asset Base and Operations; Commodity Exposure; Profitability
Water & Wastewater Management	2	Water used by hydro plants or by other generation plants, also effluent management	Asset Base and Operations; Regulation; Profitability
Waste & Hazardous Materials Management; Ecological Impacts	3	Impact of waste from operations	Asset Base and Operations; Regulation; Profitability
Exposure to Environmental Impacts	3	Plants' and networks' exposure to extreme weather	Asset Base and Operations; Regulation; Profitability

E Relevance

Social (S) Relevance Scores

General Issues	S Score	Sector-Specific Issues	Reference
Human Rights, Community Relations, Access & Affordability	3	Product affordability and access	Asset Base and Operations; Regulation; Profitability; Financial Structure
Customer Welfare - Fair Messaging, Privacy & Data Security	3	Quality and safety of products and services; data security	Regulation; Profitability
Labor Relations & Practices	3	Impact of labor negotiations and employee (dis)satisfaction	Asset Base and Operations; Profitability
Employee Wellbeing	2	Worker safety and accident prevention	Profitability; Asset Base and Operations
Exposure to Social Impacts	3	Social resistance to major projects that leads to delays and cost increases	Asset Base and Operations; Profitability

S Relevance

Governance (G) Relevance Scores

General Issues	G Score	Sector-Specific Issues	Reference
Management Strategy	3	Strategy development and implementation	Management and Corporate Governance
Governance Structure	3	Board independence and effectiveness; ownership concentration	Management and Corporate Governance
Group Structure	3	Complexity, transparency and related-party transactions	Management and Corporate Governance
Financial Transparency	3	Quality and timing of financial disclosure	Management and Corporate Governance

G Relevance

How to Read This Page

ESG relevance scores range from 1 to 5 based on a 15-level color gradation. Red (5) is most relevant to the credit rating and green (1) is least relevant.

The Environmental (E), Social (S) and Governance (G) tables break out the ESG general issues and the sector-specific issues that are most relevant to each industry group. Relevance scores are assigned to each sector-specific issue, signaling the credit-relevance of the sector-specific issues to the issuer's overall credit rating. The Criteria Reference column highlights the factor(s) within which the corresponding ESG issues are captured in Fitch's credit analysis. The vertical color bars are visualizations of the frequency of occurrence of the highest constituent relevance scores. They do not represent an aggregate of the relevance scores or aggregate ESG credit relevance.

The Credit-Relevant ESG Derivation table's far right column is a visualization of the frequency of occurrence of the highest ESG relevance scores across the combined E, S and G categories. The three columns to the left of ESG Relevance to Credit Rating summarize rating relevance and impact to credit from ESG issues. The box on the far left identifies any ESG Relevance Sub-factor issues that are drivers or potential drivers of the issuer's credit rating (corresponding with scores of 3, 4 or 5) and provides a brief explanation for the relevance score. All scores of '4' and '5' are assumed to reflect a negative impact unless indicated with a '+' sign for positive impact.

Classification of ESG issues has been developed from Fitch's sector ratings criteria. The General Issues and Sector-Specific Issues draw on the classification standards published by the United Nations Principles for Responsible Investing (PRI), the Sustainability Accounting Standards Board (SASB), and the World Bank.

CREDIT-RELEVANT ESG SCALE

How relevant are E, S and G issues to the overall credit rating?

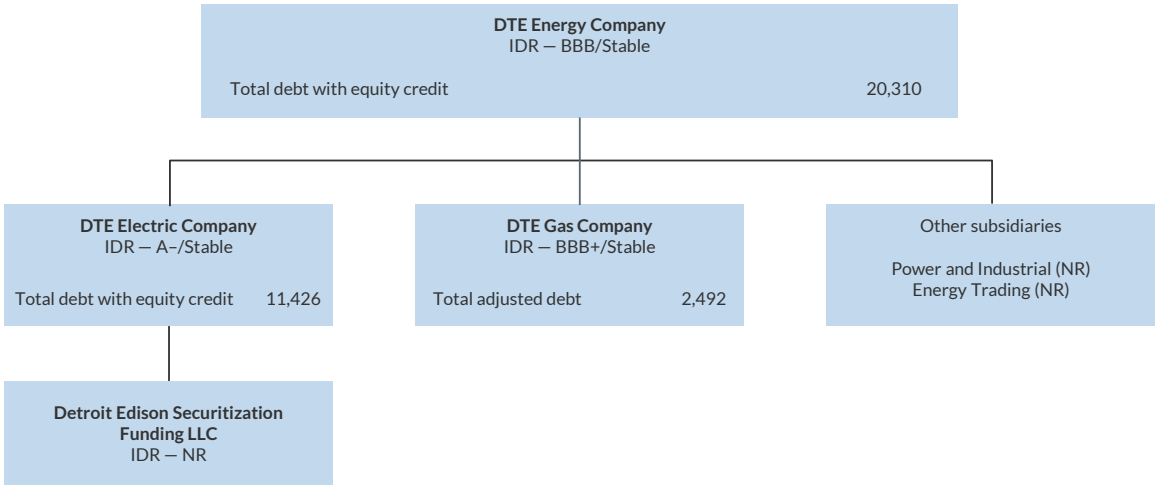
5	Highly relevant, a key rating driver that has a significant impact on the rating on an individual basis. Equivalent to "higher" relative importance within Navigator.
4	Relevant to rating, not a key rating driver but has an impact on the rating in combination with other factors. Equivalent to "moderate" relative importance within Navigator.
3	Minimally relevant to rating, either very low impact or actively managed in a way that results in no impact on the entity rating. Equivalent to "lower" relative importance within Navigator.
2	Irrelevant to the entity rating but relevant to the sector.
1	Irrelevant to the entity rating and irrelevant to the sector.

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Simplified Group Structure Diagram

Organizational Structure
$ mil., as of Sept. 30, 2023



IDR – Issuer Default Rating. NR – Not rated.
Source: Fitch Ratings, Fitch Solutions, DTE Energy Company

Peer Financial Summary

Company	Issuer Default Rating	Financial statement date	Gross revenue ($ mil.)	FFO ($ mil.)	FFO interest coverage (x)	FFO leverage (x)	EBITDA leverage (x)
DTE Electric Company	A–						
	A–	2022	6,397	2,463	8.0	3.6	4.0
	A–	2021	5,809	1,842	6.5	4.2	3.8
	A–	2020	5,506	1,849	6.7	3.9	3.6
Northern States Power Company-Wisconsin	A–						
	A–	2022	1,201	270	7.4	3.7	3.2
	A–	2021	1,105	254	7.4	3.7	3.4
	A–	2020	974	221	6.8	3.5	3.1
Consumers Energy Company	A–						
	A–	2022	8,116	2,052	7.9	4.4	4.5
	A–	2021	6,987	1,974	7.8	3.9	4.0
	A–	2020	6,155	1,239	5.1	5.4	3.8

Source: Fitch Ratings, Fitch Solutions

Fitch Adjusted Financials

($ mil., as of Dec 31, 2022)	Notes and formulas	Standardized values	Fair value and other debt adjustments	Lease treatment	Other adjustments	Adjusted values
Income statement summary						
Revenue		6,397	—	—	—	6,397
EBITDA	(a)	2,573	—	—	-6	2,567
Depreciation and amortization		-1,246	—	—	6	-1,240
EBIT		1,327	—	—	—	1,327

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Balance sheet summary						
Debt	(b)	10,298	91	-1	-215	10,173
Of which other off-balance-sheet debt		—	—	—	—	—
Lease-equivalent debt		—	—	—	—	—
Lease-adjusted debt		10,298	91	-1	-215	10,173
Readily available cash and equivalents	(c)	15	—	—	—	15
Not readily available cash and equivalents		9	—	—	—	9
Cash flow summary						
EBITDA	(a)	2,573	—	—	-6	2,567
Dividends received from associates less dividends paid to minorities	(d)	—	—	—	—	—
Interest paid	(e)	-350	—	—	—	-350
Interest received	(f)	8	—	—	—	8
Preferred dividends paid	(g)	—	—	—	—	—
Cash tax paid		33	—	—	—	33
Other items before FFO		205	—	—	—	205
FFO	(h)	2,469	—	—	-6	2,463
Change in working capital		-779	—	—	—	-779
CFO	(i)	1,690	—	—	-6	1,684
Non-operating/nonrecurring cash flow		—	—	—	—	—
Capex	(j)	-2,626	—	—	—	-2,626
Common dividends paid		-763	—	—	—	-763
FCF		-1,699	—	—	-6	-1,705
Gross leverage (x)						
EBITDA leverage	b / (a+d)	4.0	—	—	—	4.0
FFO leverage	b / (h-e-f-g)	3.7	—	—	—	3.6
(CFO-capex)/debt (%)	(i+j) / b	-9.0	—	—	—	-9.3
Net leverage (x)						
EBITDA net leverage	(b-c) / (a+d)	4.0	—	—	—	4.0
FFO net leverage	(b-c) / (h-e-f-g)	3.7	—	—	—	3.6
(CFO-capex)/net debt (%)	(i+j) / (b-c)	-9.0	—	—	—	-9.3
Coverage (x)						
EBITDA interest coverage	(a+d) / (-e)	7.4	—	—	—	7.3
FFO interest coverage	(h-e-f-g) / (-e-g)	8.0	—	—	—	8.0

CFO – Cash flow from operations. Note: The standardized items presented above are based on Fitch's taxonomy for the given sector and region. Reported items may not match the Fitch taxonomy, but they are captured into corresponding lines accordingly. Debt includes other off-balance-sheet debt.
Source: Fitch Ratings, Fitch Solutions, DTE Electric Company

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MICHIGAN PUBLIC SERVICE COMMISSION
DTE Electric Company
Projected Accounts 904, 925, and 926 Expenses
for the Projected Test-Period Ending December 31, 2025
(000's)

Case No: U-21534
Exhibit No: ~~S-15.0~~ S-14.0
Page: 1 of 1
Witness: S.Rueckert

Ln.	(a.) Description	(b.) Source	(c.) Company Projection	(d.) Adjustment	(e.) Staff Projection
1	(904) UCX	A-16 C5.8, ~~S-15.1~~ S-14.1	$ 50,870	$ (9,841)	$ 41,029
2	(925) Injuries & damages	A-13 C5.10, ~~S-15.2~~ S-14.2	$ 18,440	$ (2,863)	$ 15,577
3	(926) Employee Savings Plan	A-13 C5.11,~~S-15.3~~ S-14.3	$ 37,406	$ (7,859)	$ 29,547
4	(926) Active Healthcare	A-13 C5.11,~~S-15.3~~ S-14.3	$ 56,083	$ (2,334)	$ 53,749
5	(926) Other Benefits – General Benefits	A-13 C5.11,~~S-15.3~~ S-14.3	$ 2,395	$ (1,344)	$ 1,051
6	(926) Other Benefits – Admin Fees	A-13 C5.11,~~S-15.3~~ S-14.3	$ 7,296	$ (2,588)	$ 4,708

MICHIGAN PUBLIC SERVICE COMMISSION
DTE Electric Company
Uncollectible Accounts Expense
for the Projected Test-Period Ending December 31, 2025
(000's)

Case No.: U-21534
Exhibit No.: ~~S-15.1~~ S-14.1
Page: 1 of 1
Witness: S.Rueckert

Ln.	(a.) Description	(b.) Source	(c.) 2023	(d.) 2022	(e.) 2021
1	Accounts Written-Off		$ 72,461	$ 65,303	$ 76,776
2	(less) Collection of Accounts Written-Off		$ (28,320)	$ (27,645)	$ (36,732)
3	Net Write-Offs		$ 44,141	$ 37,658	$ 40,044
4	Billed Revenue		$ 5,847,903	$ 5,614,043	$ 5,551,588
5	Net Write-Offs to Revenue Percentage		0.7548%	0.6708%	0.7213%
6	Charges to Direct Expense		$ 1,095	$ 2,744	$ (146)
7	Projected Billed Revenue 12 month's ending 12/31/25	A-16 F2, col. b., ln. 49			$ 5,561,302
8	3-Year Average Net Write-Offs to Revenue	avg(ln.5, col.c-e)			0.72%
9	Projected Net Write-Offs	(ln 7 x ln 8)			$ 39,799
10	Historical 3 Year Average Charges to Direct Expense (ln 7)	avg(ln.6, col.c-e)			$ 1,231
11	Projected Uncollectible Accounts Expense (ln 10+ ln 11)				$ 41,029

MICHIGAN PUBLIC SERVICE COMMISSION
DTE Electric Company
Injuries & Damages Expense Normalization
($000)

Case No.: U-21534
Exhibit No.: ~~S-15.2~~ S-14.2
Page: 1 of 1
Witness: S.Rueckert

Ln.	(a.) Description	(b.) Account	(c.) 2019	(d.) 2020	(e.) 2021	(f.) 2022	(g.) 2023	(h.) Average (col.c-g)
1	Injuries & Damages Expense	925	$ 11,042	$ 11,702	$ 32,953	$ 17,158	$ 5,029	$ 15,577

MICHIGAN PUBLIC SERVICE COMMISSION
DTE Electric Company
Employee Savings Plan, Active Healthcare Expense, and Other Benefits Projections
for the Projected Test-Period Ending December 31, 2025
($000)

Case No.: U-21534
Exhibit No.: ~~S-15.3~~ S-14.3
Page: 1 of 1
Witness: S.Rueckert

Ln.	(a.) Description	(b.) Source	(c.) 2023	(d.) 2024	(e.) 2025	(f.) Staff Projection
				(ln.1, col. c * ln. 2, col. d)	((ln.1, col. c + col. d) * ln.2, col. e)	ln. 1 Σ(col. c. through e.)
1	Employee Savings Plan (ESP)	~~S-15.4~~S-14.4 ln. 11, col. g.	$ 27,286	$ 1,108	$ 1,153	$ 29,547
2	Average Annual Growth Rate	~~S-15.4~~S-14.4 ln. 7, col. g.		4.06%	4.06%	
				(ln.3, col. c * ln. 4, col. d)	((ln.3, col. c + col. d) * ln.4, col. e)	
3	Total Active Healthcare (AHC)	~~S-15.4~~S-14.4 ln. 20, col. g.	$ 80,975	$ 3,913	$ 4,102	$ 88,989
4	Average Annual Growth Rate	~~S-15.4~~S-14.4 ln. 24, col. g.		4.83%	4.83%	
5	Expense percentage	A-13 C5.11.3 col. (l)				60.4%
6	AHC Expense	(ln. 3, col. f.)*(ln. 4, col. f)				$ 53,749
				(ln.7, col. c * ln. 8, col. d)	((ln.7, col. c + col. d) * ln.8, col. e)	
7	Other Benefits – General Benefits	~~S-15.4~~S-14.4 ln. 26, col. g.	$ 1,305	$ (134)	$ (120)	$ 1,051
8	Average Annual Growth Rate			-10.24%	-10.24%	
				(ln.9, col. c * ln. 10, col. d)	((ln.9, col. c + col. d) * ln.10, col. e)	
9	Other Benefits – Admin Fees	~~S-15.4~~S-14.4 ln. 29, col. g.	$ 5,280	$ (294)	$ (278)	$ 4,708
10	Average Annual Growth Rate			-5.57%	-5.57%	

MICHIGAN PUBLIC SERVICE COMMISSION
DTE Electric Company
Employee Savings Plan, Active Healthcare Expense, and Other Benefits
Average Annual Growth Rates (AAGR)

Case No.: U-21534
Exhibit No.: ~~S-15.4~~ S-14.4
Page: 1 of 1
Witness: S.Rueckert

Ln.	(a.) Description	(b.) 2018	(c.) 2019	(d.) 2020	(e.) 2021	(f.) 2022	(g.) 2023
1	Employee Savings Plan						
2	Recorded Total	$ 41,025,520	$ 43,622,018	$ 46,240,863	$ 47,925,356	$ 49,598,887	$ 50,182,674
3	Benefits Transfer	-	-	-	-	(56,344.21)	(164,551.36)
4	Other Benefits Correction	-	-	-	-	(355,589.55)	-
5	Net of corrections	$ 41,025,520	$ 43,622,018	$ 46,240,863	$ 47,925,356	$ 49,186,953	$ 50,018,123
6	Annual Change		6.33%	6.00%	3.64%	2.63%	1.69%
7	5yr Average Annual Growth Rate						4.06%
8	Recorded Expense	$ 27,721,784	$ 29,729,511	$ 30,838,305	$ 31,164,447	$ 31,509,364	$ 30,721,622
9	Benefits Transfer	(2,112,465)	(2,259,052)	(2,359,852)	(2,085,150)	(1,973,132)	(3,435,452)
10	Other Benefits Correction					163,205	
11	Net of corrections	$ 25,609,320	$ 27,470,458	$ 28,478,453	$ 29,079,297	$ 29,699,436	$ 27,286,170
12	Recorded Capitalized	$ 13,303,736	$ 13,892,508	$ 15,402,558	$ 16,760,910	$ 18,089,523	$ 19,461,053
13	Benefits Transfer	2,112,465	2,259,052	2,359,852	2,085,150	1,916,788	3,270,901
14	Other Benefits Correction					(518,794)	
15	Net of corrections	$ 15,416,200	$ 16,151,560	$ 17,762,410	$ 18,846,060	$ 19,487,517	$ 22,731,953
16	Active Healthcare						
17	Medical Costs	$ 63,824,000	$ 65,627,000	$ 63,551,000	$ 78,455,000	$ 77,234,000	$ 74,984,000
18	Dental Costs	3,827,000	4,276,000	3,203,000	5,319,000	5,307,000	5,540,000
19	Vision Costs	526,000	516,000	448,000	510,000	457,000	451,000
20	SubTotal Active Healthcare Costs	$ 68,177,000	$ 70,419,000	$ 67,202,000	$ 84,284,000	$ 82,998,000	$ 80,975,000
21	Average Annual Number of Employees	6795	6896	6848	6751	6697	6547
22	Cost/Employee	$ 10,034	$ 10,211	$ 9,814	$ 12,485	$ 12,393	$ 12,369
23	Annual Change		1.76%	-3.89%	27.23%	-0.74%	-0.20%
24	5yr Average Annual Growth Rate						4.83%
25	Other Employee Benefits						
26	General Benefits	$ 2,447,000	$ 2,411,000	$ 2,360,000	$ 2,285,000	$ 2,198,000	$ 1,305,000
27	Annual Change		-1.5%	-2.1%	-3.2%	-3.8%	-40.63%
28	5yr Average Annual Growth Rate						-10.24%
29	Admin Fees	$ 7,451,000	$ 6,193,000	$ 5,448,000	$ 6,442,000	$ 6,697,000	$ 5,280,000
30	Annual Change		-16.9%	-12.0%	18.2%	4.0%	-21.16%
31	5yr Average Annual Growth Rate						-5.57%

MICHIGAN PUBLIC SERVICE COMMISSION
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Witness: S.Rueckert
Date: 7/26/2024

	(a.)	(b.)	(c.)	(d.)	(e.)
Ln.	Description	Source	Company Projection	Adjustment	Staff Projection
1	(904) UCX	A-16 C5.8, S-15.1	$ 50,870	$ (9,841)	$ 41,029
2	(925) Injuries & damages	A-13 C5.10, S-15.2	$ 18,440	$ (2,863)	$ 15,577
3	(926) Employee Savings Plan	A-13 C5.11, S-15.3	$ 37,406	$ (7,859)	$ 29,547
4	(926) Active Healthcare	A-13 C5.11, S-15.3	$ 56,083	$ (2,334)	$ 53,749
5	(926) Other Benefits – General Benefits	A-13 C5.11, S-15.3	$ 2,395	$ (1,344)	$ 1,051
6	(926) Other Benefits – Admin Fees	A-13 C5.11, S-15.3	$ 7,296	$ (2,588)	$ 4,708

		Historical Period	Projected Bridge Period			Projected Test Year		
		12 months ending 12/31/2022	12 months ending 12/31/2023	12 months ending 12/31/2024	24 months ending 12/31/2024	12 months ending 12/31/2025	O&M Test Year	Resource
Line	**IT Projects**							
1	Digital Worker Experience EOL		$943,000	$960,325	$1,903,325	$1,041,000		Exhibit A-12 Schedule B5.7.7 Line 18
2	End of Life Asset Replacements	$500,000						Exhibit A-12 Schedule B5.7.7 Line 19
4	**Total Individual IT Project Disallowances**	**$500,000**	**$943,000**	**$960,325**	**$1,903,325**	**$1,041,000**		
5	**Level 3 Cost Estimate Disallowance**		**$11,315,000**	**$545,500**	**$11,860,500**	**$823,200**	**$84,044**	Exhibit S-15.5
6	**Level 2 Cost Estimate Disallowance**			**$22,433,200**	**$22,433,200**	**$20,169,000**	**$2,385,653**	Exhibit S-15.2
7	**O&M Disallowance**						**$3,173,840**	Exhibit A13 Sch C5.13 Line 5
8	**TOTAL Recommended IT Disallowance**	**$500,000**	**$12,258,000**	**$23,939,025**	**$36,197,025**	**$22,033,200**	**$5,643,537**	

Line	Level 2 Projects	Portfolio	12 months ending 12/31/2024	12 months ending 12/31/2025	Exhibit	O&M (Test Year)
1	Core ERP Stacks and Packs	Corporate Applications	$1,668,000	$1,800,000		$226,891
2	Corporate Services Application Health	Corporate Applications	$779,000	$775,000		$135,097
3	Documentum (EDM) Application Health	Corporate Applications	$392,000	$387,000		$58,603
4	Enterprise Applications Health	Corporate Applications	$740,000			
5	Enterprise Resource Planning	Corporate Applications	$1,108,000	$1,490,000		$133,349
6	Financial Applications Health	Corporate Applications	$250,000	$250,000		$29,306
7	Human Resources Applications Health	Corporate Applications	$250,000	$247,000		$49,320
8	Production Growth	Corporate Applications	$893,000	$747,000	A-12 Sch B5.7.1	$0
9	Cloud Health and Safety	Corporate Applications	$2,518,000	$582,000		$99,947
10	Core ERP Data Archiving	Corporate Applications	$750,000			
11	Source to Pay (S2P) Transformation	Corporate Applications		$1,995,000		$996,999
12	Enhanced Document Management Capability Projects	Corporate Applications	$1,218,000	$2,958,000		$313,033
13	Organizational Management Optimization	Corporate Applications	$500,000			
14	SAP Employee Central Payroll	Corporate Applications		$864,000		$30,438
15	Talent System Optimization	Corporate Applications		$280,000		$33,064
16	Transparency Electric Data	Corporate Applications	$1,817,000			$142,590
17		**Total:**	$12,883,000	$12,375,000		$2,248,637
18		**Disallowance (20% of total):**	**$2,576,600**	**$2,475,000**		**$449,727**
19	Automated Application Monitoring Application Health	Customer Service	$380,000	$413,000		$30,492
20	Business Planning and Development (BPD) and Electric Sales &	Customer Service	$800,000	$730,000		$325,818
21	Contact Center Application Health	Customer Service	$1,250,000	$1,369,000		$811,609
22	Closed Loop COCL Application Health	Customer Service	$760,000	$835,000		$290,400
23	Cloud Platform Enterprise Agreement	Customer Service	$750,000			$0
24	Customer Digital Channels and Self Service Program	Customer Service	$2,770,000	$2,763,000		$340,000
25	Customer Information Technology (CIT) Configuration	Customer Service	$1,920,000	$1,057,000		$115,426
26	Customer Legacy Application Health	Customer Service	$450,000	$491,000	A-12 Sch B5.7.2	$77,537
27	Customer Relationship and Billing Program	Customer Service	$1,750,000	$1,916,000		$159,719
28	Hybris Application Health	Customer Service	$640,000	$855,000		$363,000
29	MIGreenPower Program Stabilization	Customer Service	$1,550,000	$1,550,000		$100,183
30	Powerley Customer Platform Application Health	Customer Service	$500,000	$3,750,000		$120,366
31	Supporting capabilities Test data and test data mgmt	Customer Service	$500,000	$500,000		$50,000
32	Digital Channels Transformation Program	Customer Service	$4,420,000	$2,300,000		$230,000
33	Migrate IVR to the cloud	Customer Service	$2,570,000			
34		**Total:**	$21,010,000	$18,529,000		$3,014,550
35		**Disallowance (20% of total):**	**$4,202,000**	**$3,705,800**		**$602,910**
36	GenOpts-FERC Order 841 Compliance	Plant and Field		$1,296,000		$38,284
37	Advance Metering Infrastructure (AMI) Application Health	Plant and Field	$1,382,000	$1,376,000		$100,051
38	ClickSoft Application Health	Plant and Field	$400,000	$395,000		$472,817
39	Distribution Operations Application Health	Plant and Field	$1,180,000	$1,180,000		$50,725
40	DTE Electric Generation Capacity Application Health	Plant and Field	$570,000	$563,000		$62,140
41	DTE Electric Utility Network (UN)	Plant and Field	$370,000			
42	ESRI Application Health	Plant and Field	$441,000	$436,000		$19,296
43	Fuel Supply Application Health	Plant and Field	$470,000	$469,000		$51,698
44	ITS-SRS Application Health	Plant and Field	$1,050,000	$520,000		$1,111
45	ITS ADMS Application Health	Plant and Field	$1,070,000	$1,070,000		
46	Network Reliability and Monitoring	Plant and Field	$750,000			
47	Nuclear Generation Business Systems Replacement	Plant and Field	$650,000	$648,000		$52,000
48	Production Growth	Plant and Field	$1,485,000	$1,292,000	A-12 Sch B5.7.4	$7,000
49	Renewable Operations Application Health	Plant and Field	$120,000	$123,000		$10,251
50	Supervisory Control and Data Acquisition (SCADA) System	Plant and Field	$520,000	$515,000		$39,396
51	System for Fossil Generation for Coal and Gas	Plant and Field	$415,000	$413,000		$29,783
52	Advance Metering Infrastructure Field Collection System	Plant and Field	$1,682,000	$1,678,000		$147,648
53	Cable Routing Application (CRA) Replatform	Plant and Field	$614,000			
54	Corporate Instance - Maximo Application Suite Upgrade Phase 1	Plant and Field		$3,749,000		$660,000
55	DO Business Warehouse (DOBW) Replacement	Plant and Field	$250,000			
56	DO Equipment Engineering Transformer Database	Plant and Field	$370,000			$60,000
57	Fuel Supply-Plant Fuel Management System	Plant and Field	$2,127,000			
58	Maximo Platform Program	Plant and Field	$1,192,000	$1,187,000		$70,078
59	Maximo Engineering Process Automation	Plant and Field	$3,757,000			
60	Storm Data Lakehouse	Plant and Field		$2,000,000		$205,000
61	Storm Simulation Lab	Plant and Field	$6,500,000	$3,500,000		$39,484
62		**Total:**	$27,365,000	$22,410,000		$2,116,762
63		**Disallowance (20% of total):**	**$5,473,000**	**$4,482,000**		**$423,352**
64	IT for IT Application Health	Information Technology for IT	$16,622,000	$1,695,000	A-12 Sch B5.7.5	$360,844
65		**Total:**	$16,622,000	$1,695,000		$360,844
66		**Disallowance (20% of total):**	**$3,324,400**	**$339,000**		**$72,169**

67	Cloud Privilege Access Management	Information Protection Security		$500,000		$198,707
68	Security Information & Event Management (SIEM) End of Life	Information Protection Security		$1,000,000		$231,000
69	Vendor Onboarding for DTE	Information Protection Security		$805,000		
70	Vulnerability Scan tool	Information Protection Security	$425,000			
71	Cloud Security project	Information Protection Security	$440,000	$434,000		$85,669
72	Cyber Security Defense Center (CSDC) Growth and LifeCycle	Information Protection Security	$300,000	$296,000		$1,912
73	IPS Operations PAW and DC Replacement	Information Protection Security	$320,000		A-12 Sch B5.7.6	
74	Endpoint Protection	Information Protection Security	$314,000			
75	Automated Provisioning	Information Protection Security	$2,429,000			
76	Azure Active Directory Federation Implementation	Information Protection Security	$440,000			
77	Cyber Excellence Plan (CEP) Program	Information Protection Security	$300,000			
78	Network Access Control	Information Protection Security	$500,000	$1,257,000		$44,159
79	Ransomware Recovery	Information Protection Security	$500,000			
80	Recovery Manager for AD - Disaster Recovery Edition	Information Protection Security	$664,000			
81		**Total:**	$6,632,000	$4,292,000		$561,447
82		**Disallowance (20% of total):**	**$1,326,400**	**$858,400**		**$112,289**
83	Tower and Lighting Inspections and Repairs	Infrastructure Operations	$150,000	$280,000		$9,942
84	Backup Environmental Growth	Infrastructure Operations	$624,000	$500,000		$0
85	Collaboration Application Health	Infrastructure Operations	$1,531,000	$1,523,000		$285,237
86	Dell Storage Hardware Refresh	Infrastructure Operations	$255,000			$0
87	Endpoint End of Life Electric Support Services	Infrastructure Operations	$853,000	$853,000		$0
88	Enterprise Monitoring Licensing	Infrastructure Operations		$5,000,000		$200,000
89	Enterprise Monitoring Strategy Operational Growth	Infrastructure Operations	$600,000	$1,000,000		$204,455
90	Field Communications Network FCN Growth and Upgrade	Infrastructure Operations	$300,000	$400,000		$0
91	Network Hardening and Operations	Infrastructure Operations	$400,000	$400,000		$0
92	Palo Alto Capital License Purchase	Infrastructure Operations		$5,500,000		$0
93	VMWare License Purchase	Infrastructure Operations		$5,610,000		$0
94	Compute and Storage Cache Refresh	Infrastructure Operations	$528,000			$0
95	Conference Room Audio Video Support	Infrastructure Operations	$500,000	$750,000		$0
96	Data Center Modernization and Optimization	Infrastructure Operations	$2,100,000	$800,000		$0
97	Load Balancer Asset Health and Re-Engineering	Infrastructure Operations		$466,000	A-12 Sch B5.7.7	$0
98	Microwave End Of Life	Infrastructure Operations	$402,000	$402,000		$0
99	Modernize Disaster Recovery Tools	Infrastructure Operations		$500,000		$20,000
100	Network Advanced Metering Infrastructure Support	Infrastructure Operations	$2,200,000	$2,200,000		$199,947
101	Network Data Center End of Life Project	Infrastructure Operations	$450,000	$450,000		$40,000
102	Security Infrastructure Growth and End of Life	Infrastructure Operations	$1,400,000	$1,400,000		$2,000,000
103	Wide Area Network and Wireless Local Area Network Expansion	Infrastructure Operations	$600,000	$1,000,000		$19,200
104	Virtual Desktop Infrastructure End of Life	Infrastructure Operations	$975,000	$565,000		$0
105	Self-healing Endpoint Automation	Infrastructure Operations		$250,000		$50,000
106	Data Power Replacement Phase 2	Infrastructure Operations	$650,000			
107	Endpoint Operating System and Hardware Upgrade	Infrastructure Operations	$280,000	$4,100,000		$296,017
108	External Secure File Transfer Replacement	Infrastructure Operations	$355,000	$65,000		
109	Firewall Threat Protection	Infrastructure Operations	$600,000			
110	Mobile Device Management (MDM)	Infrastructure Operations	$340,000			
111	Storm Cloud	Infrastructure Operations	$10,000,000	$6,000,000		$0
112		**Total:**	$26,093,000	$40,014,000		$3,324,798
113		**Disallowance (20% of total):**	**$5,218,600**	**$8,002,800**		**$664,960**
114	Enterprise Data Platform Application Health	Enterprise Data Analytics	1,561,000	1,530,000	A-12 Sch B5.7.8	$301,227
115		**Total:**	$1,561,000	$1,530,000		$301,227
116		**Disallowance (20% of total):**	**$312,200**	**$306,000**		**$60,245**
117		Total of all Level 2 Projects:	$112,166,000	$100,845,000		$11,928,265
118		**Disallowance (20%) for all Level 2 Projects:**	**$22,433,200**	**$20,169,000**		**$2,385,653**

MPSC Case No: U-21534

Requester: Staff

Question No.: DR-1.1

Respondent: P. Sharma

Page: 1 of 1

Question: **1.** The following questions pertain to Exhibit A-24 Sch N3 and the testimony of Witnesses Sharma and Hatsios:

Please provide a list of IT projects that moved from a Level 2 cost estimate in Case Number U-21297 to a Level 3 cost estimate in the instant case. Please also provide the Level 2 cost estimate and the Level 3 cost estimate for each IT project listed.

Answer: Please refer to the attachment for the list of IT projects that moved from a Level 2 cost estimate in Case Number U-21297 to a Level 3 cost estimate in the instant case.

Exhibit A-24 Sch N3 displays yearly project spend within the rate case period and does not provide the overall project cost; this may cause confusion since there are projects where the annual planned cost was impacted due the project work being re-timed (e.g., pulled-ahead or split into multiple years)

Attachment: U-21534 DR-1 1 Level 2&3 cost estimates

Co-Respondent(s): M. Hatsios

MPSC Case No: U-21534

Requester: Staff

Question No.: DR-1.31

Respondent: P. Sharma

Page: 1 of 1

Question: 31. Regarding the Digital Worker Experience Electric EOL project (Exhibit A-24 Sch N3 line 304), please provide the cost of each individual laptop, desktop, tablet, and monitor.

Answer: Please see the average cost for each individual device below:

- Laptop kits $1,655
- Desktops $1,105
- Monitors $165
- Tablets $795

Attachment: None

Michigan Public Service Commission
DTE Electric Company
Comparison of Level 2 and Level 3 Cost Estimates

Line No.	Spend Year	U-21534 Business Case / Project Name	IT Portfolio/Program	U-21297 Capital Cost (000's) Spend Year	U-21297 Cost Estimate Level	U-21534 Capital Cost (000's) Spend Year	U-21534 Cost Estimate Level	Percent Difference in Cost
1	2023	Core ERP Stacks and Packs	Corporate Applications	$ 1,668	Level 2	$ 1,437	Level 3	-13.85%
2	2024	Core ERP Stacks and Packs	Corporate Applications	$ 1,668	Level 2	$ 1,668	Level 3	0.00%
3	2023	Corporate Services Application Health	Corporate Applications	$ 775	Level 2	$ 507	Level 3	-34.58%
4	2024	Corporate Services Application Health	Corporate Applications	$ 780	Level 2	$ 779	Level 3	-0.13%
5	2023	Documentum (EDM) Application Health	Corporate Applications	$ 370	Level 2	$ 110	Level 3	-70.27%
6	2023	Enterprise Applications Health	Corporate Applications	$ 675	Level 2	$ 366	Level 3	-45.78%
7	2024	Enterprise Applications Health	Corporate Applications	$ 700	Level 2	$ 740	Level 3	5.71%
8	2023	Enterprise Resource Planning	Corporate Applications	$ 1,108	Level 2	$ 302	Level 3	-72.74%
9	2024	Enterprise Resource Planning	Corporate Applications	$ 1,108	Level 2	$ 1,108	Level 3	0.00%
10	2023	Financial Applications Health	Corporate Applications	$ 275	Level 2	$ 292	Level 3	6.18%
11	2024	Financial Applications Health	Corporate Applications	$ 250	Level 2	$ 250	Level 3	0.00%
12	2023	Human Resources Applications Health	Corporate Applications	$ 250	Level 2	$ 410	Level 3	64.00%
13	2024	Human Resources Applications Health	Corporate Applications	$ 250	Level 2	$ 250	Level 3	0.00%
14	2023	Production Growth	Corporate Applications	$ 1,050	Level 2	$ 517	Level 3	-50.76%
15	2024	Production Growth	Corporate Applications	$ 894	Level 2	$ 893	Level 3	-0.11%
16	2023	SuccessFactors Program	Corporate Applications	$ 310	Level 2	$ 329	Level 3	6.13%
17	2023	Automated Application Monitoring Application Health	Customer Service	$ 342	Level 2	$ 302	Level 3	-11.62%
18	2024	Automated Application Monitoring Application Health	Customer Service	$ 376	Level 2	$ 380	Level 3	1.11%
19	2023	Business Planning and Development (BPD) and Electric Sales & Marketing (ESM) Application Health	Customer Service	$ 730	Level 2	$ 851	Level 3	16.58%
20	2024	Business Planning and Development (BPD) and Electric Sales & Marketing (ESM) Application Health	Customer Service	$ 800	Level 2	$ 800	Level 3	0.00%
21	2023	Contact Center Application Health	Customer Service	$ 1,139	Level 2	$ 1,202	Level 3	5.54%
22	2024	Contact Center Application Health	Customer Service	$ 6,253	Level 2	$ 1,250	Level 3	-80.01%
23	2023	Closed Loop COCL Application Health	Customer Service	$ 690	Level 2	$ 1	Level 3	-99.86%
24	2024	Closed Loop COCL Application Health	Customer Service	$ 759	Level 2	$ 760	Level 3	0.10%
25	2023	Customer Digital Channels and Self Service Program	Customer Service	$ 2,774	Level 2	$ 2,219	Level 3	-20.01%
26	2024	Customer Digital Channels and Self Service Program	Customer Service	$ 2,111	Level 2	$ 2,770	Level 3	31.25%
27	2023	Customer Information Technology (CIT) Configuration Management	Customer Service	$ 896	Level 2	$ 574	Level 3	-35.93%
28	2024	Customer Information Technology (CIT) Configuration Management	Customer Service	$ 1,916	Level 2	$ 1,920	Level 3	0.23%
29	2023	Customer Legacy Application Health	Customer Service	$ 405	Level 2	$ 668	Level 3	64.94%
30	2024	Customer Legacy Application Health	Customer Service	$ 446	Level 2	$ 450	Level 3	0.90%
31	2023	Customer Relationship and Billing Program	Customer Service	$ 1,584	Level 2	$ 550	Level 3	-65.28%
32	2023	Hybris Application Health	Customer Service	$ 1,000	Level 2	$ 2,424	Level 3	142.40%
33	2024	Hybris Application Health	Customer Service	$ 635	Level 2	$ 640	Level 3	0.83%
34	2023	MIGreenPower Program Stabilization	Customer Service	$ 1,548	Level 2	$ 1,579	Level 3	2.03%
35	2023	Service Cloud Product Support For Customer Document Submission	Customer Service	$ 753	Level 2	$ 790	Level 3	4.91%
36	2023	Customer Service Infrastructure Landscape & Growth Project	Customer Service	$ 5,500	Level 2	$ 5,947	Level 3	8.13%
37	2023	Digital Channels Transformation Program	Customer Service	$ 4,823	Level 2	$ 3,802	Level 3	-21.17%
38	2023	Systems, Applications, and Products (SAP) Upgrade Program	Customer Service	$ 4,017	Level 2	$ 3,410	Level 3	-15.11%
39	2023	ClickSoft Application Health	Plant and Field - DO	$ 400	Level 2	$ 309	Level 3	-22.75%
40	2023	Distribution Operations Application Health	Plant and Field - DO	$ 1,280	Level 2	$ 1,098	Level 3	-14.22%
41	2024	Distribution Operations Application Health	Plant and Field - DO	$ 1,180	Level 2	$ 1,180	Level 3	0.00%
42	2023	DTE Electric Generation Capacity Application Health	Plant and Field - ES	$ 560	Level 2	$ 593	Level 3	5.89%
43	2024	DTE Electric Generation Capacity Application Health	Plant and Field - ES	$ 560	Level 2	$ 570	Level 3	1.79%
44	2024	DTE Electric Utility Network (UN)	Plant and Field - DO	$ 375	Level 2	$ 370	Level 3	-1.33%
45	2023	Fuel Supply Application Health	Plant and Field - ES	$ 470	Level 2	$ 383	Level 3	-18.51%
46	2024	Fuel Supply Application Health	Plant and Field - ES	$ 470	Level 2	$ 470	Level 3	0.00%
47	2023	Network Reliability and Monitoring	Plant and Field - DO	$ 750	Level 2	$ 246	Level 3	-67.20%
48	2024	Network Reliability and Monitoring	Plant and Field - DO	$ 750	Level 2	$ 750	Level 3	0.00%

49	2023	Nuclear Generation Business Systems Replacement	Plant and Field - ES	$ 650	Level 2	$ 678	Level 3	4.31%
50	2024	Nuclear Generation Business Systems Replacement	Plant and Field - ES	$ 650	Level 2	$ 650	Level 3	0.00%
51	2023	Production Growth	Plant and Field - DO	$ 800	Level 2	$ 1,486	Level 3	85.75%
52	2024	Production Growth	Plant and Field - DO	$ 1,310	Level 2	$ 1,485	Level 3	13.36%
53	2023	Renewable Operations Application Health	Plant and Field - ES	$ 124	Level 2	$ 111	Level 3	-10.31%
54	2024	Renewable Operations Application Health	Plant and Field - ES	$ 124	Level 2	$ 120	Level 3	-3.04%
55	2023	Supervisory Control and Data Acquisition (SCADA) System Improvement	Plant and Field - DO	$ 520	Level 2	$ 404	Level 3	-22.31%
56	2024	Supervisory Control and Data Acquisition (SCADA) System Improvement	Plant and Field - DO	$ 520	Level 2	$ 520	Level 3	0.00%
57	2023	System for Fossil Generation for Coal and Gas	Plant and Field - ES	$ 400	Level 2	$ 342	Level 3	-14.50%
58	2024	System for Fossil Generation for Coal and Gas	Plant and Field - ES	$ 400	Level 2	$ 415	Level 3	3.75%
59	2023	Advance Metering Infrastructure Field Collection System	Plant and Field - DO	$ 1,700	Level 2	$ 1,243	Level 3	-26.88%
60	2023	Maximo Platform Program	Plant and Field - DO	$ 1,175	Level 2	$ 2,278	Level 3	93.89%
61	2024	Maximo Platform Program	Plant and Field - DO	$ 1,175	Level 2	$ 1,192	Level 3	1.46%
62	2023	P3M Heat Rate Calculation and GADS Reporting Functions	Plant and Field - ES	$ 913	Level 2	$ 850	Level 3	-6.90%
63	2023	Plant & Field Document Repository	Plant & Field ES	$ 500	Level 2	$ 1,395	Level 3	179.00%
64	2023	Replace DO Lines - SOC Radio	Plant and Field - DO	$ 1,800	Level 2	$ 2,072	Level 3	15.11%
65	2024	Maximo Engineering Process Automation	Plant and Field - ES	$ 8,250	Level 2	$ 3,757	Level 3	-54.46%
66	2023	Maximo HSE Support	Plant and Field - ES	$ 334	Level 2	$ 325	Level 3	-2.69%
67	2023	Cloud Privilege Access Management	nformation Protection Security	$ 500	Level 2	$ 416	Level 3	-16.80%
68	2023	Vulnerability Scan tool	nformation Protection Security	$ 675	Level 2	$ 561	Level 3	-16.89%
69	2023	IT for IT Application Health	Information Technology for IT	$ 1,900	Level 2	$ 1,391	Level 3	-26.79%
70	2024	IT for IT Application Health	Information Technology for IT	$ 16,640	Level 2	$ 16,622	Level 3	-0.11%
71	2023	Cloud Security project	nformation Protection Security	$ 441	Level 2	$ 311	Level 3	-29.48%
72	2024	Cloud Security project	nformation Protection Security	$ 460	Level 2	$ 440	Level 3	-4.35%
73	2023	Endpoint Protection	nformation Protection Security	$ 315	Level 2	$ 287	Level 3	-8.89%
74	2024	Endpoint Protection	nformation Protection Security	$ 347	Level 2	$ 314	Level 3	-9.59%
75	2023	Application Portfolio Management - APM	Information Technology for IT	$ 500	Level 2	$ 438	Level 3	-12.40%
76	2023	Automated Provisioning	nformation Protection Security	$ 1,500	Level 2	$ 762	Level 3	-49.20%
77	2024	Automated Provisioning	nformation Protection Security	$ 2,433	Level 2	$ 2,429	Level 3	-0.18%
78	2023	Azure Active Directory Federation Implementation	nformation Protection Security	$ 441	Level 2	$ 299	Level 3	-32.20%
79	2024	Azure Active Directory Federation Implementation	nformation Protection Security	$ 460	Level 2	$ 440	Level 3	-4.35%
80	2023	DTE Private Cloud Infrastructure as a Service	Infrastructure Operations	$ 800	Level 2	$ 571	Level 3	-28.63%
81	2023	Enterprise Mobility Management	nformation Protection Security	$ 331	Level 2	$ 179	Level 3	-45.89%
82	2023	Firewall Threat Protection	nformation Protection Security	$ 1,556	Level 2	$ 1,529	Level 3	-1.74%
83	2024	Firewall Threat Protection	nformation Protection Security	$ 3,244	Level 2	$ 600	Level 3	-81.50%
84	2023	IT Service Management Tool	Information Technology for IT	$ 900	Level 2	$ 613	Level 3	-31.89%
85	2023	Ransomware Recovery	nformation Protection Security	$ 500	Level 2	$ 418	Level 3	-16.40%
86	2024	Ransomware Recovery	nformation Protection Security	$ 500	Level 2	$ 500	Level 3	0.00%
87	2023	Threat Intel module	nformation Protection Security	$ 263	Level 2	$ 43	Level 3	-83.62%
88	2023	Cyber Security Defense Center (CSDC) Growth and LifeCycle Management	nformation Protection Security	$ 300	Level 2	$ 389	Level 3	29.67%
89	2024	Cyber Security Defense Center (CSDC) Growth and LifeCycle Management	nformation Protection Security	$ 300	Level 2	$ 300	Level 3	0.00%
90	2023	Cyber Excellence Plan (CEP) Program	nformation Protection Security	$ 300	Level 2	$ 290	Level 3	-3.33%
91	2024	Cyber Excellence Plan (CEP) Program	nformation Protection Security	$ 300	Level 2	$ 300	Level 3	0.00%
92	2023	Tower and Lighting Inspections and Repairs	Infrastructure Operations	$ 280	Level 2	$ 263	Level 3	-6.07%
93	2024	Tower and Lighting Inspections and Repairs	Infrastructure Operations	$ 280	Level 2	$ 150	Level 3	-46.43%
94	2023	Backup Environmental Growth	Infrastructure Operations	$ 624	Level 2	$ 85	Level 3	-86.38%
95	2024	Backup Environmental Growth	Infrastructure Operations	$ 624	Level 2	$ 624	Level 3	0.00%
96	2023	Collaboration Application Health	Infrastructure Operations	$ 20,753	Level 2	$ 21,783	Level 3	4.96%
97	2024	Collaboration Application Health	Infrastructure Operations	$ 1,500	Level 2	$ 1,531	Level 3	2.07%
98	2023	Endpoint End of Life Electric Support Services	Infrastructure Operations	$ 853	Level 2	$ 973	Level 3	14.07%

99	2024	Endpoint End of Life Electric Support Services	Infrastructure Operations	$ 853	Level 2	$ 853	Level 3	0.00%
100	2023	Enterprise Monitoring Strategy Operational Growth	Infrastructure Operations	$ 600	Level 2	$ 583	Level 3	-2.83%
101	2024	Enterprise Monitoring Strategy Operational Growth	Infrastructure Operations	$ 500	Level 2	$ 600	Level 3	20.00%
102	2023	Field Communications Network FCN Growth and Upgrade	Infrastructure Operations	$ 400	Level 2	$ 384	Level 3	-4.00%
103	2024	Field Communications Network FCN Growth and Upgrade	Infrastructure Operations	$ 400	Level 2	$ 300	Level 3	-25.00%
104	2023	Network Hardening and Operations	Infrastructure Operations	$ 400	Level 2	$ 880	Level 3	120.00%
105	2024	Network Hardening and Operations	Infrastructure Operations	$ 400	Level 2	$ 400	Level 3	0.00%
106	2023	Server Engineering Support Services	Infrastructure Operations	$ 2,650	Level 2	$ 10,000	Level 3	277.36%
107	2024	Server Engineering Support Services	Infrastructure Operations	$ 3,100	Level 2	$ 3,100	Level 3	0.00%
108	2023	Compute and Storage Cache Refresh	Infrastructure Operations	$ 528	Level 2	$ 3	Level 3	-99.43%
109	2024	Compute and Storage Cache Refresh	Infrastructure Operations	$ 528	Level 2	$ 528	Level 3	0.00%
110	2023	Conference Room Audio Video Support	Infrastructure Operations	$ 229	Level 2	$ 112	Level 3	-51.09%
111	2024	Conference Room Audio Video Support	Infrastructure Operations	$ 250	Level 2	$ 500	Level 3	100.00%
112	2023	Digital Worker Experience Electric EOL	Infrastructure Operations	$ 2,250	Level 2	$ 3,022	Level 3	34.31%
113	2024	Digital Worker Experience Electric EOL	Infrastructure Operations	$ 2,650	Level 2	$ 2,650	Level 3	0.00%
114	2023	End of Life Asset Replacements	Infrastructure Operations	$ 500	Level 2	$ 471	Level 3	-5.80%
115	2024	End of Life Asset Replacements	Infrastructure Operations	$ 500	Level 2	$ 500	Level 3	0.00%
116	2023	Microwave End Of Life	Infrastructure Operations	$ 402	Level 2	$ 391	Level 3	-2.74%
117	2024	Microwave End Of Life	Infrastructure Operations	$ 402	Level 2	$ 402	Level 3	0.00%
118	2023	Network Advanced Metering Infrastructure Support	Infrastructure Operations	$ 2,200	Level 2	$ 2,076	Level 3	-5.64%
119	2024	Network Advanced Metering Infrastructure Support	Infrastructure Operations	$ 2,200	Level 2	$ 2,200	Level 3	0.00%
120	2023	Network Data Center End of Life Project	Infrastructure Operations	$ 650	Level 2	$ 978	Level 3	50.46%
121	2024	Network Data Center End of Life Project	Infrastructure Operations	$ 450	Level 2	$ 450	Level 3	0.00%
122	2023	Network End of Life Electric	Infrastructure Operations	$ 700	Level 2	$ 888	Level 3	26.86%
123	2024	Network End of Life Electric	Infrastructure Operations	$ 700	Level 2	$ 700	Level 3	0.00%
124	2023	Data Center Modernization and Optimization	Infrastructure Operations	$ 1,350	Level 2	$ 941	Level 3	-30.30%
125	2024	Data Center Modernization and Optimization	Infrastructure Operations	$ 1,650	Level 2	$ 2,100	Level 3	27.27%
126	2023	Wide Area Network and Wireless Local Area Network Expansion	Infrastructure Operations	$ 2,000	Level 2	$ 984	Level 3	-50.80%
127	2024	Wide Area Network and Wireless Local Area Network Expansion	Infrastructure Operations	$ 1,000	Level 2	$ 600	Level 3	-40.00%
128	2023	Security Infrastructure Growth and EOL	Infrastructure Operations	$ 1,400	Level 2	$ 1,359	Level 3	-2.93%
129	2023	PCI Compliance	Customer Service	$ 176	Level 2	$ 102	Level 3	-42.05%
130	2023	Regulatory Compliance	Customer Service	$ 2,761	Level 2	$ 2,787	Level 3	0.94%
131	2023	Rider 17 – MIGreenPower, Residential and Small Commercial & Industrial	Customer Service	$ 1,580	Level 2	$ 398	Level 3	-74.81%
132	2023	MIGP Customer - Requested Renewable Energy Projects	Customer Service	$ 4,502	Level 2	$ 413	Level 3	-90.83%
133	2023	Advanced Analytics AA Use Cases Implementation	Customer Service	$ 500	Level 2	$ 457	Level 3	-8.60%
134	2023	IT Application Environments Enhancement	Customer Service	$ 352	Level 2	$ 320	Level 3	-9.09%
135	2023	Automated Application Monitoring Enhancement	Customer Service	$ 895	Level 2	$ 305	Level 3	-65.92%
136	2023	Billing Web Self-Service	Customer Service	$ 888	Level 2	$ 590	Level 3	-33.56%
137	2023	Collection Web Self-Service	Customer Service	$ 6,475	Level 2	$ 2,379	Level 3	-63.26%
138	2023	Contact Center Enablement	Customer Service	$ 400	Level 2	$ 889	Level 3	122.25%
139	2023	Customer Closed Loop Development	Customer Service	$ 1,500	Level 2	$ 1,524	Level 3	1.60%
140	2023	MIGP Data and Reporting	Customer Service	$ 1,014	Level 2	$ 906	Level 3	-10.65%
141	2023	MIMO Web Self-Service	Customer Service	$ 5,100	Level 2	$ 5,413	Level 3	6.14%
142	2023	Payment Web Self-Service	Customer Service	$ 888	Level 2	$ 51	Level 3	-94.26%
							Highest Percent OverRecovery	-99.86%
							Highest Percent UnderRecovery	277.36%

Over Recovered Projects

Line No.	Spend Year	U-21534 Business Case / Project Name	IT Portfolio/Program	U-21297 Capital Cost (000's) Spend Year	U-21297 Cost Estimate Level	U-21534 Capital Cost (000's) Spend Year	U-21534 Cost Estimate Level	Percent Difference in Cost
1	2023	Core ERP Stacks and Packs	Corporate Applications	$ 1,668	Level 2	$ 1,437	Level 3	-13.85%
3	2023	Corporate Services Application Health	Corporate Applications	$ 775	Level 2	$ 507	Level 3	-34.58%
4	2024	Corporate Services Application Health	Corporate Applications	$ 780	Level 2	$ 779	Level 3	-0.13%
5	2023	Documentum (EDM) Application Health	Corporate Applications	$ 370	Level 2	$ 110	Level 3	-70.27%
6	2023	Enterprise Applications Health	Corporate Applications	$ 675	Level 2	$ 366	Level 3	-45.78%
8	2023	Enterprise Resource Planning	Corporate Applications	$ 1,108	Level 2	$ 302	Level 3	-72.74%
14	2023	Production Growth	Corporate Applications	$ 1,050	Level 2	$ 517	Level 3	-50.76%
15	2024	Production Growth	Corporate Applications	$ 894	Level 2	$ 893	Level 3	-0.11%
17	2023	Automated Application Monitoring Application Health	Customer Service	$ 342	Level 2	$ 302	Level 3	-11.62%
22	2024	Contact Center Application Health	Customer Service	$ 6,253	Level 2	$ 1,250	Level 3	-80.01%
23	2023	Closed Loop COCL Application Health	Customer Service	$ 690	Level 2	$ 1	Level 3	-99.86%
25	2023	Customer Digital Channels and Self Service Program	Customer Service	$ 2,774	Level 2	$ 2,219	Level 3	-20.01%
27	2023	Customer Information Technology (CIT) Configuration Management	Customer Service	$ 896	Level 2	$ 574	Level 3	-35.93%
31	2023	Customer Relationship and Billing Program	Customer Service	$ 1,584	Level 2	$ 550	Level 3	-65.28%
37	2023	Digital Channels Transformation Program	Customer Service	$ 4,823	Level 2	$ 3,802	Level 3	-21.17%
38	2023	Systems, Applications, and Products (SAP) Upgrade Program	Customer Service	$ 4,017	Level 2	$ 3,410	Level 3	-15.11%
39	2023	ClickSoft Application Health	Plant and Field - DO	$ 400	Level 2	$ 309	Level 3	-22.75%
40	2023	Distribution Operations Application Health	Plant and Field - DO	$ 1,280	Level 2	$ 1,098	Level 3	-14.22%
44	2024	DTE Electric Utility Network (UN)	Plant and Field - DO	$ 375	Level 2	$ 370	Level 3	-1.33%
45	2023	Fuel Supply Application Health	Plant and Field - ES	$ 470	Level 2	$ 383	Level 3	-18.51%
47	2023	Network Reliability and Monitoring	Plant and Field - DO	$ 750	Level 2	$ 246	Level 3	-67.20%
53	2023	Renewable Operations Application Health	Plant and Field - ES	$ 124	Level 2	$ 111	Level 3	-10.31%
54	2024	Renewable Operations Application Health	Plant and Field - ES	$ 124	Level 2	$ 120	Level 3	-3.04%
55	2023	Supervisory Control and Data Acquisition (SCADA) System Improvement	Plant and Field - DO	$ 520	Level 2	$ 404	Level 3	-22.31%
57	2023	System for Fossil Generation for Coal and Gas	Plant and Field - ES	$ 400	Level 2	$ 342	Level 3	-14.50%
59	2023	Advance Metering Infrastructure Field Collection System	Plant and Field - DO	$ 1,700	Level 2	$ 1,243	Level 3	-26.88%
62	2023	P3M Heat Rate Calculation and GADS Reporting Functions	Plant and Field - ES	$ 913	Level 2	$ 850	Level 3	-6.90%
65	2024	Maximo Engineering Process Automation	Plant and Field - ES	$ 8,250	Level 2	$ 3,757	Level 3	-54.46%
66	2023	Maximo HSE Support	Plant and Field - ES	$ 334	Level 2	$ 325	Level 3	-2.69%
67	2023	Cloud Privilege Access Management	nformation Protection Security	$ 500	Level 2	$ 416	Level 3	-16.80%
68	2023	Vulnerability Scan tool	nformation Protection Security	$ 675	Level 2	$ 561	Level 3	-16.89%
69	2023	IT for IT Application Health	Information Technology for IT	$ 1,900	Level 2	$ 1,391	Level 3	-26.79%
70	2024	IT for IT Application Health	Information Technology for IT	$ 16,640	Level 2	$ 16,622	Level 3	-0.11%
71	2023	Cloud Security project	nformation Protection Security	$ 441	Level 2	$ 311	Level 3	-29.48%
72	2024	Cloud Security project	nformation Protection Security	$ 460	Level 2	$ 440	Level 3	-4.35%
73	2023	Endpoint Protection	nformation Protection Security	$ 315	Level 2	$ 287	Level 3	-8.89%
74	2024	Endpoint Protection	nformation Protection Security	$ 347	Level 2	$ 314	Level 3	-9.59%
75	2023	Application Portfolio Management - APM	Information Technology for IT	$ 500	Level 2	$ 438	Level 3	-12.40%
76	2023	Automated Provisioning	nformation Protection Security	$ 1,500	Level 2	$ 762	Level 3	-49.20%
77	2024	Automated Provisioning	nformation Protection Security	$ 2,433	Level 2	$ 2,429	Level 3	-0.18%
78	2023	Azure Active Directory Federation Implementation	nformation Protection Security	$ 441	Level 2	$ 299	Level 3	-32.20%
79	2024	Azure Active Directory Federation Implementation	nformation Protection Security	$ 460	Level 2	$ 440	Level 3	-4.35%
80	2023	DTE Private Cloud Infrastructure as a Service	Infrastructure Operations	$ 800	Level 2	$ 571	Level 3	-28.63%
81	2023	Enterprise Mobility Management	nformation Protection Security	$ 331	Level 2	$ 179	Level 3	-45.89%
83	2023	Firewall Threat Protection	nformation Protection Security	$ 1,556	Level 2	$ 1,529	Level 3	-1.74%
84	2024	Firewall Threat Protection	nformation Protection Security	$ 3,244	Level 2	$ 600	Level 3	-81.50%
85	2023	IT Service Management Tool	Information Technology for IT	$ 900	Level 2	$ 613	Level 3	-31.89%
86	2023	Ransomware Recovery	nformation Protection Security	$ 500	Level 2	$ 418	Level 3	-16.40%

88	2023	Threat Intel module	nformation Protection Security	$ 263	Level 2	$ 43	Level 3	-83.62%
91	2023	Cyber Excellence Plan (CEP) Program	nformation Protection Security	$ 300	Level 2	$ 290	Level 3	-3.33%
93	2023	Tower and Lighting Inspections and Repairs	Infrastructure Operations	$ 280	Level 2	$ 263	Level 3	-6.07%
94	2024	Tower and Lighting Inspections and Repairs	Infrastructure Operations	$ 280	Level 2	$ 150	Level 3	-46.43%
95	2023	Backup Environmental Growth	Infrastructure Operations	$ 624	Level 2	$ 85	Level 3	-86.38%
101	2023	Enterprise Monitoring Strategy Operational Growth	Infrastructure Operations	$ 600	Level 2	$ 583	Level 3	-2.83%
103	2023	Field Communications Network FCN Growth and Upgrade	Infrastructure Operations	$ 400	Level 2	$ 384	Level 3	-4.00%
104	2024	Field Communications Network FCN Growth and Upgrade	Infrastructure Operations	$ 400	Level 2	$ 300	Level 3	-25.00%
109	2023	Compute and Storage Cache Refresh	Infrastructure Operations	$ 528	Level 2	$ 3	Level 3	-99.43%
111	2023	Conference Room Audio Video Support	Infrastructure Operations	$ 229	Level 2	$ 112	Level 3	-51.09%
115	2023	End of Life Asset Replacements	Infrastructure Operations	$ 500	Level 2	$ 471	Level 3	-5.80%
117	2023	Microwave End Of Life	Infrastructure Operations	$ 402	Level 2	$ 391	Level 3	-2.74%
119	2023	Network Advanced Metering Infrastructure Support	Infrastructure Operations	$ 2,200	Level 2	$ 2,076	Level 3	-5.64%
125	2023	Data Center Modernization and Optimization	Infrastructure Operations	$ 1,350	Level 2	$ 941	Level 3	-30.30%
127	2023	Wide Area Network and Wireless Local Area Network Expansion	Infrastructure Operations	$ 2,000	Level 2	$ 984	Level 3	-50.80%
128	2024	Wide Area Network and Wireless Local Area Network Expansion	Infrastructure Operations	$ 1,000	Level 2	$ 600	Level 3	-40.00%
129	2023	Security Infrastructure Growth and EOL	Infrastructure Operations	$ 1,400	Level 2	$ 1,359	Level 3	-2.93%
130	2023	PCI Compliance	Customer Service	$ 176	Level 2	$ 102	Level 3	-42.05%
132	2023	Rider 17 – MIGreenPower, Residential and Small Commercial & Industrial	Customer Service	$ 1,580	Level 2	$ 398	Level 3	-74.81%
133	2023	MIGP Customer - Requested Renewable Energy Projects	Customer Service	$ 4,502	Level 2	$ 413	Level 3	-90.83%
134	2023	Advanced Analytics AA Use Cases Implementation	Customer Service	$ 500	Level 2	$ 457	Level 3	-8.60%
135	2023	IT Application Environments Enhancement	Customer Service	$ 352	Level 2	$ 320	Level 3	-9.09%
136	2023	Automated Application Monitoring Enhancement	Customer Service	$ 895	Level 2	$ 305	Level 3	-65.92%
137	2023	Billing Web Self-Service	Customer Service	$ 888	Level 2	$ 590	Level 3	-33.56%
138	2023	Collection Web Self-Service	Customer Service	$ 6,475	Level 2	$ 2,379	Level 3	-63.26%
141	2023	MIGP Data and Reporting	Customer Service	$ 1,014	Level 2	$ 906	Level 3	-10.65%
143	2023	Payment Web Self-Service	Customer Service	$ 888	Level 2	$ 51	Level 3	-94.26%
							Average Over Recovery per Project	-31.45%

Under Recovered Projects

Line No.	Spend Year	U-21534 Business Case / Project Name	IT Portfolio/Program	U-21297 Capital Cost (000's) Spend Year	U-21297 Cost Estimate Level	U-21534 Capital Cost (000's) Spend Year	U-21534 Cost Estimate Level	Percent Difference in Cost
7	2024	Enterprise Applications Health	Corporate Applications	$ 700	Level 2	$ 740	Level 3	5.71%
10	2023	Financial Applications Health	Corporate Applications	$ 275	Level 2	$ 292	Level 3	6.18%
12	2023	Human Resources Applications Health	Corporate Applications	$ 250	Level 2	$ 410	Level 3	64.00%
16	2023	SuccessFactors Program	Corporate Applications	$ 310	Level 2	$ 329	Level 3	6.13%
18	2024	Automated Application Monitoring Application Health	Customer Service	$ 376	Level 2	$ 380	Level 3	1.11%
19	2023	Business Planning and Development (BPD) and Electric Sales & Marketing (ESM) Application Health	Customer Service	$ 730	Level 2	$ 851	Level 3	16.58%
21	2023	Contact Center Application Health	Customer Service	$ 1,139	Level 2	$ 1,202	Level 3	5.54%
24	2024	Closed Loop COCL Application Health	Customer Service	$ 759	Level 2	$ 760	Level 3	0.10%
26	2024	Customer Digital Channels and Self Service Program	Customer Service	$ 2,111	Level 2	$ 2,770	Level 3	31.25%
28	2024	Customer Information Technology (CIT) Configuration Management	Customer Service	$ 1,916	Level 2	$ 1,920	Level 3	0.23%
29	2023	Customer Legacy Application Health	Customer Service	$ 405	Level 2	$ 668	Level 3	64.94%
30	2024	Customer Legacy Application Health	Customer Service	$ 446	Level 2	$ 450	Level 3	0.90%
32	2023	Hybris Application Health	Customer Service	$ 1,000	Level 2	$ 2,424	Level 3	142.40%
33	2024	Hybris Application Health	Customer Service	$ 635	Level 2	$ 640	Level 3	0.83%
34	2023	MIGreenPower Program Stabilization	Customer Service	$ 1,548	Level 2	$ 1,579	Level 3	2.03%
35	2023	Service Cloud Product Support For Customer Document Submission	Customer Service	$ 753	Level 2	$ 790	Level 3	4.91%
36	2023	Customer Service Infrastructure Landscape & Growth Project	Customer Service	$ 5,500	Level 2	$ 5,947	Level 3	8.13%
42	2023	DTE Electric Generation Capacity Application Health	Plant and Field - ES	$ 560	Level 2	$ 593	Level 3	5.89%
43	2024	DTE Electric Generation Capacity Application Health	Plant and Field - ES	$ 560	Level 2	$ 570	Level 3	1.79%
49	2023	Nuclear Generation Business Systems Replacement	Plant and Field - ES	$ 650	Level 2	$ 678	Level 3	4.31%
51	2023	Production Growth	Plant and Field - DO	$ 800	Level 2	$ 1,486	Level 3	85.75%
52	2024	Production Growth	Plant and Field - DO	$ 1,310	Level 2	$ 1,485	Level 3	13.36%
58	2024	System for Fossil Generation for Coal and Gas	Plant and Field - ES	$ 400	Level 2	$ 415	Level 3	3.75%
60	2023	Maximo Platform Program	Plant and Field - DO	$ 1,175	Level 2	$ 2,278	Level 3	93.89%
61	2024	Maximo Platform Program	Plant and Field - DO	$ 1,175	Level 2	$ 1,192	Level 3	1.46%
63	2023	Plant & Field Document Repository	Plant & Field ES	$ 500	Level 2	$ 1,395	Level 3	179.00%
64	2023	Replace DO Lines - SOC Radio	Plant and Field - DO	$ 1,800	Level 2	$ 2,072	Level 3	15.11%
89	2023	Cyber Security Defense Center (CSDC) Growth and LifeCycle Management	nformation Protection Security	$ 300	Level 2	$ 389	Level 3	29.67%
97	2023	Collaboration Application Health	Infrastructure Operations	$ 20,753	Level 2	$ 21,783	Level 3	4.96%
98	2024	Collaboration Application Health	Infrastructure Operations	$ 1,500	Level 2	$ 1,531	Level 3	2.07%
99	2023	Endpoint End of Life Electric Support Services	Infrastructure Operations	$ 853	Level 2	$ 973	Level 3	14.07%
102	2024	Enterprise Monitoring Strategy Operational Growth	Infrastructure Operations	$ 500	Level 2	$ 600	Level 3	20.00%
105	2023	Network Hardening and Operations	Infrastructure Operations	$ 400	Level 2	$ 880	Level 3	120.00%
107	2023	Server Engineering Support Services	Infrastructure Operations	$ 2,650	Level 2	$ 10,000	Level 3	277.36%
112	2024	Conference Room Audio Video Support	Infrastructure Operations	$ 250	Level 2	$ 500	Level 3	100.00%
113	2023	Digital Worker Experience Electric EOL	Infrastructure Operations	$ 2,250	Level 2	$ 3,022	Level 3	34.31%
121	2023	Network Data Center End of Life Project	Infrastructure Operations	$ 650	Level 2	$ 978	Level 3	50.46%
123	2023	Network End of Life Electric	Infrastructure Operations	$ 700	Level 2	$ 888	Level 3	26.86%
126	2024	Data Center Modernization and Optimization	Infrastructure Operations	$ 1,650	Level 2	$ 2,100	Level 3	27.27%
131	2023	Regulatory Compliance	Customer Service	$ 2,761	Level 2	$ 2,787	Level 3	0.94%
139	2023	Contact Center Enablement	Customer Service	$ 400	Level 2	$ 889	Level 3	122.25%
140	2023	Customer Closed Loop Development	Customer Service	$ 1,500	Level 2	$ 1,524	Level 3	1.60%
142	2023	MIMO Web Self-Service	Customer Service	$ 5,100	Level 2	$ 5,413	Level 3	6.14%
							Average Under Recovery per Project	37.28%

Line	Level 3 Projects	Portfolio	12 months ending 12/31/2023	12 months ending 12/31/2024	12 months ending 12/31/2025	Exhibit	O&M (Test Year)
1	Core ERP Stacks and Packs	Corporate Applications	$1,437,000				
2	Corporate Services Application Health	Corporate Applications	$507,000				
3	Documentum (EDM) Application Health	Corporate Applications	$110,000				
4	Enterprise Applications Health	Corporate Applications	$366,000				
5	Enterprise Resource Planning	Corporate Applications	$302,000				
6	Financial Applications Health	Corporate Applications	$292,000			A-12 Sch B5.7.1	
7	Human Resources Applications Health	Corporate Applications	$410,000				
8	Production Growth	Corporate Applications	$517,000				
9	Powerplan Upgrade	Corporate Applications	-$18,000				
10	SOTeria Safe Worker Observations (SWO)	Corporate Applications	$54,000				
11	SuccessFactors Program	Corporate Applications	$329,000				
12		**Total:**	**$4,306,000**	**$0**	**$0**		**$0**
13		**Disallowance (10% of total):**	**$430,600**	**$0**	**$0**		**$0**
14	Automated Application Monitoring Application Health	Customer Service	$302,000				
15	Business Planning and Development (BPD) and Electric Sales &	Customer Service	$852,000				
16	Contact Center Application Health	Customer Service	$1,202,000				
17	Closed Loop COCL Application Health	Customer Service	$1,000				
18	Customer Digital Channels and Self Service Program	Customer Service	$2,219,000				
19	Customer Information Technology (CIT) Configuration	Customer Service	$574,000				
20	Customer Legacy Application Health	Customer Service	$668,000				
21	Customer Relationship and Billing Program	Customer Service	$550,000				
22	Hybris Application Health	Customer Service	$2,424,000				
23	MIGreenPower Program Stabilization	Customer Service	$1,579,000			A-12 Sch B5.7.2	
24	Powerley Customer Platform Application Health	Customer Service	$2,931,000				
25	Service Cloud Product Support For Customer Document	Customer Service	$790,000				
26	Agency Web Site AGW Rebuild	Customer Service	$1,844,000				
27	Archive and Purge	Customer Service	$41,000				
28	Contact Center Infrastructure	Customer Service	$663,000				
29	Customer Experience Suite	Customer Service	$518,000				
30	Customer Service Infrastructure Landscape & Growth Project	Customer Service	$5,947,000				
31	Digital Channels Transformation Program	Customer Service	$3,802,000				
32	Distributed Generation Upgrades	Customer Service	$60,000				
33	Systems, Applications, and Products (SAP) Upgrade Program	Customer Service	$3,410,000				
34		**Total:**	**$30,377,000**	**$0**	**$0**		**$0**
35		**Disallowance (10% of total):**	**$3,037,700**	**$0**	**$0**		**$0**

36	Advance Metering Infrastructure (AMI) Application Health	Plant and Field	$2,247,000			A-12 Sch B5.7.4	
37	ClickSoft Application Health	Plant and Field	$309,000				
38	Distribution Operations Application Health	Plant and Field	$1,098,000				
39	DTE Electric Generation Capacity Application Health	Plant and Field	$593,000				
40	DTE Electric Utility Network (UN)	Plant and Field	$298,000				
41	Fuel Supply Application Health	Plant and Field	$383,000				
42	Network Reliability and Monitoring	Plant and Field	$246,000				
43	Nuclear Generation Business Systems Replacement	Plant and Field	$678,000				
44	Production Growth	Plant and Field	$1,486,000				
45	Renewable Operations Application Health	Plant and Field	$111,000				
46	Supervisory Control and Data Acquisition (SCADA) System	Plant and Field	$404,000				
47	System for Fossil Generation for Coal and Gas	Plant and Field	$342,000				
48	Advance Metering Infrastructure Field Collection System	Plant and Field	$1,243,000				
49	ESRI Application Health	Plant and Field	$513,000				
50	Maximo Platform Program	Plant and Field	$2,278,000				
51	Meter Data Management (MDM) Consolidation	Plant and Field	-$1,437,000				
52	P3M Heat Rate Calculation and GADS Reporting Functions	Plant and Field	$850,000				
53	Plant & Field Document Repository	Plant and Field	$1,395,000				
54	Replace DO Lines - SOC Radio	Plant and Field	$2,072,000				
55	Field Service Management- ClickSoft for EFO (Electric Field	Plant and Field	$496,000				
56	Integrated Information Resource (I2R) Replacement	Plant and Field	$595,000				
57	Maximo Engineering Process Automation	Plant and Field	$3,449,000				
58	Maximo HSE Support	Plant and Field	$325,000				
59	Primavera Modernization	Plant and Field	-$4,000				
60		**Total:**	**$19,970,000**	$0	$0		$0
61		**Disallowance (10% of total):**	**$1,997,000**	**$0**	**$0**		**$0**
62	IT for IT Application Health	Information Technology for IT	$1,391,000			A-12 Sch B5.7.5	
63	IT for IT Tools	Information Technology for IT	$113,000				
64	Application Portfolio Management - APM	Information Technology for IT	$438,000				
65	Cloud Management (Service Now)	Information Technology for IT	-$65,000				
66	IT Service Management Tool	Information Technology for IT	$613,000				
67		**Total:**	**$2,490,000**	**$0**	**$0**		**$0**
68		**Disallowance (10% of total):**	**$249,000**	**$0**	**$0**		**$0**
69	Cloud Privilege Access Management	Information Protection Security	$416,000			A-12 Sch B5.7.6	
70	Vulnerability Scan tool	Information Protection Security	$561,000				
71	Cloud Security project	Information Protection Security	$311,000				
72	Cyber Security Defense Center (CSDC) Growth and LifeCycle	Information Protection Security	$389,000				
73	Endpoint Protection	Information Protection Security	$287,000		$316,000		$69,726
74	Automated Provisioning	Information Protection Security	$762,000		$746,000		$190,947
75	Azure Active Directory Federation Implementation	Information Protection Security	$299,000		$439,000		$76,709
76	Cyber Excellence Plan (CEP) Program	Information Protection Security	$290,000		$298,000		$18,088
77	Enterprise Mobility Management	Information Protection Security	$179,000		$333,000		$99,009
78	Network Access Control	Information Protection Security	$32,000				
79	Ransomware Recovery	Information Protection Security	$418,000		$500,000		$110,351
80	Threat Intel module	Information Protection Security	$14,000				
81		**Total:**	**$3,958,000**	$0	$2,632,000		$564,830

82			**Disallowance (10% of total):**	**$395,800**	**$0**	**$263,200**	**$56,483**
83	Automating Database Event Log Monitoring	Infrastructure Operations		$17,000			
84	Tower and Lighting Inspections and Repairs	Infrastructure Operations		$263,000			
85	Backup Environmental Growth	Infrastructure Operations		$85,000			
86	Collaboration Application Health	Infrastructure Operations		$21,783,000			
87	Endpoint End of Life Electric Support Services	Infrastructure Operations		$973,000			
88	Enterprise Monitoring Strategy Operational Growth	Infrastructure Operations		$583,000			
89	Field Communications Network FCN Growth and Upgrade	Infrastructure Operations		$384,000			
90	Network Hardening and Operations	Infrastructure Operations		$880,000			
91	Server Engineering Support Services	Infrastructure Operations		$10,000,000	$3,100,000	$3,100,000	$0
92	Compute and Storage Cache Refresh	Infrastructure Operations		$3,000			
93	Conference Room Audio Video Support	Infrastructure Operations		$112,000			
94	Data Center Modernization and Optimization	Infrastructure Operations		$941,000			
95	End of Life Asset Replacements	Infrastructure Operations		$471,000	$500,000	$500,000	$0
96	Field Worker Device End Of Life	Infrastructure Operations			$900,000	$900,000	$0
97	Microwave End Of Life	Infrastructure Operations		$391,000			
98	Network Advanced Metering Infrastructure Support	Infrastructure Operations		$2,076,000			
99	Network Data Center End of Life Project	Infrastructure Operations		$978,000			
100	Network End of Life Electric	Infrastructure Operations		$888,000	$700,000	$700,000	$0
101	Security Infrastructure Growth and EOL	Infrastructure Operations		$1,359,000			
102	Wide Area Network and Wireless Local Area Network Expansion	Infrastructure Operations		$984,000			
103	Virtual Desktop Infrastructure	Infrastructure Operations		$7,000			
104	Afaria Upgrade / Replacement	Infrastructure Operations		$10,000			
105	Network Segmentation (phase 2+) emergent extension	Infrastructure Operations		$588,000	$255,000	$400,000	$275,605
106	Wide Area Network Redesign Session Initiation Protocol	Infrastructure Operations		$128,000			
107	ConnectUs Teams	Infrastructure Operations		$955,000			
108	Data Power Replacements	Infrastructure Operations		$553,000			
109	DTE Private Cloud Infrastructure as a Service	Infrastructure Operations		$571,000			
110	Enterprise Monitoring Strategy Implementation	Infrastructure Operations		$24,000			
111	Firewall Threat Protection	Infrastructure Operations		$1,529,000			
112	Mobile Device Management (MDM)	Infrastructure Operations		$477,000			
113	Network Operations Center (NOC) Automation Project	Infrastructure Operations		$36,000			
114			**Total:**	**$48,049,000**	**$5,455,000**	**$5,600,000**	**$275,605**
115			**Disallowance (10% of total):**	**$4,804,900**	**$545,500**	**$560,000**	**$27,561**
116	Advance and Enhance the Enterprise Data Platform	Enterprise Data Analytics		$4,000,000			
117			**Total:**	**$4,000,000**	**$0**	**$0**	**$0**
118			**Disallowance (10% of total):**	**$400,000**	**$0**	**$0**	**$0**
119			Total of all Level 3 Projects:	$113,150,000	$5,455,000	$8,232,000	$0 $840,435
120			**Disallowance (10%) for all Level 3 Projects:**	**$11,315,000**	**$545,500**	**$823,200**	**$0** **$84,044**

A-12 Sch B5.7.7

A-12 Sch B5.7.8

Michigan Public Service Commission
DTE Electric Company
Comparison of Level 3 Cost Estimates and Actual Costs

Exh. A-24 N3 Line No.	Spend Year	Business Case Name	IT Portfolio	Total Projected IT Capital Cost ($$)	Cost Estimate Level	Actual Cost	Percent Difference
1	2022	Core ERP Stacks and Packs (2021-25)	Corporate Applications	$ 1,668,123	Level 3	$1,138,000	-31.78%
4	2022	Corporate Services Application Health	Corporate Applications	$ 788,157	Level 3	$481,000	-38.97%
7	2022	Enterprise Applications Health	Corporate Applications	$ 485,000	Level 3	$385,000	-20.62%
10	2022	Enterprise Resource Planning	Corporate Applications	$ 1,108,000	Level 3	$1,180,000	6.50%
13	2022	Financial Applications Health	Corporate Applications	$ 275,000	Level 3	$426,000	54.91%
16	2022	Human Resources Applications Health	Corporate Applications	$ 390,000	Level 3	$583,000	49.49%
19	2022	Production Growth	Corporate Applications	$ 611,000	Level 3	$515,000	-15.71%
28	2022	Powerplan Upgrade	Corporate Applications	$ 1,300,000	Level 3	$1,356,000	4.31%
29	2022	SOTeria Safe Worker Observations (SWO)	Corporate Applications	$ 250,000	Level 3	$394,000	57.60%
30	2022	SuccessFactors Program	Corporate Applications	$ 400,000	Level 3	$187,000	-53.25%
41	2022	Automated Application Monitoring Application Health	Customer Service	$ 410,000	Level 3	$589,000	43.66%
44	2022	Business Planning and Development (BPD) and Electric Sales & Marketing (ESM) Application Health	Customer Service	$ 640,000	Level 3	$386,000	-39.69%
47	2022	Contact Center Application Health	Customer Service	$ 1,040,000	Level 3	$1,148,000	10.38%
52	2022	Cloud Infrastructure and Supporting Capabilities	Customer Service	$ 500,000	Level 3	$221,000	-55.80%
53	2022	Customer Digital Channels and Self Service Program	Customer Service	$ 1,600,000	Level 3	$1,550,000	-3.13%
56	2022	Customer Information Technology (CIT) Configuration Management	Customer Service	$ 810,000	Level 3	$540,000	-33.33%
63	2022	Hybris Application Health	Customer Service	$ 580,000	Level 3	$2,019,000	248.10%
72	2022	Agency Web Site AGW Rebuild	Customer Service	$ 2,920,000	Level 3	$2,669,000	-8.60%
73	2022	Archive and Purge	Customer Service	$ 1,100,000	Level 3	$1,460,000	32.73%
74	2022	Digital Channels Transformation Program	Customer Service	$ 1,980,000	Level 3	$502,000	-74.65%
77	2022	Contact Center Infrastructure	Customer Service	$ 2,040,000	Level 3	$1,778,000	-12.84%
79	2022	Distributed Generation Upgrades	Customer Service	$ 3,180,000	Level 3	$3,175,000	-0.16%
80	2022	Systems, Applications, and Products (SAP) Enhancement Program	Customer Service	$ 1,040,000	Level 3	$1,145,000	10.10%
82	2022	Customer Experience Suite	Customer Service	$ 2,530,000	Level 3	$2,627,000	3.83%
83	2022	ACPP/Time of Day	Customer Service	$ 9,530,000	Level 3	$10,046,000	5.41%
84	2023	ACPP/Time of Day	Customer Service	$ 6,440,000	Level 3	$8,000,000	24.22%
85	2022	Corporate Energy Forecasting	Customer Service	$ 260,000	Level 3	$294,000	13.08%
86	2022	MIGP - Fixed Price Product (Rider17)	Customer Service	$ 2,670,000	Level 3	$2,854,000	6.89%
89	2022	MIGP Website Update	Customer Service	$ 890,000	Level 3	$1,080,000	21.35%
90	2022	MIGP Section 61 Settlement	Customer Service	$ 3,827,000	Level 3	$3,965,000	3.61%
93	2022	Payment Stability Plan	Customer Service	$ 420,000	Level 3	$427,000	1.67%
94	2022	Regulatory Compliance	Customer Service	$ 1,500,000	Level 3	$836,000	-44.27%
102	2022	Treasury Credential on File	Customer Service	$ 1,180,000	Level 3	$1,196,000	1.36%
103	2022	Advanced Analytics AA use cases Implementation	Customer Service	$ 1,365,442	Level 3	$1,131,000	-17.17%
106	2022	Customer Legacy Applications Enhancement	Customer Service	$ 980,000	Level 3	$868,000	-11.43%
107	2022	Customer Relationship and Billing Program Enhancement	Customer Service	$ 2,040,000	Level 3	$2,794,000	36.96%
108	2022	IT Application Environments Enhancement	Customer Service	$ 300,000	Level 3	$164,000	-45.33%
113	2022	Automated Application Monitoring Enhancement	Customer Service	$ 1,630,000	Level 3	$1,513,000	-7.18%
116	2022	SAP Cloud Platform - Foundational Additions	Customer Service	$ 400,000	Level 3	$102,000	-74.50%
117	2022	Supporting Capabilities Test Data and Test Data Management	Customer Service	$ 1,170,000	Level 3	$953,000	-18.55%
119	2022	API Integration Security Gateway and API Layer	Customer Service	$ 1,550,000	Level 3	$80,000	-94.84%
129	2022	Customer Closed Loop Development	Customer Service	$ 500,000	Level 3	$314,000	-37.20%
131	2022	Customer Service Communications	Customer Service	$ 1,000,000	Level 3	$0	-100.00%
132	2023	Customer Service Communications	Customer Service	$ 2,355,000	Level 3	$3,852,000	63.57%
134	2022	Enhanced Training Environments	Customer Service	$ 250,000	Level 3	$255,000	2.00%
135	2022	Error Free Communication	Customer Service	$ 12,300,000	Level 3	$14,904,000	21.17%
136	2023	Error Free Communication	Customer Service	$ 10,000,000	Level 3	$13,359,000	33.59%
138	2022	Field Service Management for RM&P	Customer Service	$ 1,540,000	Level 3	$1,534,000	-0.39%
139	2022	Field Service Management Billing & Metering	Customer Service	$ 885,000	Level 3	$831,000	-6.10%
140	2022	High Volume IVR Overflow	Customer Service	$ 340,000	Level 3	$0	-100.00%
141	2023	High Volume IVR Overflow	Customer Service	$ 260,000	Level 3	$23,000	-91.15%
143	2022	IVR Virtual Assistants	Customer Service	$ 1,260,389	Level 3	$1,271,000	0.84%
144	2022	Journey Work Product Transformation Teams	Customer Service	$ 6,872,000	Level 3	$6,744,000	-1.86%
147	2022	MIGP - Integrate DTE Insight	Customer Service	$ 183,000	Level 3	$169,000	-7.65%
152	2022	Platform Integration Component	Customer Service	$ 1,550,000	Level 3	$1,048,000	-32.39%
154	2022	Qualtrics Expansion	Customer Service	$ 470,000	Level 3	$507,000	7.87%

156	2022	SIP in Call Center	Customer Service	$ 200,000	Level 3	$0	-100.00%
157	2023	SIP in Call Center	Customer Service	$ 1,487,500	Level 3	$856,000	-42.45%
158	2022	Speech Analytics	Customer Service	$ 1,173,000	Level 3	$1,145,000	-2.39%
159	2022	Social Technologies	Customer Service	$ 170,000	Level 3		-100.00%
160	2023	Social Technologies	Customer Service	$ 30,000	Level 3		-100.00%
161	2022	Workforce Automation for Contact Center	Customer Service	$ 1,200,000	Level 3	$1,233,000	2.75%
162	2023	Workforce Automation for Contact Center	Customer Service	$ 105,000	Level 3	$161,000	53.33%
164	2022	Advance Metering Infrastructure (AMI) Application Health	Plant and Field	$ 1,390,000	Level 3	$801,000	-42.37%
167	2022	ClickSoft Application Health	Plant and Field	$ 100,000	Level 3	$2,000	-98.00%
172	2022	Distribution Operations Application Health	Plant and Field	$ 1,450,000	Level 3	$1,765,000	21.72%
177	2022	DTE Electric Generation Capacity Application Health	Plant and Field	$ 560,000	Level 3	$691,000	23.39%
180	2022	Fuel Supply Application Health	Plant and Field	$ 470,000	Level 3	$387,000	-17.66%
185	2022	Nuclear Generation Business Systems Replacement	Plant and Field	$ 620,000	Level 3	$508,000	-18.06%
188	2022	Production Growth	Plant and Field	$ 1,410,000	Level 3	$9,132,000	547.66%
191	2022	Renewable Operations Application Health	Plant and Field	$ 123,760	Level 3	$115,000	-7.08%
194	2022	Supervisory Control and Data Acquisition (SCADA) System Improvement	Plant and Field	$ 520,000	Level 3	$573,000	10.19%
197	2022	System for Fossil Generation for Coal and Gas	Plant and Field	$ 400,000	Level 3	$394,000	-1.50%
200	2022	Advance Metering Infrastructure Field Collection System	Plant and Field	$ 1,690,000	Level 3	$2,076,000	22.84%
205	2022	ESRI Application Health	Plant and Field	$ 380,000	Level 3	$0	-100.00%
209	2022	Maximo Platform Program	Plant and Field	$ 1,910,000	Level 3	$4,051,000	112.09%
212	2022	Meter Data Management (MDM) Consolidation	Plant and Field	$ 13,590,000	Level 3	$13,157,000	-3.19%
213	2022	Replace DO Lines - SOC Radio	Plant and Field	$ 5,070,000	Level 3	$5,160,000	1.78%
217	2022	Fermi Enhancements	Plant and Field	$ 500,000	Level 3	$421,000	-15.80%
218	2022	Field Service Management- ClickSoft for EFO (Electric Field Operations)	Plant and Field	$ 1,045,000	Level 3	$1,057,000	1.15%
219	2022	Integrated Information Resource (I2R) Replacement	Plant and Field	$ 12,910,000	Level 3	$12,825,000	-0.66%
223	2022	Plant & Field Document Repository	Plant and Field	$ 3,320,000	Level 3	$3,031,000	-8.70%
226	2022	Primavera Modernization	Plant and Field	$ 430,000	Level 3	$423,000	-1.63%
227	2022	Automating Database Event Log Monitoring	Information Technology for IT	$ 418,000	Level 3	$319,000	-23.68%
234	2022	IT for IT Application Health	Information Technology for IT	$ 2,000,000	Level 3	$1,669,000	-16.55%
239	2022	Afaria Upgrade / Replacement	Information Technology for IT	$ 300,000	Level 3	$388,000	29.33%
240	2022	Endpoint Protection	Information Technology for IT	$ 300,000	Level 3	$454,000	51.33%
243	2022	IT for IT Tools	Information Technology for IT	$ 400,000	Level 3	$254,000	-36.50%
245	2022	Automated Provisioning	Information Technology for IT	$ 490,000	Level 3	$1,581,000	222.65%
251	2022	Cloud Management (Service Now)	Information Technology for IT	$ 750,000	Level 3	$647,000	-13.73%
253	2022	DTE Private Cloud Infrastructure as a Service	Information Technology for IT	$ 832,293	Level 3	$442,000	-46.89%
266	2022	IT Service Management Tool	Information Technology for IT	$ 1,200,000	Level 3	$1,876,000	56.33%
271	2022	Network Access Control	Information Technology for IT	$ 350,000	Level 3	$186,000	-46.86%
274	2022	Network Operations Center (NOC) Automation Project	Information Technology for IT	$ 750,000	Level 3	$738,000	-1.60%
275	2022	PBX (Private Branch Exchange) Replacement	Information Technology for IT	$ 189,000	Level 3	$185,000	-2.12%
276	2022	Ransomware Protection	Information Technology for IT	$ 350,000	Level 3	$2,538,000	625.14%
279	2022	Threat Intel module	Information Technology for IT	$ 600,000	Level 3	$524,000	-12.67%
287	2022	Cyber Security Defense Center (CSDC) Growth and LifeCycle Management	Information Protection Security	$ 300,000	Level 3	$157,000	-47.67%
291	2022	Security Infrastructure Growth and EOL	Information Protection Security	$ 1,400,000	Level 3	$7,416,000	429.71%
294	2022	Cyber Excellence Plan (CEP) Program	Information Protection Security	$ 300,000	Level 3	$310,000	3.33%
298	2022	Collaboration Application Health	Infrastructure Operations	$ 1,500,000	Level 3	$705,000	-53.00%
301	2022	ConnectUs Teams	Infrastructure Operations	$ 1,000,000	Level 3	$1,905,000	90.50%
304	2022	Tower and Lighting Inspections and Repairs	Infrastructure Operations	$ 280,000	Level 3	$293,000	4.64%
307	2022	Ashley Mews Closure and Relocation	Infrastructure Operations	$ 700,000	Level 3	$705,000	0.71%
308	2022	Backup Environmental Growth	Infrastructure Operations	$ 500,000	Level 3	$201,000	-59.80%

311	2022	Field Communications Network FCN Growth and Upgrade	Infrastructure Operations	**$ 400,000**	**Level 3**	$406,000	1.50%
314	2022	Network Hardening and Operations	Infrastructure Operations	**$ 400,000**	**Level 3**	$582,000	45.50%
317	2022	Server Engineering Support Services	Infrastructure Operations	**$ 2,700,000**	**Level 3**	-$3,466,000	-228.37%
320	2022	Conference Room Audio Video Support	Infrastructure Operations	**$ 250,000**	**Level 3**	$308,000	23.20%
323	2022	Digital Worker Experience Electric End Of Life	Infrastructure Operations	**$ 3,907,108**	**Level 3**	$7,889,000	101.91%
326	2022	Endpoint End of Life Electric Support Services	Infrastructure Operations	**$ 800,000**	**Level 3**	$611,000	-23.63%
329	2022	End of Life Asset Replacements	Infrastructure Operations	**$ 500,000**	**Level 3**	$6,845,000	1269.00%
332	2022	Microwave End Of Life	Infrastructure Operations	**$ 402,000**	**Level 3**	$484,000	20.40%
335	2022	Network Advanced Metering Infrastructure Support	Infrastructure Operations	**$ 2,200,000**	**Level 3**	$2,394,000	8.82%
338	2022	Network Data Center End of Life Project	Infrastructure Operations	**$ 525,443**	**Level 3**	$402,000	-23.49%
341	2022	Network End of Life Electric	Infrastructure Operations	**$ 771,015**	**Level 3**	$397,000	-48.51%
344	2022	Data Center Modernization and Optimization	Infrastructure Operations	**$ 1,200,000**	**Level 3**	$1,084,000	-9.67%
349	2022	Virtual Desktop Infrastructure	Infrastructure Operations	**$ 260,000**	**Level 3**	$258,000	-0.77%
350	2022	Wide Area Network Redesign Session Initiation Protocol Backhaul	Infrastructure Operations	**$ 828,000**	**Level 3**	$654,000	-21.01%
351	2022	Wireless Local Area Network Expansion	Infrastructure Operations	**$ 1,012,000**	**Level 3**	$1,260,000	24.51%
352	2022	Command Center Stand Up	Infrastructure Operations	**$ 200,000**	**Level 3**	$12,000	-94.00%
353	2022	Digital Infrastructure and Services	Infrastructure Operations	**$ 8,310,002**	**Level 3**	$6,408,000	-22.89%
354	2023	Digital Infrastructure and Services	Infrastructure Operations	**$ 250,000**	**Level 3**	$0	-100.00%
355	2022	Enterprise Monitoring Strategy Operational Growth	Infrastructure Operations	**$ 500,000**	**Level 3**	$448,000	-10.40%
360	2022	Advance and Enhance the Enterprise Data Platform	Enterprise Data Analytics	**$ 1,996,000**	**Level 3**	$5,521,000	176.60%
						Highest Percent OverRecovery	**-100.00%**
						Highest Percent UnderRecovery	**1269.00%**

Over Recovered Projects

Exh. A-24 N3 Line No.	Spend Year	Business Case Name	IT Portfolio	Total Projected IT Capital Cost ($$)	Cost Estimate Level	Actual Cost	Percent Difference
1	2022	Core ERP Stacks and Packs (2021-25)	Corporate Applications	$ 1,668,123	Level 3	$1,138,000	-31.78%
4	2022	Corporate Services Application Health	Corporate Applications	$ 788,157	Level 3	$481,000	-38.97%
7	2022	Enterprise Applications Health	Corporate Applications	$ 485,000	Level 3	$385,000	-20.62%
19	2022	Production Growth	Corporate Applications	$ 611,000	Level 3	$515,000	-15.71%
30	2022	SuccessFactors Program	Corporate Applications	$ 400,000	Level 3	$187,000	-53.25%
44	2022	Business Planning and Development (BPD) and Electric Sales & Marketing (ESM) Application Health	Customer Service	$ 640,000	Level 3	$386,000	-39.69%
52	2022	Cloud Infrastructure and Supporting Capabilities	Customer Service	$ 500,000	Level 3	$221,000	-55.80%
53	2022	Customer Digital Channels and Self Service Program	Customer Service	$ 1,600,000	Level 3	$1,550,000	-3.13%
56	2022	Customer Information Technology (CIT) Configuration Management	Customer Service	$ 810,000	Level 3	$540,000	-33.33%
72	2022	Agency Web Site AGW Rebuild	Customer Service	$ 2,920,000	Level 3	$2,669,000	-8.60%
74	2022	Digital Channels Transformation Program	Customer Service	$ 1,980,000	Level 3	$502,000	-74.65%
77	2022	Contact Center Infrastructure	Customer Service	$ 2,040,000	Level 3	$1,778,000	-12.84%
79	2022	Distributed Generation Upgrades	Customer Service	$ 3,180,000	Level 3	$3,175,000	-0.16%
94	2022	Regulatory Compliance	Customer Service	$ 1,500,000	Level 3	$836,000	-44.27%
103	2022	Advanced Analytics AA use cases Implementation	Customer Service	$ 1,365,442	Level 3	$1,131,000	-17.17%
106	2022	Customer Legacy Applications Enhancement	Customer Service	$ 980,000	Level 3	$868,000	-11.43%
108	2022	IT Application Environments Enhancement	Customer Service	$ 300,000	Level 3	$164,000	-45.33%
113	2022	Automated Application Monitoring Enhancement	Customer Service	$ 1,630,000	Level 3	$1,513,000	-7.18%
116	2022	SAP Cloud Platform - Foundational Additions	Customer Service	$ 400,000	Level 3	$102,000	-74.50%
117	2022	Supporting Capabilities Test Data and Test Data Management	Customer Service	$ 1,170,000	Level 3	$953,000	-18.55%
119	2022	API Integration Security Gateway and API Layer	Customer Service	$ 1,550,000	Level 3	$80,000	-94.84%
129	2022	Customer Closed Loop Development	Customer Service	$ 500,000	Level 3	$314,000	-37.20%
131	2022	Customer Service Communications	Customer Service	$ 1,000,000	Level 3	$0	-100.00%
138	2022	Field Service Management for RM&P	Customer Service	$ 1,540,000	Level 3	$1,534,000	-0.39%
139	2022	Field Service Management Billing & Metering	Customer Service	$ 885,000	Level 3	$831,000	-6.10%
140	2022	High Volume IVR Overflow	Customer Service	$ 340,000	Level 3	$0	-100.00%
141	2023	High Volume IVR Overflow	Customer Service	$ 260,000	Level 3	$23,000	-91.15%
144	2022	Journey Work Product Transformation Teams	Customer Service	$ 6,872,000	Level 3	$6,744,000	-1.86%
147	2022	MIGP - Integrate DTE Insight	Customer Service	$ 183,000	Level 3	$169,000	-7.65%
152	2022	Platform Integration Component	Customer Service	$ 1,550,000	Level 3	$1,048,000	-32.39%
156	2022	SIP in Call Center	Customer Service	$ 200,000	Level 3	$0	-100.00%
157	2023	SIP in Call Center	Customer Service	$ 1,487,500	Level 3	$856,000	-42.45%
158	2022	Speech Analytics	Customer Service	$ 1,173,000	Level 3	$1,145,000	-2.39%
159	2022	Social Technologies	Customer Service	$ 170,000	Level 3		-100.00%
160	2023	Social Technologies	Customer Service	$ 30,000	Level 3		-100.00%
164	2022	Advance Metering Infrastructure (AMI) Application Health	Plant and Field	$ 1,390,000	Level 3	$801,000	-42.37%
167	2022	ClickSoft Application Health	Plant and Field	$ 100,000	Level 3	$2,000	-98.00%
180	2022	Fuel Supply Application Health	Plant and Field	$ 470,000	Level 3	$387,000	-17.66%
185	2022	Nuclear Generation Business Systems Replacement	Plant and Field	$ 620,000	Level 3	$508,000	-18.06%
191	2022	Renewable Operations Application Health	Plant and Field	$ 123,760	Level 3	$115,000	-7.08%
197	2022	System for Fossil Generation for Coal and Gas	Plant and Field	$ 400,000	Level 3	$394,000	-1.50%
205	2022	ESRI Application Health	Plant and Field	$ 380,000	Level 3	$0	-100.00%
212	2022	Meter Data Management (MDM) Consolidation	Plant and Field	$ 13,590,000	Level 3	$13,157,000	-3.19%
217	2022	Fermi Enhancements	Plant and Field	$ 500,000	Level 3	$421,000	-15.80%
219	2022	Integrated Information Resource (I2R) Replacement	Plant and Field	$ 12,910,000	Level 3	$12,825,000	-0.66%
223	2022	Plant & Field Document Repository	Plant and Field	$ 3,320,000	Level 3	$3,031,000	-8.70%
226	2022	Primavera Modernization	Plant and Field	$ 430,000	Level 3	$423,000	-1.63%

227	2022	Automating Database Event Log Monitoring	Information Technology for IT	$ 418,000	Level 3	$319,000	-23.68%
234	2022	IT for IT Application Health	Information Technology for IT	$ 2,000,000	Level 3	$1,669,000	-16.55%
243	2022	IT for IT Tools	Information Technology for IT	$ 400,000	Level 3	$254,000	-36.50%
251	2022	Cloud Management (Service Now)	Information Technology for IT	$ 750,000	Level 3	$647,000	-13.73%
253	2022	DTE Private Cloud Infrastructure as a Service	Information Technology for IT	$ 832,293	Level 3	$442,000	-46.89%
271	2022	Network Access Control	Information Technology for IT	$ 350,000	Level 3	$186,000	-46.86%
274	2022	Network Operations Center (NOC) Automation Project	Information Technology for IT	$ 750,000	Level 3	$738,000	-1.60%
275	2022	PBX (Private Branch Exchange) Replacement	Information Technology for IT	$ 189,000	Level 3	$185,000	-2.12%
279	2022	Threat Intel module	Information Technology for IT	$ 600,000	Level 3	$524,000	-12.67%
287	2022	Cyber Security Defense Center (CSDC) Growth and LifeCycle Management	Information Protection Security	$ 300,000	Level 3	$157,000	-47.67%
298	2022	Collaboration Application Health	Infrastructure Operations	$ 1,500,000	Level 3	$705,000	-53.00%
308	2022	Backup Environmental Growth	Infrastructure Operations	$ 500,000	Level 3	$201,000	-59.80%
317	2022	Server Engineering Support Services	Infrastructure Operations	$ 2,700,000	Level 3	-$3,466,000	-228.37%
326	2022	Endpoint End of Life Electric Support Services	Infrastructure Operations	$ 800,000	Level 3	$611,000	-23.63%
338	2022	Network Data Center End of Life Project	Infrastructure Operations	$ 525,443	Level 3	$402,000	-23.49%
341	2022	Network End of Life Electric	Infrastructure Operations	$ 771,015	Level 3	$397,000	-48.51%
344	2022	Data Center Modernization and Optimization	Infrastructure Operations	$ 1,200,000	Level 3	$1,084,000	-9.67%
349	2022	Virtual Desktop Infrastructure	Infrastructure Operations	$ 260,000	Level 3	$258,000	-0.77%
350	2022	Wide Area Network Redesign Session Initiation Protocol Backhaul	Infrastructure Operations	$ 828,000	Level 3	$654,000	-21.01%
352	2022	Command Center Stand Up	Infrastructure Operations	$ 200,000	Level 3	$12,000	-94.00%
353	2022	Digital Infrastructure and Services	Infrastructure Operations	$ 8,310,002	Level 3	$6,408,000	-22.89%
354	2023	Digital Infrastructure and Services	Infrastructure Operations	$ 250,000	Level 3	$0	-100.00%
355	2022	Enterprise Monitoring Strategy Operational Growth	Infrastructure Operations	$ 500,000	Level 3	$448,000	-10.40%
						Average Percent Over Recovery	**-38.31%**

Under Recovered Projects

Exh. A-24 N3 Line No.	Spend Year	Business Case Name	IT Portfolio	Total Projected IT Capital Cost ($$)	Cost Estimate Level	Actual Cost	Percent Difference
10	2022	Enterprise Resource Planning	Corporate Applications	$ 1,108,000	Level 3	$1,180,000	6.50%
13	2022	Financial Applications Health	Corporate Applications	$ 275,000	Level 3	$426,000	54.91%
16	2022	Human Resources Applications Health	Corporate Applications	$ 390,000	Level 3	$583,000	49.49%
28	2022	Powerplan Upgrade	Corporate Applications	$ 1,300,000	Level 3	$1,356,000	4.31%
29	2022	SOTeria Safe Worker Observations (SWO)	Corporate Applications	$ 250,000	Level 3	$394,000	57.60%
41	2022	Automated Application Monitoring Application Health	Customer Service	$ 410,000	Level 3	$589,000	43.66%
47	2022	Contact Center Application Health	Customer Service	$ 1,040,000	Level 3	$1,148,000	10.38%
63	2022	Hybris Application Health	Customer Service	$ 580,000	Level 3	$2,019,000	248.10%
73	2022	Archive and Purge	Customer Service	$ 1,100,000	Level 3	$1,460,000	32.73%
80	2022	Systems, Applications, and Products (SAP) Enhancement Program	Customer Service	$ 1,040,000	Level 3	$1,145,000	10.10%
82	2022	Customer Experience Suite	Customer Service	$ 2,530,000	Level 3	$2,627,000	3.83%
83	2022	ACPP/Time of Day	Customer Service	$ 9,530,000	Level 3	$10,046,000	5.41%
84	2023	ACPP/Time of Day	Customer Service	$ 6,440,000	Level 3	$8,000,000	24.22%
85	2022	Corporate Energy Forecasting	Customer Service	$ 260,000	Level 3	$294,000	13.08%
86	2022	MIGP - Fixed Price Product (Rider17)	Customer Service	$ 2,670,000	Level 3	$2,854,000	6.89%
89	2022	MIGP Website Update	Customer Service	$ 890,000	Level 3	$1,080,000	21.35%
90	2022	MIGP Section 61 Settlement	Customer Service	$ 3,827,000	Level 3	$3,965,000	3.61%
93	2022	Payment Stability Plan	Customer Service	$ 420,000	Level 3	$427,000	1.67%
102	2022	Treasury Credential on File	Customer Service	$ 1,180,000	Level 3	$1,196,000	1.36%
107	2022	Customer Relationship and Billing Program Enhancement	Customer Service	$ 2,040,000	Level 3	$2,794,000	36.96%
132	2023	Customer Service Communications	Customer Service	$ 2,355,000	Level 3	$3,852,000	63.57%
134	2022	Enhanced Training Environments	Customer Service	$ 250,000	Level 3	$255,000	2.00%
135	2022	Error Free Communication	Customer Service	$ 12,300,000	Level 3	$14,904,000	21.17%
136	2023	Error Free Communication	Customer Service	$ 10,000,000	Level 3	$13,359,000	33.59%
143	2022	IVR Virtual Assistants	Customer Service	$ 1,260,389	Level 3	$1,271,000	0.84%
154	2022	Qualtrics Expansion	Customer Service	$ 470,000	Level 3	$507,000	7.87%
161	2022	Workforce Automation for Contact Center	Customer Service	$ 1,200,000	Level 3	$1,233,000	2.75%
162	2023	Workforce Automation for Contact Center	Customer Service	$ 105,000	Level 3	$161,000	53.33%
172	2022	Distribution Operations Application Health	Plant and Field	$ 1,450,000	Level 3	$1,765,000	21.72%
177	2022	DTE Electric Generation Capacity Application Health	Plant and Field	$ 560,000	Level 3	$691,000	23.39%
188	2022	Production Growth	Plant and Field	$ 1,410,000	Level 3	$9,132,000	547.66%
194	2022	Supervisory Control and Data Acquisition (SCADA) System Improvement	Plant and Field	$ 520,000	Level 3	$573,000	10.19%
200	2022	Advance Metering Infrastructure Field Collection System	Plant and Field	$ 1,690,000	Level 3	$2,076,000	22.84%

209	2022	Maximo Platform Program	Plant and Field	$	**1,910,000**	**Level 3**	$4,051,000	112.09%
213	2022	Replace DO Lines - SOC Radio	Plant and Field	$	**5,070,000**	**Level 3**	$5,160,000	1.78%
218	2022	Field Service Management- ClickSoft for EFO (Electric Field Operations)	Plant and Field	$	**1,045,000**	**Level 3**	$1,057,000	1.15%
239	2022	Afaria Upgrade / Replacement	Information Technology for IT	$	**300,000**	**Level 3**	$388,000	29.33%
240	2022	Endpoint Protection	Information Technology for IT	$	**300,000**	**Level 3**	$454,000	51.33%
245	2022	Automated Provisioning	Information Technology for IT	$	**490,000**	**Level 3**	$1,581,000	222.65%
266	2022	IT Service Management Tool	Information Technology for IT	$	**1,200,000**	**Level 3**	$1,876,000	56.33%
276	2022	Ransomware Protection	Information Technology for IT	$	**350,000**	**Level 3**	$2,538,000	625.14%
291	2022	Security Infrastructure Growth and EOL	Information Protection Security	$	**1,400,000**	**Level 3**	$7,416,000	429.71%
294	2022	Cyber Excellence Plan (CEP) Program	Information Protection Security	$	**300,000**	**Level 3**	$310,000	3.33%
301	2022	ConnectUs Teams	Infrastructure Operations	$	**1,000,000**	**Level 3**	$1,905,000	90.50%
304	2022	Tower and Lighting Inspections and Repairs	Infrastructure Operations	$	**280,000**	**Level 3**	$293,000	4.64%
307	2022	Ashley Mews Closure and Relocation	Infrastructure Operations	$	**700,000**	**Level 3**	$705,000	0.71%
311	2022	Field Communications Network FCN Growth and Upgrade	Infrastructure Operations	$	**400,000**	**Level 3**	$406,000	1.50%
314	2022	Network Hardening and Operations	Infrastructure Operations	$	**400,000**	**Level 3**	$582,000	45.50%
320	2022	Conference Room Audio Video Support	Infrastructure Operations	$	**250,000**	**Level 3**	$308,000	23.20%
323	2022	Digital Worker Experience Electric End Of Life	Infrastructure Operations	$	**3,907,108**	**Level 3**	$7,889,000	101.91%
329	2022	End of Life Asset Replacements	Infrastructure Operations	$	**500,000**	**Level 3**	$6,845,000	1269.00%
332	2022	Microwave End Of Life	Infrastructure Operations	$	**402,000**	**Level 3**	$484,000	20.40%
335	2022	Network Advanced Metering Infrastructure Support	Infrastructure Operations	$	**2,200,000**	**Level 3**	$2,394,000	8.82%
351	2022	Wireless Local Area Network Expansion	Infrastructure Operations	$	**1,012,000**	**Level 3**	$1,260,000	24.51%
360	2022	Advance and Enhance the Enterprise Data Platform	Enterprise Data Analytics	$	**1,996,000**	**Level 3**	$5,521,000	176.60%
							Average Percent Under Recovery	**86.31%**

Device Type	Refresh Year		
	2023	2024	2025
Laptop	617	800	700
$1,655	$1,021,135	$1,324,000	$1,158,500
Desktop	1	100	185
$1,105	$1,105	$110,500	$204,425
Monitor	180	100	100
$165	$29,700	$16,500	$16,500
Tablet	25	40	28
$795	$19,875	$31,800	$22,260
Additional	125	125	125
$1,655	$206,875	$206,875	$206,875
TOTAL	**$1,278,690**	**$1,689,675**	**$1,608,560**
Requested Expense	$3,022,000	$2,650,000	$2,650,000
DIFFERENCE	**$1,743,310**	**$960,325**	**$1,041,440**
Additional Expense	$800,000	$0	$0
TOTAL RECOMMENDED ADJUSTMENT	**$943,310**	**$960,325**	**$1,041,440**

Steam, Hydraulic, and
Other Power Generation -- Non-Routine
($000)

Monthly amounts from case as filed from A-12 Schedule B5.1 p. 2

Line No.	Description	Bridge Jan-23	Bridge Feb-23	Bridge Mar-23	Bridge Apr-23	Bridge May-23	Bridge Jun-23	Bridge Jul-23	Bridge Aug-23	Bridge Sep-23	Bridge Oct-23	Bridge Nov-23	Bridge Dec-23	Bridge Jan-24	Bridge Feb-24	Bridge Mar-24	Bridge Apr-24
1	**Steam Power Generation - Non-Routine Additions:**																
2	Belle River Fuel Conversion	221	92	32	41	140	88	74	86	78	202	(330)	1,520	13,312	3,796	6,205	289
3	Belle River Bottom Ash Basin Modification (CCR)	408	20	222	566	506	216	780	313	380	(50)	2	-	-	-	-	-
4	Monroe Dry Fly Ash Conversion (ELG)	260	1,157	3,879	(310)	3,236	5,737	(405)	352	(40)	602	5,412	951	305	228	180	184
5	Monroe Bottom Ash Conversion (ELG)	2,868	476	3,859	244	200	1,328	604	726	831	(574)	445	350	2,014	980	866	394
6	Monroe FGD Wastewater (ELG)	13	62	120	78	35	48	(3)	13	7	16	21	68	83	83	83	83
7	Monroe Dry Fly Ash Haul Road	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Site Security Project 11504	48	518	363	328	(170)	228	236	(247)	166	197	240	249	108	50	203	732
9	Site Security Project 18700	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	Site Security Project 18906	6	5	5	(0)	1	10	96	12	25	113	279	211	101	53	71	46
11	Site Security Project 20061	-	-	-	-	-	153	8	-	5	1	16	-	-	-	-	-
12	NERC Compliance Project 18885	358	226	126	82	160	28	42	11	12	1	31	-	-	-	-	-
13	NERC Compliance Project 19895	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-
14	Sibley Quarry Landfill Modification (CCR)	18	278	311	586	134	240	(5)	(91)	9	41	107	176	8	-	-	-
15	Sibley Quarry Conveyor Installation (CCR)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	Sibley Quarry Infrastructure Modification (CCR)	6	-	(0)	3	-	-	-	-	-	-	-	-	-	-	-	-
17	Sibley Quarry Landfill Dewatering and Discharging Line	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	Total Steam Power Generation - Non-Routine	4,290	2,833	8,917	1,617	4,249	8,076	1,427	1,176	1,473	549	6,223	3,525	15,932	5,190	7,607	1,728

2023 actuals from STDE-2.1a and 2024 actuals through April from STDE-2.1b

Line No.	Description	Bridge Jan-23	Bridge Feb-23	Bridge Mar-23	Bridge Apr-23	Bridge May-23	Bridge Jun-23	Bridge Jul-23	Bridge Aug-23	Bridge Sep-23	Bridge Oct-23	Bridge Nov-23	Bridge Dec-23	Bridge Jan-24	Bridge Feb-24	Bridge Mar-24	Bridge Apr-24
1	**Steam Power Generation - Non-Routine Additions:**																
2	Belle River Fuel Conversion	221	92	32	41	140	88	74	86	78	202	177	858	7,352	4,462	6,429	119
3	Belle River Bottom Ash Basin Modification (CCR)	490	(69)	268	645	492	150	910	206	395	(150)	65	(9)	80	(148)	26	-
4	Monroe Dry Fly Ash Conversion (ELG)	260	1,157	3,879	(310)	3,236	5,737	(405)	352	(40)	602	5,412	872	254	307	388	180
5	Monroe Bottom Ash Conversion (ELG)	2,868	476	3,859	244	200	1,328	604	726	831	(574)	448	651	1,775	938	1,754	1,511
6	Monroe FGD Wastewater (ELG)	13	62	120	78	35	48	(3)	13	7	16	21	12	8	11	11	8
7	Monroe Dry Fly Ash Haul Road	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Site Security Project 11504	48	518	363	328	(170)	228	236	(247)	166	197	63	(7)	35	48	207	251
9	Site Security Project 18700	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	Site Security Project 18906	6	5	5	(0)	1	10	96	12	25	113	291	113	252	200	201	561
11	Site Security Project 20061	-	-	-	-	-	153	8	-	5	1	-	-	-	-	-	-
12	NERC Compliance Project 18885	351	196	103	72	177	(1)	46	4	13	(5)	33	(10)	-	-	-	-
13	NERC Compliance Project 19895	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-
14	Sibley Quarry Landfill Modification (CCR)	18	278	311	586	134	240	(5)	(91)	9	41	115	175	33	(23)	0	97
15	Sibley Quarry Conveyor Installation (CCR)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	Sibley Quarry Infrastructure Modification (CCR)	6	-	(0)	3	-	-	-	-	-	-	-	-	-	-	-	-
17	Sibley Quarry Landfill Dewatering and Discharging Line	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	Total Steam Power Generation - Non-Routine	4,365	2,715	8,941	1,686	4,253	7,981	1,561	1,062	1,489	444	6,626	2,654	9,789	5,796	9,015	2,728
	Difference between Actuals and Case as Filed	76	(118)	24	69	3	(95)	134	(114)	16	(106)	402	(871)	(6,143)	605	1,408	999

Sum of difference for Jan-Dec 2023 **(580)**
Sum of difference for Jan-Apr 2024 **(3,131)**

Monroe Bottom Ash Conversion Breakdown from STDE-2.2b

	Forecast Jan-25	Forecast Feb-25	Forecast Mar-25	Forecast Apr-25	Forecast May-25	Forecast Jun-25	Forecast Jul-25	Forecast Aug-25	Forecast Sep-25	Forecast Oct-25	Forecast Nov-25	Forecast Dec-25	Jan-Dec 2025
Units 1&2	$ 693,229	$ 354,739	$ 300,030	$ 483,463	$ 621,132	$ 2,134,056	$ 2,797,296	$ 2,243,064	$ 2,284,989	$ 2,286,782	$ 3,131,219	$ 659,724	$ 17,989,722
Units 3&4	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Common	$ 73,770	$ 73,770	$ 73,770	$ 73,770	$ 73,770	$ 73,770	$ 73,770	$ 73,770	$ 73,770	$ 73,770	$ 73,770	$ 73,770	$ 885,241
Total	$ 766,999	$ 428,509	$ 373,800	$ 557,233	$ 694,902	$ 2,207,826	$ 2,871,066	$ 2,316,834	$ 2,358,759	$ 2,360,552	$ 3,204,989	$ 733,494	$ 18,874,963

Costs without contingency from updated project sheets provided in response to STDE-2.1d

	2025
PMP 15134	$ 14,900,464
PMP 19356	$ 2,048,273
PMP 19357	$ 16,414
Total	$ 16,965,151

2025 Total from updated project sheets	$ 16,965,151
Jan-Dec 2025 costs in case	$ 18,874,963
Reduction in project costs from Updated project sheets	**$ (1,909,812)**

ENERGY SUPPLY PAT REVIEW REQUEST FORM

PAT-AT Agenda Date:	3/13/2024		
PMP Project ID:	15134		
PAT LVL/REV:	PAT 2 REV 0		

	Scope Change	X	New Revision
	Schedule Change		Realized Risk

			Cancel

Project Title: Monroe Bottom Ash Conversion (ELG)

Project Site:	MONPP	Project Complexity:	High
Unit:	Common	Project Start Date:	5/4/2020
Outage Related?	Yes	Constr. Start Date:	10/1/2023
Current IRR:	N/A	Project I/S Date:	12/19/2025
SAP Profit Center #:	0202R165-FG MNPP COM CA	Investment Reason:	9 Environmental
WBS Element:	I-000022-0367		
Project Type/Systems:	14 Common		
Reconciliation Category:	Engineering & Long Lead for Future Projects		

PMP Problem Description & Project Objective *(Project deliverables? Sum benefits-attach extra sheets if required):*

PROBLEM: Monroe Units 1-4 currently have bottom ash sluicing and dewatering systems that do not meet the proposed criteria established in the Effluent Limitation Guidelines (ELG) as the transport water is discharged in a once-through operation. According to the proposed rules, conversion to dry handling or a high recycling system is required no later than 12/31/2023.

OBJECTIVE: The plant will implement a cost-effective project to satisfy the proposed ELG mandate related to bottom ash. Preliminary engineering has confirmed that compliance can be accomplished with a closed-loop, high-recycle system that recirculates the water sent to the existing Bottom Ash Dewatering System (BADS) and uses it for bottom ash sluicing, spray water, bottom ash hopper and boiler seal trough uses. The proposed rule, which is expected to be finalized later this year, allows for blowdown to the FGD and, under certain conditions, to the chem ditch. Blowdown is needed to maintain a balanced chemistry of the recirculated water.

Brief Project Scope Summary *(Summarize products & services provided)*

1. Additon of new grinders and compact submerged conveyors(CSC) under each unit's bottom ash hoppers.
2. Additon of pipe-style belt conveyors to collect and trasport bottom ash from CSCs
3. Additon of bottom ash loadout bunker
4. Adjustment of truck access routes and grading around bunkers in order to accomadate truck traffic to and from bunkers
5. Eliminate tie between economizer ash removal system and bottom ash system. The economizer ash removal system will be replaced by a drag chain conveyor system tied inti the ELG complinat dry flyash system under separate projects.

Reason for Submittal *(State reason for submittal, categorize requested dollar amount changes, and explain any estimate at completion (EAC) benefits or IRR changes):*

PAT 2 revision to true-up 2023 costs and request release of funding to cover construction costs based on labor bids receieved and most up to date estimates for engineering and DTE construction support.

Project cost changes as follows:

DTE Labor: Decreased $83,354 due to less than expected hours from all DTE teams in 2023 and later construction start date than expected in 2024.
Contract Labor: Decreased $1,583,618 based on labor bids received.
Material: Increased $229,099 based on recent material bids.
Other: Increased $5,268.
Shared Costs: No change.
Indirects: Decreased $558,586 based on above changes and latest indirect rates.
Calculated Risk: Increased $1,991,191to maintain EAC.

No Change to EAC.

SAP Budget Approval	Prior Years	2023	2024	2025
Previously Approved PAT:	$10,412,386	$9,043,950	$5,539,411	$0
PAT Change Request:	$0	$0	$15,101,096	$14,900,464
Current PAT Request:	$10,412,386	$9,043,950	$20,640,507	$14,900,464
Total PAT Request:	**$54,997,307**		Total PAT Change:	**$30,001,560**

Forecast Charge Categories	Current Approved PAT Form				Forecast Changes				Revised PAT Forecast				
	Prior Years	2023	2024	2025	Prior Years	2023	2024	2025	Prior Years	2023	2024	2025	Project Total (EAC)
DTE Labor (Direct)	$138,176	$65,517	$390,000	$174,493	$0	-$3,089	-$80,265	$0	$138,176	$62,428	$309,735	$174,493	**$684,832**
Contract Labor (Direct)	$5,640,125	$1,779,343	$13,149,913	$13,585,740	$0	$295,000	-$578,618	-$1,300,000	$5,640,125	$2,074,343	$12,571,295	$12,285,740	**$32,571,503**
Material (Direct)	$3,378,814	$6,355,694	$5,716,270	$1,110,541	$0	$11,373	$217,726	$0	$3,378,814	$6,367,067	$5,933,996	$1,110,541	**$16,790,418**
Other (Direct)	$4,423	$0	$0	$0	$0	$200	$5,068	$0	$4,423	$200	$5,068	$0	**$9,691**
Shared Costs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Indirects	$1,250,848	$843,396	$2,130,786	$1,577,612	$0	-$291	-$310,373	-$247,922	$1,250,848	$843,105	$1,820,413	$1,329,690	**$5,244,056**
Sub-Total	**$10,412,386**	**$9,043,950**	**$21,386,969**	**$16,448,386**	**$0**	**$303,193**	**-$746,462**	**-$1,547,922**	**$10,412,386**	**$9,347,143**	**$20,640,507**	**$14,900,464**	**$55,300,500**
Calculated Risk	$0	$500,000	$18,700,867	$18,407,442	$0	-$500,000	$2,491,191	$0	$0	$0	$21,192,058	$18,407,442	**$39,599,500**
TOTAL	**$10,412,386**	**$9,543,950**	**$40,087,836**	**$34,855,828**	**$0**	**-$196,807**	**$1,744,729**	**-$1,547,922**	**$10,412,386**	**$9,347,143**	**$41,832,565**	**$33,307,906**	**$94,900,000**
						Change in Total EAC:		$0					

Project Developer:	R. Luberacki	APPROVAL DISPOSITION:					
Project Engineer:	S. Labaf	Without Risk:					
Project Manager:	P. Duran	With Risk:	X	Approved by:		Date:	3-13-24

See SWI (Standard Work Instruction) ALLPP-SWI-03-004-011-0643 for instructions on filling out this form

Form: ALLPP-FM-0013 Rev: 8 Date: 01/25/2022

ENERGY SUPPLY PAT REVIEW REQUEST FORM

PAT-AT Agenda Date:	1/24/2024
PMP Project ID:	19356
PAT LVL/REV:	PAT 2 REV 0

	Scope Change	X	New Revision
	Schedule Change		Realized Risk

			Cancel

Project Title: MONPP U1 Economizer Ash Conveyor (ELG)

Project Site:	MONPP	Project Complexity:	Medium
Unit:	1	Project Start Date:	10/17/2022
Outage Related?	Yes	Constr. Start Date:	7/8/2024
Current IRR:	N/A	Project I/S Date:	11/29/2025
SAP Profit Center #:	0202R169-FG MNPP U1 CAP	Investment Reason:	9 Environmental
WBS Element:	I-000022-0455		
Project Type/Systems:	08 Plant Waste		
Reconciliation Category:	Approved Projects in Development		

PMP Problem Description & Project Objective *(Project deliverables? Sum benefits-attach extra sheets if required):*

PROBLEM: Ash from the existing Economizer Ash Handling systems is currently sluiced to the BADS system and will need to be separated in order to be comply with the ELG Rule. Also, the existing Economizer Ash Hoppers experience frequent pluggage when operating with fuel blends consisting of Pet coke. The current system is not designed to convey large particles of ash as found when burning pet coke blends, nor is the system designed for continuous operation. This results in increased cleaning of the hoppers and O&M expense, as well as dedicated Operator when in use.

OBJECTIVE: Replace the current economizer ash system conveyor which is tied in with the dry fly ash system.

Brief Project Scope Summary *(Summarize products & services provided)*

Engineer, procure and install a conveyor system which conveys to a holding tank, and then pneumatically conveyed from the holding tank to the dry fly ash filter separator.

Reason for Submittal *(State reason for submittal, categorize requested dollar amount changes, and explain any estimate at completion (EAC) benefits or IRR changes):*

This is a PAT 2 request to update 2023 to actual costs and request release of $1,708,564 to cover constructions costs.

Project cost changes as follows:
DTE Labor: Decreased $11,490 due to less than expected spend in 2023.
Contract Labor: Increased $1,085,356 based on labor bids received and remaining material being purchased by contractor.
Material: Decreased $1,467,052, due tomaterials being purchased by the installation contractor.
Other: No change.
Shared Costs: Increased $13,640 based on bids recieved and updated DTE labor costs.
Indirects: Decreased $137,083 based on above changes and latest indirect rates.

Increased Calculated Risk by $516,629 to maintain EAC.

SAP Budget Approval	2022	2023	2024	2025
Previously Approved PAT:	$480,881	$900,274	$1,613,344	$200,000
PAT Change Request:	$0	-$342,721	$203,012	$1,848,273
Current PAT Request:	$480,881	$557,553	$1,816,356	$2,048,273
Total PAT Request:	**$4,903,063**	**Total PAT Change:**		**$1,708,564**

Forecast Charge Categories	Current Approved PAT Form				Forecast Changes				Revised PAT Forecast				
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	Project Total (EAC)
DTE Labor (Direct)	$487	$17,710	$29,000	$79,740	$0	-$11,490	$0	$0	$487	$6,220	$29,000	$79,740	**$115,447**
Contract Labor (Direct)	$0	$85,000	$120,000	$1,745,294	$0	-$85,000	$1,440,974	-$270,618	$0	$0	$1,560,974	$1,474,676	**$3,035,650**
Material (Direct)	$439,548	$665,265	$1,173,354	$0	$0	-$293,698	-$1,173,354	$0	$439,548	$371,567	$0	$0	**$811,115**
Other (Direct)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Shared Costs	$0	$0	$0	$133,082	$0	$0	$0	$13,640	$0	$0	$0	$146,722	**$146,722**
Indirects	$40,846	$132,299	$290,990	$382,077	$0	-$37,533	-$64,608	-$34,942	$40,846	$94,766	$226,382	$347,135	**$709,129**
Sub-Total	**$480,881**	**$900,274**	**$1,613,344**	**$2,340,193**	**$0**	**-$427,721**	**$203,012**	**-$291,920**	**$480,881**	**$472,553**	**$1,816,356**	**$2,048,273**	**$4,818,063**
Calculated Risk	$0	$0	$0	$865,308	$0	$0	$381,937	$134,692	$0	$0	$381,937	$1,000,000	**$1,381,937**
TOTAL	**$480,881**	**$900,274**	**$1,613,344**	**$3,205,501**	**$0**	**-$427,721**	**$584,949**	**-$157,228**	**$480,881**	**$472,553**	**$2,198,293**	**$3,048,273**	**$6,200,000**
						Change in Total EAC:		**$0**					

Project Developer:	Sulove Patel	APPROVAL DISPOSITION:	
Project Engineer:	Saeid Labaf	Without Risk:	
Project Manager:	Paul Duran	With Risk:	

1/24/24

Approved by: Date:

ENERGY SUPPLY PAT REVIEW REQUEST FORM

PAT-AT Agenda Date:	1/24/2024
PMP Project ID:	19357
PAT LVL/REV:	PAT 2 REV 0

	Scope Change	X	New Revision
	Schedule Change	X	Realized Risk

Project Site:	MONPP	Project Complexity:	Medium
Unit:	2	Project Start Date:	10/17/2022
Outage Related?	Yes	Constr. Start Date:	5/6/2024
Current IRR:	N/A	Project I/S Date:	11/23/2024
SAP Profit Center #:	0202R173-FG MNPP U2 CAP	Investment Reason:	9 Environmental
WBS Element:	I-000022-0456		
Project Type/Systems:	08 Plant Waste		
Reconciliation Category:	Approved Projects in Development		

Project Title: MONPP U2 Economizer Ash Conveyor (ELG)

PMP Problem Description & Project Objective *(Project deliverables? Sum benefits-attach extra sheets if required):*

PROBLEM: Ash from the existing Economizer Ash Handling systems is currently sluiced to the BADS system and will need to be separated in order to be comply with the ELG Rule. Also, the existing Economizer Ash Hoppers experience frequent pluggage when operating with fuel blends consisting of Pet coke. The current system is not designed to convey large particles of ash as found when burning pet coke blends, nor is the system designed for continuous operation. This results in increased cleaning of the hoppers and O&M expense, as well as dedicated Operator when in use.

OBJECTIVE: Replace the current economizer ash system conveyor which is tied in with the dry fly ash system.

Brief Project Scope Summary *(Summarize products & services provided)*

Engineer, procure and install a conveyor system which conveys to a holding tank, and then pneumatically conveyed from the holding tank to the dry fly ash filter separator.

Reason for Submittal *(State reason for submittal, categorize requested dollar amount changes, and explain any estimate at completion (EAC) benefits or IRR changes):*

This is a PAT 2 request to update 2023 to actual costs and request release of $1,855,986 to cover constructions costs.

Project cost changes as follows:
DTE Labor: Decreased $10,081 due to less than expected spend in 2023.
Contract Labor: Increased $1,667,256 based on labor bids received and remaining material being purchased by contractor.
Material: Decreased $1,410,582, due to materials being purchased by the installation contractor.
Other: No change.
Shared Costs: Increased $75,029 based on bids recieved and updated DTE labor costs.
Indirects: Decreased $111,167 based on above changes and latest indirect rates.

Decreased Calculated Risk by $210,455.

SAP Budget Approval	2022	2023	2024	2025
Previously Approved PAT:	$486,019	$1,594,917	$1,555,000	$0
PAT Change Request:	$0	-$197,214	$2,036,786	$16,414
Current PAT Request:	$486,019	$1,397,703	$3,591,786	$16,414
Total PAT Request:	**$5,491,922**	**Total PAT Change:**		**$1,855,986**

Forecast Charge Categories	Current Approved PAT Form				Forecast Changes				Revised PAT Forecast				
	2022	2023	2024	2025	2022	2023	2024	2025	2022	2023	2024	2025	Project Total (EAC)
DTE Labor (Direct)	$158	$20,367	$97,633	$9,234	$0	-$9,074	-$1,007	$0	$158	$11,293	$96,626	$9,234	**$117,311**
Contract Labor (Direct)	$5,000	$547,700	$1,337,594	$65,000	$0	$294,622	$1,437,634	-$65,000	$5,000	$842,322	$2,775,228	$0	**$3,622,550**
Material (Direct)	$439,695	$813,240	$1,030,232	$0	$0	-$440,350	-$970,232	$0	$439,695	$372,890	$60,000	$0	**$872,585**
Other (Direct)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Shared Costs	$0	$0	$133,082	$0	$0	$0	$75,029	$0	$0	$0	$208,111	$0	**$208,111**
Indirects	$41,166	$213,610	$514,019	$13,737	$0	-$42,412	-$62,198	-$6,557	$41,166	$171,198	$451,821	$7,180	**$671,365**
Sub-Total	**$486,019**	**$1,594,917**	**$3,112,560**	**$87,971**	**$0**	**-$197,214**	**$479,226**	**-$71,557**	**$486,019**	**$1,397,703**	**$3,591,786**	**$16,414**	**$5,491,922**
Calculated Risk	$0	$0	$918,533	$0	$0	$0	-$210,455	$0	$0	$0	$708,078	$0	**$708,078**
TOTAL	**$486,019**	**$1,594,917**	**$4,031,093**	**$87,971**	**$0**	**-$197,214**	**$268,771**	**-$71,557**	**$486,019**	**$1,397,703**	**$4,299,864**	**$16,414**	**$6,200,000**
						Change in Total EAC:		**$0**					

Project Developer:	Sulove Patel	APPROVAL DISPOSITION:	
Project Engineer:	Saeid Labaf	Without Risk:	
Project Manager:	Paul Duran	With Risk:	

1/24/24

Approved by: Date:

See SWI (Standard Work Instruction) ALLPP-SWI-03-004-011-0643 for instructions on filling out this form

Michigan Public Service Commission
DTE Electric Company
Actual Capital Expenditures
Years 2022 to 2023
Routine Maintenance Projects greater than $1M

Case No.: U-21534
Requestor: Staff
Question No.: STDE-2.1a
Respondent: M. Guillaumin

Line No.	(a) Facility	(b) Calendar Year	(c) Unit	(d) High Level Breakdown	(f) Description	Actual Jan-23	Actual Feb-23	Actual Mar-23	Actual Apr-23	Actual May-23	Actual Jun-23
68	Belle River/Range Road	2023	2	Safety	Unit 2 LP Turbine Rotor & Blades	129,989	13,900	66,834	864,765	(106,923)	114,429
69	Belle River/Range Road	2023	2	Reliability	Unit 2 Exciter	(3,609)	36,825	31,773	679,598	(17,424)	45,922
70	Belle River/Range Road	2023	2	Reliability	Unit 2 Waterwall Tubes	92,474	149,963	(15,957)	15,431	26,783	(11,977)
71	Belle River/Range Road	2023	2	Safety	Unit 2 IP Turbine Valves	-	79,231	(13,727)	18,732	(2,463)	756
72	Belle River/Range Road	2023	Fuel Supply	Infrastructure	Fuel Supply & Common Systems Separation from St. Clair Power Plant	790,386	743,039	157,081	88,093	33,280	632,763
73	Belle River/Range Road	2023	Fuel Supply	Combustible Dust	Fuel Supply Dust Collector 3TH-9	33,525	19,747	(3,696)	259,410	(31,952)	17,626
74	Greenwood Energy Center	2023	1	Safety	Unit 1 LP Turbine Rotor & Blades	64,904	33,258	1,710,791	1,033,831	119,026	84,148
75	Monroe without Large Enviro.	2023	1	Reliability	Unit 1 Waterwall Tubes	1,789,066	2,554,599	4,426,430	3,796,794	2,076,894	219,868
76	Monroe without Large Enviro.	2023	1	Safety	Unit 1 LPA & LPB Turbine Rotor and Blades	512,858	2,672,590	5,125,815	1,224,167	892,898	514,830
77	Monroe without Large Enviro.	2023	1	Reliability	Unit 1 Reheat Outlet Pendants	583,658	970,724	1,820,217	1,453,217	1,341,192	(889,760)
78	Monroe without Large Enviro.	2023	1	Reliability	Unit 1 Expansion Joints	125,888	1,900,421	1,513,564	1,681,700	115,016	(13,584)
79	Monroe without Large Enviro.	2023	1	Safety	Unit 1 Coal Mill Primary Air Duct & Damper	593,816	207,132	1,212,937	1,533,499	592,981	54,161
80	Monroe without Large Enviro.	2023	1	Reliability	Unit 1 HP Turbine Blades	35,802	1,322,199	1,207,568	826,635	665,761	388,686
81	Monroe without Large Enviro.	2023	1	Reliability	Unit 1 IP Turbine Blades	65,940	984,296	1,389,980	1,278,216	657,745	205,119
82	Monroe without Large Enviro.	2023	1	Minor Environmental	Unit 1 SCR Catalyst Layers 1, 2, & 4	182,679	622,445	1,112,805	676,691	610,787	50,307
83	Monroe without Large Enviro.	2023	1	Reliability	Unit 1 IP Turbine Rotor	-	-	-	-	-	1,240,326
84	Monroe without Large Enviro.	2023	1	Reliability	Unit 1 Economizer Tubes	167,607	744,499	604,023	701,542	222,313	17,806
85	Monroe without Large Enviro.	2023	1	Safety	Unit 1 Reheat Stop Valves	440,739	187,171	426,117	950,863	401,015	63,631
86	Monroe without Large Enviro.	2023	1	Minor Environmental	Unit 1 SCR Inlet & Outlet Dampers	4,221	92,425	773,492	590,320	19,467	940
87	Monroe without Large Enviro.	2023	1	Reliability	Unit 1 Air Heater Hot and Cold End Baskets	15,302	162,952	395,236	811,338	47,658	(1,368)
88	Monroe without Large Enviro.	2023	1	Safety	Unit 1 Main Turbine Control Valves	125,254	231,975	652,258	541,612	(165,503)	(28,158)
89	Monroe without Large Enviro.	2023	1	Safety	Unit 1 Main Steam Stop Valve	170,207	166,228	676,411	159,019	73,781	21,900
90	Monroe without Large Enviro.	2023	1	Reliability	Unit 1 Coal Mill 1-3 Silo	1,850	65,554	4,824	842	127,340	931,198
91	Monroe without Large Enviro.	2023	1	Reliability	Unit 1 Turning Gear & Bull Gear	338,367	655,075	163,402	(19,092)	25,611	1,001
92	Monroe without Large Enviro.	2023	1	Minor Environmental	Unit 1 1st & 2nd Stage FGD Mist Eliminators	91,266	865,733	71,336	55,543	6,396	8,634
93	Monroe without Large Enviro.	2023	1	Minor Environmental	Unit 1 FGD Absorber Inlet Expansion Joint	908	492,033	247,059	296,112	22,776	(3,573)
94	Monroe without Large Enviro.	2023	1	Minor Environmental	Unit 1 North & South FGD Booster Fans & Hubs	99,135	11,951	881,708	39,226	105	(81,113)
95	Monroe without Large Enviro.	2023	2	Reliability	Unit 2 Air Heater Cold End Baskets	-	-	-	-	-	-
96	Monroe without Large Enviro.	2023	3	Reliability	Unit 3 Air Heater Cold End Baskets	-	-	-	-	-	536
97	Monroe without Large Enviro.	2023	3	Minor Environmental	Unit 3 SCR Catalyst	1,562	1,601	478,663	969,269	32,184	(3,768)
98	Monroe without Large Enviro.	2023	3	Reliability	Unit 3 Expansion Joints	4,823	303,636	18,121	5,052	3,822	306,295
99	Monroe without Large Enviro.	2023	3	Safety	Unit 3 Coal Mill Primary Air Duct & Damper	92,139	9,250	8,725	12,345	5,077	33,638
100	Monroe without Large Enviro.	2023	3	Reliability	Unit 3 Coal Mill 3-6 Overhaul	-	-	-	-	-	-
101	Monroe without Large Enviro.	2023	4	Safety	Unit 4 LPA & LPB Turbine Rotor and Blades	-	-	6,420	31,293	120,637	124,352
102	Monroe without Large Enviro.	2023	4	Minor Environmental	Unit 4 SCR Catalyst Layer 2	3,652	1,322	8,923	2,422	5,374	271,703
103	Monroe without Large Enviro.	2023	4	Reliability	Unit 4 South Boiler Feed Pump Turbine Condenser	-	-	-	-	6,742	14,698
104	Monroe without Large Enviro.	2023	4	Minor Environmental	Unit 4 SCR Catalyst Layers 1, 3, & 4	-	-	-	-	-	-
105	Monroe without Large Enviro.	2023	4	Reliability	Unit 4 Coal Mill 4-1 Silo	-	-	-	-	-	-
106	Monroe without Large Enviro.	2023	Common	Reliability	Main Unit Transformer	-	-	34,045	33,555	44,226	33,461
107	Monroe without Large Enviro.	2023	Common	Minor Environmental	Underground Storage Tank 389	6,469	30,152	14,414	38,113	91,138	64,496
108	Monroe without Large Enviro.	2023	Fuel Supply	Minor Environmental	Fuel Supply Coal Pile Runoff Oil Waste Water System	23,413	49,519	1,285,369	80,130	50,077	394,954
109	Monroe without Large Enviro.	2023	Fuel Supply	Safety	Fuel Supply Tripper Gallery B Infrastructure	5,179	3,738	4,266	-	3,484	17,217
110	Monroe without Large Enviro.	2023	Fuel Supply	Combustible Dust	Fuel Supply CV-C4 to CV-C5 & CV-CV5A Transfer Chute	2,530	192,592	17,390	6,213	387,343	232,458
111	Monroe without Large Enviro.	2023	Fuel Supply	Combustible Dust	Fuel Supply CV-04 Transfer Chute	778,267	109,853	(33,119)	16,276	16,508	18,365
112	Monroe without Large Enviro.	2023	Fuel Supply	Safety	Fuel Supply Tripper Gallery C Infrastructure	-	-	-	-	624	20,729
113	Monroe without Large Enviro.	2023	Fuel Supply	Combustible Dust	Fuel Supply CV-19 to CV-10 Transfer Chute	-	101,491	2,475	15,069	15,757	6,035
114	Peakers	2023	Belle River	Reliability	Belle River 12-2 Peaker Major Overhaul	2,794,997	876,899	457,913	1,197,032	137,986	9,119
115	Peakers	2023	Belle River	Reliability	Belle River 13-1 Peaker Modified Hot Gas Path Overhaul	-	-	-	-	-	-
116	Peakers	2023	Belle River	Reliability	Belle River 12-2 Peaker Generator Field	69,968	198,413	756,048	311,095	69,967	(6,747)
117	Peakers	2023	Greenwood	Reliability	Greenwood 11-1 Peaker Major Overhaul	-	-	-	-	-	-
118	Peakers	2023	Northeast	Reliability	Northeast 13-2 Peaker Generator Field	7,570	1,463,430	88,821	30,834	7,578	12,862
119	Peakers	2023	Renaissance	Reliability	Renaissance Unit 4 Peaker Generator Stator & Rotor	3,666,806	1,874,088	549,144	2,086,017	156,952	69,893
120	Peakers	2023	Renaissance	Reliability	Renaissance Unit 3 Peaker Major Overhaul	331,579	1,443,429	354,305	4,347,347	445,443	114,605
121	Peakers	2023	Renaissance	Reliability	Renaissance Unit 2 Peaker Modified Hot Gas Path Overhaul	-	-	-	-	-	-
122	Peakers	2023	Renaissance	Minor Environmental	Renaissance Unit 2 Peaker Exhaust Silencers	4,567	513,915	597,896	1,123,110	42,278	12,441
123	Peakers	2023	Renaissance	Reliability	Renaissance Unit 3 Peaker Exhaust Cylinder & Manifold	88,390	425,193	102,281	1,033,741	73,773	45,916
124	Peakers	2023	Renaissance	Minor Environmental	Renaissance Unit 4 Peaker Exhaust Silencers	30,095	1,138,196	505,275	14,109	2,495	888
125	Peakers	2023	Renaissance	Reliability	Renaissance Peakers Main Unit Transformer	35,144	11,397	11,397	11,601	11,398	11,398
126	Trenton Channel	2023	Sibley	Minor Environmental	Sibley Quarry Capping Section 1A	102,380	72,955	94,671	245,077	219,376	603,971
	Monroe without Large Enviro.	2023	2	Minor Environmental	Unit 2 SCR Catalyst L3 Replacement - 2024	-	-	-	-	-	1,429
	Monroe without Large Enviro.	2023	Common	Reliability	Inlet Canal Skimmer	-	-	-	206,737	6,326	-
	Peakers	2023	Greenwood	Minor Environmental	Greenwood 11-1, 11-2 & 12-1 Exhaust Silencer Baffle Replacements	235	6,827	1,812	5,180	6,918	179,910

Michigan Public Service Commission
DTE Electric Company
Actual Capital Expenditures
Years 2022 to 2023
Routine Maintenance Projects greater than $1M

Case No.: U-21534
Requestor: Staff
Question No.: STDE-2.1a
Respondent: M. Guillaumin

Line No.	(a) Facility	(b) Calendar Year	(c) Unit	(d) High Level Breakdown	(f) Description	Actual Jul-23	Actual Aug-23	Actual Sep-23	Actual Oct-23	Actual Nov-23	Actual Dec-23	Jan-Dec 2023
68	Belle River/Range Road	2023	2	Safety	Unit 2 LP Turbine Rotor & Blades	2,636,306	(58,235)	17,841	106,877	75,799	1,996,573	5,858,155
69	Belle River/Range Road	2023	2	Reliability	Unit 2 Exciter	14,473	136,672	147,947	900,165	72,754	349,563	2,394,659
70	Belle River/Range Road	2023	2	Reliability	Unit 2 Waterwall Tubes	12,399	26,812	56,065	230,421	365,314	754,229	1,701,958
71	Belle River/Range Road	2023	2	Safety	Unit 2 IP Turbine Valves	123,241	93,544	372,803	55,198	55,647	26,878	809,839
72	Belle River/Range Road	2023	Fuel Supply	Infrastructure	Fuel Supply & Common Systems Separation from St. Clair Power Plant	557,823	(16,564)	15,688	19,176	56,013	(3,494)	3,073,284
73	Belle River/Range Road	2023	Fuel Supply	Combustible Dust	Fuel Supply Dust Collector 3TH-9	320,543	373,324	297,948	241,383	175,307	40,822	1,743,984
74	Greenwood Energy Center	2023	1	Safety	Unit 1 LP Turbine Rotor & Blades	236,216	65,736	102,867	102,045	2,002,106	283,671	5,838,599
75	Monroe without Large Enviro.	2023	1	Reliability	Unit 1 Waterwall Tubes	59,177	104,436	8,576	853	3,726	-	15,040,419
76	Monroe without Large Enviro.	2023	1	Safety	Unit 1 LPA & LPB Turbine Rotor and Blades	(39,082)	(463,476)	15,718	(13,604)	-	5,866	10,448,580
77	Monroe without Large Enviro.	2023	1	Reliability	Unit 1 Reheat Outlet Pendants	35,652	69,569	18,359	821	-	-	5,403,649
78	Monroe without Large Enviro.	2023	1	Reliability	Unit 1 Expansion Joints	1,144	-	-	-	-	-	5,324,148
79	Monroe without Large Enviro.	2023	1	Safety	Unit 1 Coal Mill Primary Air Duct & Damper	11,041	(213)	-	-	-	-	4,205,353
80	Monroe without Large Enviro.	2023	1	Reliability	Unit 1 HP Turbine Blades	(251,050)	(335,402)	9,173	(13,454)	(2,572)	-	3,853,346
81	Monroe without Large Enviro.	2023	1	Reliability	Unit 1 IP Turbine Blades	(350,958)	(421,071)	(63,873)	-	-	-	3,745,394
82	Monroe without Large Enviro.	2023	1	Minor Environmental	Unit 1 SCR Catalyst Layers 1, 2, & 4	13,415	43,371	-	-	-	-	3,312,499
83	Monroe without Large Enviro.	2023	1	Reliability	Unit 1 IP Turbine Rotor	91,139	941,601	35,955	17,645	226,134	22,141	2,574,941
84	Monroe without Large Enviro.	2023	1	Reliability	Unit 1 Economizer Tubes	(139)	-	-	-	-	-	2,457,650
85	Monroe without Large Enviro.	2023	1	Safety	Unit 1 Reheat Stop Valves	242	(75,308)	-	-	-	-	2,394,471
86	Monroe without Large Enviro.	2023	1	Minor Environmental	Unit 1 SCR Inlet & Outlet Dampers	-	-	-	-	-	-	1,480,864
87	Monroe without Large Enviro.	2023	1	Reliability	Unit 1 Air Heater Hot and Cold End Baskets	(201)	-	-	-	-	-	1,430,916
88	Monroe without Large Enviro.	2023	1	Safety	Unit 1 Main Turbine Control Valves	(22,071)	-	-	(13,956)	-	-	1,321,411
89	Monroe without Large Enviro.	2023	1	Safety	Unit 1 Main Steam Stop Valve	(7,015)	973	-	13	-	-	1,261,517
90	Monroe without Large Enviro.	2023	1	Reliability	Unit 1 Coal Mill 1-3 Silo	61,774	-	(11,479)	-	-	-	1,181,903
91	Monroe without Large Enviro.	2023	1	Reliability	Unit 1 Turning Gear & Bull Gear	(4,735)	-	-	(275)	-	196	1,159,550
92	Monroe without Large Enviro.	2023	1	Minor Environmental	Unit 1 1st & 2nd Stage FGD Mist Eliminators	(4,523)	(496)	9,486	-	-	-	1,103,375
93	Monroe without Large Enviro.	2023	1	Minor Environmental	Unit 1 FGD Absorber Inlet Expansion Joint	17,363	37	-	-	-	-	1,072,714
94	Monroe without Large Enviro.	2023	1	Minor Environmental	Unit 1 North & South FGD Booster Fans & Hubs	104,414	-	-	-	-	-	1,055,427
95	Monroe without Large Enviro.	2023	2	Reliability	Unit 2 Air Heater Cold End Baskets	-	-	1,049	232,016	16,507	924,826	1,174,397
96	Monroe without Large Enviro.	2023	3	Reliability	Unit 3 Air Heater Cold End Baskets	236,926	933,596	952,663	86,611	24,066	12,065	2,246,462
97	Monroe without Large Enviro.	2023	3	Minor Environmental	Unit 3 SCR Catalyst	826	461	6,428	259	259	3,590,252	5,077,996
98	Monroe without Large Enviro.	2023	3	Reliability	Unit 3 Expansion Joints	25,723	4,665	264,728	(39,413)	186,320	272,919	1,356,692
99	Monroe without Large Enviro.	2023	3	Safety	Unit 3 Coal Mill Primary Air Duct & Damper	12,356	302,209	12,614	498,408	39,202	7,591	1,033,555
100	Monroe without Large Enviro.	2023	3	Reliability	Unit 3 Coal Mill 3-6 Overhaul	-	-	246	181,424	1,060,385	57,759	1,299,813
101	Monroe without Large Enviro.	2023	4	Safety	Unit 4 LPA & LPB Turbine Rotor and Blades	9,088	(4,951)	1,717,923	2,146,820	167,385	19,417	4,338,382
102	Monroe without Large Enviro.	2023	4	Minor Environmental	Unit 4 SCR Catalyst Layer 2	509,910	81,955	11,282	166,636	733,384	83,236	1,879,799
103	Monroe without Large Enviro.	2023	4	Reliability	Unit 4 South Boiler Feed Pump Turbine Condenser	2,470	23,970	225,192	165,573	981,253	8,251	1,428,149
104	Monroe without Large Enviro.	2023	4	Minor Environmental	Unit 4 SCR Catalyst Layers 1, 3, & 4	-	-	-	7,698	7,827	3,579,288	3,594,813
105	Monroe without Large Enviro.	2023	4	Reliability	Unit 4 Coal Mill 4-1 Silo	-	-	15,423	146,776	900,967	61,211	1,124,377
106	Monroe without Large Enviro.	2023	Common	Reliability	Main Unit Transformer	132,653	2,273,125	290,275	104,584	21,156	8,810	2,975,889
107	Monroe without Large Enviro.	2023	Common	Minor Environmental	Underground Storage Tank 389	9,444	92,878	348,618	369,342	379,253	426,600	1,870,916
108	Monroe without Large Enviro.	2023	Fuel Supply	Minor Environmental	Fuel Supply Coal Pile Runoff Oil Waste Water System	173,763	543,247	203,762	885,564	95,329	(68,085)	3,717,043
109	Monroe without Large Enviro.	2023	Fuel Supply	Safety	Fuel Supply Tripper Gallery B Infrastructure	801,025	857,117	1,180,508	109,338	13,055	3,985	2,998,911
110	Monroe without Large Enviro.	2023	Fuel Supply	Combustible Dust	Fuel Supply CV-C4 to CV-C5 & CV-CV5A Transfer Chute	24,223	14,945	11,748	115,908	1,073,223	81,571	2,160,143
111	Monroe without Large Enviro.	2023	Fuel Supply	Combustible Dust	Fuel Supply CV-04 Transfer Chute	109,701	118,264	742,099	75,599	10,028	4,186	1,966,027
112	Monroe without Large Enviro.	2023	Fuel Supply	Safety	Fuel Supply Tripper Gallery C Infrastructure	8,313	929	4,580	8,605	1,541,901	83,460	1,669,141
113	Monroe without Large Enviro.	2023	Fuel Supply	Combustible Dust	Fuel Supply CV-19 to CV-10 Transfer Chute	8,523	213,779	171,845	(19,019)	115,797	555,603	1,187,357
114	Peakers	2023	Belle River	Reliability	Belle River 12-2 Peaker Major Overhaul	(65,226)	-	-	-	-	-	5,408,718
115	Peakers	2023	Belle River	Reliability	Belle River 13-1 Peaker Modified Hot Gas Path Overhaul	-	-	-	-	409,478	809,235	1,218,712
116	Peakers	2023	Belle River	Reliability	Belle River 12-2 Peaker Generator Field	(7,262)	-	-	-	-	-	1,391,482
117	Peakers	2023	Greenwood	Reliability	Greenwood 11-1 Peaker Major Overhaul	-	-	-	269	-	1,348,854	1,349,123
118	Peakers	2023	Northeast	Reliability	Northeast 13-2 Peaker Generator Field	(303)	-	-	-	-	-	1,610,791
119	Peakers	2023	Renaissance	Reliability	Renaissance Unit 4 Peaker Generator Stator & Rotor	164,871	68,925	75,826	19,934	22,678	201,128	8,956,261
120	Peakers	2023	Renaissance	Reliability	Renaissance Unit 3 Peaker Major Overhaul	(22,454)	82,538	9,550	2,155	(0)	-	7,108,498
121	Peakers	2023	Renaissance	Reliability	Renaissance Unit 2 Peaker Modified Hot Gas Path Overhaul	-	-	-	-	10	3,869,907	3,869,917
122	Peakers	2023	Renaissance	Minor Environmental	Renaissance Unit 2 Peaker Exhaust Silencers	384	-	-	-	-	-	2,294,591
123	Peakers	2023	Renaissance	Reliability	Renaissance Unit 3 Peaker Exhaust Cylinder & Manifold	(17,765)	(21,286)	62,995	22,098	-	-	1,815,336
124	Peakers	2023	Renaissance	Minor Environmental	Renaissance Unit 4 Peaker Exhaust Silencers	202	-	-	3,246	3,496	-	1,698,001
125	Peakers	2023	Renaissance	Reliability	Renaissance Peakers Main Unit Transformer	11,512	18,691	38,158	103,733	821,150	97,439	1,183,017
126	Trenton Channel	2023	Sibley	Minor Environmental	Sibley Quarry Capping Section 1A	475,646	412,203	1,156,280	2,315,967	1,618,483	1,745,305	9,062,316
	Monroe without Large Enviro.	2023	2	Minor Environmental	Unit 2 SCR Catalyst L3 Replacement - 2024	5,441	9,290	4,976	166,783	15,790	964,367	1,168,077
	Monroe without Large Enviro.	2023	Common	Reliability	Inlet Canal Skimmer	209,156	528,252	27,990	4,710	-	27,463	1,010,634
	Peakers	2023	Greenwood	Minor Environmental	Greenwood 11-1, 11-2 & 12-1 Exhaust Silencer Baffle Replacements	513,362	38,168	2,716	3,602	5,152	500,041	1,263,924
											Total of Lines 68-126 that match case exhibit	181,315,232
											A-12 B5.1 p. 5 Line 127	180,090,471
											Increase due to Actual spending for 2023	**1,224,761**

Michigan Public Service Commission
DTE Electric Company
Actual Capital Expenditures
Year 2024
Routine Maintenance Projects greater than $1M

Case No.: U-21534
Requestor: Staff
Question No.: STDE-2.1b
Respondent: M. Guillaumin

Line No.	(a) Facility	(b) Calendar Year	(c) Unit	(d) High Level Breakdown	(f) Description	Actual Jan-24	Actual Feb-24	Actual Mar-24	Actual Apr-24
128	Belle River/Range Road	2024	1	Safety	Unit 1 480 Volt Breakers	2,195	2,126	413,151	(15,327)
129	Belle River/Range Road	2024	1	Safety	Unit 1 Medium Voltage Breakers	721	970	4,792	1,182
130	Belle River/Range Road	2024	1	Reliability	Unit 1 East Boiler Feed Pump Turbine Blades & Rotor	(29)	1	213,543	(30,857)
131	Belle River/Range Road	2024	1	Reliability	Unit 1 White Coal Mill	(36,427)	(2,022)	-	133,843
132	Belle River/Range Road	2024	2	Safety	Unit 2 LP Turbine Rotor & Blades	2,760,967	1,771,558	(3,646)	(119,287)
133	Belle River/Range Road	2024	2	Reliability	Unit 2 Waterwall Tubes	1,340,829	1,570,807	(76,853)	116,074
134	Belle River/Range Road	2024	2	Reliability	Unit 2 Exciter	977,474	571,060	422,685	(42,494)
135	Belle River/Range Road	2024	2	Safety	Unit 2 IP Turbine Valves	1,798,590	939,851	(57,734)	(155,887)
136	Belle River/Range Road	2024	2	Safety	Unit 2 Turbine Stop Valve Actuators	574,892	499,451	740,580	13,910
137	Belle River/Range Road	2024	2	Safety	Unit 2 480 Voltage Breakers	377	3,796	856	399,356
138	Belle River/Range Road	2024	2	Safety	Unit 2 Medium Voltage Breakers	377	(21,064)	25,554	964
139	Belle River/Range Road	2024	2	Reliability	Unit 2 Primary Superheat Tubes	462,220	716,587	(19,245)	(17,207)
140	Belle River/Range Road	2024	Common	Safety	Unit 1 & 2 Common Systems 480 Volt Breakers	141	(115)	6,438	529
141	Belle River/Range Road	2024	Common	Safety	Unit 1 & 2 Common Systems Medium Voltage Breakers	513	1,003	4,343	352
142	Belle River/Range Road	2024	Common	Minor Environmental	Underground Storage Tanks 387 and 388	(1,178)	27,270	21,766	3,215
143	Belle River/Range Road	2024	Common	Minor Environmental	Underground Storage Tank 393	(1,951)	30,996	20,576	23,696
144	Blue Water Energy Center	2024	Common	Infrastructure	Circulating Water Pumps Enclosure	22,576	51,853	46,759	7,810
145	Blue Water Energy Center	2024	Common	Safety	Conference Room Building	25,913	11,412	26,925	520,343
146	Blue Water Energy Center	2024	Common	Reliability	Control Server	-	-	-	-
147	Blue Water Energy Center	2024	ST1	Reliability	STG Transformer	-	-	-	-
148	Greenwood Energy Center	2024	1	Safety	Unit 1 LP Turbine Rotor & Blades	238,965	109,506	2,310,248	344,303
149	Greenwood Energy Center	2024	1	Reliability	Unit 1 Feedwater Heater #6	183,494	32,562	193,970	34,373
150	Greenwood Energy Center	2024	1	Reliability	Unit 1 Feedwater Heater #3	137,009	23,237	146,294	35,463
151	Monroe without Large Enviro.	2024	1	Minor Environmental	Unit 1 SCR Catalyst Layer 3	-	-	6,053	2,869
152	Monroe without Large Enviro.	2024	1	Reliability	Unit 1 IP Turbine Rotor	11,578	840,700	60,841	15,589
153	Monroe without Large Enviro.	2024	2	Safety	Unit 2 LPA & LPB Turbine Rotor and Blades	-	208,518	123,277	3,940,817
154	Monroe without Large Enviro.	2024	2	Reliability	Unit 2 Air Heater Cold End Baskets	33,485	942,059	63,078	13,361
155	Monroe without Large Enviro.	2024	2	Minor Environmental	Unit 2 SCR Catalyst	35,579	98	6,472	6,583
156	Monroe without Large Enviro.	2024	2	Reliability	Unit 2 Coal Mill Feeder Controls	10,444	6,101	4,090	376,560
157	Monroe without Large Enviro.	2024	3	Reliability	Unit 3 Waterwall Tubes	33,016	153,450	2,296,932	7,621,327
158	Monroe without Large Enviro.	2024	3	Minor Environmental	Unit 3 SCR Catalyst	165,179	197,117	562,359	1,074,494
159	Monroe without Large Enviro.	2024	3	Safety	Unit 3 Coal Mill Primary Air Duct & Damper	634,469	50,210	1,378,104	1,244,086
160	Monroe without Large Enviro.	2024	3	Safety	Unit 3 Turbine Valves	181,208	620,241	953,920	2,114,992
161	Monroe without Large Enviro.	2024	3	Reliability	Unit 3 IP Turbine Blades	82,220	153,731	1,295,776	1,596,068
162	Monroe without Large Enviro.	2024	3	Reliability	Unit 3 Expansion Joints	29,242	203,859	1,118,563	755,211
163	Monroe without Large Enviro.	2024	3	Reliability	Unit 3 Reheat Outlet Pendants	104,459	18,019	336,634	1,400,895
164	Monroe without Large Enviro.	2024	3	Reliability	Unit 3 Air Heater Cold End Baskets	297,316	198,377	704,435	822,080
165	Monroe without Large Enviro.	2024	3	Reliability	Unit 3 Horizontal Reheater Tubes	22,469	187,257	657,172	1,144,605
166	Monroe without Large Enviro.	2024	3	Reliability	Unit 3 DCS & Control Room	128,368	116,679	307,315	338,949
167	Monroe without Large Enviro.	2024	3	Reliability	Unit 3 Coal Mill Classifiers	4,196	398,501	330,171	505,152
168	Monroe without Large Enviro.	2024	3	Reliability	Unit 3 Coal Mill 3-7 Silo	37,304	142,111	562,133	418,045
169	Monroe without Large Enviro.	2024	4	Safety	Unit 4 LPA & LPB Turbine Rotor and Blades	1,785,036	119,076	32,338	1,036,210
170	Monroe without Large Enviro.	2024	4	Minor Environmental	Unit 4 SCR Catalyst	107,470	2,761	1,693	1,331
171	Monroe without Large Enviro.	2024	4	Safety	Unit 4 Coal Mill Primary Air Duct & Damper	5,128	56,497	9,228	6,339
172	Monroe without Large Enviro.	2024	4	Reliability	Unit 4 Expansion Joints	327,132	21,159	3,481	3,437
173	Monroe without Large Enviro.	2024	4	Safety	Unit 4 Turbine Valves	-	-	-	-

	(a)	(b)	(c)	(d)	(f)					
Line No.	**Facility**	**Calendar Year**	**Unit**	**High Level Breakdown**	**Description**	Actual Jan-24	Actual Feb-24	Actual Mar-24	Actual Apr-24	
174	Monroe without Large Enviro.	2024	Common	Minor Environmental	Underground Storage Tank 389	46,820	333,929	46,950	546,136	
175	Monroe without Large Enviro.	2024	Fuel Supply	Safety	Fuel Supply Tripper Gallery C Infrastructure	6,058	7,292	6,391	6,664	
176	Monroe without Large Enviro.	2024	Fuel Supply	Combustible Dust	Fuel Supply CV-C2 Loading Zone Transfer Chutes	948	1,333	(2,249)	153,738	
177	Monroe without Large Enviro.	2024	Fuel Supply	Minor Environmental	Fuel Supply Coal Pile Runoff Oil Waste Water System	81,271	63,611	83,427	24,348	
178	Peakers	2024	Belle River	Reliability	Belle River 13-1 Peaker Combustion Overhaul	25,183	-	-	-	
179	Peakers	2024	DTE	Reliability	Blackstart Peaker Unit 1 Starting System	1,563	1,410	3,377	1,138	
180	Peakers	2024	Greenwood	Reliability	Greenwood 11-1 Peaker Major Overhaul	138,094	10,600	72,652	37,421	
181	Peakers	2024	Greenwood	Minor Environmental	Greenwood 11-1, 11-2 & 12-1 Peakers Exhaust Silencers	19,624	7,007	225,940	702,366	
182	Peakers	2024	Greenwood	Reliability	Greenwood 11-1 Peaker Generator Field	2,878	13	13	13	
183	Peakers	2024	Renaissance	Reliability	Renaissance Unit 1 Peaker Generator Stator & Rotor	115,487	4,638	3,340	61,353	
184	Peakers	2024	Renaissance	Reliability	Renaissance Unit 3 Peaker Generator Stator Rewind & Rotor	25,438	3,360	-	-	
185	Peakers	2024	Renaissance	Reliability	Renaissance Unit 1 Peaker Main Unit Transformer	14,732	8,501	46,080	17,060	
186	Trenton Channel	2024	Sibley	Minor Environmental	Sibley Quarry Capping Section 1A	412,099	287,340	203,097	788,144	
										Jan-Apr 2024
					Sum of lines 128-186	13,413,156	11,706,397	15,944,085	28,031,737	69,095,375
					Projected Monthly Total Amounts for A-12 B5.1 page 6 from Part III file "U-21534 FG Att 9.7"	16,186,281	14,908,104	26,151,651	34,407,592	91,653,628
					Difference	(2,773,125)	(3,201,706)	(10,207,567)	(6,375,855)	**(22,558,252)**

aace International

AACE International Recommended Practice No. 18R-97

COST ESTIMATE CLASSIFICATION SYSTEM – AS APPLIED IN ENGINEERING, PROCUREMENT, AND CONSTRUCTION FOR THE PROCESS INDUSTRIES

TCM Framework: 7.3 – Cost Estimating and Budgeting

Acknowledgments:

Peter Christensen, CCE (Author)
Larry R. Dysert, CCC (Author)
Jennifer Bates, CCE
Dorothy J. Burton
Robert C. Creese, PE CCE
John K. Hollmann, PE CCE
Kenneth K. Humphreys, PE CCE
Donald F. McDonald, Jr. PE CCE
C. Arthur Miller
Bernard A. Pietlock, CCC
Wesley R. Querns, CCE
Don L. Short, II

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COST ESTIMATE CLASSIFICATION SYSTEM – AS APPLIED IN ENGINEERING, PROCUREMENT, AND CONSTRUCTION FOR THE PROCESS INDUSTRIES

TCM Framework: 7.3 – Cost Estimating and Budgeting

February 2, 2005

PURPOSE

As a recommended practice of AACE International, the Cost Estimate Classification System provides guidelines for applying the general principles of estimate classification to project cost estimates (i.e., cost estimates that are used to evaluate, approve, and/or fund projects). The Cost Estimate Classification System maps the phases and stages of project cost estimating together with a generic maturity and quality matrix, which can be applied across a wide variety of industries.

This addendum to the generic recommended practice provides guidelines for applying the principles of estimate classification specifically to project estimates for engineering, procurement, and construction (EPC) work for the process industries. This addendum supplements the generic recommended practice (17R-97) by providing:

- a section that further defines classification concepts as they apply to the process industries;
- charts that compare existing estimate classification practices in the process industry; and
- a chart that maps the extent and maturity of estimate input information (project definition deliverables) against the class of estimate.

As with the generic standard, an intent of this addendum is to improve communications among all of the stakeholders involved with preparing, evaluating, and using project cost estimates specifically for the process industries.

It is understood that each enterprise may have its own project and estimating processes and terminology, and may classify estimates in particular ways. This guideline provides a generic and generally acceptable classification system for process industries that can be used as a basis to compare against. It is hoped that this addendum will allow each user to better assess, define, and communicate their own processes and standards in the light of generally-accepted cost engineering practice.

INTRODUCTION

For the purposes of this addendum, the term process industries is assumed to include firms involved with the manufacturing and production of chemicals, petrochemicals, and hydrocarbon processing. The common thread among these industries (for the purpose of estimate classification) is their reliance on process flow diagrams (PFDs) and piping and instrument diagrams (P&IDs) as primary scope defining documents. These documents are key deliverables in determining the level of project definition, and thus the extent and maturity of estimate input information.

Estimates for process facilities center on mechanical and chemical process equipment, and they have significant amounts of piping, instrumentation, and process controls involved. As such, this addendum may apply to portions of other industries, such as pharmaceutical, utility, metallurgical, converting, and similar industries. Specific addendums addressing these industries may be developed over time.

This addendum specifically does not address cost estimate classification in nonprocess industries such as commercial building construction, environmental remediation, transportation infrastructure, “dry” processes such as assembly and manufacturing, “soft asset” production such as software development, and similar industries. It also does not specifically address estimates for the exploration, production, or transportation of mining or hydrocarbon materials, although it may apply to some of the intermediate processing steps in these systems.

The cost estimates covered by this addendum are for engineering, procurement, and construction (EPC) work only. It does not cover estimates for the products manufactured by the process facilities, or for research and development work in support of the process industries. This guideline does not cover the

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significant building construction that may be a part of process plants. Building construction will be covered in a separate addendum.

This guideline reflects generally-accepted cost engineering practices. This addendum was based upon the practices of a wide range of companies in the process industries from around the world, as well as published references and standards. Company and public standards were solicited and reviewed by the AACE International Cost Estimating Committee. The practices were found to have significant commonalities that are conveyed in this addendum.

COST ESTIMATE CLASSIFICATION MATRIX FOR THE PROCESS INDUSTRIES

The five estimate classes are presented in figure 1 in relationship to the identified characteristics. Only the level of project definition determines the estimate class. The other four characteristics are secondary characteristics that are generally correlated with the level of project definition, as discussed in the generic standard. The characteristics are typical for the process industries but may vary from application to application.

This matrix and guideline provide an estimate classification system that is specific to the process industries. Refer to the generic standard for a general matrix that is non-industry specific, or to other addendums for guidelines that will provide more detailed information for application in other specific industries. These will typically provide additional information, such as input deliverable checklists to allow meaningful categorization in those particular industries.

	Primary Characteristic	***Secondary Characteristic***			
ESTIMATE CLASS	**LEVEL OF PROJECT DEFINITION** Expressed as % of complete definition	**END USAGE** Typical purpose of estimate	**METHODOLOGY** Typical estimating method	**EXPECTED ACCURACY RANGE** Typical variation in low and high ranges [a]	**PREPARATION EFFORT** Typical degree of effort relative to least cost index of 1 [b]
Class 5	0% to 2%	Concept Screening	Capacity Factored, Parametric Models, Judgment, or Analogy	L: -20% to -50% H: +30% to +100%	1
Class 4	1% to 15%	Study or Feasibility	Equipment Factored or Parametric Models	L: -15% to -30% H: +20% to +50%	2 to 4
Class 3	10% to 40%	Budget, Authorization, or Control	Semi-Detailed Unit Costs with Assembly Level Line Items	L: -10% to -20% H: +10% to +30%	3 to 10
Class 2	30% to 70%	Control or Bid/ Tender	Detailed Unit Cost with Forced Detailed Take-Off	L: -5% to -15% H: +5% to +20%	4 to 20
Class 1	50% to 100%	Check Estimate or Bid/Tender	Detailed Unit Cost with Detailed Take-Off	L: -3% to -10% H: +3% to +15%	5 to 100

Notes: [a] The state of process technology and availability of applicable reference cost data affect the range markedly. The +/- value represents typical percentage variation of actual costs from the cost estimate after application of contingency (typically at a 50% level of confidence) for given scope.

[b] If the range index value of "1" represents 0.005% of project costs, then an index value of 100 represents 0.5%. Estimate preparation effort is highly dependent upon the size of the project and the quality of estimating data and tools.

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Figure 1. – Cost Estimate Classification Matrix for Process Industries

CHARACTERISTICS OF THE ESTIMATE CLASSES

The following charts (figures 2a through 2e) provide detailed descriptions of the five estimate classifications as applied in the process industries. They are presented in the order of least-defined estimates to the most-defined estimates. These descriptions include brief discussions of each of the estimate characteristics that define an estimate class.

For each chart, the following information is provided:

- **Description:** a short description of the class of estimate, including a brief listing of the expected estimate inputs based on the level of project definition.
- **Level of Project Definition Required:** expressed as a percent of full definition. For the process industries, this correlates with the percent of engineering and design complete.
- **End Usage:** a short discussion of the possible end usage of this class of estimate.
- **Estimating Methods Used:** a listing of the possible estimating methods that may be employed to develop an estimate of this class.
- **Expected Accuracy Range:** typical variation in low and high ranges after the application of contingency (determined at a 50% level of confidence). Typically, this results in a 90% confidence that the actual cost will fall within the bounds of the low and high ranges.
- **Effort to Prepare:** this section provides a typical level of effort (in hours) to produce a complete estimate for a US$20,000,000 plant. Estimate preparation effort is highly dependent on project size, project complexity, estimator skills and knowledge, and on the availability of appropriate estimating cost data and tools.
- **ANSI Standard Reference (1989) Name:** this is a reference to the equivalent estimate class in the existing ANSI standards.
- **Alternate Estimate Names, Terms, Expressions, Synonyms:** this section provides other commonly used names that an estimate of this class might be known by. These alternate names are not endorsed by this Recommended Practice. The user is cautioned that an alternative name may not always be correlated with the class of estimate as identified in the chart.

CLASS 5 ESTIMATE	
Description: Class 5 estimates are generally prepared based on very limited information, and subsequently have wide accuracy ranges. As such, some companies and organizations have elected to determine that due to the inherent inaccuracies, such estimates cannot be classified in a conventional and systemic manner. Class 5 estimates, due to the requirements of end use, may be prepared within a very limited amount of time and with little effort expended—sometimes requiring less than an hour to prepare. Often, little more than proposed plant type, location, and capacity are known at the time of estimate preparation. **Level of Project Definition Required:** 0% to 2% of full project definition. **End Usage:** Class 5 estimates are prepared for any number of strategic business planning purposes, such as but not limited to market studies, assessment of initial viability, evaluation of alternate schemes, project screening, project location studies, evaluation of resource needs and budgeting, long-range capital planning, etc.	**Estimating Methods Used:** Class 5 estimates virtually always use stochastic estimating methods such as cost/capacity curves and factors, scale of operations factors, Lang factors, Hand factors, Chilton factors, Peters-Timmerhaus factors, Guthrie factors, and other parametric and modeling techniques. **Expected Accuracy Range:** Typical accuracy ranges for Class 5 estimates are - 20% to -50% on the low side, and +30% to +100% on the high side, depending on the technological complexity of the project, appropriate reference information, and the inclusion of an appropriate contingency determination. Ranges could exceed those shown in unusual circumstances. **Effort to Prepare (for US$20MM project):** As little as 1 hour or less to perhaps more than 200 hours, depending on the project and the estimating methodology used. **ANSI Standard Reference Z94.2-1989 Name:** Order of magnitude estimate (typically -30% to +50%). **Alternate Estimate Names, Terms, Expressions, Synonyms:** Ratio, ballpark, blue sky, seat-of-pants, ROM, idea study, prospect estimate, concession license estimate, guesstimate, rule-of-thumb.

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Figure 2a. – Class 5 Estimate

CLASS 4 ESTIMATE	
Description: Class 4 estimates are generally prepared based on limited information and subsequently have fairly wide accuracy ranges. They are typically used for project screening, determination of feasibility, concept evaluation, and preliminary budget approval. Typically, engineering is from 1% to 15% complete, and would comprise at a minimum the following: plant capacity, block schematics, indicated layout, process flow diagrams (PFDs) for main process systems, and preliminary engineered process and utility equipment lists. **Level of Project Definition Required:** 1% to 15% of full project definition. **End Usage:** Class 4 estimates are prepared for a number of purposes, such as but not limited to, detailed strategic planning, business development, project screening at more developed stages, alternative scheme analysis, confirmation of economic and/or technical feasibility, and preliminary budget approval or approval to proceed to next stage.	**Estimating Methods Used:** Class 4 estimates virtually always use stochastic estimating methods such as equipment factors, Lang factors, Hand factors, Chilton factors, Peters-Timmerhaus factors, Guthrie factors, the Miller method, gross unit costs/ratios, and other parametric and modeling techniques. **Expected Accuracy Range:** Typical accuracy ranges for Class 4 estimates are -15% to -30% on the low side, and +20% to +50% on the high side, depending on the technological complexity of the project, appropriate reference information, and the inclusion of an appropriate contingency determination. Ranges could exceed those shown in unusual circumstances. **Effort to Prepare (for US$20MM project):** Typically, as little as 20 hours or less to perhaps more than 300 hours, depending on the project and the estimating methodology used. **ANSI Standard Reference Z94.2-1989 Name:** Budget estimate (typically -15% to + 30%). **Alternate Estimate Names, Terms, Expressions, Synonyms:** Screening, top-down, feasibility, authorization, factored, pre-design, pre-study.

Figure 2b. – Class 4 Estimate

CLASS 3 ESTIMATE	
Description: Class 3 estimates are generally prepared to form the basis for budget authorization, appropriation, and/or funding. As such, they typically form the initial control estimate against which all actual costs and resources will be monitored. Typically, engineering is from 10% to 40% complete, and would comprise at a minimum the following: process flow diagrams, utility flow diagrams, preliminary piping and instrument diagrams, plot plan, developed layout drawings, and essentially complete engineered process and utility equipment lists. **Level of Project Definition Required:** 10% to 40% of full project definition. **End Usage:** Class 3 estimates are typically prepared to support full project funding requests, and become the first of the project phase “control estimates” against which all actual costs and resources will be monitored for variations to the budget. They are used as the project budget until replaced by more detailed estimates. In many owner organizations, a Class 3 estimate may be the last estimate required and could well form the only basis for cost/schedule control.	**Estimating Methods Used:** Class 3 estimates usually involve more deterministic estimating methods than stochastic methods. They usually involve a high degree of unit cost line items, although these may be at an assembly level of detail rather than individual components. Factoring and other stochastic methods may be used to estimate less-significant areas of the project. **Expected Accuracy Range:** Typical accuracy ranges for Class 3 estimates are -10% to -20% on the low side, and +10% to +30% on the high side, depending on the technological complexity of the project, appropriate reference information, and the inclusion of an appropriate contingency determination. Ranges could exceed those shown in unusual circumstances. **Effort to Prepare (for US$20MM project):** Typically, as little as 150 hours or less to perhaps more than 1,500 hours, depending on the project and the estimating methodology used. **ANSI Standard Reference Z94.2-1989 Name:** Budget estimate (typically -15% to + 30%). **Alternate Estimate Names, Terms, Expressions, Synonyms:** Budget, scope, sanction, semi-detailed, authorization, preliminary control, concept study, development, basic engineering phase estimate, target estimate.

Figure 2c. – Class 3 Estimate

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CLASS 2 ESTIMATE	
Description: Class 2 estimates are generally prepared to form a detailed control baseline against which all project work is monitored in terms of cost and progress control. For contractors, this class of estimate is often used as the "bid" estimate to establish contract value. Typically, engineering is from 30% to 70% complete, and would comprise at a minimum the following: process flow diagrams, utility flow diagrams, piping and instrument diagrams, heat and material balances, final plot plan, final layout drawings, complete engineered process and utility equipment lists, single line diagrams for electrical, electrical equipment and motor schedules, vendor quotations, detailed project execution plans, resourcing and work force plans, etc. **Level of Project Definition Required:** 30% to 70% of full project definition. **End Usage:** Class 2 estimates are typically prepared as the detailed control baseline against which all actual costs and resources will now be monitored for variations to the budget, and form a part of the change/variation control program.	**Estimating Methods Used:** Class 2 estimates always involve a high degree of deterministic estimating methods. Class 2 estimates are prepared in great detail, and often involve tens of thousands of unit cost line items. For those areas of the project still undefined, an assumed level of detail takeoff (forced detail) may be developed to use as line items in the estimate instead of relying on factoring methods. **Expected Accuracy Range:** Typical accuracy ranges for Class 2 estimates are -5% to -15% on the low side, and +5% to +20% on the high side, depending on the technological complexity of the project, appropriate reference information, and the inclusion of an appropriate contingency determination. Ranges could exceed those shown in unusual circumstances. **Effort to Prepare (for US$20MM project):** Typically, as little as 300 hours or less to perhaps more than 3,000 hours, depending on the project and the estimating methodology used. Bid estimates typically require more effort than estimates used for funding or control purposes. **ANSI Standard Reference Z94.2-1989 Name:** Definitive estimate (typically -5% to + 15%). **Alternate Estimate Names, Terms, Expressions, Synonyms:** Detailed control, forced detail, execution phase, master control, engineering, bid, tender, change order estimate.

Figure 2d. – Class 2 Estimate

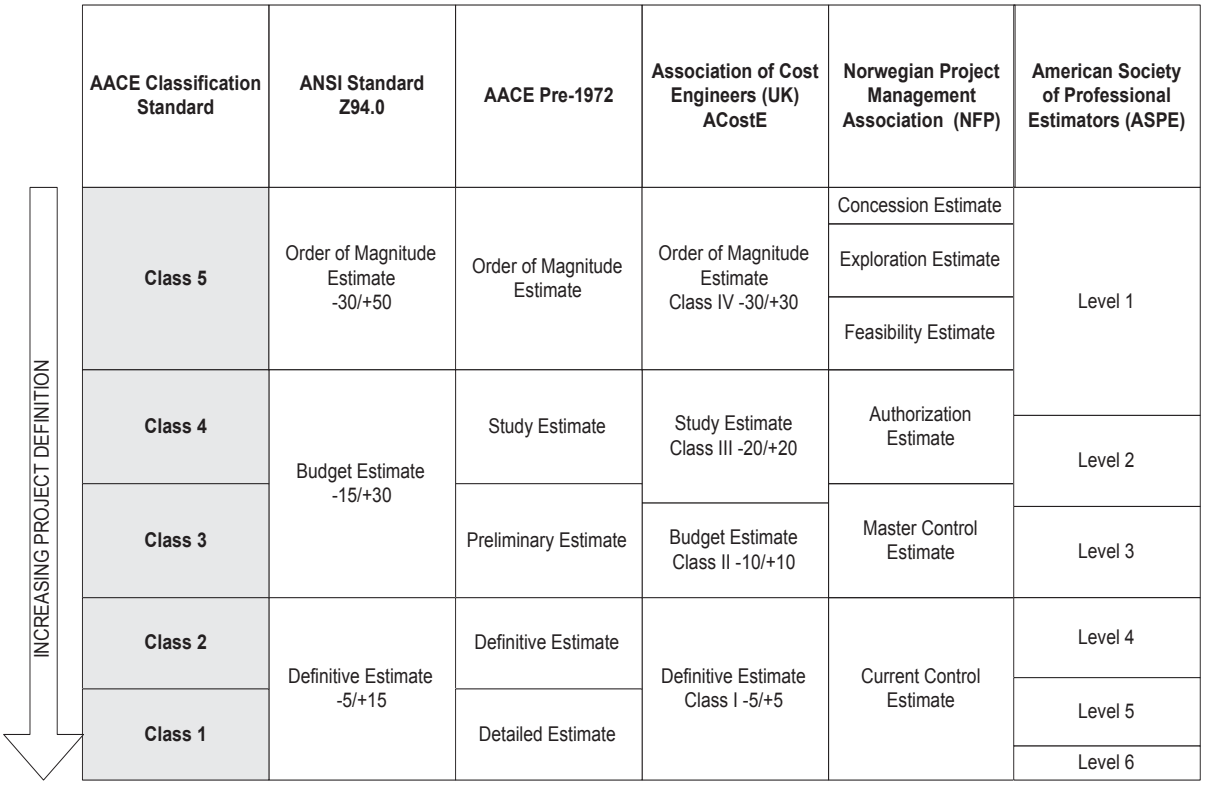
CLASS 1 ESTIMATE	
Description: Class 1 estimates are generally prepared for discrete parts or sections of the total project rather than generating this level of detail for the entire project. The parts of the project estimated at this level of detail will typically be used by subcontractors for bids, or by owners for check estimates. The updated estimate is often referred to as the current control estimate and becomes the new baseline for cost/schedule control of the project. Class 1 estimates may be prepared for parts of the project to comprise a fair price estimate or bid check estimate to compare against a contractor's bid estimate, or to evaluate/dispute claims. Typically, engineering is from 50% to 100% complete, and would comprise virtually all engineering and design documentation of the project, and complete project execution and commissioning plans. **Level of Project Definition Required:** 50% to 100% of full project definition. **End Usage:** Class 1 estimates are typically prepared to form a current control estimate to be used as the final control baseline against which all actual costs and resources will now be monitored for variations to the budget, and form a part of the change/variation control program. They may be used to evaluate bid checking, to support vendor/contractor negotiations, or for claim evaluations and dispute resolution.	**Estimating Methods Used:** Class 1 estimates involve the highest degree of deterministic estimating methods, and require a great amount of effort. Class 1 estimates are prepared in great detail, and thus are usually performed on only the most important or critical areas of the project. All items in the estimate are usually unit cost line items based on actual design quantities. **Expected Accuracy Range:** Typical accuracy ranges for Class 1 estimates are -3% to -10% on the low side, and +3% to +15% on the high side, depending on the technological complexity of the project, appropriate reference information, and the inclusion of an appropriate contingency determination. Ranges could exceed those shown in unusual circumstances. **Effort to Prepare (for US$20MM project):** Class 1 estimates require the most effort to create, and as such are generally developed for only selected areas of the project, or for bidding purposes. A complete Class 1 estimate may involve as little as 600 hours or less, to perhaps more than 6,000 hours, depending on the project and the estimating methodology used. Bid estimates typically require more effort than estimates used for funding or control purposes. **ANSI Standard Reference Z94.2 Name:** Definitive estimate (typically -5% to + 15%). **Alternate Estimate Names, Terms, Expressions, Synonyms:** Full detail, release, fall-out, tender, firm price, bottoms-up, final, detailed control, forced detail, execution phase, master control, fair price, definitive, change order estimate.

Figure 2e. – Class 1 Estimate

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COMPARISON OF CLASSIFICATION PRACTICES

Figures 3a through 3c provide a comparison of the estimate classification practices of various firms, organizations, and published sources against one another and against the guideline classifications. These tables permits users to benchmark their own classification practices.



	AACE Classification Standard	ANSI Standard Z94.0	AACE Pre-1972	Association of Cost Engineers (UK) ACostE	Norwegian Project Management Association (NFP)	American Society of Professional Estimators (ASPE)
	Class 5	Order of Magnitude Estimate -30/+50	Order of Magnitude Estimate	Order of Magnitude Estimate Class IV -30/+30	Concession Estimate	Level 1
					Exploration Estimate	
					Feasibility Estimate	
	Class 4	Budget Estimate -15/+30	Study Estimate	Study Estimate Class III -20/+20	Authorization Estimate	Level 2
	Class 3		Preliminary Estimate	Budget Estimate Class II -10/+10	Master Control Estimate	Level 3
	Class 2	Definitive Estimate -5/+15	Definitive Estimate	Definitive Estimate Class I -5/+5	Current Control Estimate	Level 4
	Class 1		Detailed Estimate			Level 5
						Level 6

Figure 3a. – Comparison of Classification Practices

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AACE Classification Standard	Major Consumer Products Company (Confidential)	Major Oil Company (Confidential)	Major Oil Company (Confidential)	Major Oil Company (Confidential)
Class 5	Class S Strategic Estimate	Class V Order of Magnitude Estimate	Class A Prospect Estimate	Class V
			Class B Evaluation Estimate	
Class 4	Class 1 Conceptual Estimate	Class IV Screening Estimate	Class C Feasibility Estimate	Class IV
			Class D Development Estimate	
Class 3	Class 2 Semi-Detailed Estimate	Class III Primary Control Estimate		Class III
			Class E Preliminary Estimate	
Class 2	Class 3 Detailed Estimate	Class II Master Control Estimate	Class F Master Control Estimate	Class II
Class 1		Class I Current Control Estimate	Current Control Estimate	Class I

INCREASING PROJECT DEFINITION

Figure 3b. – Comparison of Classification Practices

AACE Classification Standard	J.R. Heizelman, 1988 AACE Transactions [1]	K.T. Yeo, The Cost Engineer, 1989 [2]	Stevens & Davis, 1988 AACE Transactions [3]	P. Behrenbruck, Journal of Petroleum Technology, 1993 [4]
Class 5	Class V	Class V Order of Magnitude	Class III*	Order of Magnitude
Class 4	Class IV	Class IV Factor Estimate	Class II	Study Estimate
Class 3	Class III	Class III Office Estimate		Budget Estimate
Class 2	Class II	Class II Definitive Estimate		
Class 1	Class I	Class I Final Estimate	Class I	Control Estimate

INCREASING PROJECT DEFINITION

[1] John R. Heizelman, ARCO Oil & Gas Co., 1988 AACE Transactions, Paper V3.7
[2] K.T. Yeo, The Cost Engineer, Vol. 27, No. 6, 1989
[3] Stevens & Davis, BP International Ltd., 1988 AACE Transactions, Paper B4.1 (* Class III is inferred)
[4] Peter Behrenbruck, BHP Petroleum Pty., Ltd., article in Petroleum Technology, August 1993

Figure 3c. – Comparison of Classification Practices

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ESTIMATE INPUT CHECKLIST AND MATURITY MATRIX

Figure 4 maps the extent and maturity of estimate input information (deliverables) against the five estimate classification levels. This is a checklist of basic deliverables found in common practice in the process industries. The maturity level is an approximation of the degree of completion of the deliverable. The degree of completion is indicated by the following letters.

- None (blank): development of the deliverable has not begun.
- Started (S): work on the deliverable has begun. Development is typically limited to sketches, rough outlines, or similar levels of early completion.
- Preliminary (P): work on the deliverable is advanced. Interim, cross-functional reviews have usually been conducted. Development may be near completion except for final reviews and approvals.
- Complete (C): the deliverable has been reviewed and approved as appropriate.

	ESTIMATE CLASSIFICATION				
General Project Data:	**CLASS 5**	**CLASS 4**	**CLASS 3**	**CLASS 2**	**CLASS 1**
Project Scope Description	General	Preliminary	Defined	Defined	Defined
Plant Production/Facility Capacity	Assumed	Preliminary	Defined	Defined	Defined
Plant Location	General	Approximate	Specific	Specific	Specific
Soils & Hydrology	None	Preliminary	Defined	Defined	Defined
Integrated Project Plan	None	Preliminary	Defined	Defined	Defined
Project Master Schedule	None	Preliminary	Defined	Defined	Defined
Escalation Strategy	None	Preliminary	Defined	Defined	Defined
Work Breakdown Structure	None	Preliminary	Defined	Defined	Defined
Project Code of Accounts	None	Preliminary	Defined	Defined	Defined
Contracting Strategy	Assumed	Assumed	Preliminary	Defined	Defined
Engineering Deliverables:					
Block Flow Diagrams	S/P	P/C	C	C	C
Plot Plans		S	P/C	C	C
Process Flow Diagrams (PFDs)		S/P	P/C	C	C
Utility Flow Diagrams (UFDs)		S/P	P/C	C	C
Piping & Instrument Diagrams (P&IDs)		S	P/C	C	C
Heat & Material Balances		S	P/C	C	C
Process Equipment List		S/P	P/C	C	C
Utility Equipment List		S/P	P/C	C	C
Electrical One-Line Drawings		S/P	P/C	C	C
Specifications & Datasheets		S	P/C	C	C
General Equipment Arrangement Drawings		S	P/C	C	C
Spare Parts Listings			S/P	P	C
Mechanical Discipline Drawings			S	P	P/C
Electrical Discipline Drawings			S	P	P/C
Instrumentation/Control System Discipline Drawings			S	P	P/C
Civil/Structural/Site Discipline Drawings			S	P	P/C

Figure 4. – Estimate Input Checklist and Maturity Matrix

REFERENCES

ANSI Standard Z94.2-1989. **Industrial Engineering Terminology: Cost Engineering**.
AACE International Recommended Practice No.17R-97, **Cost Estimate Classification System**.

CONTRIBUTORS

Peter Christensen, CCE (Author)
Larry R. Dysert, CCC (Author)
Jennifer Bates, CCE

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Dorothy J. Burton
Robert C. Creese, PE CCE
John K. Hollmann, PE CCE
Kenneth K. Humphreys, PE CCE
Donald F. McDonald, Jr. PE CCE
C. Arthur Miller
Bernard A. Pietlock, CCC
Wesley R. Querns, CCE
Don L. Short, II

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Projected amounts from Part III attachment U-21534 FG Att 9.7

Line No.	(a) Facility	(b) Calendar Year	(c) Unit	(d) High Level Breakdown	(e) Description	(j) Forecasted May-24	(k) Forecasted Jun-24	(l) Forecasted Jul-24	(m) Forecasted Aug-24	(n) Forecasted Sep-24	(o) Forecasted Oct-24	(p) Forecasted Nov-24	(q) Forecasted Dec-24	(r) May-Dec 2024	(s) 15% reduction	(t) PAT level from project sheets
128	Belle River/Range Road	2024	1	Safety	Unit 1 480 Volt Breakers	14,779	14,836	14,893	14,950	15,007	15,064	15,121	1,610,384	1,715,032	(257,255)	PAT 0 REV 0
129	Belle River/Range Road	2024	1	Safety	Unit 1 Medium Voltage Breakers	2,316	668,499	716,021	148,063	30,556	23,175	23,243	80,342	1,692,214	(253,832)	PAT 0 REV 0
130	Belle River/Range Road	2024	1	Reliability	Unit 1 East Boiler Feed Pump Turbine Blades & Rotor	27,928	5,015	5,024	515,703	30,353	7,142	7,150	7,159	605,473	(90,821)	PAT 0 REV 1
131	Belle River/Range Road	2024	1	Reliability	Unit 1 White Coal Mill	417,966	18,002	-	-	-	-	-	-	435,968		
132	Belle River/Range Road	2024	2	Safety	Unit 2 LP Turbine Rotor & Blades	603,500	26,404	-	-	-	-	-	-	629,905		PAT 2 REV 0
133	Belle River/Range Road	2024	2	Reliability	Unit 2 Waterwall Tubes	46,780	-	-	-	-	-	-	-	46,780		PAT 2 REV 1
134	Belle River/Range Road	2024	2	Reliability	Unit 2 Exciter	126,964	3,303	-	-	-	-	-	-	130,267		PAT 2 REV 0
135	Belle River/Range Road	2024	2	Safety	Unit 2 IP Turbine Valves	12,937	-	-	-	-	-	-	-	12,937		PAT 2 REV 1
136	Belle River/Range Road	2024	2	Safety	Unit 2 Turbine Stop Valve Actuators	361,769	43,960	-	-	-	-	-	-	405,729		PAT 2 REV 1
137	Belle River/Range Road	2024	2	Safety	Unit 2 480 Voltage Breakers	14,667	14,725	14,784	14,842	14,899	14,958	15,016	1,622,952	1,726,844	(259,027)	PAT 0 REV 0
138	Belle River/Range Road	2024	2	Safety	Unit 2 Medium Voltage Breakers	3,044	704,761	37,483	6,037	707,753	40,615	107,459	14,263	1,621,416	(243,212)	PAT 0 REV 0
139	Belle River/Range Road	2024	2	Reliability	Unit 2 Primary Superheat Tubes	4,900	-	-	-	-	-	-	-	4,900		PAT 2 REV 3
140	Belle River/Range Road	2024	Common	Safety	Unit 1 & 2 Common Systems 480 Volt Breakers	62,064	22,402	19,679	19,753	19,826	19,899	19,973	2,203,305	2,386,901	(358,035)	PAT 0 REV 0
141	Belle River/Range Road	2024	Common	Safety	Unit 1 & 2 Common Systems Medium Voltage Breakers	2,327	712,922	762,631	240,950	35,309	23,943	24,011	21,183	1,823,275	(273,491)	PAT 0 REV 0
142	Belle River/Range Road	2024	Common	Minor Environmental	Underground Storage Tanks 387 and 388	155,932	169,321	392,812	405,944	379,852	34,520	4,919	13,822	1,557,121	(233,568)	PAT 0 REV 1
143	Belle River/Range Road	2024	Common	Minor Environmental	Underground Storage Tank 393	267,573	257,230	332,713	385,237	226,496	20,130	5,769	15,697	1,510,846	(226,627)	PAT 0 REV 0
144	Blue Water Energy Center	2024	Common	Infrastructure	Circulating Water Pumps Enclosure	47,333	41,963	260,396	757,240	807,161	622,976	511,413	467,068	3,515,550	(527,333)	PAT 0/1 REV 0
145	Blue Water Energy Center	2024	Common	Safety	Conference Room Building	603,097	283,225	320,041	321,381	322,721	254,677	46,471	16,886	2,168,499	(325,275)	PAT 0 REV 1
146	Blue Water Energy Center	2024	Common	Reliability	Control Server	13,312	13,346	13,379	13,414	13,447	13,481	13,515	11,817	105,711	(15,857)	PAT 0 REV 0
147	Blue Water Energy Center	2024	ST1	Reliability	STG Transformer	8,745	1,001,415	45,986	6,221	6,230	6,237	6,245	6,253	1,087,332	(163,100)	PAT 0 REV 0
148	Greenwood Energy Center	2024	1	Safety	Unit 1 LP Turbine Rotor & Blades	175,692	82,968	75,463	2,136,536	1,572,315	2,285,560	232,100	2,748,156	9,308,790	(1,396,318)	PAT 1 REV 4
149	Greenwood Energy Center	2024	1	Reliability	Unit 1 Feedwater Heater #6	262,546	52,018	133,328	216,062	199,217	47,283	32,483	40,888	983,825	(147,574)	PAT 1 REV 1
150	Greenwood Energy Center	2024	1	Reliability	Unit 1 Feedwater Heater #3	181,635	27,963	157,862	250,380	210,211	105,950	34,739	30,455	999,195	(149,879)	PAT 1 REV 1
151	Monroe without Large Enviro.	2024	1	Minor Environmental	Unit 1 SCR Catalyst Layer 3	640,582	17,963	18,025	17,459	17,578	18,114	650,602	17,635	1,397,958	(209,694)	PAT 0 REV 1
152	Monroe without Large Enviro.	2024	1	Reliability	Unit 1 IP Turbine Rotor	13,624	13,625	162,118	21,525	14,205	14,206	14,207	72,626	326,134	(48,920)	PAT 0/1 REV 0
153	Monroe without Large Enviro.	2024	2	Safety	Unit 2 LPA & LPB Turbine Rotor and Blades	138,673	15,594	15,601	15,608	15,616	15,623	4,605,170	198,733	5,020,618	(753,093)	PAT 0 REV 1
154	Monroe without Large Enviro.	2024	2	Reliability	Unit 2 Air Heater Cold End Baskets	12,932	12,951	244,052	151,404	413,021	1,274,912	866,639	135,146	3,111,056	(466,658)	PAT 1 REV 2
155	Monroe without Large Enviro.	2024	2	Minor Environmental	Unit 2 SCR Catalyst	37,367	8,448	538,113	348,397	594,573	606,087	198,813	23,480	2,355,279	(353,292)	PAT 0/1 REV 0
156	Monroe without Large Enviro.	2024	2	Reliability	Unit 2 Coal Mill Feeder Controls	28,398	13,590	13,635	45,962	182,734	413,055	331,909	139,080	1,168,365	(175,255)	PAT 1 REV 1
157	Monroe without Large Enviro.	2024	3	Reliability	Unit 3 Waterwall Tubes	2,134,734	151,548	49,883	-	-	149,666	6,592	-	2,492,423		PAT 2 REV 2
158	Monroe without Large Enviro.	2024	3	Minor Environmental	Unit 3 SCR Catalyst	664,295	590,853	121,132	4,313	-	-	-	-	1,380,593		PAT 2 REV 0
159	Monroe without Large Enviro.	2024	3	Safety	Unit 3 Coal Mill Primary Air Duct & Damper	1,345,525	61,166	3,503	-	-	-	-	-	1,410,194		PAT 2 REV 0
160	Monroe without Large Enviro.	2024	3	Safety	Unit 3 Turbine Valves	1,721,539	75,912	1,771	1,771	-	-	-	-	1,800,993	(270,149)	PAT 0/2 REV 2
161	Monroe without Large Enviro.	2024	3	Reliability	Unit 3 IP Turbine Blades	1,245,849	335,572	12,688	-	-	-	-	-	1,594,109		PAT 2 REV 0
162	Monroe without Large Enviro.	2024	3	Reliability	Unit 3 Expansion Joints	824,587	348,362	20,939	-	-	-	-	-	1,193,887		PAT 2 REV 0
163	Monroe without Large Enviro.	2024	3	Reliability	Unit 3 Reheat Outlet Pendants	397,830	116,212	4,526	-	-	-	-	-	518,568		PAT 2 REV 0
164	Monroe without Large Enviro.	2024	3	Reliability	Unit 3 Air Heater Cold End Baskets	593,170	140,541	322,935	19,980	-	-	-	-	1,076,626		PAT 2 REV 1
165	Monroe without Large Enviro.	2024	3	Reliability	Unit 3 Horizontal Reheater Tubes	413,146	129,177	9,555	-	-	-	-	-	551,878		PAT 2 REV 0
166	Monroe without Large Enviro.	2024	3	Reliability	Unit 3 DCS & Control Room	1,134,300	185,576	26,153	-	-	-	-	-	1,346,030		PAT 2 REV 0
167	Monroe without Large Enviro.	2024	3	Reliability	Unit 3 Coal Mill Classifiers	531,911	114,933	5,940	1,771	-	-	-	-	654,556		PAT 2 REV 1
168	Monroe without Large Enviro.	2024	3	Reliability	Unit 3 Coal Mill 3-7 Silo	203,032	44,833	-	-	-	-	-	-	247,866		PAT 2 REV 2
169	Monroe without Large Enviro.	2024	4	Safety	Unit 4 LPA & LPB Turbine Rotor and Blades	26,759	30,322	30,344	30,366	26,831	26,838	1,009,091	2,899,681	4,080,232	(612,035)	PAT 1 REV 1
170	Monroe without Large Enviro.	2024	4	Minor Environmental	Unit 4 SCR Catalyst	18,184	20,005	2,301,697	141,585	27,383	27,427	29,248	1,138,099	3,703,629	(555,544)	PAT 0/1 REV 0
171	Monroe without Large Enviro.	2024	4	Safety	Unit 4 Coal Mill Primary Air Duct & Damper	30,279	46,140	135,517	183,084	403,000	290,723	284,732	390,737	1,764,212	(264,632)	PAT 0/1 REV 0
172	Monroe without Large Enviro.	2024	4	Reliability	Unit 4 Expansion Joints	6,216	326,241	22,113	9,220	9,245	11,047	648,996	42,666	1,075,743	(161,361)	PAT 1 REV 0
173	Monroe without Large Enviro.	2024	4	Safety	Unit 4 Turbine Valves	4,220	421,247	241,232	15,383	6,972	6,990	7,007	445,982	1,149,033	(172,355)	PAT 0 REV 0
174	Monroe without Large Enviro.	2024	Common	Minor Environmental	Underground Storage Tank 389	177,205	7,627	-	-	-	-	-	-	184,832		PAT 2 REV 2
175	Monroe without Large Enviro.	2024	Fuel Supply	Safety	Fuel Supply Tripper Gallery C Infrastructure	1,064,723	1,168,903	144,909	1,130,827	631,783	74,028	30,501	396,062	4,641,735		PAT 2 REV 0
176	Monroe without Large Enviro.	2024	Fuel Supply	Combustible Dust	Fuel Supply CV-C2 Loading Zone Transfer Chutes	5,520	7,306	7,321	998,412	776,917	614,991	41,724	15,241	2,467,432	(370,115)	PAT 0/1 REV 0
177	Monroe without Large Enviro.	2024	Fuel Supply	Minor Environmental	Fuel Supply Coal Pile Runoff Oil Waste Water System	35,429	-	-	-	-	-	-	-	35,429		PAT 2 REV 1
178	Peakers	2024	Belle River	Reliability	Belle River 13-1 Peaker Combustion Overhaul	3,542	1,519	-	-	-	-	-	-	5,061		PAT 2 REV 2
179	Peakers	2024	DTE	Reliability	Blackstart Peaker Unit 1 Starting System	23,422	23,507	23,593	30,073	854,341	1,310,434	85,409	24,634	2,375,414		
180	Peakers	2024	Greenwood	Reliability	Greenwood 11-1 Peaker Major Overhaul	36,625	3,542	551,455	1,441,659	1,666,952	1,083,147	621,857	601,909	6,007,145	(901,072)	PAT 0/2 REV 0
181	Peakers	2024	Greenwood	Minor Environmental	Greenwood 11-1, 11-2 & 12-1 Peakers Exhaust Silencers	343,114	513,872	29,368	-	-	-	-	-	886,354		PAT 2 REV 0
182	Peakers	2024	Greenwood	Reliability	Greenwood 11-1 Peaker Generator Field	2,656	2,656	2,656	75,806	959,009	239,260	205,086	205,721	1,692,850	(253,928)	PAT 0/2 REV 0
183	Peakers	2024	Renaissance	Reliability	Renaissance Unit 1 Peaker Generator Stator & Rotor	4,194,765	2,414,651	697,477	33,715	-	-	-	-	7,340,608		PAT 2 REV 2
184	Peakers	2024	Renaissance	Reliability	Renaissance Unit 3 Peaker Generator Stator Rewind & Rotor	3,388	6,819	6,832	6,845	6,859	1,590,643	2,512,318	2,888,642	7,022,345		PAT 2 REV 1
185	Peakers	2024	Renaissance	Reliability	Renaissance Unit 1 Peaker Main Unit Transformer	516,529	512,102	29,466	3,861	1,771	-	-	-	1,063,730	(159,559)	PAT 1 REV 3
186	Trenton Channel	2024	Sibley	Minor Environmental	Sibley Quarry Capping Section 1A	922,889	1,243,548	139,056	78,936	65,037	64,477	2,844	-	2,516,788		PAT 2 REV 2

15% reduction for May-December 2024 for PAT 0 and PAT 1 projects **(10,648,865)**

Line No.	(a) Facility	(b) Test Year	(c) Unit	(d) High Level Breakdown	(e) Description	(f) Amount	(g) 20 % reduction	(h) PAT Level
188	Belle River/Range Road	2025	1	Reliability	Unit 1 Waterwall Tubes	6,347,145	(1,269,429)	PAT 0 REV 1
189	Belle River/Range Road	2025	1	Reliability	Unit 1 Secondary Air Heater Baskets	5,288,096	(1,057,619)	PAT 0 REV 0
190	Belle River/Range Road	2025	1	Safety	Unit 1 IP Turbine Valves	4,475,894	(895,179)	PAT 0 REV 1
191	Belle River/Range Road	2025	1	Reliability	Unit 1 Duplex Heater	3,258,602	(651,720)	PAT 0 REV 1
192	Belle River/Range Road	2025	1	Reliability	Unit 1 Expansion Joints	2,607,260	(521,452)	PAT 0 REV 1
193	Belle River/Range Road	2025	1	Reliability	Unit 1 Horizontal Middle Reheat Tubes	2,197,608	(439,522)	PAT 0 REV 0
194	Belle River/Range Road	2025	1	Reliability	Unit 1 East Boiler Feed Pump Turbine Blades & Rotor	2,392,484	(478,497)	PAT 0 REV 1
195	Belle River/Range Road	2025	Common	Minor Environmental	Range Road Landfill Capping (Area G2 Phase II)	5,022,703	(1,004,541)	PAT 1 REV 0
196	Belle River/Range Road	2025	Common	Safety	North Auxiliary Boiler	1,869,086	(373,817)	PAT 0 REV 1
197	Belle River/Range Road	2025	Common	Safety	South Auxiliary Boiler	1,866,836	(373,367)	PAT 0 REV 2
198	Blue Water Energy Center	2025	ST1	Reliability	STG Transformer	1,900,068	(380,014)	PAT 0 REV0
199	Blue Water Energy Center	2025	Common	Reliability	CT Transformer	1,798,256	(359,651)	PAT 0 REV 1
200	Blue Water Energy Center	2025	Common	Reliability	Control Server	1,701,212	(340,242)	PAT 0 REV 0
201	Greenwood Energy Center	2025	1	Safety	Unit 1 LP Turbine Rotor & Blades	5,863,594	(1,172,719)	PAT 1 REV 4
202	Greenwood Energy Center	2025	1	Reliability	Unit 1 Feedwater Heater #6	2,225,303	(445,061)	PAT 1 REV 1
203	Greenwood Energy Center	2025	1	Reliability	Unit 1 Feedwater Heater #3	2,117,684	(423,537)	PAT 1 REV 1
204	Greenwood Energy Center	2025	1	Safety	Unit 1 Turbine Valves	1,765,657	(353,131)	PAT 1 REV 1
205	Greenwood Energy Center	2025	1	Reliability	Unit 1 North Boiler Feed Pump Turbine Blades	1,508,890	(301,778)	PAT 1 REV 2
206	Greenwood Energy Center	2025	1	Minor Environmental	Underground Storage Tank 377	1,310,838	(262,168)	PAT 0 REV 1
207	Monroe without Large Enviro.	2025	1	Reliability	Unit 1 IP Turbine Rotor	4,167,682	(833,536)	PAT 0/1 REV 0
208	Monroe without Large Enviro.	2025	1	Minor Environmental	Unit 1 SCR Catalyst Layer 3	2,530,867	(506,173)	PAT 0 REV 1
209	Monroe without Large Enviro.	2025	1	Reliability	Unit 1 Coal Mill Feeder Controls	1,363,072	(272,614)	PAT 0/1 REV 0
210	Monroe without Large Enviro.	2025	2	Safety	Unit 2 LPA & LPB Turbine Rotor and Blades	10,976,839	(2,195,368)	PAT 0 REV 1
211	Monroe without Large Enviro.	2025	2	Minor Environmental	Unit 2 SCR Catalyst Layers 1, 2, & 4	4,399,643	(879,929)	PAT 0 REV 1
212	Monroe without Large Enviro.	2025	2	Reliability	Unit 2 North & South Air Heater Hot End Baskets	2,993,448	(598,690)	PAT 0 REV 0
213	Monroe without Large Enviro.	2025	4	Safety	Unit 4 LPA & LPB Turbine Rotor and Blades	5,257,264	(1,051,453)	PAT 1 REV 1
214	Monroe without Large Enviro.	2025	4	Safety	Unit 4 Turbine Valves	4,194,728	(838,946)	PAT 0 REV 0
215	Monroe without Large Enviro.	2025	4	Minor Environmental	Unit 4 SCR Catalyst Layers 1, 3, & 4	3,588,903	(717,781)	PAT 0/1 REV 0
216	Monroe without Large Enviro.	2025	4	Safety	Unit 4 Coal Mill Primary Air Duct & Damper	2,649,721	(529,944)	PAT 0/1 REV 0
217	Monroe without Large Enviro.	2025	4	Reliability	Unit 4 Expansion Joints	2,381,698	(476,340)	PAT 1 REV 0
218	Monroe without Large Enviro.	2025	4	Minor Environmental	Unit 4 FGD Inlet Expansion Joint Flange Mod & Joint	2,054,274	(410,855)	PAT 1/2 REV 0
219	Monroe without Large Enviro.	2025	4	Reliability	Unit 4 DCS & Control Room	1,914,456	(382,891)	PAT 0 REV 1
220	Monroe without Large Enviro.	2025	4	Reliability	Unit 4 Secondary Heat Exchanger	1,906,379	(381,276)	PAT 1 REV 0
221	Monroe without Large Enviro.	2025	Common	Reliability	U2A Emergency Reactor Cooling & GSW Return Piping	1,038,478	(207,696)	PAT 0 REV 0
222	Monroe without Large Enviro.	2025	Common	Reliability	U2A Reactor Condensate Return	1,032,462	(206,492)	PAT 0 REV 0
223	Monroe without Large Enviro.	2025	Fuel Supply	Safety	Fuel Supply Tripper Gallery D Infrastructure	7,134,048	(1,426,810)	PAT 0 REV 1
224	Monroe without Large Enviro.	2025	Fuel Supply	Safety	Fuel Supply Dust Collector 04	1,900,054	(380,011)	PAT 0 REV 1
225	Peakers	2025	DTE	Reliability	Blackstart Peaker Unit 2 Starting System	2,794,791	(558,958)	N/A
226	Peakers	2025	Delray	Minor Environmental	Delray 11-1 & 12-1 Peaker Exhaust Silencers	1,894,035	(378,807)	PAT 0 REV 1
227	Peakers	2025	Greenwood	Reliability	Greenwood 11-2 Peaker Major Overhaul	1,179,132	(235,826)	PAT 0 REV 1
228	Peakers	2025	Greenwood	Reliability	Greenwood 12-1 Peaker Major Overhaul	1,137,038	(227,408)	PAT 0 REV 1
229	Peakers	2025	Renaissance	Reliability	Renaissance 4 Peaker Exhaust Cylinder & Manifold	8,658,508	(1,731,702)	PAT 0 REV 1
230	Peakers	2025	Renaissance	Reliability	Renaissance Unit 2 Peaker Generator Rotor	3,214,388	(642,878)	PAT 0 REV 1
231	Peakers	2025	DTE	Reliability	Blackstart Unit Major Overhaul	6,376,480	(1,275,296)	N/A
232	**Total 2025 Projects**					**142,255,604**		
					20% reduction for 2025 for all PAT0 and PAT1 projects		**(28,451,121)**	

Michigan Public Service Commission
DTE Electric Company
Projected Capital Expenditures
Midwest Energy Resources Company (MERC) & Fuel Supply
($000)

Case No.: U-21534
Exhibit No.: A-12
Schedule: B5.2
Witness: D. C. Milo
Page: 1 of 1

	(a)	(b)	(c)	(d)	(e)	(f)
		Capital Expenditures				
		Historical	**Projected Bridge Period**			**Projected Test Year**
Line No.	**Description**	**12 mos. ended 12/31/2022**	**12 mos. ending 12/31/2023**	**12 mos. ending 12/31/2024**	**24 mos. ending 12/31/2024**	**12 mos. ending 12/31/2025**
					col. (c)+(d)	
1	MERC:					
2	Conveyor Belting	563	112	-	112	-
3	D11 Caterpillar Dozer	295	-	-	-	-
4	85' Man Lift	153	-	-	-	-
5	Large Mobile - Major Components (Engine, Transmission, etc.)	-	254	106	360	54
6	Terminal Roadways & Railroad Tracks	-	117	-	117	-
7	750KVA & 1500KVA Transformers	-	165	-	165	-
8	Other Capital Spend <$100K	213	278	184	462	100
9	Total MERC	1,224	926	290	1,216	154
10	Fuel Supply:					
11	Railcar truck/ draft system rebuilds	1,000	700	1,000	1,700	1,000
12	Total Fuel Supply	1,000	700	1,000	1,700	1,000
13	**Total MERC and Fuel Supply**	2,224	1,626	1,290	2,916	1,154
	Actual amounts from STDE-2.21a and 2.21b		1,495	1,318		
	Difference updating with actual amounts through April 2024		**(131)**	**28**		

Midwest Energy Resources Company (MERC) & Fuel Supply
Actual Capital Expenditures
($000's)

Case: U-21534
Response: STDE-2.21a
Respondent: D. Milo

Line No.	(a) Description	(b) Jan-22	(c) Feb-22	(d) Mar-22	(e) Apr-22	(f) May-22	(g) Jun-22	(h) Jul-22	(i) Aug-22	(j) Sep-22	(k) Oct-22	(l) Nov-22	(m) Dec-22	(n) Actual 12 mos. ended 12/31/2022
1	MERC:													
2	Conveyor Belting			284	147							132		563
3	D11 Caterpillar Dozer										277	18		295
4	85' Man Lift								138			15		153
5	Other Capital Spend <$100K	11	38	36	28	23	14	9	11	16	55	(53)	24	213
6	Total MERC	11	38	320	175	23	14	9	149	16	331	112	24	1,224
7	Fuel Supply:													
8	Railcar truck/ draft system rebuilds	142	134	179	145	-	110	192	86	-	-	-	13	1,000
9	Total Fuel Supply	142	134	179	145	-	110	192	86	-	-	-	13	1,000
10	**Total MERC and Fuel Supply**	153	172	499	320	23	124	201	236	16	331	112	37	2,223

Line No.	Description	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Actual 12 mos. ended 12/31/2023
11	MERC:													
12	Conveyor Belting	23	61		51									135
13	Large Mobile - Major Components (Engine, Transmiss	25	22	139	25						42			253
14	Terminal Roadways & Railroad Tracks							20		83				103
15	750KVA & 1500KVA Transformers									102	45	15		161
16	Other Capital Spend <$100K	10	13	24	29	6	15	4	21	14	6	4	74	221
17	Total MERC	58	96	163	105	6	15	24	21	200	92	18	74	873
18	Fuel Supply:													
19	Railcar truck/ draft system rebuilds	-	166	-	-	-	-	31	64	26	150	134	51	622
20	Total Fuel Supply	-	166	-	-	-	-	31	64	26	150	134	51	622
21	**Total MERC and Fuel Supply**	58	262	163	105	6	15	55	85	226	242	152	125	1,495

Midwest Energy Resources Company (MERC) & Fuel Supply
Projected 2024 Capital Expenditures
($000's)

Case: U-21534
Response: STDE-2.21b
Respondent: D. Milo

Line No.	(a) Description	(b) Actual Jan-24	(c) Actual Feb-24	(d) Actual Mar-24	(e) Actual Apr-24	(f) Projected May-24	(g) Projected Jun-24	(h) Projected Jul-24	(i) Projected Aug-24	(j) Projected Sep-24	(k) Projected Oct-24	(l) Projected Nov-24	(m) Projected Dec-24	(n) Projected 12 mos. ended 12/31/2024
1	MERC:													
2	Large Mobile - Major Components (Engine, Transmission, etc.)	-	37	-	-	-	-	-	-	-	-	-	-	37
3	Other Capital Spend <$100K	11	48	85	17	45	35	-	-	-	40	-	-	281
4	Total MERC	11	85	85	17	45	35	-	-	-	40	-	-	318
5	Fuel Supply:													
6	Railcar truck/ draft system rebuilds	18	212	70	15	86	86	86	86	86	86	86	83	1,000
7	Total Fuel Supply	18	212	70	15	86	86	86	86	86	86	86	83	1,000
8	**Total MERC and Fuel Supply**	30	297	154	32	131	121	86	86	86	126	86	83	1,318

Sum Jan-Apr 2024 513

DTE Electric Company
Projected Capital Expenditures
Nuclear Production Plant
Routine and Small Projects
($000)

Line No.	Project Name	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Forecasted May-Dec 24	Forecasted Jan-Dec 25
1	**Routine and Small Projects**							
2	Undervessel replacements	**212**	**865**	**49**	**1,177**	**44**	985	-
3	Visual Annunciator System (VAS) replacement	-	-	-	-	-	-	-
4	Security system computer	**715**	**423**	**466**	**459**	**403**	7,837	-
5	Plant radio system	567	362	342	74	72	-	-
6	Residual heat removal service water outlet valve (F068A/B) replacement	**76**	**96**	**317**	**1,129**	**819**	767	-
7	Environmentally Qualified (EQ) seal replacements	-	-	-	-	-	-	-
8	Safety relief valves (SRVs)	**391**	**(812)**	**22**	1,076	1,037	287	759
9	Snubbers	**23**	**(14)**	**9**	**796**	**228**	10	32
10	Low Pressure Turbine (LPT) expansion joints	-	-	-	-	-	-	-
11	Unitized actuators (UAs) replacement	**507**	**195**	**373**	**699**	**593**	986	230
12	Residual Heat Removal (RHR) motors replacement	**117**	**532**	**285**	**1,005**	**644**	521	949
13	High pressure stop and control valves (HPSV/HPCV) replacement	**528**	**190**	**666**	**1,512**	**1,123**	943	-
14	Reactor recirculation system (RRS) replacements	-	-	-	-	-	-	-
15	Main Steam Isolation Valves (MSIV) replacement	**227**	**5**	**(1)**	**750**	**1,121**	-	-
16	Low pressure stop and intercept valves (LPSV/LPIV) replacements	**352**	**125**	**588**	**994**	**350**	945	-
17	Valve replacements	**146**	**(97)**	**190**	**210**	**1,536**	5	-
18	Main steam bypass valve (MSBV) replacement	-	-	-	-	-	-	-
19	Core spray line vents	108	204	114	**102**	**188**	255	-
20	Diesel fire pump	-	-	-	-	-	-	-
21	Emergency equipment service water (EESW) pump	-	-	-	-	-	-	-
22	Motor operated valves (MOV)	-	-	-	-	-	-	-
23	Reactor Protection System (RPS) motor-generator (MG) set replacements	**(385)**	**13**	**13**	**420**	**195**	-	176
24	Emergency Diesel Generator (EDG) cylinder liner replacements	-	-	-	-	-	-	-
25	Flow accelerated corrosion (FAC) program piping insulation	73	1	195	**278**	**1,011**	-	-
26	Owner Controlled Area (OCA) security access control system	-	-	-	-	-	-	-
27	Residual heat removal service water (RHRSW) pump	-	-	-	-	-	-	-
28	Control rod drive mechanism (CRDM) replacement	**56**	**12**	**25**	**142**	**635**	-	4,867
29	Moisture separator reheater relief valve (MSRRV)	-	-	-	-	-	-	-
30	General plant tools	**1,505**	**203**	**168**	**401**	**469**	1,669	3,375
31	Heater Drains Pump (HDP) replacement	-	-	-	-	-	-	-
32	Condensate pump	**205**	**6**	**184**	**250**	**79**	-	189
33	Residual Heat Removal (RHR) HVAC hydramotors	-	-	-	-	-	83	45
34	Breaker replacement	-	-	-	-	-	190	265
35	Plant wireless	**183**	**279**	**139**	**88**	**41**	5,615	-
36	Condensate filter demineralizer (CFD) septas	1	-	180	**50**	**1**	349	345
37	Refuel bridge mast	-	-	-	-	-	-	-
38	Refuel Floor monorail replacement	**(6)**	**20**	**22**	**41**	**10**	-	-
39	Switchyard footer replacement	-	-	-	-	-	132	-
40	Unitized Actuator shop	**8**	**6**	**6**	**4**	**56**	58	-
41	Hot machine shop	**947**	**456**	**388**	**313**	**2**	-	-
42	Contractor time & work tracking system	-	-	-	-	-	-	-
43	Piping replacements	**28**	**1**	**(26)**	46	8	-	-
44	Security defensive strategy simulator	-	-	-	-	-	-	-
45	Control rod blade (CRB) replacements	**1,495**	**31**	**(9)**	-	-	-	887
46	Pump and motor replacements	-	**44**	**3**	**57**	**672**	-	-
47	Reverse osmosis system replacement	-	-	-	-	-	-	2,597
48	Independent Spent Fuel Storage Installation (ISFSI) casks	**2**	**1**	-	**2**	**1,028**	301	282
49	Integrated Plant Computer System (IPCS) replacement	-	-	-	-	-	-	-
50	Paperless recorders replacement	-	-	-	-	-	126	124
51	Roof replacements	**568**	**33**	-	-	-	-	-
52	Neutron Monitoring System replacements	**22**	**17**	**32**	**16**	**10**	420	-
53	SCRAM discharge header	**320**	**366**	**234**	**348**	**(41)**	-	-
54	Temporary power modifications	**180**	**22**	**18**	**9**	**2**	1,842	-
55	Balance of plant (BOP) battery replacement	**85**	**32**	**18**	**212**	**558**	-	-
56	Reactor feed pump turbine (RFPT) rotor	**167**	**59**	**124**	**249**	**844**	331	-
57	Hydrogen seal replacement	**124**	**46**	**93**	**165**	**264**	244	-
58	Heater Feed Pump (HFP) replacement	-	-	-	**217**	**164**	-	-
59	Natural draft cooling towers	-	-	**42**	**4**	**915**	-	9,515
60	Document management system enhancements	-	-	-	-	-	-	9,992
61	Remote monitoring	-	-	-	-	-	-	4,473
62	Electronic work package system	-	-	-	-	-	-	2,584
63	GSW Pump House Critical Digital Asset (CDA)	-	-	-	-	-	-	745
64	Balance of Projects (<$500K)	-	**53**	**3**	**11**	**115**	14	16
65	**Total Routine and Small Projects**	**9,547**	**3,775**	**5,272**	**13,306**	**15,196**	24,915	42,450
	Difference between actual Dec 23 to Apr 24 to projections	(1,442)	(3,167)	(7,936)	(71)	4,745	**15% reduction for May-Dec 24** (3,737)	**20% reduction for Jan-Dec 2025** (8,490)

Total difference between actual Dec 23 to Apr 24 to projections in case as filed (7,870)
Projections in case Dec 23 to Apr 24 54,966

Percent Reduction of actual compared to projections for Dec 23 to Apr 24 -14.3%

DTE Electric Company
Projected Capital Expenditures
Nuclear Production Plant
Non-Routine and Large Projects
($000)

No.	Project Name	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	Forecasted May-Dec 24	Forecasted Jan-Dec 25
1	**Non-Routine and Large Projects**							
2	Main Unit Generator replacement	3,300	5,849	(1,600)	5,408	1,358	**33,230**	**14,292**
3	Torus Vent Header	-	-	-	-	-	**-**	**-**
4	Underground safety-related service water piping	863	1,946	1,584	5,495	10,320	**14,865**	**-**
5	Main Unit Generator rotor replacement	-	-	-	-	-	**-**	**-**
6	Generator excitation automatic voltage regulator (AVR)	-	-	-	-	-	**-**	**-**
7	Transformer #65 and #69 replacements	-	-	-	36	105	**-**	**-**
8	License renewal implementation (LRI)	417	427	425	624	1,220	**4,285**	**729**
9	Circulating Water (CW) Discharge Pipe	-	-	-	-	-	**-**	**734**
10	Feed water heaters replacements	2,159	288	303	510	547	**1,603**	**4,730**
11	Drywell Coolers #12 and #13	-	-	-	-	-	**-**	**-**
12	Boraflex fuel storage racks	1,178	336	417	162	48	**90**	**-**
13	Radiation monitors	983	319	319	341	311	**6,969**	**2,611**
14	Reactor Building Freight Elevator	-	-	-	-	-	**-**	**-**
15	Transformer replacements	-	-	-	-	-	**-**	**-**
16	Drywell Cooler #8	-	-	-	-	-	**-**	**626**
17	Fire header restoration	204	(4)	(1)	-	-	**-**	**-**
18	Drywell Coolers #10 and #14	-	-	-	-	-	**-**	**-**
19	Off-gas chiller replacement	-	-	-	-	-	**-**	**-**
20	General Service Water (GSW) intake groin replacement	3,693	(35)	50	-	-	**-**	**-**
21	Turbine Building moisture barrier	36	53	180	22	230	**-**	**-**
22	Digital control modifications	-	-	-	-	-	**-**	**-**
23	Drywell moisture barrier replacement	66	83	420	988	970	**2,766**	**-**
24	Fire detection system replacement	13	38	59	56	80	**1,537**	**1,252**
25	Interuptable Air Supply (IAS) dryer replacements	4	10	7	10	20	**558**	**-**
26	Reactor recirculation motor-generator (RRMG) replacements	-	-	-	-	-	**-**	**6,226**
27	Turbine controls replacements	37	11	19	18	20	**64**	**762**
28	Sanitary system replacement	-	-	-	-	-	**-**	**6,457**
29	Emergency Diesel Generator Service Water (EDGSW) piping	-	-	-	-	-	**-**	**-**
30	Other Capital Spend <$100K						**-**	**-**
31	**Total Non-Routine and Large Projects**	12,953	9,321	2,182	13,670	15,229	**65,968**	**38,420**
	Difference between actual Dec 23 to Apr 24 to projections	(371)	(1,874)	(3,697)	7,220	(9,151)	**15% reduction for May-Dec 24** (9,895)	**20% reduction for Jan-Dec 2025** (7,684)

Total difference between actual Dec 23 to Apr 24 to projections in case as filed (7,874)
Projections in case Dec 23 to Apr 24 61,229

Percent Reduction of actual compared to projections for Dec 23 to Apr 24 -12.9%

Michigan Public Service Commission
DTE Electric Company
Projected Operation and Maintenance Expenses
Steam Power Generation
($000)

MPSC Case No.: U-21534
Requestor: Staff
Question No.: STDE-9.1 Sup
Respondent: M. Guillaumin

Line No.	(a) Description	(b) Account	(c) 2023	(d) Rate Case Adjustments: Reclass Fuel Handling to O&M 2/	(e) Rate Case Adjustments: Reclass MERC Fuel Handling Non-O&M Expense 3/	(f) Historical Adjustments 4/	(g) Adjusted Historical Test Period	(h) Projected Adjustments	(i) Projected Adjustments: 1/1/24 - 12/31/24 Inflation Adj 5/	(j) Projected Adjustments: 1/1/25 - 12/31/25 Inflation Adj 5/	(k) Projected Adjustments: Other Adjustments 6/	(l) Total Projected Adjustments	(m) Projected Test Period
1	**Steam Power Generation**						sum (c) thru (f)					sum (h) thru (k)	(g) + (l)
2	**Operation**												
3	Operation Supervision and Engineering	500	8,114	-	-	2,445	10,558	-	306	315	-	621	11,180
4	Fuel Handling	501	-	23,332	(6,391)	5,854	22,795	-	661	680	-	1,341	24,136
5	Steam Expenses	502	13,634	-	-	422	14,056	-	408	419	-	827	14,883
6	Steam from Other Sources	503	-	-	-	-	-	-	-	-	-	-	-
7	(Less) Steam Transferred-Cr.	504	-	-	-	-	-	-	-	-	-	-	-
8	Electric Expenses	505	2,193	-	-	(162)	2,032	-	59	61	-	120	2,151
9	Misc Steam Power Expenses	506	27,763	-	-	3,541	31,304	-	908	934	-	1,842	33,146
10	Rents	507	-	-	-	-	-	-	-	-	-	-	-
11	Total Operation Expense		51,704	23,332	(6,391)	12,100	80,744	-	2,342	2,409	-	4,751	85,495
12	**Maintenance**												
13	Maintenance Supervision and Engineering	510	295	-	-	-	295	-	9	9	-	17	313
14	Maintenance of Structures	511	5,038	-	-	3,414	8,452	-	245	252	-	497	8,949
15	Maintenance of Boilers	512	39,266	-	-	14,987	54,253	-	1,573	1,619	-	3,192	57,445
16	Maintenance of Electric Plant	513	7,023	-	-	1,263	8,286	-	240	247	-	488	8,774
17	Maintenance of Misc Steam Plant	514	32,710	-	-	5,718	38,428	-	1,114	1,147	-	2,261	40,690
18	Total Maintenance Expense		84,332	-	-	25,382	109,714	-	3,182	3,274	-	6,456	116,170
19	Total Steam Power Generation		136,036	23,332	(6,391)	37,482	190,458	-	5,523	5,683	-	11,207	201,665
20	Less Fuel Supply & MERC Fuel Handling	1/	1,672	12,226	(6,391)	-	7,507	-	218	224	(297)	145	7,652
21	Total Steam excluding Fuel Supply & MERC		134,363	11,106	-	37,482	182,951	-	5,306	5,459	297	11,062	194,013

1/ Reclassify Fuel Supply and MERC Fuel Handling sponsored by Witness Milo on Exh A-13, C5.2

2/ Reclassify Fuel Handling O&M charged to Fuel Account 501

3/ Portion of MERC Fuel Handling Charge that is reallocated to other line item classifications within net operating income (see Witness Milo's Exh A-13, C5.2)

5/ Annual Inflation Rate	1/1/23 - 12/31/23	1/1/24 - 12/31/24	1/1/25 - 12/31/25
	0.00%	2.90%	2.90%
No. of Months in Period	12	12	12
Pro-rated Inflation Rate	0.00%	2.90%	2.90%

(sponsored by Witness T. Uzenski on Exh. A-13, Sch.C5.15)

4/ Historical Adjustments:	Account	Amount
Corporate Membership Adjustment	506	(42)
Temporary reductions from deferral of non time-critical contract labor maintenance activities	500,501,502, 505, 506, 511, 512,513,514	6,780
Temporary reductions from deferral of non time-critical material procurement	500,501,502, 505, 506, 511, 512,513,514	11,231
Temporary delay in hiring to replace employees that retired or left the company	500,501,502, 505, 506, 511, 512,513,514	8,698
Periodic Outage Timing	500,501,502, 505, 506, 511, 512,513,514	7,232
Environmental compliance requirements	506	3,583
Total Estimated Historical Adjustments		37,482

6/ Projected Adjustments	Account	Amount
Projected savings from reduced operations as transshipments decrease	501	(297)

Michigan Public Service Commission
DTE Electric Company
Projected Operation and Maintenance Expenses
Fuel Supply & Midwest Energy Resources Company (MERC)
($000)

Case No.: U-21534
Exhibit: A-13
Case: U-21534
Response: STDE-9.3
Respondent: D. Milo

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
				Rate Case Adjustments			Projected Adjustments					
Line No.	Description	Account	1/1/2023 - 12/31/2023	Reclass Fuel Handling to O&M 1/	Reclass MERC Fuel Handling Non-O&M Expense 2/	Adjusted Historical Test Period		1/1/24 - 12/31/24 Inflation Adj 3/	1/1/25 - 12/31/25 Inflation Adj 3/	Other Adjustments 4/	Total Projected Adjustments	Projected Test Period
						sum (c) thru (e)					sum (g) thru (j)	(f) + (k)
1	**Fuel Supply**											
2	Operation Supervision and Engineering	500	533	-	-	533	-	15	16	-	31	565
3	Fuel Handling	501	-	2,484	-	2,484	-	72	74	-	146	2,630
4	Misc Steam Power Expenses	506	37	-	-	37	-	1	1	-	2	39
5	Maintenance Supervision and Engineering	510	79	-	-	79	-	2	2	-	5	84
6	Maintenance of Misc Steam Plant	514	1,023	-	-	1,023	-	30	31	-	60	1,084
7	Total Fuel Supply		1,672	2,484	-	4,156	-	121	124	-	245	4,401
8	**MERC Fuel Handling**											
9	O&M			3,351	-	3,351	-	97	100	(297)	(100)	3,251
10	Depreciation			3,985	(3,985)	-	-	-	-	-	-	-
11	Property Taxes			865	(865)	-	-	-	-	-	-	-
12	Payroll Taxes			172	(172)	-	-	-	-	-	-	-
13	Income Taxes			(31)	31	-	-	-	-	-	-	-
14	Interest Expense			1,400	(1,400)	-	-	-	-	-	-	-
15	Total MERC Fuel Handling	501		9,742	(6,391)	3,351	-	97	100	(297)	(100)	3,251
16	Total Fuel Supply & MERC Fuel Handling		1,672	12,226	(6,391)	7,507	-	218	224	(297)	145	7,652

1/ Reclassify Fuel Supply's Fuel Handling O&M charged to Fuel Account 501

2/ MERC fuel handling is reallocated to the proper line item classification within net operating income as shown on Exhibit A-3 C16 sponsored by Witness Uzenski.

3/ Annual Inflation Rate	1/1/23 - 12/31/23	1/1/24 - 12/31/24	1/1/25 - 12/31/25
	0.00%	2.90%	2.90%
No. of Months in Period	12	12	12
Pro-rated Inflation Rate	0.00%	2.90%	2.90%

(sponsored by Witness T. Uzenski on Exh. A-13, Sch.C5.15)

4/ Projected savings from reduced operations as transshipments decrease

Michigan Public Service Commission
DTE Electric Company
Projected Operation and Maintenance Expenses
Nuclear Power Generation
($000)

Discovery Response STDE-9.5

Case No.: U-21534
Exhibit: A-13
Schedule: C5.3
Witness: J. C. Davis
Page: 1 of 2

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
				Rate Case Adjustments				Projected Adjustments						
Line No.	Description	Account	2023	Nuclear Surcharge 1/	Reclassify PERC	Historical Adjustments 2/	Adjusted Historical Test Period		1/1/24 - 12/31/24 Inflation Adj 3/	1/1/25 - 12/31/25 Inflation Adj 3/	Outage Accrual 4/	PERC Amortization 5/	Total Projected Adjustments	Projected Test Period
1	**Nuclear Power Generation**						sum (c) thru (f)						sum (h) thru (l)	(g) + (m)
2	**Operation**													
3	Operation Supervision and Engineering	517	9,330	(172)	-	-	9,158	-	266	273	-	-	539	9,696
4	Coolants and Water	519	3,307	-	-	-	3,307	-	96	99	-	-	195	3,502
5	Steam Expenses	520	12,459	(4,772)	-	-	7,687	-	223	229	(622)	-	(170)	7,517
6	Steam from Other Sources	521	-	-	-	-	-	-	-	-	-	-	-	-
7	(Less) Steam Transferred-Cr.	522	-	-	-	-	-	-	-	-	-	-	-	-
8	Electric Expenses	523	3,960	-	-	-	3,960	-	115	118	-	-	233	4,193
9	Misc Nuclear Power Expenses	524	57,638	(22,832)	(356)	1,088	35,538	-	1,031	1,060	-	-	2,091	37,629
10	Rents	525	-	-	-	-	-	-	-	-	-	-	-	-
11	Station Expense	562	(20)	-	-	-	(20)	-	(1)	(1)	-	-	(1)	(21)
12	Total Operation Expense		86,673	(27,776)	(356)	1,088	59,629	-	1,729	1,779	(622)	-	2,886	62,516
13	**Maintenance**													
14	Maintenance Supervision and Engineering	528	13,592	-	-	-	13,592	-	394	406	-	-	800	14,392
15	Maintenance of Structures	529	18,972	(20)	-	-	18,952	-	550	566	-	-	1,115	20,067
16	Maintenance of Reactor Plant Equipment	530	33,943	(0)	(13,825)	-	20,118	-	583	600	(1,866)	-	(683)	19,435
17	Maintenance of Electric Plant	531	15,488	-	(13,085)	4,070	6,472	-	188	193	-	-	381	6,853
18	Maintenance of Misc Nuclear Plant	532	15,204	-	(209)		14,995	-	435	447	-	-	882	15,878
19	Maintenance of station equipment	570	-	-	-	-	-	-	-	-	-	-	-	-
20	Total Maintenance Expense		97,199	(20)	(27,119)	4,070	74,130	-	2,150	2,212	(1,866)	-	2,495	76,625
	PERC Regulatory Asset													
21	PERC Base Expense		-	-	15,000	-	15,000	-	-	-	-	-	-	15,000
22	Reg Asset Amortization-PERC		-	-	12,475	-	12,475	-	-	-	-	(7,621)	(7,621)	4,854
23	Total PERC Expense		-	-	27,475	-	27,475	-	-	-	-	(7,621)	(7,621)	19,854
24	Total Nuclear Power Generation		183,873	(27,796)	-	5,158	161,235	-	3,879	3,992	(2,489)	(7,621)	(2,239)	158,996

1/ Eliminate O&M expenses recovered separately in Nuclear Surcharge

	Amount	Account
Site Security	(16,133)	524
Radiation Protection	(11,663)	517-520,524 ,530,531
	(27,796)	

2/ Historical Adjustments:

	Amount	Account
Utility Service Alliance (USA) Refund Adjustment (one-time difference)	1,116	524
Staffing temporarily below long-term sustainable threshold	4,070	529
Excluded membership dues	(28)	524

3/ Annual Inflation Rate

	1/1/23 - 12/31/23	1/1/24 - 12/31/24	1/1/25 - 12/31/25
No. of Months in Period	12	12	12
Pro-rated Inflation Rate	0.00%	2.90%	2.90%

(sponsored by Witness T. Uzenski on Exh. A-13, Sch.C5.15)

4/ Outage Accrual Projection Adjustment:

	Amount	Account
Outage Accrual Steam Expense	(622)	520
Outage Accrual Reactor Plant Maint.	(1,866)	530
Total Outage Accrual	(2,489)	

5/ PERC (Performance Evaluation Review Committee) regulatory asset amortization sponsored by Witness T. Uzenski on Exh. A-13, Sch.C5.17

Michigan Public Service Commission
DTE Electric Company
Projected Operation and Maintenance Expenses
Other Power Generation
($000)

Case No.: U-21534
Discovery Request: ABDE-1.6 Supplemental

	(a)	(b)	(c)	(d)		(e)		
Line No.	**Description**	**Account**	**2023 Actual**	**Estimated Rate Case Adjustments 1/2**	**Estimated Historical Adjustments 3/**	**Estimated Adjusted 2023**		
1	**Other Power Generation**					sum (c) thru (d)		
2	**Operation**							
3	Operation Supervision and Engineering	546	-	-		-		
4	Generation Expenses	548	4,180		507	4,687		
5	Misc Other Power Expenses	549	16,362	(15,063)		1,299		
6	Rents	550	-	-	-	-		
7	Total Operation Expense		20,542	(15,063)	507	5,986		
8	**Maintenance**							
9	Maintenance Supervision and Engineering	551	-	-	-	-		
10	Maintenance of Structures	552	-	-	-	-		
11	Maintenance of Generating & Electric Plant	553	38,520	(25,366)	1,783	14,937		
12	Maintenance of Misc Other Power Plant	554	1,993	-	1,202	3,195		
13	Total Maintenance Expense		40,513	(25,366)	2,985	18,132		
14	**Power Supply Related Expenses**							
15	Operation Supervision and Engineering	556	2,658	-	-	2,658		
16	Generation Expenses	557	2	(2)	118	118		
17	Total Expense		2,660	(2)	118	2,776	Inflation 2024	Inflation 2025
							2.9%	2.9%
18	Total Other Power Generation Expenses		63,715	(40,431)	3,610	26,894	27,673	28,476

1/ Eliminate Renewable Energy Program

2/ Rate Case Adjustments	Account	Amount
Eliminate Renewable Energy Program	549, 553, 557	(40,431)

3/ Normalization Adjustments:	Account	Amount
Normalization of Periodic Outage spend	548, 553, 554,557	1,667
Temporary reductions for deferral of non time-critical material procurement	548, 553, 554,557	988
Temporary delay of hiring replacement employees.	548, 553, 554,557	220
BWEC Routine Maintenance	548, 553, 554,557	735
Total Estimated Historical Adjustments		3,610

MPSC Case No: U-21534

Requester: Staff

Question No.: EMB-1.1

Respondent: J. Sparks

Page: 1 of 1

Question: Referencing the 83,000 monthly RIA credit disbursement projection proposed on page 16 of Jason E. Sparks' testimony:

1. Please provide the calculation for the development of the 83,000 monthly RIA projection over the historical year(s) customer counts and explain all components of the calculation.

Answer: The Company used a 2 year historical average rate of change. Applying that average to the 2023 monthly average of enrollments results in a forecast of 87,000 per month. We also calculated a slight 6% decline in 2023 of accounts receiving energy assistance and included that as part of the forecast since energy assistance triggers accounts to receive the RIA credit. Using that 6% decline brings it to an estimated 83,000 monthly projection.

Year	Month Average	Change from previous year
2021	56,913	43%
2022	71,829	26%
2023	75,522	5%
YTD May 2024	75,860	
F2025	83,000	

Attachment: None

MPSC Case No: U-21534

Requester: Staff

Question No.: EMB-1.2

Respondent: J. Sparks

Page: 1 of 1

Question: Referencing the 83,000 monthly RIA credit disbursement projection proposed on page 16 of Jason E. Sparks' testimony:

2. Please provide explanations/citations supporting the use of that method for calculating the RIA projection.

Answer: See response to EMB-1.1

Attachment: None

MPSC Case No: U-21534

Requester: Staff

Question No.: EMB-1.3

Respondent: J. Sparks

Page: 1 of 1

Question: Referencing the 83,000 monthly RIA credit disbursement projection proposed on page 16 of Jason E. Sparks' testimony:

3. Please provide any additional support for the RIA projection. Include justification for the increase over the historical year actual disbursements.

Answer: In addition to the 2023 numbers exceeding the 2022 historical, the 2024 year to date May average enrollments are ahead of 2023, and supports the forecast of 83,000 in 2025.

Attachment: None

MPSC Case No: U-21534

Requester: Staff

Question No.: EMB-1.4

Respondent: J. Sparks

Page: 1 of 1

Question: Referencing the 83,000 monthly RIA credit disbursement projection proposed on page 16 of Jason E. Sparks' testimony:

4. Please reference where in its case (testimonies, exhibits, workpapers) the Company provided support/explanations justifying this proposed projection.

Answer: In my direct testimony on page JES-16, Table 4 "2020-2023 Electric RIA Customer Counts" demonstrates the year-over-year increases despite the absence of workpapers.

Attachment: None

MPSC Case No: U-21534

Requester: Staff

Question No.: EMB-1.5

Respondent: A. Willis

Page: 1 of 2

Question: Referencing the included recovery of 103,450 (across rate schedules D1.11, D1.8R, D1.2, and D1) monthly senior citizen provision credit disbursements in Company witness Aaron Willis's Schedule F-3:

5. Please provide the calculation for the development of the 103,450 monthly senior citizen credit projection over the historical year(s) customer counts and explain all components of the calculation.

Answer: The Company notes Exhibit A-16, Schedule F3 reflects 104,224 customers receiving the senior citizen provision, across Rate Schedules D1, D1.2, D1.8R, D1.11 and D2 (the Company assumes the question inadvertently did not count D2 in the 103,450 cited). Billing determinants used in Exhibit A-16, Schedule F3 are further supported in initial filing documents, "U-21534 Billing Determinants Workpaper.xlsx". For each Rate Schedule with senior citizen provision customers included, the workpaper shows as follows:

- D1: Tab "AH>D1" calculates the forecasted 501 D1 senior citizen provision customers to be the same as the 2022 historic year data contained in tab "BD-Monthly", given no additional growth of D1 is anticipated.
- D1.2: Tab "AH>D1.2" calculates the 350 D1.2 senior citizen provision customers based on 50% of the percentage of D1.11 senior citizen provision customers. More specifically, the percentage of D1.11 customers on the senior citizen provision is 5.18% (cell M28 of tab "AH>D1.11"); thus the number of D1.2 customers on the senior citizen provision is calculated by applying 2.59% (half of the 5.18%) to the D1.2 customer count of 13,500 (13,500*2.59%=350)
- The senior citizen provision customers on Rate Schedules D1.8R and D2 were calculated using the same methodology as described above for Rate Schedule D1.2.
- D1.11: Tab "AH>D1.11" shows the 102,050 senior citizen provision customers were calculated based on Rate Schedule D1, D1-A, D1-B, and D1.11 trends. While compiling this response the Company realized it inadvertently used the number of senior citizen provision customers for D1.11 in its Exhibit A-16

MPSC Case No: U-21534

Requester: Staff

Question No.: EMB-1.5

Respondent: A. Willis

Page: 2 of 2

Schedule F3 page 9 that it used in its last rate case, Case No. U-21297, instead of updating it. Had the number been updated based on the stated methodology using the most recent three years of data available (11/2020 thru 10/2023), it would be 121,899 as opposed to 102,050. Further detail on this calculation is provided in the attachment "U-21534 EMB-1.5 Senior Citizen Provision Customers.xlsx".

The attachment has five tabs:

- WP-Data – this reflects the active senior citizen provision customer count from Nov 2020 through Oct 2023
- WP-Pivot – reformatted version of WP-Data with the same data
- WP-Chart-Jan2025 – reflects data from WP-Pivot and a linear trendline projected to January 2025
- WP-Chart-Dec2025 – reflects data from WP-Pivot and a linear trendline projected to December 2025
- WP-Summary – Describes the Jan and Dec 2025 forecasted counts, and reflects their average as 122,400. It further adjusts for D1 senior citizen provision customer counts (501 customers) to yield the 121,899 count referenced above as the accurate D1.11 input to the current case.

Attachment: U-21534 EMB-1.5 D1.11 Senior Citizen Provision Customers.xlsx

MPSC Case No: U-21534

Requester: Staff

Question No.: EMB-1.6

Respondent: A. Willis

Page: 1 of 1

Question: Referencing the included recovery of 103,450 (across rate schedules D1.11, D1.8R, D1.2, and D1) monthly senior citizen provision credit disbursements in Company witness Aaron Willis's Schedule F-3:

6. Please provide explanations/citations supporting the use of that method for calculating the senior citizen provision credit disbursement projection.

Answer: The method used for calculating the senior citizen provision customers in the test year described in the response to EMB-1.5 is the same method proposed (and approved) in the Company's most recent rate case, Case No. U-21297.

Attachment: None

MPSC Case No: U-21534

Requester: Staff

Question No.: EMB-1.7

Respondent: A. Willis

Page: 1 of 1

Question: Referencing the included recovery of 103,450 (across rate schedules D1.11, D1.8R, D1.2, and D1) monthly senior citizen provision credit disbursements in Company witness Aaron Willis's Schedule F-3:

7. Please provide any additional support for the projection. Include justification for the increase over the historical year actual disbursements.

Answer: See response to EMB-1.5.

Attachment: None

MPSC Case No: U-21534

Requester: Staff

Question No.: EMB-1.8

Respondent: A. Willis

Page: 1 of 1

Question: Referencing the included recovery of 103,450 (across rate schedules D1.11, D1.8R, D1.2, and D1) monthly senior citizen provision credit disbursements in Company witness Aaron Willis's Schedule F-3:

8. Please reference where in its case (testimonies, exhibits, workpapers) the Company provided support/explanations justifying this proposed projection.

Answer: See the response to EMB-1.5

Attachment: None

Case No.: U-21534
Exhibit No.: S-17.1
Witness: EMBraunschweig
Date: July 26, 2024
Page: 1 of 1

Residential Income Assistance and Residential Senior Citizen Credit Projection Support

Senior Citizen Credit

	Company Projection	Staff Projection (3 year historical average)	Difference between Staff and Company (revenue adjustment)
Monthly Customer Count	104,224	94,525	
Credit amount	4.25	4.25	
TY Revenue Offset (cost of program)	$ 5,315,424	$ 4,820,768	$ 494,656.08

Customers Source: Part III Attachment 5(9)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			Calendar Year Monthly Average
2022	99,133	84,509	104,174	89,714	94,700	99,092	89,392	101,017	96,157	91,601	91,974	102,482			95,329
2021	92,179	84,161	102,245	93,987	89,611	98,973	94,049	100,508	95,831	89,431	89,515	98,915			94,117
2020	106,138	85,082	100,044	90,098	90,276	99,271	94,115	93,949	93,425	92,993	83,834	100,320			94,129
2019	113,149	95,433	100,641	94,928	104,157	93,602	98,182	101,918	92,028	101,355	86,188	100,224			98,484
2018	113,539	107,450	112,211	111,739	116,760	110,014	109,328	119,477	100,520	105,730	104,239	98,083			109,091

Residential Income Assistance Credit

	Company Projection	Staff Projection (3 year historical average)	Difference between Staff and Company (revenue adjustment)
Monthly Customer Count	83,000	56,134	
Credit amount	8.5	8.5	
TY Revenue Offset (cost of program)	$ 8,466,000	$ 5,725,679	$ 2,740,320.67

Customers Source: Part III Attachment 5(9)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Fiscal Year Monthly Average (Oct-Sept)	Calendar Year Monthly Average
2023	83,898	67,558	84,225	68,573	79,637	74,767	71,061	80,429	77,502	77,240	70,466	70,910		77,107	
2022	55,269	52,469	77,853	64,094	71,276	76,709	70,158	80,901	75,554	77,992	76,119	83,522		65,521	71,826
2021	49,349	47,618	59,861	59,239	56,918	70,001	60,726	60,092	57,131	54,670	52,631	54,664		54,773	56,908
2020	40,632	30,546	42,921	35,150	34,222	36,974	38,501	40,711	40,019	42,557	42,233	51,546		39,013	39,668
2019	31,056	30,971	40,407	42,628	51,059	45,530	48,015	50,430	43,918	49,328	35,631	43,526			42,708
2018	32,722	28,866	16,614	9,438	9,950	9,171	8,959	5,526	954	2,009	16,965	19,031			13,350

Affordability, Alignment, and Assistance Subcommittee 12/5/2023

Elaina Braunschweig (MPSC—Rates and Tariff) Braunschweige@michigan.gov
Jamie Curtis (MPSC—MEAP administrator) CurtisJ14@michigan.gov
Kasey Grieco (SWP MEAP Grantee—Asst. Program Manager) kgrieco@superiorwatersheds.org

MPSC MICHIGAN PUBLIC SERVICE COMMISSION

*Meeting presentations, recordings, and materials are shared on the EAAC website in the AAA section

Agenda

1. Review Subcommittee Charge and Goals
2. Review utility data submissions depicting RIA/LIA reform options
3. Discussion on the data
4. Next Steps

Overarching Charge of the Energy Policy Board

1

The overall goal of the work of the EAAC is to define and ensure energy affordability, accessibility, and security/self-sufficiency in collaboration with the EWR-LI and the LIEPB (its advisory organization) as stated by the Commission through Case No. U20757.

2

To build on these directives, the LIEPB set their primary purpose as “guiding the process of assessing energy affordability and accessibility holistically, especially through linking EWR services and energy assistance programs.”

3

They set as their overarching goal “to reduce the number of households with unsustainable energy burdens.” All work of the Board, EAAC, and EWR-LI Workgroup flowed from this purpose and goal.

Shared Goals of the Subcommittee



To promote energy affordability.



To support program alignment for ease of access and use, effectiveness of administration, and evaluation.



To evaluate and improve systems of energy assistance.

Guiding Principles

The ideal system/program design should achieve this while also:

- **Ensuring equitable distribution** in the access to, use of, and outcomes from energy affordability and assistance policies/programs
- **Centering impacted community priorities** and participation in policy/program development, accountability, and assessment
- **Treating customers with dignity**, enabling them to live comfortably, and not penalizing customers for an inability to pay their bills
- **Coordinating and communicating clearly** with relevant state agencies to integrate state policy goals, including those related to healthy homes and climate change

*Established by AAA members in September 2021

Proposed 2023-2024 AAA Charge p. 58—Awaiting Commission Approval

Initiate a stakeholder discussion of DTE's report on the enrollment of customers in the LIA credit program and submit a report and recommendations to the Commission.

Discuss the LIA/RIA enrollment assignment, enrollment cap, and best use/program pairings.

Evaluate the feasibility of a low-income customer subclass in the Cost-of-Service-Study (COSS)

Develop a proposal for an energy affordability standard and how the standard can be integrated into the regulatory environment.

Evaluate and make recommendations regarding PIPPs. (2024)

2023 Recap

- The AAA has been reviewing ways to fulfill MCL 460.11 (2), which authorizes low-income rates (Appendix 1), by means of analyzing the current RIA and LIA credits.
- In October, the AAA evaluated the feasibility of a Consumers Energy cost-based low-income electric cost of service study, which is relevant to the above legislation.
- The AAA has outlined different possibilities to fulfill this legislation and can make an informed recommendation to the Commission on RIA/LIA credit reform with data supporting the final recommendation.

Utility RIA/LIA Reform Data

Data averaged for fiscal years 2020-2023 for investor-owned utilities (regulated by the MPSC)



MPSC
MICHIGAN PUBLIC SERVICE COMMISSION

Current Residential and Low-Income Assistance

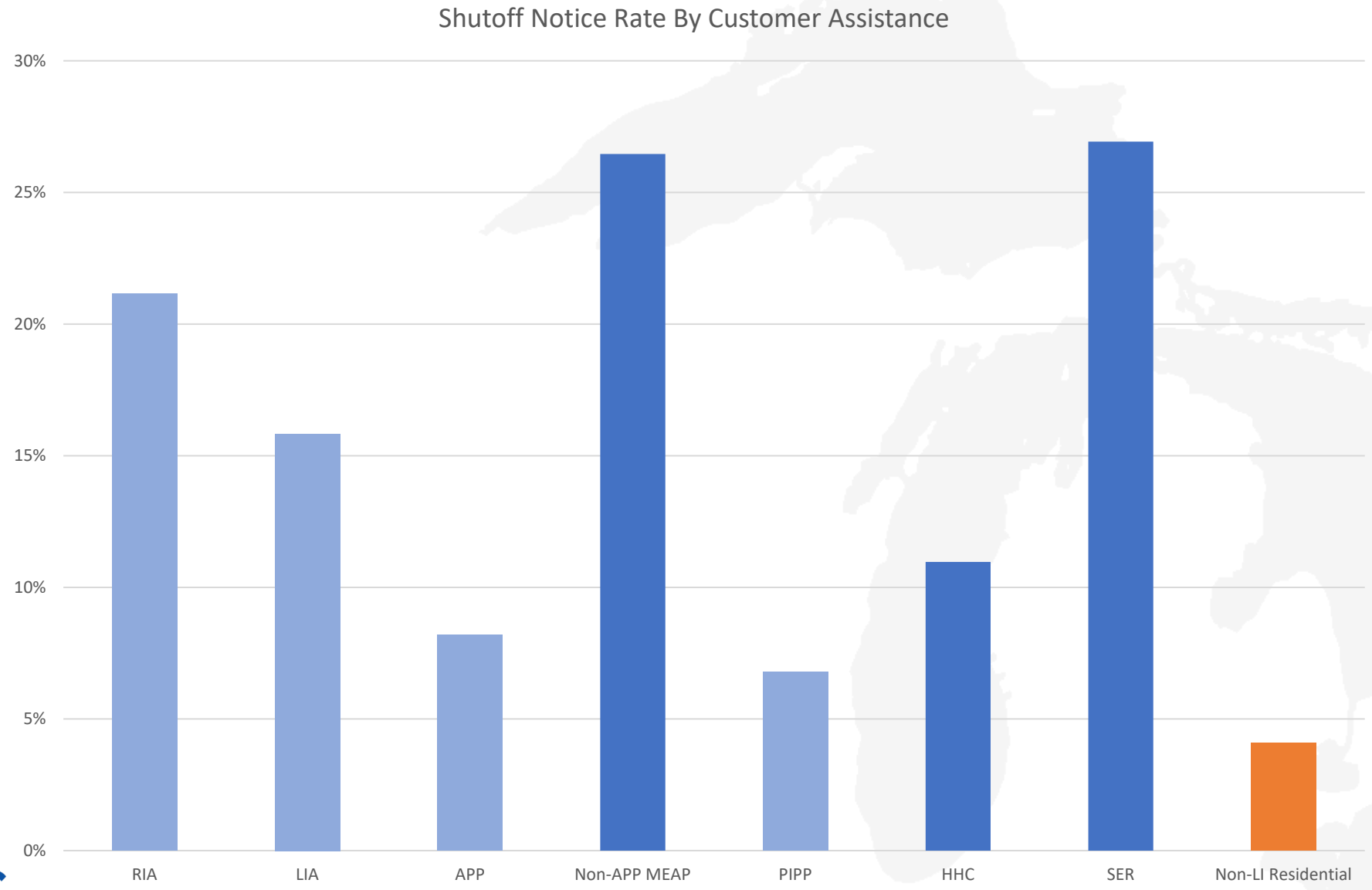
In Fiscal Year 2023:

- Number of income-qualified customer accounts ≈572,000
- RIA/LIA dollars dispersed≈$77,000,000
- Average income-qualified bill:
  - → Electric: $139.59
  - → Natural Gas: $64.37
  - → Combination Service: $185.25
- Current cost of administering RIA/LIA for a mid-sized utility:
  - → $30,000 one-time cost
  - → $70,000 annual administration

On-time Payment Rate by Assistance Type

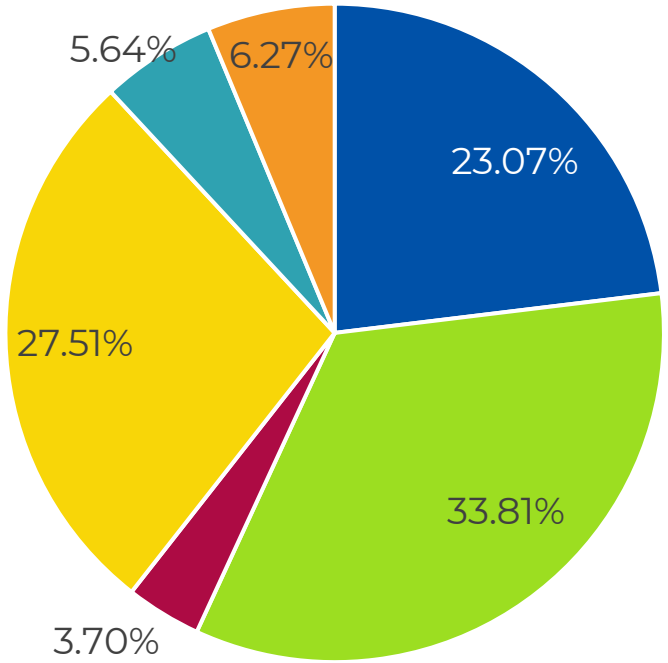


Shutoff Notice Rate by Assistance Type

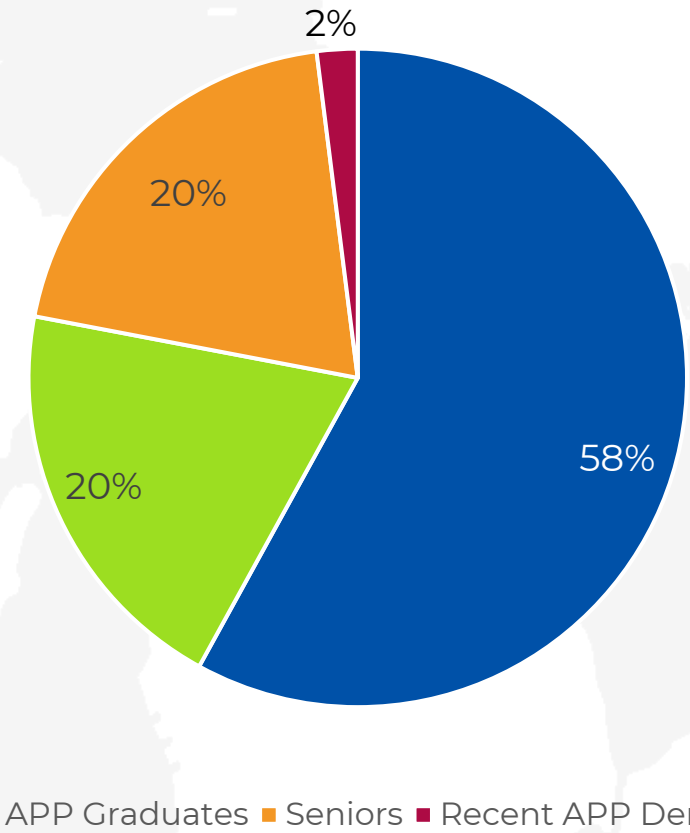


Current LIA Credit Recipients

Large Utility: Groups Prioritized for LIA



Mid-Sized Utility: Groups Prioritized for LIA



AAA RIA/LIA Reform Options Summary

- Continue the current administration of the credits
  - → Could adjust LIA enrollment cap
- Reform option 1: continue current credits, but prioritize underserved customers for the LIA
- Reform option 2: switch to a single credit that is tied to rate increases.
- Reform option 3: institute a percent of income payment plan
- The conclusions from the cost-of-service based low-income rate presentation indicated a cost-based rate not providing greater assistance.

Reform Option 1: Prioritize Underserved Customers

- Large utility:
  - $50,000 annual maintenance cost
  - $50,000 in one-time IT upgrades
- Mid-sized utility:
  - $65,000 annual administration cost
  - $75,000 one-time cost
  - $500 annually for another mid-sized utility depending on which groups are prioritized

*These numbers are based on utility self-reported estimates
*Large utility: 1-3 million customers
Mid-sized utility: 150,000-300,000 customers

Reform Option 2: Single Credit tied to Rate Increases

- Anticipated additional administrative burden to implement:
  - Large utility:
    - $200,000 annually
  - Mid-Sized utility:
    - $50,000 one-time expense
    - Annual administration costs requiring more evaluation.

Reform Option 3: Percent of Income Payment Plan

- Anticipated additional administrative burden to implement:
  - Large utility:
    - Estimated cost is $500,000 annually
  - Mid-Sized utility:
    - $260,000 annually to verify income at utility
    - $420,000 one-time cost.
    - To maintain current funding levels, enrollment would have to potentially decrease 33%. To serve all eligible customers, the cost would increase 50%.
- Bill subsidy costs for one of the current PIPP pilots is $671 per customer annually with arrearage restrictions and consumption restrictions for customers to qualify.
    - Current RIA/LIA direct costs are about $140/customer annually across all utilities.

Comparing Reform Options

	Option 1 (Prioritize underserved for LIA)	Option 2 (Single Credit of $25 [for example])	Option 3 (PIPP) *Example based off of one piloted utility with income/usage limits
Direct Bill Subsidy Per customer/month:	$30 for LIA $5-$15 for RIA	$25	$56
Annually for all eligible customers:	≈$77,000,000	$171,490,200	$383,566,414
Est. Admin Costs One time:	$50,000-75,000	$50,000	$420,000
Annual:	$50,000-65,000	$200,000	$260,000-500,000
Non-Financial Benefit	Benefit customers who haven't had access to greater assistance.	Greater benefit on average. Keeps up with rate increases.	Achieving energy security
Drawbacks	Difficult to determine eligibility.	Inequitable rate increase for smaller utility customers	Inequitable rate increase for smaller utility customers

Reminders Before our Discussion



Use the raise hand function in Teams to speak



Be respectful of diverse input



Voice dissent in a productive and respectful manner

Primer for the Discussion

- When choosing a reform recommendation, is it best to:
  - → Narrow eligibility and availability to provide greater assistance to few?
  - → Expand availability, but provide a smaller amount in assistance to all?
  - → Expand availability *and* provide greater assistance to all eligible?
    - Potentially disproportionately impact the energy burden of ALICE customers and other ratepayers.

Next Steps

Next Meeting:
To be scheduled as needed

Data:
Aggregated data will be uploaded to the website

Goals:
Awaiting the Commission's U-20757 Order for further Goals

Leadership:
Working on writing the RIA/LIA report to the Commission

Appendix 1: Authorizing Legislation: MCL 460.11(2)

"Notwithstanding any other provision of this act, the commission may establish eligible low-income customer or eligible senior citizen customer rates. Upon filing of a rate increase request, a utility shall include proposed eligible low-income customer and eligible senior citizen customer rates and a method to allocate the revenue shortfall attributed to the implementation of those rates upon all customer classes. As used in this subsection, 'eligible low-income customer' and 'eligible senior citizen customer' mean those terms as defined in section 10t."

Appendix 2: Energy Assistance Summary

- RIA credit=equal to monthly customer charge. Automatically applied when customer receives other energy assistance (SER, HHC, MEAP). Can also self-attest
- LIA credit=$30-$40 monthly credit. Applied at company's discretion. Generally given to APP customers to offset MEAP agency's portion of the subsidized bill. Can't receive RIA and LIA together

AAA website for more assistance and protections information

Appendix 2 cont.: Energy Assistance Summary

- MEAP: Michigan Energy Assistance Program
  - → $50M collected through the LIEAF surcharge to fund APPs and self-sufficiency services through community agencies
- APP: the MEAP Affordable Payment Plan
- HHC: Home Heating Credit
- SER: State Emergency Relief
- FPL: Federal Poverty Level
- ALICE: Asset-Limited, Income-Constrained, Employed

Case No. U-21534, Audit Request BMK-1.2
Requested By: Brittney Klocke
Respondents: M. Hatsios
Date of Response: 5/8/2024

Question: Please provide the following documents or data. If the requested item is already included in the Company's filing, please provide a reference to its location (exhibit, workpaper, schedule, etc.).
2) What changes or enhancements are expected for the EFC project in future years? How is this project expected to differ from that as presented in Case No. U-21297?

Answer: By future years, the Company interprets this period to be the projected 2023-2024 bridge and 2025 test periods in Case No. U-21534. Discussion of these future year enhancements are split by the EFC Core System and Customer-Facing System as shown in Exhibit A-24, Schedule N7 and as they are discussed in my direct testimony.

EFC Core System
Please see Pages MJH-73, Lines 18-25 through MJH-80, Lines 1-16, of my direct testimony for the 2023-2025 enhancements to the EFC Core System, discussed by technical component, as shown on Page 1 of Exhibit A-24, Schedule N7 in columns (c) through (e).
New 2023-2025 EFC Core System scope, relative to scope that was already approved in Case No. U-21297, includes $5.8 million in incremental capital (that was not requested for capital cost recovery in Case No. 21297) to address emergent defects as a result of the 2023 ADMS implementation, and to further enhance the PPS system, improve estimate accuracy, and to enhance outage status reporting capabilities based on learnings from 2023. See Exhibit A-24, Schedule N7, Page 1, Line 10. Also, see Exhibit A-24, Schedule N10, Pages 5-6 which provides screenshots of the Outage Map enhancements.

EFC Customer-Facing System
Please see Pages MJH-80, Lines 18-25 through MJH-84, Lines 1-7, of my direct testimony which supports the recovery of $16.8 million in incremental 2022-2024 EFC capital, which includes fully (2022 Customer Channel enhancements that were included in digital self-service project disallowances) and partially disallowed capital (2024 Level 2 project disallowance) not recovered in Case No. U-21297. See Exhibit A-24, Schedule N7, Page 3, Line 11. Also, see Exhibit A-24, Schedule N10, which provides screenshots of the 2022-2024 Web and Mobile channel enhancements.

Attachment: None.

Case No. U-21534, Audit Request BMK-1.3
Requested By: Brittney Klocke
Respondents: M. Hatsios
Date of Response: 5/8/2024

Question: Please further describe the Outage Map contained within the EFC project, and any changes being made to it for future years.

Answer: By future years, the Company interprets this period to be the projected 2023-2024 bridge and 2025 test periods in Case No. U-21534.

The current Outage Map was deployed in May 2023, concurrent with the new ADMS system. As described on Pages MJH-81, Lines 8-21, of my direct testimony, 2023 enhancements were made to improve the integration between WISMO and the Outage Map to ensure the consistency of the data that was being presented in customer outage notifications and what customers see on the Outage Map. See below for more details regarding these enhancements and their customer benefits. Please also see Pages 5-6 of Exhibit A-24, Schedule N10, in which we provided screenshots and summarized notes on the features of the Outage Map.

2023 enhancements include the following areas:
<u>Consistency and Quality of Outage Map Information</u>
• Ensuring customer outage counts match what is displayed and provided in all the customer channels.
• Updating estimate verbiage in the map for clearer messaging.
• Adjusting the use and calculation of electrical system components (e.g., transformer location) to improve the accuracy of the outage map polygons that display customer outages and enabling the ability to fix incorrect premise data used to generate outage areas displayed in the map.

<u>Resiliency and Performance of the Outage Map</u>
• In addition to the Central US Region, hosting the map from servers in the Eastern US Region to minimize down-time and ensure high availability during storms.
• Integrating master data from multiple sources and made readily available in the Cloud platform and enabling automated data feeds to the map.

<u>System Monitoring</u>
• Generating alerts when there are process or system failures that prevent the delivery and update of key data points during processing of the map inputs.
• Implementing tools to track customer engagement with the map.
• Creating a dashboard to audit and reconcile customer outage counts between the map and back-end systems (e.g., ADMS) to identify anomalies and reduce incorrect information from being displayed and communicated to customers.

2024 Outage Map enhancements include the following areas, as we continue to improve our customers' outage experience and eliminate errors in communicating with them:

Enhancing Information Provided to Customers

- Providing outage cause codes / reasons.
- Updating logic to reduce the display of overlapping areas /polygons and reduce confusion with customer counts.
- Continuing to fix incorrect premise data used to generate outage areas displayed in the map.

System Monitoring

- Generating alerts when key data points for outage areas are not rendering properly on the map.

Attachment: None.

Case No. U-21534, Audit Request BMK-1.4
Requested By: Brittney Klocke
Respondents: M. Hatsios
Date of Response: 5/8/2024

Question: 4) Please further describe what the Company learned from the 2023 catastrophic storms and what changes are being implemented to the EFC due to them, per Exhibit A-24, Schedule N3.1. Specifically, please describe the additional scope that was added to the Core and Customer-facing systems.

Answer: See below for the additional scope, mostly in 2023 and 2024, that was added to the EFC Core and Customer-facing Systems because of learnings from the 2023 catastrophic storms.

EFC Core System
• Improvements in Customer Power Status with Premise-Power Status (PPS) Enhancements in 2023 to ensure the number of customer outages align across all systems and making minor enhancements in 2024-2025 such as adding logic in our systems to allow OMS to process outages before we send communication to customers, ensuring error free outage communications. See Pages MJH-74, Lines 4-19 of my direct testimony.

• Improvements in the Accuracy and Timeliness of Restoration Estimates included standardization of processes to improve the timeliness of providing customer estimates such as aligning the daily restoration plan with our estimate strategy and machine-learning modeling to improve the accuracy of restoration estimates. Machine-learning offers the opportunity to reduce our reliance on the manual process which left customers waiting for prolonged periods of time without an estimate, especially during catastrophic storms like the one in February 2023. Work began on the model in 2023 with enhancements and testing in 2024; from these learnings, we expect to continue to refine the model over several years per industry peers who are using machine-learning to generate restoration estimates. See Pages MJH-76, Lines 4-18 through MJH-77, Lines 1-5 of my direct testimony.

• Improvements to the Outage Status and Reporting Dashboards to improve our visibility into the customers outage experience by integrating our view of Customer Power Status provided from our AMI-meters and the successful delivery of outbound customer outage notifications. See Pages MJH-78, Lines 9-19 through MJH-80, Lines 1-16 of my direct testimony for a discussion of our learnings in 2023 of what additional dashboard enhancements, and data analysis are required to effectively monitor our customers' outage experience with investments in 2024.

Customer-Facing System
• System Enhancements Workstream: The 2023 enhancements and changes to the Outage Map and the interfaces with WISMO and the SAP Customer System discussed in BMK-1.3 were

mostly in response to learnings from the 2023 catastrophic storm. Changes had to be made with the Outage Map and its interfaces to ensure the consistency and quality of data being presented to customers during significant storm events. The performance and resiliency of the map was improved by decoupling Outage reporting from our SAP Customer System so that it stood alone. Monitoring and tracking mechanisms were also implemented to make inconsistencies and anomalies in customer outage information visible so that we could remediate them during storms. See Pages MJH-81, Lines 23-25 through MJH-82, Lines 14-21, of my direct testimony.

• Customer Notifications Workstream: Learnings from the 2023 catastrophic storms led to enhancements and changes being made so that outage notification interaction records would no longer be sent to the SAP Customer System and instead stored in the DTE cloud platform for ease of access, alleviating performance issues in the SAP Customer System. We also integrated learnings into modifications to the language and content of outage Email, SMS and Voice notifications as we transitioned from the prior OMS to ADMS System. See Pages MJH-81, Line 25 through MJH-82, Lines 1-2, of my direct testimony.

• Customer Channels Workstream: Changes were made in the Web for channel resiliency to better support the higher volume of customers reporting outages during significant events such as storms and to ensure stability and consistency in the customer experience. For example, the address search function was modified and decoupled from the SAP CRM System and moved over to WISMO to retrieve this information when reporting an outage. This learning came from the 2023 catastrophic storm when we noticed that the search function was over-loading our CRM System. Web enhancements were also needed to support the Outage Map changes discussed above. Adjustments were also made to the re-write of the native mobile app with new features and functionality so that it is more intuitive and user-friendly to use in situations such as a catastrophic storm. See screenshots and summarized notes related to the native mobile app on Page 8 of Exhibit A-24, Schedule N10.

• Police and Fire Website: This Website was enhanced to better support emergency workers and city officials during storms, including the ability to identify a power line problem for locations that are difficult to identify by address or intersection by providing the ability to pin a location on a map, the capability to upload photos and provide more timely estimated time of arrival information, which were based on direct feedback following the 2023 catastrophic storm. See Pages MJH-83, Lines 12-19, of my direct testimony for where these enhancements are discussed. Please also see Page 9 of Exhibit A-24, Schedule N10 where we provided screenshots and summarized notes on the Police and Fire Website.

Attachment: None.

Michigan Public Service Commission
DTE Electric Company
2023 Energy Sales Revenue Net of Fuel Cost

Case No.: U-21260
Exhibit: A-22
Witness: E. R. Bidlingmaier
Page: 1 of 1

Line No.	(a) Description	(b) Order U-20836	(c) 2023 Actual	(d) Variance
	Energy Sales Revenue			
1	2023 Energy Market Sales - $1,000	$ 1,680,882	$ 1,184,410	$ (496,473)
2	Off-System Energy Sales - $1,000	$ -	$ -	$ -
3	Unit Specific Bilateral Energy Sales - $1,000	$ -	$ -	$ -
4	2023 Regulation, Spinning, and Supplemental Ancillary Services Sales - $1,000	$ 915	$ 3,282	$ 2,367
5	2023 Schedule 2 Reactive Ancillary Services Revenue - $1,000	$ 10,776	$ 704	$ (10,072)
6	Total 2023 Energy Sales Revenue - $1,000	$ 1,692,573	$ 1,188,395	$ (504,178)
7				
8				
9	**Fuel Related Generation Cost**			
10	Total 2023 Fuel & Fuel-Related Generation Expense - $1,000	$ 1,004,837	$ 1,020,096	$ 15,260
11	2020 Reconciliation of Net Sales Benefit Difference - $1,000	$ (351,365)		
12	**2023 Energy Sales Revenue Net of Fuel Related Costs - $1,000**	**$ 336,372**	**$ 168,299**	**$ (168,073)**

Base Capital					
Category	**2025 DGP ($M)**	**2025 U-21534 ($M)**	**Variance ($M)**	**Variance %**	**Commentary**
Emergent Replacements (Reactive Trouble and Storm Capital)	$399	$507	$107	27%	- Emergent capital is forecasted based upon a five year historical average for each bucket -DGP emergent capital totaled $399 MM for 2025, which was based upon the historical 5-year average in U-21297, which averaged investments from 2017 to 2021, less the projected Emergent Reduction due to Strategic Spend -For the instant electric rate case, emergent increased to $507 MM because the 5-year average dropped 2017 and includes 2022 -The five-year average increased by $63M primarily driven by -Replacing lower investment of $313M in 2017 to a higher investment of $485M in 2022 -Increased inflation rates in 2022, driven by a 4.4% increase (3.6% to 8%) -The remaining $45M difference is due to an inflation adjustment to convert the 2022 dollars to 2025 dollars, using an average inflation of 3% per year
Customer Connections, Relocations and Others	$296	$301	$5	2%	
Total Base Capital	**$695**	**$808**	**$113**	**16%**	

Maintenance Programs					
Category	**2025 DGP ($M)**	**2025 U-21534 ($M)**	**Variance ($M)**	**Variance %**	**Commentary**
Tree Trimming	$140	$240	$100	71%	The $140M in the DGP is an error, it should have been $153M. Therefore, the variance should have been $87M, which is the incremental Regulatory Asset increase discussed in witness Rachel Steudle testimony.
Preventive Maintenance	$10	$12	$2	24%	For the instant rate case, preventative maintenance is based upon $11.3 million for the historic test year and $1 million due to inflation adjustment to convert 2022 actuals to 2025 dollars.
Total Maintenance Programs	**$150**	**$252**	**$102**	**68%**	

Infrastructure Resilience & Hardening					
Category	**2025 DGP**	**2025 Rate Case**	**Variance**	**Variance %**	**Commentary**
Pole and Pole Top Maintenance and Modernization	$121	$121	$0	0%	
4.8 KV Hardening	$95	$125	$30	32%	The increase is to accelerate the program to allow it to finish in 2026
4.8 KV Automatic Pole Top Switch (APTS)	$5	$5	($0)	0%	
SCADA Pole Top Device	$2	$2	$0	2%	
Steel Pole Highway Crossings	$5	$5	$0	0%	
System Cable Replacement	$20	$17	($3)	-17%	Reduced to support increased investments in CEMI & 4.8kV Hardening to accelerate the removal of arc wire
Underground Residential Distribution (URD Cable)	$15	$14	($2)	-10%	Reduced to match Commission IRM approval amount
Subtransmission Disconnect Switches	$3	$3	$0	0%	
Circuit Switchers	$2	$2	($0)	-5%	
Circuit Breakers	$15	$13	($2)	-16%	Reduced to match Commission IRM approval amount
Substation Regulators	$1	$1	($0)	-18%	Reduced to support increased investments in CEMI & 4.8kV Hardening to accelerate the removal of arc wire
Batteries & Chargers	$3	$3	$0	1%	
Substation Outage Risk	$2	$9	$7	365%	Shifting Chestnut investment from 2024 to 2025 to accommodate increased 2024 McGraw investment
Station Upgrades	$9	$6	($3)	-37%	Reduced to support increased investments in CEMI & 4.8kV Hardening to accelerate the removal of arc wire
Mobile Fleet	$2	$2	($1)	-25%	Reduced to support increased investments in CEMI & 4.8kV Hardening to accelerate the removal of arc wire
Frequent Outage (CEMI) including Circuit Renewal	$20	$62	$42	212%	The Company initially forecasted to ramp CEMI down; however, given the recent reliability performance of our system, the Company has determined that this program needs to continue at its existing funding level until reliability improves
120kV Relays Upgrade for ITC Projects	$0	$2	$2		Added project post DGP submission
DTE-ITC Animal Mitigation	$0	$0	$0		Added project post DGP submission
Total Infrastructure Resilience & Hardening	**$320**	**$391**	**$71**	**22%**	

Infrastructure Redesign & Modernization					
Category	**2025 DGP**	**2025 Rate Case**	**Variance**	**Variance %**	**Commentary**
System Loading	$75	$79	$4	6%	
Substransmission Redesign & Rebuild	$100	$107	$6	6%	
4.8 kV Conversion and Consolidation	$76	$96	$19	25%	Net increase in Conversion projects of 13% (conversion projects are 4.8 kV, CODI, and 8.3 kV).
City of Detroit Infrastructure (CODI)	$126	$147	$21	17%	The largest investment increase is related to the 4.8 kV ISO conversion program to expand the
8.3 kV Conversion and Consolidation	$31	$22	($9)	-28%	number of ISO down areas being worked on in 2025.
Strategic Undergrounding	$5	$16	$11	220%	$11M increase in additional undergrounding projects
Total Infrastructure Redesign & Modernization	**$414**	**$467**	**$53**	**13%**	

Technology & Automation					
Category	**2025 DGP**	**2025 Rate Case**	**Variance**	**Variance %**	**Commentary**
Grid Automation	163	151	-12	-7%	
Grid Automation Telecommunications	15	15	0	0%	
CVR/VVO	5	3	-3	-50%	Reduced to support increased investments in other Technology and Automation projects
Capacitor Replacement and Control Program	6	6	0	-7%	
NWA Projects	1	17	16	1623%	DTE received DOE grant for Adapative Networked Microgrids that requires a matching investment from the Company.
Grid Edge Enablement program	4	5	1	18%	In the Rate Case, the New Technology Evaluation Program is grouped with Grid Edge Enablement program. As such, there is no variance.
Vehicle Electrification Projects	1	3	2	150%	Timing of funding shifted due to external customer needs
Line Sensors	0	0	0	0%	
URD Fault Indicators	3	0	-3	-100%	In the Rate Case, this project is grouped with Grid Automation; however, it is now $1M of spend, not $3M.
Large/Medium Sized DER Monitoring and Control	0	0	0	-3%	
New Technology Evaluation Program	1	0	-1	-100%	In the Rate Case, the New Technology Evaluation Program is grouped with Grid Edge Enablement program. As such, there is no variance.
Grid Management	26	36	10	39%	Addition of Customer Power Status Visibility Project
Distribution Planning	13	13	0	-2%	
Work Management and Scheduling	14	6	-8	-54%	Reduced to support increased investments in other Technology and Automation projects
Asset Management	3	1	-2	-80%	Reduced to support increased investments in other Technology and Automation projects
Mobile Technology	6	5	-1	-10%	Reduced to support increased investments in other Technology and Automation projects
Total Technology & Automation	**261**	**260**	**-1**	**0%**	

Total Strategic Capital	**995**	**1,117**	**123**	**12%**