



DTE Electric Company
One Energy Plaza, 1635 WCB
Detroit, MI 48226-1221

Estella R. Branson
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July 2, 2026

Lisa Felice
Executive Secretary
Michigan Public Service Commission
7109 West Saginaw Highway
Lansing, Michigan 48917

RE: In the matter of the Application of **DTE ELECTRIC COMPANY** for Approval
of Special Contracts and for other relief
MPSC Case No: U-22058

Dear Ms. Felice:

Enclosed for electronic filing in the above captioned matter is DTE Electric Company's Official Exhibits A-2 through A-4, and A-7 through A-13. If you have any questions or concerns about this filing, please contact me at the above reference number.

Respectfully submitted,

Estella R. Branson
Senior Paralegal

Enclosure

Line No.	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
			2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
1	Sales and Requirement Calculation		Source									
2	Method: Weather Normalized or 3 Year Average											
3	If Selected Weather Normalized:											
4	Current Year Sales to Retail Customers	U-21662 Exh A-29 Column (i)	39,634,892	39,497,918	39,869,525	39,910,589	40,013,252	40,203,583	40,511,120	40,702,673	41,076,945	41,418,790
5	Incremental First Data Center Customer Load	U-21990	3,285	5,031,963	10,903,572	10,903,572	10,903,572	10,903,572	10,903,572	10,903,572	10,903,572	10,903,572
6	Incremental Second Data Center Customer Load	WP-1	-	33,480	3,300,480	7,884,000	7,884,000	7,884,000	7,884,000	7,884,000	7,884,000	7,884,000
7	Less Number of Megawatt Hours Sold from Michigan Nuclear Energy		-	-	-	-	-	-	-	-	-	-
8	Current Year Weather Normalization Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
9	Less VGP sales	U-21662 WP-6	2,794,617	5,358,090	6,616,223	7,426,909	7,415,003	7,385,969	7,375,761	7,328,315	7,299,690	7,271,202
10	Less Incremental VGP Sales	WP-1	-	-	-	-	997,527	2,398,048	3,203,084	3,178,360	3,162,468	3,146,656
11	Less Outflow from DG Customers	U-21662 Exh A-29 Column (j)	55,355	68,099	83,171	100,829	121,202	143,020	164,705	185,876	204,715	222,048
12	Current Year Weather Normalized Sales	Calculated	36,788,205	39,137,172	47,374,183	51,170,422	50,267,091	49,064,118	48,555,143	48,797,693	49,197,643	49,566,457
13	If Selected 3 Year Average:											
14	Current Year Retail Sales to Retail Customers											
15	Less Number of Megawatt Hours Sold from Michigan Nuclear Energy											
16	Less VGP sales											
17	Less outflow from DG customers											
18	3 Year Average of sales											
19	RPS Required Energy Credits (For 2026 through 2029 15%, 2030 through 2034 50% 2035 and beyond 60%)	Calculated	5,667,532	5,518,231	5,870,576	7,106,127	25,585,211	25,133,545	24,532,059	24,277,571	24,398,847	29,518,586
20	Energy Credits											
21	Energy Credit Beginning Balance	Line 26	2,455,332	2,833,451	5,401,814	9,327,780	15,308,233	5,072,900	(2,451,067)	(8,173,568)	(11,708,730)	(13,312,505)
22	Plus: Energy Credits Obtained Through Generation/BOT	U-21662 Exh A-4 +WP-4	3,405,313	4,785,213	5,979,683	7,689,837	9,356,714	11,743,705	13,258,615	15,574,681	17,938,444	20,437,898
23	Plus: Energy Credits Obtained Through PPA	U-21662 Exh A-4 +WP-4	2,356,962	3,025,469	3,451,320	4,117,483	4,736,487	4,639,271	4,337,065	3,947,786	3,380,699	3,300,608
24	Plus: Energy Credits Obtained Through REC Purchases ¹	U-21662 Exh A-4 Line 7	283,377	275,912	365,538	1,279,261	1,256,677	1,226,603	1,213,879	1,219,942	1,475,929	1,486,994
25	Less: Energy Credits Sold		-	-	-	-	-	-	-	-	-	-
26	Available Energy Credits (Lines 21 + 22 + 23 + 24 - 25)	Calculated	8,500,983	10,920,045	15,198,356	22,414,360	30,658,111	22,682,478	16,358,491	12,568,841	11,086,342	11,912,994
27	Less: Compliance Requirement (Line 19)	Calculated	5,667,532	5,518,231	5,870,576	7,106,127	25,585,211	25,133,545	24,532,059	24,277,571	24,398,847	29,518,586
28	Less: Energy Credit Expired		-	-	-	-	-	-	-	-	-	-
29	Energy Credit Ending Balance (Lines 26 - 27 - 28)	Calculated	2,833,451	5,401,814	9,327,780	15,308,233	5,072,900	(2,451,067)	(8,173,568)	(11,708,730)	(13,312,505)	(17,605,592)
30	Base Case without Data Center Load											
31	RPS Required Energy Credits (For 2026 through 2029 15%, 2030 through 2034 50% 2035 and beyond 60%)	U-21662 Exh A-2 Line 16	5,667,532	5,517,738	5,110,759	4,975,520	16,191,425	16,238,523	16,337,297	16,485,327	16,594,241	20,143,524
32	Energy Credit Ending Balance	U-21662 Exh A-2 Line 26	2,833,451	5,402,282	9,978,064	17,058,641	15,769,987	16,726,366	18,801,613	22,663,019	28,217,633	32,819,791
33	Updated RPS											
34	Required RECs adjusted to include First Data Center Customer	U-21990 Exh A-3 Line 16	5,667,532	5,518,231	5,865,554	6,611,055	21,643,211	21,690,309	21,789,083	21,937,113	22,046,027	26,685,667
35	Required RECs adjusted to include both Data Center Customers	Line 19	5,667,532	5,518,231	5,870,576	7,106,127	25,585,211	25,133,545	24,532,059	24,277,571	24,398,847	29,518,586
36	With Additional 1800 MW for First Customer (Case U-21990) and 1600 MW VGP for Second Customer											
37	Energy Credit Ending Balance		2,833,451	5,401,814	9,317,548	15,298,001	6,794,075	1,859,360	686,444	1,459,343	3,572,386	2,693,688

1. Updated to represent 5% of RPS requirement through 2035

Line No.	(a)	(b)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)
			2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
1	Sales and Requirement Calculation	Source										
2	Method: Weather Normalized or 3 Year Average											
3	If Selected Weather Normalized:											
4	Current Year Sales to Retail Customers	U-21662 Exh A-29 Column (i)	41,796,601	41,972,411	42,220,700	42,421,326	42,654,688	42,699,590	42,849,878	43,041,817	43,325,884	43,439,572
5	Incremental First Data Center Customer Load	U-21990	10,903,572	10,903,572	10,903,572	10,903,572	10,903,572	10,903,572	10,903,572	10,903,572	10,903,572	10,903,572
6	Incremental Second Data Center Customer Load	WP-1	7,884,000	7,884,000	7,884,000	7,884,000	7,884,000	7,884,000	7,884,000	7,884,000	7,884,000	7,884,000
7	Less Number of Megawatt Hours Sold from Michigan Nuclear Energy		-	-	-	-	-	-	-	-	-	-
8	Current Year Weather Normalization Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
9	Less VGP sales	U-21662 WP-6	7,261,222	7,214,626	7,186,536	7,158,575	7,148,812	7,103,051	7,075,484	7,048,047	7,038,504	6,993,562
10	Less Incremental VGP Sales	WP-1	3,139,501	3,115,268	3,099,692	3,084,193	3,077,180	3,053,429	3,038,161	3,022,971	3,016,097	2,992,817
11	Less Outflow from DG Customers	U-21662 Exh A-29 Column (j)	239,754	257,838	276,311	295,137	313,920	332,890	352,794	373,097	393,673	414,458
12	Current Year Weather Normalized Sales	Calculated	49,943,696	50,172,251	50,445,733	50,670,992	50,902,347	50,997,792	51,171,010	51,385,273	51,665,183	51,826,308
13	If Selected 3 Year Average:											
14	Current Year Retail Sales to Retail Customers											
15	Less Number of Megawatt Hours Sold from Michigan Nuclear Energy											
16	Less VGP sales											
17	Less outflow from DG customers											
18	3 Year Average of sales											
19	RPS Required Energy Credits (For 2026 through 2029 15%, 2030 through 2034 50% 2035 and beyond 60%)	Calculated	29,739,874	29,966,218	30,103,350	30,267,440	30,402,595	30,541,408	30,598,675	30,702,606	30,831,164	30,999,110
20	Energy Credits											
21	Energy Credit Beginning Balance	Line 26	(17,605,592)	(20,860,040)	(21,739,132)	(20,104,865)	(16,009,553)	(9,319,900)	(238,954)	11,275,395	22,809,220	33,986,930
22	Plus: Energy Credits Obtained Through Generation/BOT	U-21662 Exh A-4 +WP-4	23,189,448	25,812,563	28,475,980	31,113,974	33,847,982	36,399,106	38,902,443	39,038,455	38,815,294	38,478,159
23	Plus: Energy Credits Obtained Through PPA	U-21662 Exh A-4 +WP-4	3,295,979	3,274,563	3,261,638	3,248,777	3,244,266	3,223,249	3,210,581	3,197,976	3,193,581	3,172,955
24	Plus: Energy Credits Obtained Through REC Purchases ¹	U-21662 Exh A-4 Line 7	-	-	-	-	-	-	-	-	-	-
25	Less: Energy Credits Sold		-	-	-	-	-	-	-	-	-	-
26	Available Energy Credits (Lines 21 + 22 + 23 + 24 - 25)	Calculated	8,879,834	8,227,086	9,998,486	14,257,886	21,082,695	30,302,455	41,874,071	53,511,826	64,818,094	75,638,043
27	Less: Compliance Requirement (Line 19)	Calculated	29,739,874	29,966,218	30,103,350	30,267,440	30,402,595	30,541,408	30,598,675	30,702,606	30,831,164	30,999,110
28	Less: Energy Credit Expired		-	-	-	-	-	-	-	-	-	-
29	Energy Credit Ending Balance (Lines 26 - 27 - 28)	Calculated	(20,860,040)	(21,739,132)	(20,104,865)	(16,009,553)	(9,319,900)	(238,954)	11,275,395	22,809,220	33,986,930	44,638,934
30	Base Case without Data Center Load											
31	RPS Required Energy Credits (For 2026 through 2029 15%, 2030 through 2034 50% 2035 and beyond 60%)	U-21662 Exh A-2 Line 16	20,355,325	20,577,375	20,699,968	20,854,712	20,980,568	21,115,173	21,158,189	21,252,960	21,372,403	21,536,224
32	Energy Credit Ending Balance	U-21662 Exh A-2 Line 26	39,967,659	49,506,278	61,578,926	76,129,701	93,290,409	112,853,350	134,866,094	156,912,213	178,617,304	199,809,005
33	Updated RPS											
34	Required RECs adjusted to include First Data Center Customer	U-21990 Exh A-3 Line 16	26,897,468	27,119,518	27,242,111	27,396,855	27,522,711	27,657,316	27,700,333	27,795,103	27,914,546	28,078,367
35	Required RECs adjusted to include both Data Center Customers	Line 19	29,739,874	29,966,218	30,103,350	30,267,440	30,402,595	30,541,408	30,598,675	30,702,606	30,831,164	30,999,110
36	With Additional 1800 MW for First Customer (Case U-21990) and 1600 MW VGP for Second Customer											
37	Energy Credit Ending Balance		2,854,161	5,403,494	10,459,073	17,958,589	28,044,705	40,495,900	55,363,645	70,234,099	84,740,852	98,696,202

1. Updated to represent 5% of RPS requirement through 2035



Justin J. W. Brooks, P.E.

Project Lead

jbrooks@power-gem.com | Charlotte, NC | <https://www.linkedin.com/in/justinbrookspowergem/>

PROFESSIONAL SUMMARY

Mr. Brooks has fourteen years of experience in resource adequacy analysis and nuclear engineering. Areas of expertise include physical reliability studies, capacity accreditation methodologies, production cost modeling, utility integrated resource planning (IRP), and software development for resource adequacy applications. As a Project Lead with PowerGEM, Mr. Brooks leads reliability and resource adequacy studies for utility clients and manages the SERVVM software development team. Prior to joining PowerGEM, Mr. Brooks served as a Lead Quantitative Analyst at Duke Energy and began his career in the naval nuclear propulsion program at Newport News Shipbuilding and the Naval Nuclear Laboratory. Mr. Brooks is a licensed Professional Engineer, holds an M.S. in Mechanical and Nuclear Engineering from Virginia Commonwealth University, and a B.S. in Nuclear Engineering from North Carolina State University.

WORK EXPERIENCE

Project Lead

April 2024 - Present

PowerGEM, Charlotte, NC

- Manage the SERVVM Software Development Team
- Manage and perform Resource Adequacy Analysis for large scale utilities

Lead Quantitative Analyst

October 2019 – April 2024

Duke Energy, Charlotte, NC

- Lead analyst for physical reliability analysis for all Duke jurisdictions. Develop and run in-house and third-party models, input tooling, and output tooling.
- Assisted with writing testimony and discovery requests for regulatory proceedings. Authored portions of various Integrated Resource Plans.
- Served on the Southeast Reliability Corporation (SERC) Resource Adequacy Working Group (RAWG) supporting ProbA studies.

Senior Nuclear Engineer

April 2017 - September 2019

Naval Nuclear Laboratory, Pittsburgh, PA

- Lead Nuclear Safety Engineer for Federal Project 20-D-931 (KL Fuel Development Laboratory).
- Nuclear Safety Engineer supporting naval spent fuel.

Engineer Nuclear II

May 2017 – April 2017

Newport News Shipbuilding, Newport News, VA

- Worked in several different business areas across multiple platforms (Aircraft Carrier, Submarine, and Training Prototype).
- Lead Radiation Shielding Engineer: Managed all aspects of the temporary radiation shielding program for Overhaul Engineering including design and installation across multiple platforms.



- Underhull Tank Entry: Lead Engineer for preliminary tank access including development of multiple temporary systems and mock-up structures. Managed cost, schedule, and developed engineering products for concurrent job scopes.

REPORTS & WHITE PAPERS

"Wide-Area Resource Adequacy Assessments. Probabilistic Planning for Interconnected Grids." Prepared for Energy Systems Integration Group. 2025.

"Duke Energy Carolinas and Duke Energy Progress Effective Load Carrying Capability (ELCC) Report." Prepared for Duke Energy. 2025.

"New Resource Adequacy Criteria for the Energy Transition. Modernizing Reliability Requirements." Prepared for Energy Systems Integration Group. 2024.

EDUCATION

M.S. in Mechanical and Nuclear Engineering

December 2015

Virginia Commonwealth University, Richmond, VA

B.S. in Nuclear Engineering

May 2012

North Carolina State University, Raleigh, NC

SKILLS

Technical Skills: SERVM, PowerSIMM, Python, C#, MATLAB, Autodesk Suite

Industry Knowledge: Resource Adequacy, Capacity Accreditation, Integrated Resource Planning

Soft Skills: Employee Engagement, Project Management, Vendor Relations, Technical Writing

CERTIFICATIONS & LICENSES

- Professional Engineer License Number 051456–NCBELS, 2020



Date, 02 March 2026

As requested, PowerGEM has performed a resource adequacy analysis of the DTE Electric (DTE) system in future years 2029 and 2033. This analysis evaluated the proposed build plans created by DTE in support of the Customer 2 Data Center and was conducted with DTE being interconnected to the Midcontinent Independent System Operator (MISO) system. This interconnected system was stochastically simulated in PowerGEMs proprietary Strategic Energy and Risk Valuation Model (SERVM). For each proposed build plan a total of 11,000 scenarios at an hourly resolution considering uncertainty in weather, economic load growth, and generator performance were evaluated.

To be found resource adequate, the system needed to demonstrate that it's Loss of Load Expectation (LOLE), measured in units of event-day per year, meets or exceeds the commonly used threshold of one day in ten years or 0.1 LOLE. The results of the analysis were:

Year	LOLE [event-day per year]	Result
2029	0.102	Pass
2033	0.238	Fail

To rectify the resource adequacy problem identified in 2033, 677 MW of perfect capacity were required to bring the system back to the threshold of 0.1 LOLE. DTE provided a revised 2033 build plan with a placeholder firm capacity resource for 2033. The results of the revised build plan were:

Year	LOLE [event-day per year]	Result
2033	0.093	Pass

Which satisfied the one day in ten years resource adequacy threshold.

Sincerely,

/s/

Justin J. W. Brooks, P.E.
Project Lead

Michigan Public Service Commission
DTE Electric Company
Projected Fuel, Purchases and Sales of Power, and PSCR Expense - Base Case
Years 2028 - 2047

Case No.: U-22058
Exhibit: A-7
Witness: S. D. Burgdorf
Page: 1 of 1

Line No.	(a) Description	(b) 2028	(c) 2029	(d) 2030	(e) 2031	(f) 2032	(g) 2033	(h) 2034	(i) 2035	(j) 2036	(k) 2037	(l) 2038	(m) 2039	(n) 2040	(o) 2041	(p) 2042	(q) 2043	(r) 2044	(s) 2045	(t) 2046	(u) 2047
1	Generation & Fuel																				
2	- GWh	37,864	27,863	25,554	27,110	26,226	26,630	22,512	24,410	22,399	22,884	20,668	20,668	20,668	20,668	20,668	20,668	20,668	20,668	20,668	20,668
3	- \$1,000	\$ 945,589	\$ 724,517	\$ 737,150	\$ 769,861	\$ 773,248	\$ 746,194	\$ 632,624	\$ 670,121	\$ 621,745	\$ 618,134	\$ 591,359	\$ 591,359	\$ 591,359	\$ 591,359	\$ 591,359	\$ 591,359	\$ 591,359	\$ 591,359	\$ 591,359	\$ 591,359
4																					
5	Ludington+Battery Losses																				
6	- GWh	(700)	(1,055)	(1,081)	(1,166)	(1,145)	(1,103)	(1,061)	(1,146)	(1,637)	(1,693)	(1,644)	(1,644)	(1,644)	(1,644)	(1,644)	(1,644)	(1,644)	(1,644)	(1,644)	(1,644)
7																					
8	Net Wholesale Power Purchases/Sales																				
9	- GWh	16,531	27,005	29,549	28,153	29,223	28,823	33,087	31,470	34,309	33,994	36,588	36,588	36,588	36,588	36,588	36,588	36,588	36,588	36,588	36,588
10	- \$1,000	\$ 1,164,982	\$ 1,793,271	\$ 2,025,539	\$ 1,984,108	\$ 2,120,693	\$ 2,206,783	\$ 2,469,713	\$ 2,334,189	\$ 2,277,418	\$ 2,319,688	\$ 2,531,393	\$ 2,531,393	\$ 2,531,393	\$ 2,531,393	\$ 2,531,393	\$ 2,531,393	\$ 2,531,393	\$ 2,531,393	\$ 2,531,393	\$ 2,531,393
11																					
12	Emission Allowances																				
13	NOx Seasonal - \$1,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14	NOx Annual - \$1,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15	SO2 (CSAPR) - \$1,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
16	SO2 (ARP) - \$1,000	\$ 0	\$ 0	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
17																					
18	Chemical Costs																				
19	Urea - \$1,000	\$ 21,049	\$ 10,496	\$ 10,057	\$ 10,914	\$ 11,143	\$ 11,437	\$ 8,997	\$ 10,820	\$ 11,086	\$ 11,240	\$ 9,510	\$ 9,510	\$ 9,510	\$ 9,510	\$ 9,510	\$ 9,510	\$ 9,510	\$ 9,510	\$ 9,510	\$ 9,510
20	Limestone - \$1,000	\$ 9,445	\$ 4,710	\$ 4,513	\$ 4,897	\$ 5,000	\$ 5,132	\$ 4,037	\$ 4,855	\$ 4,974	\$ 5,043	\$ 4,267	\$ 4,267	\$ 4,267	\$ 4,267	\$ 4,267	\$ 4,267	\$ 4,267	\$ 4,267	\$ 4,267	\$ 4,267
21	Ammonia - \$1,000	\$ 1,631	\$ 1,567	\$ 1,350	\$ 1,472	\$ 1,555	\$ 1,492	\$ 1,425	\$ 1,375	\$ 1,336	\$ 1,182	\$ 1,297	\$ 1,297	\$ 1,297	\$ 1,297	\$ 1,297	\$ 1,297	\$ 1,297	\$ 1,297	\$ 1,297	\$ 1,297
22	Potassium Iodide - \$1,000	\$ 916	\$ 457	\$ 437	\$ 475	\$ 485	\$ 498	\$ 391	\$ 471	\$ 482	\$ 489	\$ 414	\$ 414	\$ 414	\$ 414	\$ 414	\$ 414	\$ 414	\$ 414	\$ 414	\$ 414
23																					
24	Net System Output																				
25	- GWh	53,696	53,812	54,022	54,098	54,305	54,351	54,539	54,734	55,072	55,185	55,612	55,612	55,612	55,612	55,612	55,612	55,612	55,612	55,612	55,612
26	- \$1,000	\$ 2,143,612	\$ 2,535,018	\$ 2,779,046	\$ 2,771,727	\$ 2,912,124	\$ 2,971,536	\$ 3,117,188	\$ 3,021,830	\$ 2,917,041	\$ 2,955,775	\$ 3,138,241	\$ 3,138,241	\$ 3,138,241	\$ 3,138,241	\$ 3,138,241	\$ 3,138,241	\$ 3,138,241	\$ 3,138,241	\$ 3,138,241	\$ 3,138,241
27	- \$/MWh	\$ 39.92	\$ 47.11	\$ 51.44	\$ 51.24	\$ 53.63	\$ 54.67	\$ 57.16	\$ 55.21	\$ 52.97	\$ 53.56	\$ 56.43	\$ 56.43	\$ 56.43	\$ 56.43	\$ 56.43	\$ 56.43	\$ 56.43	\$ 56.43	\$ 56.43	\$ 56.43
28																					
29	Bundled Transmission																				
30	- \$1,000	\$702,259	\$797,911	\$914,961	\$974,102	\$1,057,734	\$1,164,666	\$1,307,665	\$1,464,381	\$1,488,354	\$1,509,434	\$1,535,282	\$1,561,143	\$1,588,508	\$1,612,167	\$1,637,651	\$1,648,805	\$1,661,770	\$1,642,020	\$1,654,398	\$1,661,912
31																					
32	Non-PSCR Customer Sales Adjustment																				
33	- GWh	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919
34	- \$1,000	\$ 45,917	\$ 45,927	\$ 47,084	\$ 48,769	\$ 48,712	\$ 47,559	\$ 45,401	\$ 45,569	\$ 44,359	\$ 44,661	\$ 45,738	\$ 45,738	\$ 45,738	\$ 45,738	\$ 45,738	\$ 45,738	\$ 45,738	\$ 45,738	\$ 45,738	\$ 45,738
35																					
36	Transmission Adjustment																				
37	- GWh	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919
38	- \$1,000	\$ 12,015	\$ 13,622	\$ 15,560	\$ 16,542	\$ 17,894	\$ 19,686	\$ 22,027	\$ 24,579	\$ 24,828	\$ 25,128	\$ 25,362	\$ 25,789	\$ 26,242	\$ 26,632	\$ 27,053	\$ 27,238	\$ 27,470	\$ 27,143	\$ 27,348	\$ 27,472
39																					
40	PSCR Fuel & Purchased Power																				
41	- GWh	52,777	52,893	53,103	53,179	53,386	53,433	53,620	53,815	54,153	54,267	54,693	54,693	54,693	54,693	54,693	54,693	54,693	54,693	54,693	54,693
42	- \$1,000	\$ 2,787,939	\$ 3,273,380	\$ 3,631,363	\$ 3,680,518	\$ 3,903,252	\$ 4,068,958	\$ 4,357,424	\$ 4,416,063	\$ 4,336,208	\$ 4,395,421	\$ 4,602,422	\$ 4,627,856	\$ 4,654,769	\$ 4,678,038	\$ 4,703,100	\$ 4,714,070	\$ 4,726,804	\$ 4,707,379	\$ 4,719,553	\$ 4,726,943
43	- \$/MWh	\$ 52.82	\$ 61.89	\$ 68.38	\$ 69.21	\$ 73.11	\$ 76.15	\$ 81.26	\$ 82.06	\$ 80.07	\$ 81.00	\$ 84.15	\$ 84.61	\$ 85.11	\$ 85.53	\$ 85.99	\$ 86.19	\$ 86.42	\$ 86.07	\$ 86.29	\$ 86.43

**Michigan Public Service Commission
DTE Electric Company
Purchased Power, Sales, and Expense - Base Case
Years 2028 - 2047**

Case No.: U-22058
Exhibit: A-8
Witness: S. D. Burgdorf
Page: 1 of 1

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)
Line No.	Description	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
1	MISO WHOLESALE PURCHASES & SALES																				
2	MISO Wholesale Purchases																				
3	- GWh	\$ 5,202	\$ 11,287	\$ 10,750	\$ 7,950	\$ 6,716	\$ 5,115	\$ 6,572	\$ 4,631	\$ 5,780	\$ 5,219	\$ 6,515	\$ 6,515	\$ 6,515	\$ 6,515	\$ 6,515	\$ 6,515	\$ 6,515	\$ 6,515	\$ 6,515	\$ 6,515
4	- \$1,000	\$ 185,683	\$ 430,542	\$ 394,517	\$ 291,753	\$ 241,843	\$ 215,375	\$ 289,038	\$ 190,907	\$ 168,522	\$ 167,546	\$ 230,376	\$ 230,376	\$ 230,376	\$ 230,376	\$ 230,376	\$ 230,376	\$ 230,376	\$ 230,376	\$ 230,376	\$ 230,376
5	-\$/MWh	\$ 35.70	\$ 38.15	\$ 36.70	\$ 36.70	\$ 36.01	\$ 42.11	\$ 43.98	\$ 41.22	\$ 29.16	\$ 32.10	\$ 35.36	\$ 35.36	\$ 35.36	\$ 35.36	\$ 35.36	\$ 35.36	\$ 35.36	\$ 35.36	\$ 35.36	\$ 35.36
6																					
7	MISO Wholesale Sales																				
8	- GWh	\$ 3,660	\$ 2,189	\$ 2,457	\$ 3,963	\$ 4,637	\$ 5,664	\$ 5,048	\$ 6,977	\$ 8,238	\$ 8,397	\$ 7,165	\$ 7,165	\$ 7,165	\$ 7,165	\$ 7,165	\$ 7,165	\$ 7,165	\$ 7,165	\$ 7,165	\$ 7,165
9	- \$1,000	\$ 202,836	\$ 133,236	\$ 167,389	\$ 246,832	\$ 277,852	\$ 272,455	\$ 215,148	\$ 310,172	\$ 437,392	\$ 433,890	\$ 385,606	\$ 385,606	\$ 385,606	\$ 385,606	\$ 385,606	\$ 385,606	\$ 385,606	\$ 385,606	\$ 385,606	\$ 385,606
10	-\$/MWh	\$ 55.41	\$ 60.87	\$ 68.14	\$ 62.28	\$ 59.92	\$ 48.10	\$ 42.62	\$ 44.46	\$ 53.10	\$ 51.67	\$ 53.82	\$ 53.82	\$ 53.82	\$ 53.82	\$ 53.82	\$ 53.82	\$ 53.82	\$ 53.82	\$ 53.82	\$ 53.82
11																					
12	MISO Market Expenses (excluding Sch 16 &17) - \$1,000	\$ 78,564	\$ 63,698	\$ 55,344	\$ 59,526	\$ 57,442	\$ 58,488	\$ 57,971	\$ 58,237	\$ 58,116	\$ 58,185	\$ 58,164	\$ 58,164	\$ 58,164	\$ 58,164	\$ 58,164	\$ 58,164	\$ 58,164	\$ 58,164	\$ 58,164	\$ 58,164
13																					
14	NET MISO PURCHASES & SALES																				
15	- GWh	\$ 1,541	\$ 9,098	\$ 8,294	\$ 3,986	\$ 2,078	\$ (550)	\$ 1,524	\$ (2,346)	\$ (2,458)	\$ (3,178)	\$ (649)	\$ (649)	\$ (649)	\$ (649)	\$ (649)	\$ (649)	\$ (649)	\$ (649)	\$ (649)	\$ (649)
16	- \$1,000	\$ 61,411	\$ 361,004	\$ 282,473	\$ 104,446	\$ 21,432	\$ 1,408	\$ 131,861	\$ (61,028)	\$ (210,753)	\$ (208,160)	\$ (97,067)	\$ (97,067)	\$ (97,067)	\$ (97,067)	\$ (97,067)	\$ (97,067)	\$ (97,067)	\$ (97,067)	\$ (97,067)	\$ (97,067)
17	-\$/MWh	\$ 39.84	\$ 39.68	\$ 34.06	\$ 26.20	\$ 10.31	\$ (2.56)	\$ 86.51	\$ 26.02	\$ 85.73	\$ 65.50	\$ 149.46	\$ 149.46	\$ 149.46	\$ 149.46	\$ 149.46	\$ 149.46	\$ 149.46	\$ 149.46	\$ 149.46	\$ 149.46
18																					
19	P.A. 295 RENEWABLE PURCHASES																				
20	Renewable Energy Build																				
21	Wind																				
22	- GWh	\$ 3,957	\$ 3,943	\$ 3,943	\$ 4,377	\$ 4,931	\$ 5,454	\$ 5,992	\$ 8,260	\$ 10,988	\$ 11,475	\$ 11,480	\$								

*Capacity costs in calendar year consist of Jan-May at the previous MISO Planning Year price and associated volume as well as the Jun-Dec current MISO Planning Year price and associated volume. The volume shown is for the current Planning Year that begins June 1st.

Line No.	(a) Description	(b) 2028	(c) 2029	(d) 2030	(e) 2031	(f) 2032	(g) 2033	(h) 2034	(i) 2035	(j) 2036	(k) 2037	(l) 2038	(m) 2039	(n) 2040	(o) 2041	(p) 2042	(q) 2043	(r) 2044	(s) 2045	(t) 2046	(u) 2047
1	Generation & Fuel																				
2	- GWh	38,009	29,865	27,622	28,499	27,015	31,376	27,266	28,884	26,894	27,422	25,207	25,207	25,207	25,207	25,207	25,207	25,207	25,207	25,207	25,207
3	- \$1,000	\$ 950,968	\$ 817,138	\$ 849,803	\$ 852,441	\$ 819,461	\$ 907,947	\$ 796,080	\$ 844,752	\$ 805,735	\$ 810,182	\$ 789,484	\$ 789,484	\$ 789,484	\$ 789,484	\$ 789,484	\$ 789,484	\$ 789,484	\$ 789,484	\$ 789,484	\$ 789,484
4																					
5	Ludington+Battery Losses																				
6	- GWh	(701)	(1,020)	(1,135)	(1,254)	(1,246)	(1,227)	(1,184)	(1,295)	(1,667)	(1,713)	(1,664)	(1,664)	(1,664)	(1,664)	(1,664)	(1,664)	(1,664)	(1,664)	(1,664)	(1,664)
7																					
8	Net Wholesale Power Purchases/Sales																				
9	- GWh	18,941	32,973	35,541	34,859	36,563	32,209	36,463	35,152	37,874	37,483	40,077	40,077	40,077	40,077	40,077	40,077	40,077	40,077	40,077	40,077
10	- \$1,000	\$ 1,307,983	\$ 2,193,765	\$ 2,415,029	\$ 2,364,974	\$ 2,516,458	\$ 2,301,908	\$ 2,572,721	\$ 2,434,788	\$ 2,446,318	\$ 2,505,289	\$ 2,718,578	\$ 2,718,578	\$ 2,718,578	\$ 2,718,578	\$ 2,718,578	\$ 2,718,578	\$ 2,718,578	\$ 2,718,578	\$ 2,718,578	\$ 2,718,578
11																					
12	Emission Allowances																				
13	NOx Seasonal - \$1,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14	NOx Annual - \$1,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15	SO2 (CSAPR) - \$1,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
16	SO2 (ARP) - \$1,000	\$ 0	\$ 0	\$ 0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
17																					
18	Chemical Costs																				
19	Urea - \$1,000	\$ 21,058	\$ 10,561	\$ 10,266	\$ 10,944	\$ 11,139	\$ 11,569	\$ 9,067	\$ 11,006	\$ 11,227	\$ 11,372	\$ 9,487	\$ 9,487	\$ 9,487	\$ 9,487	\$ 9,487	\$ 9,487	\$ 9,487	\$ 9,487	\$ 9,487	\$ 9,487
20	Limestone - \$1,000	\$ 9,449	\$ 4,739	\$ 4,607	\$ 4,911	\$ 4,998	\$ 5,191	\$ 4,069	\$ 4,939	\$ 5,038	\$ 5,103	\$ 4,257	\$ 4,257	\$ 4,257	\$ 4,257	\$ 4,257	\$ 4,257	\$ 4,257	\$ 4,257	\$ 4,257	\$ 4,257
21	Ammonia - \$1,000	\$ 1,648	\$ 1,705	\$ 1,447	\$ 1,561	\$ 1,637	\$ 2,496	\$ 2,453	\$ 2,338	\$ 2,327	\$ 2,200	\$ 2,362	\$ 2,362	\$ 2,362	\$ 2,362	\$ 2,362	\$ 2,362	\$ 2,362	\$ 2,362	\$ 2,362	\$ 2,362
22	Potassium Iodide - \$1,000	\$ 916	\$ 459	\$ 447	\$ 476	\$ 485	\$ 503	\$ 394	\$ 479	\$ 488	\$ 495	\$ 413	\$ 413	\$ 413	\$ 413	\$ 413	\$ 413	\$ 413	\$ 413	\$ 413	\$ 413
23																					
24	Net System Output																				
25	- GWh	56,249	61,819	62,029	62,105	62,334	62,358	62,546	62,741	63,101	63,192	63,619	63,619	63,619	63,619	63,619	63,619	63,619	63,619	63,619	63,619
26	- \$1,000	\$ 2,292,022	\$ 3,028,366	\$ 3,281,599	\$ 3,235,307	\$ 3,354,177	\$ 3,229,614	\$ 3,384,784	\$ 3,298,300	\$ 3,271,133	\$ 3,334,641	\$ 3,524,580	\$ 3,524,580	\$ 3,524,580	\$ 3,524,580	\$ 3,524,580	\$ 3,524,580	\$ 3,524,580	\$ 3,524,580	\$ 3,524,580	\$ 3,524,580
27	- \$/MWh	\$ 40.75	\$ 48.99	\$ 52.90	\$ 52.09	\$ 53.81	\$ 51.79	\$ 54.12	\$ 52.57	\$ 51.84	\$ 52.77	\$ 55.40	\$ 55.40	\$ 55.40	\$ 55.40	\$ 55.40	\$ 55.40	\$ 55.40	\$ 55.40	\$ 55.40	\$ 55.40
28																					
29	Bundled Transmission																				
30	- \$1,000	\$712,780	\$889,001	\$1,017,101	\$1,078,821	\$1,168,845	\$1,285,817	\$1,444,089	\$1,616,099	\$1,637,586	\$1,655,358	\$1,678,441	\$1,702,236	\$1,727,379	\$1,748,509	\$1,771,745	\$1,782,200	\$1,794,604	\$1,768,566	\$1,780,868	\$1,785,691
31																					
32	Non-PSCR Customer Sales Adjustment																				
33	- GWh	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919
34	- \$1,000	\$ 45,917	\$ 45,927	\$ 47,084	\$ 48,769	\$ 48,712	\$ 47,559	\$ 45,401	\$ 45,569	\$ 44,359	\$ 44,661	\$ 45,738	\$ 45,738	\$ 45,738	\$ 45,738	\$ 45,738	\$ 45,738	\$ 45,738	\$ 45,738	\$ 45,738	\$ 45,738
35																					
36	Transmission Adjustment																				
37	- GWh	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919	919
38	- \$1,000	\$ 11,642	\$ 13,211	\$ 15,064	\$ 15,959	\$ 17,227	\$ 18,943	\$ 21,211	\$ 23,664	\$ 23,842	\$ 24,066	\$ 24,238	\$ 24,581	\$ 24,944	\$ 25,249	\$ 25,585	\$ 25,736	\$ 25,915	\$ 25,539	\$ 25,717	\$ 25,786
39																					
40	PSCR Fuel & Purchased Power																				
41	- GWh	55,330	60,900	61,110	61,186	61,415	61,440	61,627	61,822	62,182	62,273	62,700	62,700	62,700	62,700	62,700	62,700	62,700	62,700	62,700	62,700
42	- \$1,000	\$ 2,947,244	\$ 3,858,228	\$ 4,236,551	\$ 4,249,401	\$ 4,457,083	\$ 4,448,928	\$ 4,762,261	\$ 4,845,166	\$ 4,840,518	\$ 4,921,273	\$ 5,133,045	\$ 5,156,497	\$ 5,181,276	\$ 5,202,102	\$ 5,225,002	\$ 5,235,306	\$ 5,247,530	\$ 5,221,869	\$ 5,233,993	\$ 5,238,747
43	- \$/MWh	\$ 53.27	\$ 63.35	\$ 69.33	\$ 69.45	\$ 72.57	\$ 72.41	\$ 77.28	\$ 78.37	\$ 77.84	\$ 79.03	\$ 81.87	\$ 82.24	\$ 82.64	\$ 82.97	\$ 83.33	\$ 83.50	\$ 83.69	\$ 83.28	\$ 83.48	\$ 83.55

**Michigan Public Service Commission
DTE Electric Company
Purchased Power, Sales, and Expense - Customer Datacenter Case
Years 2028 - 2047**

Case No.: U-22058
Exhibit: A-10
Witness: S. D. Burgdorf
Page: 1 of 1

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)
Line No.	Description	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
1	<u>MISO WHOLESALE PURCHASES & SALES</u>																				
2	MISO Wholesale Purchases																				
3	- GWh																				
4	- \$1,000	\$ 251,198	\$ 658,210	\$ 589,868	\$ 462,815	\$ 406,608	\$ 242,529	\$ 319,214	\$ 223,477	\$ 191,612	\$ 195,236	\$ 262,756	\$ 262,756	\$ 262,756	\$ 262,756	\$ 262,756	\$ 262,756	\$ 262,756	\$ 262,756	\$ 262,756	\$ 262,756
5	- \$/MWh	\$ 37.62	\$ 41.29	\$ 39.99	\$ 40.91	\$ 41.00	\$ 42.34	\$ 44.24	\$ 41.51	\$ 31.14	\$ 35.39	\$ 38.32	\$ 38.32	\$ 38.32	\$ 38.32	\$ 38.32	\$ 38.32	\$ 38.32	\$ 38.32	\$ 38.32	\$ 38.32
6																					
7	MISO Wholesale Sales																				
8	- GWh																				
9	- \$1,000	\$ 153,768	\$ 57,824	\$ 101,435	\$ 179,169	\$ 211,542	\$ 282,375	\$ 216,233	\$ 307,345	\$ 405,582	\$ 398,206	\$ 350,126	\$ 350,126	\$ 350,126	\$ 350,126	\$ 350,126	\$ 350,126	\$ 350,126	\$ 350,126	\$ 350,126	\$ 350,126
10	- \$/MWh	\$ 56.42	\$ 66.25	\$ 75.54	\$ 62.71	\$ 58.37	\$ 49.31	\$ 43.78	\$ 45.48	\$ 52.76	\$ 50.73	\$ 52.50	\$ 52.50	\$ 52.50	\$ 52.50	\$ 52.50	\$ 52.50	\$ 52.50	\$ 52.50	\$ 52.50	\$ 52.50
11																					
12	MISO Market Expenses (excluding Sch 16 &17) - \$1,000	\$ 78,735	\$ 67,630	\$ 63,624	\$ 65,632	\$ 64,636	\$ 65,138	\$ 64,892	\$ 65,023	\$ 64,971	\$ 65,005	\$ 65,001	\$ 65,001	\$ 65,001	\$ 65,001	\$ 65,001	\$ 65,001	\$ 65,001	\$ 65,001	\$ 65,001	\$ 65,001
13																					
14	<u>NET MISO PURCHASES & SALES</u>																				
15	- GWh																				
16	- \$1,000	\$ 176,165	\$ 668,016	\$ 552,058	\$ 349,278	\$ 259,702	\$ 25,292	\$ 167,873	\$ (18,844)	\$ (148,999)	\$ (137,965)	\$ (22,370)	\$ (22,370)	\$ (22,370)	\$ (22,370)	\$ (22,370)	\$ (22,370)	\$ (22,370)	\$ (22,370)	\$ (22,370)	\$ (22,370)
17	- \$/MWh	\$ 44.59	\$ 44.34	\$ 41.18	\$ 41.30	\$ 41.26	\$ 15,295.43	\$ 73.78	\$ 13.71	\$ 97.08	\$ 59.13	\$ (119.77)	\$ (119.77)	\$ (119.77)	\$ (119.77)	\$ (119.77)	\$ (119.77)	\$ (119.77)	\$ (119.77)	\$ (119.77)	\$ (119.77)
18																					
19	<u>P.A. 295 RENEWABLE PURCHASES</u>																				
20	Renewable Energy Build																				
21	Wind																				
22	- GWh																				
23	- \$1,000	338,079	345,520	353,434	385,508	425,443	463,266	503,244	643,301	812,408	850,132	860,463	860,463	860,463	860,463	860,463	860,463	860,463	860,463	860,463	860,463
24	- \$/MWh	\$ 85.44	\$ 87.63	\$ 89.64	\$ 88.07	\$ 86.27	\$ 84.94	\$ 83.98	\$ 77.82	\$ 73.92	\$ 74.07	\$ 74.95	\$ 74								

¹Capacity costs in calendar year consist of Jan-May at the previous MISO Planning Year price and associated volume as well as the Jun-Dec current MISO Planning Year price and associated volume. The volume shown is for the current Planning Year that begins June 1st.

Line No.	(a) Description	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)
			2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	Source:
1	Power Supply Costs (adjusted for R10, D8 in buy through & third party sales)	\$000s	\$2,787,939	\$3,273,380	\$3,631,363	\$3,680,518	\$3,903,252	\$4,068,958	\$4,357,424	\$4,416,063	\$4,336,208	\$4,395,421	\$4,602,422	\$4,627,856	\$4,654,769	\$4,678,038	\$4,703,100	\$4,714,070	\$4,726,804	\$4,707,379	\$4,719,553	\$4,726,943	Exh- A-7 line 43
2	Net System Requirement (adjusted for R10, D8 in buythrough)	GWh	52,777	52,893	53,103	53,179	53,386	53,433	53,620	53,815	54,153	54,267	54,693	54,693	54,693	54,693	54,693	54,693	54,693	54,693	54,693	54,693	Exh- A-7 line 42
3	Unit Cost of Power Supply	Mills/kWh	52.82	61.89	68.38	69.21	73.11	76.15	81.26	82.06	80.07	81.00	84.15	84.61	85.11	85.53	85.99	86.19	86.42	86.07	86.29	86.43	line 3 ÷ line 4
4	Base Unit Cost	Mills/kWh	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	U-21534: Exh A-13, Sch C4, line 1
5	Unit Cost Above (Below) Base	Mills/kWh	21.56	30.63	37.12	37.95	41.85	44.89	50.00	50.80	48.81	49.74	52.89	53.35	53.85	54.27	54.73	54.93	55.16	54.81	55.03	55.17	line 5 - line 6
6	Loss Multiplier		1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	U-21534 A-13, C4.1 line 6
7	Final PSCR Factor	Mills/kWh	23.22	32.98	39.98	40.87	45.07	48.34	53.85	54.71	52.57	53.56	56.96	57.46	57.99	58.45	58.94	59.16	59.41	59.02	59.26	59.41	line 7 * line 8

Line No.	(a) Description	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)
			2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	Source:
1	Power Supply Costs (adjusted for R10, D8 in buy through & third party sales)		\$2,947,244	\$3,858,228	\$4,236,551	\$4,249,401	\$4,457,083	\$4,448,928	\$4,762,261	\$4,845,166	\$4,840,518	\$4,921,273	\$5,133,045	\$5,156,497	\$5,181,276	\$5,202,102	\$5,225,002	\$5,235,306	\$5,247,530	\$5,221,869	\$5,233,993	\$5,238,747	Exh- A-9 line 43
2	Net System Requirement (adjusted for R10, D8 in buythrough)	GWh	55,330	60,900	61,110	61,186	61,415	61,440	61,627	61,822	62,182	62,273	62,700	62,700	62,700	62,700	62,700	62,700	62,700	62,700	62,700	62,700	Exh- A-9 line 42
3	Unit Cost of Power Supply	Mills/kWh	53.27	63.35	69.33	69.45	72.57	72.41	77.28	78.37	77.84	79.03	81.87	82.24	82.64	82.97	83.33	83.50	83.69	83.28	83.48	83.55	line 3 + line 4
4	Base Unit Cost	Mills/kWh	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	31.26	U-21534: Exh A-13, Sch C4, line 1
5	Unit Cost Above (Below) Base	Mills/kWh	22.01	32.09	38.07	38.19	41.31	41.15	46.02	47.11	46.58	47.77	50.61	50.98	51.38	51.71	52.07	52.24	52.43	52.02	52.22	52.29	line 5 - line 6
6	Loss Multiplier		1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	1.077	U-21534 A-13, C4.1 line 6
7	Final PSCR Factor	Mills/kWh	23.70	34.56	40.99	41.13	44.49	44.32	49.55	50.74	50.17	51.44	54.50	54.90	55.33	55.68	56.08	56.25	56.46	56.02	56.23	56.31	line 7 * line 8

Line No.	(a) Description	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)
			2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	Source:
1	Power Supply Costs (adjusted for R10, D8 in buy through & third party sales)		\$ 159,305	\$ 584,849	\$ 605,189	\$ 568,883	\$ 553,831	\$ 379,971	\$ 404,837	\$ 429,104	\$ 504,310	\$ 525,852	\$ 530,623	\$ 528,640	\$ 526,507	\$ 524,064	\$ 521,901	\$ 521,236	\$ 520,727	\$ 514,489	\$ 514,440	\$ 511,804	Exh A-11 line 1 minus Exh A-12 line 1
2	Net System Requirement (adjusted for R10, D8 in buythrough)	GWh	2,553	8,007	8,007	8,007	8,029	8,007	8,007	8,007	8,029	8,007	8,007	8,007	8,007	8,007	8,007	8,007	8,007	8,007	8,007	8,007	Exh A-11 line 2 minus Exh A-12 line 2
3	Unit Cost of Power Supply	Mills/kWh	0.44	1.47	0.94	0.24	(0.54)	(3.74)	(3.99)	(3.69)	(2.23)	(1.97)	(2.28)	(2.37)	(2.47)	(2.56)	(2.66)	(2.69)	(2.73)	(2.79)	(2.81)	(2.87)	Exh A-11 line 3 minus Exh A-12 line 3
4	Base Unit Cost	Mills/kWh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Exh A-11 line 4 minus Exh A-12 line 4
5	Unit Cost Above (Below) Base	Mills/kWh	0.44	1.47	0.94	0.24	(0.54)	(3.74)	(3.99)	(3.69)	(2.23)	(1.97)	(2.28)	(2.37)	(2.47)	(2.56)	(2.66)	(2.69)	(2.73)	(2.79)	(2.81)	(2.87)	Exh A-11 line 5 minus Exh A-12 line 5
6	Loss Multiplier		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Exh A-11 line 6 minus Exh A-12 line 6
7	Final PSCR Factor	Mills/kWh	0.48	1.58	1.02	0.26	(0.58)	(4.03)	(4.30)	(3.97)	(2.40)	(2.12)	(2.46)	(2.56)	(2.66)	(2.76)	(2.86)	(2.90)	(2.94)	(3.00)	(3.03)	(3.10)	Exh A-11 line 7 minus Exh A-12 line 7

Line	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)	(x)	(y)	(z)	(aa)	(ab)
1	Inflation		3.00%																									
												2038											2048					
2	CCGT w/CCS Capacity Revenue (\$K)											\$ 41,000											\$ 55,101					
3	CCGT w/CCS Energy Value (\$K)											\$ 100,600											\$ 135,198					
4	Storage Asset Capacity Revenue (\$K)											\$ 42,400											\$ 56,982					
5	Storage Asset Energy Value (\$K)											\$ 33,500											\$ 45,021					
6	Solar Capacity Revenue (\$K)											\$ 64,500											\$ 86,683					
7	Solar Energy Value (\$K)											\$ 3,700											\$ 4,972					
	Proxy CCGT w/CCS	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
8	CCGT Revenue Requirement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 220,257	\$ 213,014	\$ 205,772	\$ 198,529	\$ 191,287	\$ 184,373	\$ 178,116
9	CCS Revenue Requirement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 228,240	\$ 223,807	\$ 219,373	\$ 214,939	\$ 210,505	\$ 206,273	\$ 202,443
10	Nominal Cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 448,497	\$ 436,821	\$ 425,145	\$ 413,468	\$ 401,792	\$ 390,645	\$ 380,559
11	Energy Value	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 135,198	\$ 139,254	\$ 143,432	\$ 147,734	\$ 152,167	\$ 156,732	\$ 161,433
12	Capacity Revenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 55,101	\$ 56,754	\$ 58,456	\$ 60,210	\$ 62,016	\$ 63,877	\$ 65,793
13	Total Wholesale Value CCGT w/CCS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 190,299	\$ 196,008	\$ 201,888	\$ 207,944	\$ 214,183	\$ 220,608	\$ 227,226
	Solar																											
14	Energy Value	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 86,683	\$ 89,283	\$ 91,962	\$ 94,720	\$ 97,562	\$ 100,489	\$ 103,504
15	Capacity Revenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 4,972	\$ 5,122	\$ 5,275	\$ 5,434	\$ 5,597	\$ 5,764	\$ 5,937
16	Total Solar Revenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 91,655	\$ 94,405	\$ 97,237	\$ 100,154	\$ 103,159	\$ 106,253	\$ 109,441
	576 MW Storage Alternative																											
17	Storage Revenue Requirement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 230,375	\$ 223,603	\$ 216,348	\$ 211,929	\$ 208,390	\$ 205,485	\$ 204,351
18	Energy Value	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 45,021	\$ 46,372	\$ 47,763	\$ 49,196	\$ 50,672	\$ 52,192	\$ 53,758
19	Capacity Revenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 56,982	\$ 58,692	\$ 60,452	\$ 62,266	\$ 64,134	\$ 66,058	\$ 68,040
20	Total Wholesale Value Storage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ 102,003	\$ 105,063	\$ 108,215	\$ 111,462	\$ 114,806	\$ 118,250	\$ 121,797
		CCGT w/CCS	Storage Asset																									
21	NPV Cost	\$1,009,847	\$558,370																									
22	NPV Market Value	\$646,714	\$346,650																									
23	Net NPV (line 21 - line 22)	(\$363,133)	(\$211,721)																									
24	Including avoidance of additional Storage Asset	(\$151,412)																										
25	NPV of Solar Revenues	\$226,422																										
26	Net NPV Incl Solar Credits (line 24 + line 25)	\$75,010																										

Line	(a)	(ac)	(ad)	(ae)	(af)	(ag)	(ah)	(ai)	(aj)	(ak)	(al)	(am)	(an)	(ao)
1														
2						2059	2060	2061						
3					Solar End of Life	500	700	400						
4					% of total	31%	44%	25%						
5					Jan 1 % Remaining	100%	69%	25%						
6														
7														
	Proxy CCGT w/CCS	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067
8	CCGT Revenue Requirement	\$ 172,378	\$ 167,020	\$ 161,851	\$ 156,682	\$ 151,513	\$ 146,344	\$ 141,175	\$ 136,006	\$ 130,837	\$ 125,668	\$ 120,500	\$ 115,331	\$ 110,162
9	CCS Revenue Requirement	\$ 198,930	\$ 195,649	\$ 192,485	\$ 189,321	\$ 186,157	\$ 182,992	\$ 179,828	\$ 176,664	\$ 173,499	\$ 170,335	\$ 167,171	\$ 164,007	\$ 160,842
10	Nominal Cost	\$ 371,308	\$ 362,669	\$ 354,336	\$ 346,003	\$ 337,669	\$ 329,336	\$ 321,003	\$ 312,670	\$ 304,337	\$ 296,004	\$ 287,670	\$ 279,337	\$ 271,004
11	Energy Value	\$ 166,276	\$ 171,265	\$ 176,403	\$ 181,695	\$ 187,146	\$ 192,760	\$ 198,543	\$ 204,499	\$ 210,634	\$ 216,953	\$ 223,462	\$ 230,166	\$ 237,070
12	Capacity Revenue	\$ 67,767	\$ 69,800	\$ 71,894	\$ 74,051	\$ 76,272	\$ 78,560	\$ 80,917	\$ 83,345	\$ 85,845	\$ 88,420	\$ 91,073	\$ 93,805	\$ 96,619
13	Total Wholesale Value CCGT w/CCS	\$ 234,043	\$ 241,065	\$ 248,296	\$ 255,745	\$ 263,418	\$ 271,320	\$ 279,460	\$ 287,844	\$ 296,479	\$ 305,373	\$ 314,535	\$ 323,971	\$ 333,690
	Solar													
14	Energy Value	\$ 106,609	\$ 109,807	\$ 113,101	\$ 116,494	\$ 119,989	\$ 84,967	\$ 21,879						
15	Capacity Revenue	\$ 6,116	\$ 6,299	\$ 6,488	\$ 6,683	\$ 6,883	\$ 4,874	\$ 1,255						
16	Total Solar Revenue	\$ 112,724	\$ 116,106	\$ 119,589	\$ 123,177	\$ 126,872	\$ 89,841	\$ 23,134						
	576 MW Storage Alternative													
17	Storage Revenue Requirement	\$ 204,063	\$ 203,574	\$ 202,872	\$ 201,945	\$ 200,780	\$ 199,363	\$ 197,680	\$ 195,717	\$ 193,458	\$ 190,887	\$ 187,988	\$ 184,743	\$ 181,135
18	Energy Value	\$ 55,370	\$ 57,032	\$ 58,742	\$ 60,505	\$ 62,320	\$ 64,189	\$ 66,115	\$ 68,099	\$ 70,142	\$ 72,246	\$ 74,413	\$ 76,646	\$ 78,945
19	Capacity Revenue	\$ 70,081	\$ 72,183	\$ 74,349	\$ 76,579	\$ 78,876	\$ 81,243	\$ 83,680	\$ 86,190	\$ 88,776	\$ 91,439	\$ 94,183	\$ 97,008	\$ 99,918
20	Total Wholesale Value Storage	\$ 125,451	\$ 129,215	\$ 133,091	\$ 137,084	\$ 141,196	\$ 145,432	\$ 149,795	\$ 154,289	\$ 158,918	\$ 163,685	\$ 168,596	\$ 173,654	\$ 178,863