



Andrea E. Hayden
(734) 546-0179
andrea.hayden@dteenergy.com

August 4, 2025

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

RE: In the matter of the Application of DTE Electric Company for approval of its
Integrated Resource Plan pursuant to MCL 460.6t, and for other relief
MPSC Case No: U-21193

Dear Ms. Felice:

Attached for electronic filing in the above referenced matter is DTE Electric Company's
Integrated Resource Plan Annual Report.

Very truly yours,

Andrea E.
Hayden

Andrea E. Hayden

Digitally signed by Andrea E.
Hayden
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Enclosures

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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In the matter of the Application of **DTE**)
ELECTRIC COMPANY for approval)
of its Integrated Resource Plan pursuant to)
MCL 460.6t, and for other relief)

Case No. U-21193

IRP REPORT OF DTE ELECTRIC COMPANY

Introduction

DTE Electric (“DTE Electric” or the “Company”) hereby submits its annual Integrated Resource Plan (IRP) report.

Summary:

The 2019 IRP interim order¹ included among the Commission’s recommended changes that the Company provide the reporting requirements proposed by Staff. Those requirements include the following:

- “Staff recommends that the Company file annually in this docket, or more frequently if required by the Commission, reports to the Commission regarding the status of any project (resource addition) for which an integrated resource plan has been approved. The annual update should include at a minimum, the status of the approved resources additions with any cost, schedule, or size updates including any deviations from the original projections in the 3-year period for which IRP costs are approved.”
- “...a spreadsheet for reporting the estimated and actual Capital and Operation and Maintenance (O&M) costs and capacity additions in megawatts (MW) by resource addition for the full three-year outlook. Staff recommends the Company fill out the reporting template along with a supplemental narrative report to be filed annually in this docket. Staff expects the Company will provide a detailed narrative that explains any adjustments in status and changes in scope, timing, size, or expected costs. Furthermore, the Company should explain any changes from the approved plan, including enough detail to convey the logic and decision-making process the Company used to support any deviations.”
- “Staff seeks to maintain an open and transparent dialog with the Company throughout the duration of the three-year period of resource additions. Staff also recommends the Company provide immediate communication to Staff and the Commission if there is a

¹ Commission Order in Case No. U-20471, February 20, 2020, pages 90-91, 97.

significant change or anticipated change to the expected cost, timing, or size of any resource additions in its IRP.”

Additionally, the 2022 IRP Settlement in U-21193 (“IRP Settlement Agreement” or “Settlement Agreement”), approved by the Commission on July 26, 2023, included the requirement to provide a reconciliation of all procured capacity.²

- “The Company will include a reconciliation of all procured capacity in its annual IRP report, identifying self-build, build transfer, and power purchase agreements separately.”

Lastly, on February 8, 2024, the Commission’s Order in U-21571³ provided direction for the implementation of the annual energy storage report that is described in Section 103 of Act 235.

- “To provide clarification about the December 31, 2024 report that must be submitted by each rate-regulated utility, the Commission directs each utility to file the storage report contained in its most recently approved IRP docket, combined with subsequent annual IRP reports to the extent that the utility is required to file an annual IRP report. For purposes of this report, the Commission finds that short-duration storage is that which does not meet the definition of long-duration or multi-day storage.

For subsequent annual reports, the Commission finds that the report shall include the following:

1. Amount of storage by category (short-duration, long-duration, or multi-day) that was installed prior to the effective date of Act 235. The amount should be expressed in both installed capacity (MW) and energy (megawatt-hours);
2. Amount of storage by category (short-duration, long-duration, or multi-day) that has been installed since the effective date of Act 235;
3. Amount of storage by category (short-duration, long-duration, or multi-day) that is contracted for but not yet installed since the effective date of Act 235. Expected commercial operation dates (CODs) shall be included;
4. Identification of the proportion of all storage amounts discussed above that are centralized as compared to distributed storage systems;
5. A map of the location of individual storage facilities including both centralized and distributed;
6. A schedule of current and expected future energy storage solicitations, by category;
7. Any challenges encountered in storage development and anticipated challenges in future developments;

² Commission Order in Case U-21193, July 26, 2023, pages 5-6

³ Commission Order in Case U-21571, February 8, 2024, pages 7-8

8. Upon the Commission’s adoption of a methodology to determine individual storage targets, an estimation of the utility’s energy storage target at the time of the report; and
9. Any additional information that the utility would like to present to the Commission.”

Section I: Cost Pre-approval Report and Time Period

Each program’s progress is summarized below and detailed further in Exhibit 1. The time period covered in this report details actual capital expenditures for the time period of January 1, 2024 through Dec. 31, 2024, unless otherwise noted, as approved in Case No. U-21193 and detailed above.

The remaining future filing of an Annual Cost Pre-approval Report will be as follows:

- July 26, 2026 Annual Cost Approval Report:
 - Capital expenditures for January 1, 2025 through Dec. 31, 2025

Demand Response

DTE Electric continues to develop its demand response (DR) portfolio that includes tariffs, programs, and pilots for its residential, commercial, and industrial customers.

In the Commission’s Order in the Company’s 2022 IRP (Case No. U-21193), DTE Electric received pre-approval for capital expenditures related to the CoolCurrents and SmartCurrents programs as well as the Commercial and Industrial (C&I) Dashboard and the Interruptible Water Heating replacement project for \$4.35 million in both 2024 and 2025. As shown in Exhibit 1, the Company’s actual 2024 cost for these programs was \$5.76 million. For a more detailed description of the Company’s programs and pilots and 2024 performance and expenditures, please refer to the Company’s Demand Response Reconciliation filing that was filed on June 30, 2025 (Case No. U-21919).

Belle River Conversion

In the Commission’s Order in the Company’s 2022 IRP (Case No. U-21193), DTE Electric received pre-approval for \$125 million in capital costs associated with conversion of the Belle River Power Plant in China Township from a base-loaded coal-fired plant to a natural gas-fired peaking facility. The Belle River Power Plant conversion is a low-cost option that will continue to serve customers during periods of high electricity demand.

Following conversion to natural gas, Belle River Power Plant will operate with the same capacity as when fueled by coal. As the plant is expected to operate as a cycling plant, predominantly generating in periods of high demand, the capacity factor is expected to be reduced from 50-60%

observed in 2017-2021 to an average capacity factor of 5-10% projected between 2027-2039.⁴ Slight changes to key operating parameters including heat rate, minimum load, startup time, and ramp rate are expected and will be validated through performance testing once construction is complete. It is also anticipated that lower annual expenses will be required to operate and maintain the facility due to the elimination of coal and ash handling, lower wear and tear on equipment due to less operation, and a reduced number of headquartered personnel.

It is projected that the Belle River Power Plant will operate fully on natural gas by 2027, with the conversion of Unit 1 completed by the end of 2025 and Unit 2 by the end of 2026. To achieve this timeline, numerous milestones have been completed prior to and during the current reporting period:

- Selection of an owner's engineer, Black & Veatch
- Development of a technical bid specification
- Execution of a bid event for the technology provider
- Selection of a technology provider, Babcock Power Services
- Complete detailed design
- Long lead material procurement

In 2025, a new natural gas line, gas yard, and distribution system to the units are being installed to provide the required flow to achieve full generating output. During the Fall 2025 and Fall 2026 fuel conversion outages, the coal mills and burner piping will be separated from the boilers and isolated for Unit 1 and Unit 2, respectively. The primary combustion air fans and heat exchangers will be separated and isolated. The existing pulverized coal burners will be replaced with burners designed for natural gas combustion. Additional boiler tubes will be added in the reheat steam circuit for additional heat transfer. Bottom ash and fly ash handling equipment will be separated and isolated. Finally, control systems will be updated to incorporate the newly installed equipment and be tuned for optimal performance.

The total capital expense associated with conversion is expected to remain at the \$125 million approved in the Commission's order. Updated actuals and projections are shown in Exhibit 1 and Attachment A.⁵ As the Belle River Power Plant is co-owned with the Michigan Public Power Agency (MPPA), the values shown are for DTE Electric's share of the expense only.

Section II: Procured Capacity Report

Renewable Energy

The IRP Settlement Agreement outlined DTE Electric's target capacity allocation for renewable energy projects in its proposed course of action (PCA) through 2030, which is displayed

⁴ Per the modeling conducted in the 2022 IRP, Case No. U-21193

⁵ Attachment A also includes projections for 2026 and 2027.

in Table 1. The IRP Settlement Agreement also indicated the acceleration of the development of an additional 400 MW of renewable energy projects to 2026 or 2027 (depending on available capacity) from 2032 as proposed in the PCA which is displayed in Table 2.

Table 1 Target Renewables PCA Build and Capacity Allocation (MW)								
	2024	2025	2026	2027	2028	2029	2030	Total
PCA Build	0	0	400	400	600	1000	1000	3400
Company Owned	0	0	280	280	420	700	700	2380
PPA	0	0	120	120	180	300	300	1020

Table 2 Target Renewables Acceleration Build and Capacity Allocation (MW)								
	2024	2025	2026	2027	2028	2029	2030	Total
Acceleration	0	0	200	200	0	0	0	400
BTA	0	0	50	50	0	0	0	100
PPA	0	0	150	150	0	0	0	300

As described in DTE Electric’s 2024 IRP Annual Report, DTE Electric sought to fulfill the renewables build and capacity targets for 2026 through an RFP that was issued in March 2023. Through the 2023 RFP, DTE Electric contracted 138 MW of Company-owned projects and 250 MW of power purchase agreements (PPAs). The unfulfilled 2026 capacity of 212 MW (consisting of 142 MW Company-owned, 20 MW PPA, and 50 MW BTA) was carried over to 2027.

DTE Electric sought to fulfill the renewables build and capacity targets for 2027 (including the 2026 carryover) through the 2024 Renewable Energy All Source RFP which was issued on September 10, 2024. Additionally, the Company sought an additional 150 MW of renewables capacity to support MIGreenPower (MIGP) in the 2024 Renewable Energy All Source RFP.

Several projects from the 2024 Renewable Energy All Source RFP were shortlisted, and the Company successfully negotiated two PPAs for a combined 220 MW. Additionally, 529 MW of company-owned projects were selected in the RFP.

PPAs:

- Eagle Creek 120 MW
- Freshwater II 100 MW

Company-owned:

- Au Gres 175 MW
- Elmwood 125 MW
- Poseyville 129 MW

- Strasburg 100 MW

As shown in Table 3, the contracted projects from the 2024 Renewable Energy All Source RFP did not achieve the IRP or MIGP targets. There was a total of 180 MW of unfilled IRP capacity and 33 MW of unfilled MIGreenPower capacity.

Table 3 2027 Renewables Capacity Summary			
	2027 Target	Contracted	Unfilled Capacity
<i>Company Owned</i>	407	446	(39)
<i>PPA</i>	305	186	119
<i>BTA</i>	100	0	100
2027 PCA & Accel & Carryover Subtotal	812	632	180
<i>Company Owned</i>	98	83	15
<i>PPA</i>	52	34	18
MIGP Subtotal	150	117	33
<i>Company Owned</i>	505	529	(24)
<i>PPA</i>	357	220	137
<i>BTA</i>	100	0	100
Total	962	749	213

Energy Storage

The IRP Settlement Agreement outlined DTE Electric's target capacity allocation for energy storage projects in its proposed course of action (PCA) through 2030 which is displayed in Table 4.

	Table 4 Target Energy Storage PCA Build and Allocation (MW)						
	2025	2026	2027	2028	2029	2030	Subtotal
PCA Build	230	0	120	430	0	0	780
Company Owned	230	0	0	275	0	0	505
TA	0	0	120	155	0	0	275

The Company sought to fulfill the storage build and capacity targets for 2027 through the 2024 Energy Storage RFP which was issued on June 28, 2024, seeking 120 MW of energy storage capacity via tolling agreements (TA) with third-party developers. The Company shortlisted several projects, however, none resulted in successfully negotiated contracts. All of the 120 MW of unfulfilled capacity was carried over to the 2025 Energy Storage RFP as directed in the IRP Settlement Agreement.

DTE Electric sought to fulfill the storage build and capacity targets for 2028 (including the 2027 carryover) in the 2025 Energy Storage RFP, which was issued on May 9, 2025 with a

bid due date of June 27, 2025. The Company is currently evaluating proposals and will seek *ex parte* approval of any agreements subsequent to contract execution.

Section III: Energy Storage Systems Update

As required by the Commission’s Order in U-21571, the Company filed its first annual storage report in December 2024. As part of DTE Electric’s 2022 IRP Settlement Agreement, the Company agreed to add 780 MW of storage capacity by the end of 2028.

Energy Storage Installed Prior to Act 235

Table 5 provides a list of battery storage projects installed prior to the passage of Act 235.

Table 5 Energy Storage Installed Prior to Act 235					
Project Name	Installed Capacity (MW)	Energy (MWh)	Storage Length	COD	Centralized or Distributed
Battery Trailer (Westland)	1	4	Short Duration	2023	Distributed
Battery Storage (Ford Industrial site)	0.125	0.506	Short Duration	2021	Distributed

Energy Storage Installed Since Act 235

Table 6 provides a list of battery storage projects installed since the passage of Act 235.

Table 6 Energy Storage Installed Since Act 235					
Project Name	Installed Capacity (MW)	Energy (MWh)	Storage Length	COD	Centralized or Distributed
Slocum	14	56	Short Duration	2025	Distributed

Energy Storage Contracted, Not Yet Installed Since Act 235

Table 7 lists the Company’s current storage pilots and projects that are contracted but not yet installed. These projects are expecting to have a commercial operation date (COD) in 2025 or 2026.

Table 7 Energy Storage Contracted, Not Yet Installed					
Project Name	Installed Capacity (MW)	Energy (MWh)	Storage Length	Expected COD	Centralized or Distributed
C&I Battery DR Pilot	0.25	1	Short Duration	2025	Distributed
O'Shea Battery Storage	1	1.3	Short Duration	2025	Distributed
Omega Load Relief	2	8	Short Duration	2025	Distributed

Port Austin Load Relief	1	4	Short Duration	2025	Distributed
Trenton	220	880	Short Duration	2026	Centralized

Map of Individual Storage Facilities

Image 1 depicts a map of the listed energy storage projects in Tables 1 and 2. The projects marked with a green pin are those which were installed prior to Act 235 and currently in service. The project marked with a blue pin, or number three on the image legend, is one that has come online since Act 235. The projects marked with a red pin are those which are contracted but have yet to be installed post Act 235.

Image 1 Legend		
Battery Storage Project	City	County
1. Battery Trailer	Westland	Wayne
2. Battery Storage (Ford Facility)	Dearborn	Wayne
3. Slocum	Trenton	Wayne
4. C&I Battery DR Pilot	Detroit	Wayne
5. O'Shea Battery Storage	Detroit	Wayne
6. Omega Load Relief	Harrison Township	Macomb
7. Port Austin Load Relief	Port Austin Township	Huron
8. Trenton Channel Energy Center	Trenton	Wayne

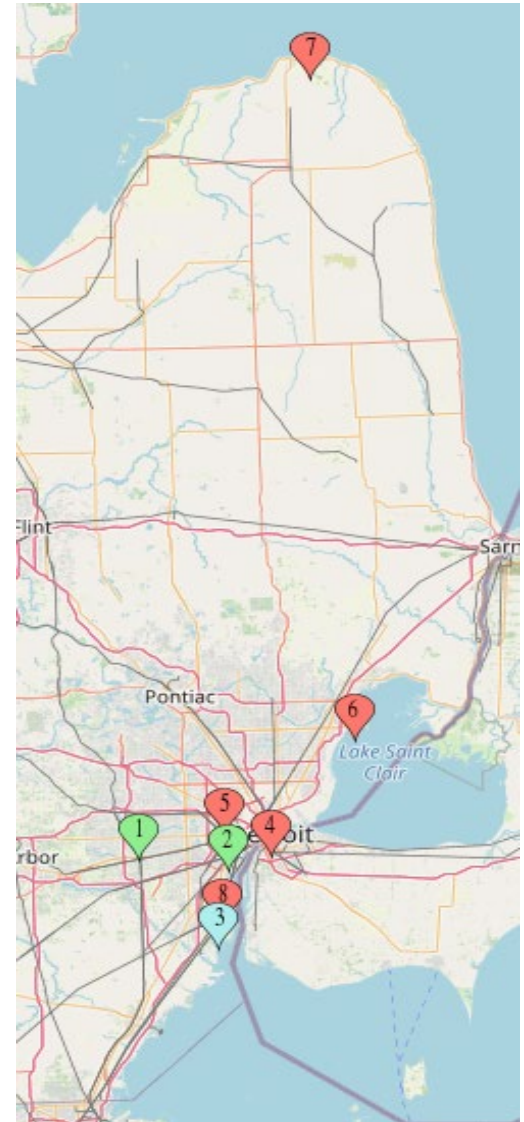


Image 1

Existing and Anticipated Challenges in Storage Development

One of the primary challenges the Company faces in energy storage development is the absence of established ordinances. This lack of preexisting guidelines means that each project must first navigate through the creation of a workable ordinance (CREO) and then the often-lengthy specific permit approval process. Securing permits requires building and maintaining

strong relations with local authorities and stakeholders, and it can take time to build trust in the communities where we strive to be a long-term partner.

Recent changes to federal policies and tax credits along with remaining uncertainty around potential new tariffs make it difficult for the energy storage industry to plan and source materials effectively, putting energy storage projects at risk of cost increases and scheduling delays. This uncertainty can also impose additional financial strain on battery equipment suppliers themselves, particularly those that are more exposed to tariff fluctuations as well as those that are not diversified into other industries.

The Company navigated supplier risk challenges in 2025 as it executes the Trenton Channel Energy Center project. The battery supplier for that project encountered unforeseen business circumstances that resulted in financial instability and inability to meet its contractual commitments with DTE. As a result, DTE terminated the contract with the battery supplier. In June 2025, the battery supplier filed for Chapter 11 bankruptcy. The Company has contracted with a new battery supplier, maintaining the 2026 COD.

Estimation of Company's Storage Target

On April 29th, 2025, Commission Staff filed the proportional share minimum of the statewide energy storage target for all of Michigan's Load Serving Entities (LSE), based upon the approved calculation methodology in U-21571. The Company's share target was listed as 1,132.75 MW. The Company will provide its plan for compliance with this target in its next IRP filing.

Summary

Over the past year the Company has shown its continued commitment to implementing the 2022 IRP, including its Demand Response programs, the Belle River Conversion, and renewables and storage capacity procurement. The programs and projects are demonstrating success or progressing towards meeting the goals laid out in the Company's IRP as well as identifying opportunities to implement improvements.

Respectfully Submitted,

DTE ELECTRIC COMPANY

[illegible]

Company Name: DTE Electric Company

Case Number: U-21193

Filing Date: August 4, 2025

Attachment A

2022 IRP Belle River Conversion Costs (\$ million)								
Category	2022	2023	2024	2025	2026	2027	Project Total	
Internal Labor (Direct)	\$ 0.02	\$ 0.37	\$ 0.75	\$ 1.48	\$ 0.99	\$ -	\$ 3.6	
Contract Labor (Direct)	\$ 1.02	\$ 19.03	\$ 28.58	\$ 27.67	\$ 20.46	\$ -	\$ 96.8	
Material (Direct)	\$ -	\$ -	\$ -	\$ 0.01	\$ 0.01	\$ -	\$ 0.0	
Other (Direct)	\$ -	\$ -	\$ -	\$ 0.82	\$ 0.82	\$ -	\$ 1.6	
Subtotal (Direct)	\$ 1.0	\$ 19.4	\$ 29.3	\$ 30.0	\$ 22.3	\$ -	\$ 102.0	
Indirects	0.13	2.60	4.43	7.66	8.74		\$ 23.6	
Subtotal	\$ 1.2	\$ 22.0	\$ 33.8	\$ 37.6	\$ 31.0	\$ -	\$ 125.6	

June 2025 Project Forecast								
	2022	2023	2024	2025	2026	2027	Project Total	
Internal Labor (Direct)	\$ 0.10	\$ 0.33	\$ 0.33	\$ 0.89	\$ 1.10	\$ 0.36	\$ 3.1	
Contract Labor (Direct)	\$ 1.21	\$ 1.31	\$ 40.05	\$ 29.19	\$ 23.12	\$ 6.25	\$ 101.1	
Material (Direct)	\$ 0.00	\$ 0.00	\$ 0.01	\$ -	\$ -	\$ -	\$ 0.0	
Other (Direct)	\$ 0.00	\$ 0.01	\$ 0.03	\$ 1.66	\$ 1.64	\$ 0.01	\$ 3.3	
Subtotal (Direct)	\$ 1.3	\$ 1.7	\$ 40.4	\$ 31.7	\$ 25.9	\$ 6.6	\$ 107.6	
Indirects	0.11	0.23	2.74	4.98	6.44	2.54	\$ 17.0	
Subtotal	\$ 1.4	\$ 1.9	\$ 43.2	\$ 36.7	\$ 32.3	\$ 9.2	\$ 124.6	