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June 27, 2025

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

RE: In the matter, on the Commission's own motion, regarding the regulatory reviews, revisions, determinations, and/or approvals necessary for **DTE ELECTRIC COMPANY and DTE GAS COMPANY** to fully comply with Public Act 295 of 2008, as amended by Public Act 342 of 2016  
MPSC Case No. U-21681

Dear Ms. Felice:

Attached for electronic filing in the above captioned matter are DTE Electric Company's and DTE Gas Company's Application for Approval of its Energy Waste Reduction Plan, and Direct Testimony and Exhibits of Witnesses, Reema A. Biel, George H. Chapel, Jose N. Goncalves, Jason R. Kupser, Rebecca M. Malfroid, Thac K. Nguyen, Frank Sirwaitis, Eddie Smith, and Kevin A. Stewart. Also attached is the Proof of Service.

Very truly yours,

Breanne K. Reitzel

BKR/erb  
Attachments

cc: Service List

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter, on the Commission’s own )  
motion, regarding the regulatory reviews, )  
revisions, determinations, and/or approvals )  
necessary for **DTE ELECTRIC** )  
**COMPANY and DTE GAS COMPANY** )  
to fully comply with Public )  
Act 295 of 2008, as amended. )  
\_\_\_\_\_)

Case No. U-21681  
(Paperless e-file)

**DTE ELECTRIC COMPANY’S AND DTE GAS COMPANY’S**  
**APPLICATION FOR APPROVAL OF ITS**  
**ENERGY WASTE REDUCTION PLANS FOR 2026-2029**

Applicants DTE Electric Company (“DTE Electric”) and DTE Gas Company (“DTE Gas”)(collectively, “DTE” or “Company”), file this Application for approval of their Energy Waste Reduction (“EWR”) Plans pursuant to MCL 460.1001 *et seq.* (2008 PA 295, the Michigan Clean, Renewable, and Efficient Energy Act as amended), and authority to implement EWR surcharges, and other related relief. In support of the relief requested in this Application, the Company respectfully states as follows:

1. DTE Electric is a subsidiary of DTE Energy Company, a Michigan corporation with its principal offices located at One Energy Plaza, Detroit, Michigan 48226. DTE Electric is a public utility subject to the jurisdiction of the Michigan Public Service Commission (“Commission”) and is engaged in the generation and distribution of electricity and other related services to over two million residential, commercial and industrial customers within the State of Michigan.

2. DTE Gas is a subsidiary of DTE Energy Company, a Michigan corporation with its principal offices located at One Energy Plaza, Detroit, Michigan 48226. DTE Gas is a public

utility subject to the jurisdiction of the Michigan Public Service Commission (“Commission”) and is engaged in the acquisition, storage, transportation, distribution, and sale of natural gas and other related services to approximately 1.3 million residential, commercial and industrial customers within the State of Michigan.

3. The “Clean, Renewable, and Efficient Energy Act,” 2008 PA 295, MCL 460.1001 et seq. (“Act 295” or “PA 295”) was signed into law on October 6, 2008. In December 2016, the legislature enacted 2016 PA 342 (“Act 342” or “PA 342”) that amended in part and added new statutory provisions to PA 295. On March 28, 2017, the Commission issued an order on its own motion in Case No, U-18262 *et al.* in which it reviewed the expectations for EWR plans in light of the impacts of PA 342. Act 295 was subsequently amended by Public Act 229 which became effective on February 13, 2024, and clarified by the Commission in Case No. U-21567.

4. Act 295, as amended, requires certain electric providers and natural gas providers to file EWR plans with the Commission for its review and approval every four years beginning with a plan filed in 2025. On November 7, 2024, the Commission issued an order setting forth filing deadlines for the Company’s new EWR plans. DTE files this Application and supporting testimony and exhibits in compliance with the Commission’s March 28, 2017 Order, November 7, 2024 Order, and PA 295, as amended, seeking Commission approval for a new four-year EWR plan for 2026 through 2029.

5. In this case the Company is proposing four-year plans (2026-2029) which are consistent with the four-year review period set forth in PA 295, as amended by PA 229, and consistent with the Commission’s forward-looking, four-year review process.

6. Consistent with the statutory requirements of Act 295, as amended, and the requirements set forth in the Commission’s March 28, 2017 Order, DTE’s EWR Plan components

are set forth in the testimony and exhibits attached to this Application. The testimony and exhibits describe all aspects of the EWR Plans in terms of policy and programs and provides explanations and justifications for each of the proposed amendments including the addition and /or removal of programs including the performance incentive mechanism.

7. In support of this Application, DTE is filing the direct testimony and exhibits of ten witnesses (Ms. Biel, Mr. Chapel, Mr. Galvin, Mr. Goncalves, Mr. Kupser, Ms. Malfroid, Mr. Nguyen, Mr. Sirwaitis, Mr. Smith, and Mr. Stewart) concurrently with this Application. The testimony and exhibits provide support for the Company's revenue and expense items and proposed ratemaking items.

8. DTE Electric and DTE Gas are filing EWR Plans for the 2026-2029 Plan years concurrently. Consistent with past practice and for the sake of administrative efficiency and the convenience of all participating parties, DTE requests that the case be scheduled in the most efficient manner possible.

9. Among other things, DTE is proposing adjustments to the portfolio mix of existing programs included in the testimony and exhibits attached to this Application. In addition, the Company seeks Commission approval of to retain the existing deemed net free ridership adjustment factor of 0.92 to the energy savings of most programs, and approval of the performance incentive mechanism set forth in Section 75 of PA 295 as amended.

10. Consistent with Section 73 of Act 295, as amended, DTE 's EWR Plans describe how they will achieve compliance with MCL 460.1073, by proposing a set of cost effective EWR programs that provide benefits for each customer class, specifying necessary funding levels, explaining customer behaviors the programs are designed to influence, and describing how EWR

program costs will be recovered consistent with MCL 460.1089. DTE's EWR Plans also describe how the Company plans, to the extent possible, to ensure charges collected from a customer rate class will be spent on EWR programs for that same rate class. Finally, DTE will demonstrate that the proposed EWR programs and funding are sufficient to ensure the achievement of applicable EWR standards.

11. DTE has developed a comprehensive portfolio of EWR programs that are designed to deliver electric and gas savings that meet the requirements outlined in Act 295 as amended. The programs target all customer classes, including income-qualified and small business customers. For residential customers, the programs are designed to reduce electric and natural gas consumption. Commercial and industrial customers will be offered prescriptive incentives on proven technologies identified in the deemed savings database and also custom programs that allow for more sophisticated energy savings programs.

12. The testimony and exhibits filed with this Application demonstrate that DTE's proposed EWR Plans are reasonable and prudent and consistent with the requirements of Act 295 as amended, thus warranting Commission approval of the recovery of annual EWR Plan levelized requested funding levels of approximately: \$225.8 million in 2026, \$226.1 million in 2027, \$226.7 million in 2028, and \$227.0 million in 2029 for DTE Electric and \$52.4 million in 2026, \$52.6 million in 2027, \$52.1 million in 2028, and \$51.5 million in 2029 for DTE Gas.

13. DTE requests approval of surcharges that are designed to recover the costs of the EWR Plan. Consistent with the Commission's September 10, 2020 Order in Case No. U-20373 and November 19, 2020 Order in Case No. U-20429, surcharges for all classes will remain at levels approved by the Commission in those cases until the surcharges in this EWR Plan are approved.

14. DTE Electric’s costs will be recovered from residential customers on a levelized per-kWh basis over the entire prospective time period of the plan (January 1, 2026 through December 31, 2029). The Company is also requesting approval of levelized per-meter surcharges for the commercial and industrial primary rate classes and another set of levelized per-meter surcharges for the commercial and industrial secondary rate classes for the time period of January 1, 2026 through December 31, 2029. DTE Electric expects to achieve energy savings during this Plan term of 2.0% of planned retail sales of the prior year, consistent with PA 295, as amended.

15. DTE Gas’s costs will be recovered from residential customers on a levelized per-Ccf basis over the entire prospective time period of the plan (January 1, 2026 through December 31, 2029). The Company is also requesting approval of levelized per-Ccf surcharges for the commercial and industrial rate classes and end use transportation customers for the time period of January 1, 2026 through December 31, 2029. DTE Gas expects to achieve energy savings during this Plan term of 1.05% of planned retail sales of the prior year, consistent with PA 295 as amended.

16. DTE requests that the Commission approve the establishment of base surcharges set forth in DTE Electric’s proposed tariff to recover the costs of the EWR Plan from electric residential customers through a surcharge of \$0.003689 per kWh and from C&I customers as follows:

|           | <b>Voltage</b>   | <b>Customers Without Self-Directed Plans Energy Waste Reduction Surcharge</b> | <b>Customers With Self-Directed Plans Energy Waste Reduction Surcharge</b> |
|-----------|------------------|---|--|
| Secondary | 0 – 850 kWh      | <b>\$3.83/meter/month</b>   | <b>\$0.94/meter/month</b>  |
| Secondary | 851 – 1,650 kWh  | <b>\$23.26/meter/month</b>  | \$6.08/meter/month   |
| Secondary | Above 1,650 kWh  | <b>\$97.87/meter/month</b>  | \$25.59/meter/month  |
| Primary   | 0 – 11,500 kWh   | <b>\$145.32/meter/month</b>   | \$31.56/meter/month  |
| Primary   | Above 11,500 kWh | <b>\$1,567.47/meter/month</b>   | \$383.84/meter/month   |

17. DTE Gas requests that the Commission approve the establishment of base surcharges set forth in DTE Gas’s proposed tariff to recover the costs of the EWR plan from natural gas customers as follows:

| <b>Rate<br/>Schedule<br/>No.</b>                 | <b>Energy<br/>Waste Reduction<br/>Surcharge<br/>\$/Ccf</b> |
|--|--|
| A Residential                                    | <b><i>\$0.02536</i></b>                                    |
| 2A Residential Multiple Family Dwelling Class I  | <b><i>\$0.04478</i></b>                                    |
| 2A Residential Multiple Family Dwelling Class II | <b><i>\$0.04478</i></b>                                    |
| GS-1 Non-Residential General Service             | <b><i>\$0.04478</i></b>                                    |
| GS-2 Large Volume                                |  |
| <100,000 Mcf                                     | <b><i>\$0.04478</i></b>                                    |
| >100,000 Mcf                                     | <b><i>\$0.00289</i></b>                                    |
| S School   | <b><i>\$0.04478</i></b>                                    |
| ST Small Volume Transportation                   | <b><i>\$0.00289</i></b>                                    |
| LT Large Volume Transportation                   | <b><i>\$0.00289</i></b>                                    |
| XLT Extra Large Volume Transportation            | <b><i>\$0.00289</i></b>                                    |
| XXLT Double Extra Large Volume Transportation    | <b><i>\$0.00289</i></b>                                    |
| C&I/EUT Exploratory Program                      | <b><i>\$0.00119</i></b>                                    |

*(Remainder left intentionally blank)*

WHEREFORE, DTE respectfully requests that the Michigan Public Service Commission:

A. Determine that DTE’s EWR Plans are reasonable and prudent, and that they meet all relevant requirements of Act 295, as amended;

B. Approve the proposed 2026-2029 EWR Plan surcharges and Performance Incentive Mechanisms;

C. Approve the necessary accounting authority described in DTE’s testimony; and

D. Grant such other and further relief as is just and reasonable.

**DTE ELECTRIC COMPANY and  
DTE GAS COMPANY**

By: \_\_\_\_\_  
Attorney for Applicants  
Breanne K. Reitzel (P81107)  
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(313) 235-9772

Dated: June 27, 2025

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter, on the Commission's own )  
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**COMPANY and DTE GAS COMPANY** to )  
fully comply with Public Act 295 of 2008, )  
as amended )  
\_\_\_\_\_ )

Case No. U-21681  
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QUALIFICATIONS  
AND  
DIRECT TESTIMONY  
OF  
JASON R. KUPSER

**DTE ELECTRIC COMPANY AND DTE GAS COMPANY**  
**QUALIFICATIONS AND DIRECT TESTIMONY OF JASON R. KUPSER**

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1   **Q1.   What is your name, business address and by whom are you employed?**

2   A1.   My name is Jason R. Kupser (he/him/his). My business address is: One Energy  
3       Plaza, Detroit, Michigan, 48226. I am employed by DTE Electric Company.

4

5   **Q2.   On whose behalf are you testifying?**

6   A2.   I am testifying on behalf of DTE Electric Company (DTE Electric) and DTE Gas  
7       Company (DTE Gas) (collectively, DTE).

8

9   **Q3.   What is your educational background?**

10  A3.   I graduated from Wayne State University with a Bachelor of Arts degree in Public  
11       Relations in 1998. In 2013, I graduated from Wayne State University with a Master  
12       of Business Administration.

13

14  **Q4.   What is your work experience?**

15  A4.   In 1999, I was hired by Detroit Edison in which I held several individual contributor  
16       positions in the Customer Service and Electric Marketing departments.

17

18       In 2009, I continued my career in the Energy Optimization (EO) department. In this  
19       department, I held individual contributor positions that were responsible for:  
20       program management of several residential programs; cost-effectiveness testing;  
21       energy savings tracking database administration; business intelligence analytics;  
22       various reporting functionality; and special projects as needed.

23

24       In 2014, I became the Principal Supervisor of the EO EM&V staff. My primary job  
25       responsibilities included team leadership, facilitating the many interactions between

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1 DTE Energy and its independent evaluator. Other responsibilities included support  
2 of the MEMD calibration efforts and actively engaging with the State of Michigan  
3 EO Collaborative.

4

5 In 2016, I was promoted to Manager of Residential programs, EO, now referred to  
6 as Energy Waste Reduction (EWR). As the Manager of the Residential EWR  
7 programs, I was responsible for development of residential and low-income electric  
8 and gas product offerings that supported DTE Energy's overall energy efficiency  
9 program strategies. In addition, in 2017 I assumed the management of the EWR  
10 Education & Awareness team.

11

12 In 2019, my responsibilities changed to manage the EWR Strategy, EWR EM&V,  
13 and Demand Response teams.

14

15 In 2022, I was placed on a developmental assignment in DTE's Distribution  
16 Operations department.

17

18 **Q5. What are your current job responsibilities?**

19 A5. Starting in 2023, I resumed management of the EWR Strategy, EWR Evaluation  
20 Measurement & Verification (EM&V), and briefly the Demand Response teams.  
21 The EWR Pilots team also began reporting to me at this time.

22

23 Currently, I have overall responsibility for strategic development and planning of  
24 EWR programs. Additionally, I am responsible for ensuring EWR program cost-

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1 effectiveness, the evaluation of EWR programs, the management of the EWR Pilots  
2 team, and the management of the EWR Education & Awareness team.

3

4 **Q6. Are you a member of any professional organizations?**

5 A6. Yes. I am a member of the Association of Energy Services Professionals (AESP).  
6 AESP is an organization that provides professional development programs, a  
7 network of energy practitioners, and promotes the transfer of knowledge and  
8 experience to promote energy efficiency programs. I am a member of the  
9 Consortium for Energy Efficiency (CEE), engaging on its Portfolio Advisory  
10 committee. CEE is the United States and Canadian consortium of gas and electric  
11 efficiency program administrators whose goal is to accelerate the development and  
12 availability of energy efficient products and services.

13

14 **Q7. Have you previously testified before the Michigan Public Service Commission**  
15 **(MPSC or Commission)?**

16 A7. Yes. I provided testimony in the following cases:

17 U-16358 2009 DTE Electric EO Reconciliation

18 U-16289 2009 DTE Gas EO Reconciliation

19 U-16671 2011 DTE Electric Biennial Review and Amended EO Plan

20 U-16730 2011 DTE Gas Biennial Review and Amended EO Plan

21 U-17049 2012 DTE Electric Amended EO Plan

22 U-17050 2012 DTE Gas Amended EO Plan

23 U-18262 2018-2019 DTE Electric EWR Plan

24 U-18268 2018-2019 DTE Gas EWR Plan

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|    |         |  |
|----|---------|--|
| 1  | U-18332 | 2016 DTE Electric EO Reconciliation              |
| 2  | U-18338 | 2016 DTE Gas EO Reconciliation                   |
| 3  | U-20029 | 2017 DTE Electric EWR Reconciliation             |
| 4  | U-20035 | 2017 DTE Gas EWR Reconciliation                  |
| 5  | U-20366 | 2018 DTE Electric EWR Reconciliation             |
| 6  | U-20369 | 2018 DTE Gas EWR Reconciliation                  |
| 7  | U-20373 | 2020-2021 DTE Electric EWR Plan                  |
| 8  | U-20429 | 2020-2021 DTE Gas EWR Plan                       |
| 9  | U-21322 | 2024-2025 DTE Electric and DTE Gas EWR Plan      |
| 10 | U-21558 | 2023 DTE Electric and DTE Gas EWR Reconciliation |

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1 **PURPOSE OF TESTIMONY**

2 **Q8. What is the purpose of your testimony?**

3 A8. I am providing policy testimony and exhibits for DTE Electric and DTE Gas's  
4 EWR Plan, in accordance with the requirements set forth in Public Act 229 of 2023,  
5 (PA 229) Section 73(3) and as directed by the Commission in its February 8, 2023  
6 and November 7, 2024 Orders in Case No. U-21567. Specifically, I will:

7

8 1) Provide an overview of the 2026-2029 EWR Plan, including an overview  
9 of the Education and Awareness program.

10 2) Summarize DTE's plan for administering the programs.

11 3) Detail the energy savings targets and the process to verify savings.

12 4) Describe how DTE's 2026-2029 EWR Plan meets all the requirements set  
13 forth in PA 229 and associated orders.

14 5) Discuss program expenditures and flexibility in program administration.

15 6) Provide cost allocations by customer class for the 2026-2029 EWR Plan.

16 7) Summarize the recovery mechanism for the 2026-2029 EWR Plan spend.

17 8) Describe DTE's proposal for a financial incentive mechanism.

18

19 **Q9. Are you sponsoring any exhibits in this proceeding?**

20 A9. Yes, I am sponsoring the following exhibits:

| 21 | <u>Exhibit</u> | <u>Description</u>                                  |
|----|----------------|---|
| 22 | A-1            | Portfolio Costs and Savings Summary – Electric      |
| 23 | A-2            | Portfolio Costs and Savings Summary – Gas           |
| 24 | A-3            | Customer Class Cost Allocation Percentages-Electric |

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1 A-4 Customer Class Cost Allocation Percentages-Gas

2 A-5 Customer Class Cost-Electric

3 A-6 Customer Class Cost-Gas

4 A-7 Financial Incentive Mechanism-Electric

5 A-8 Financial Incentive Mechanism-Gas

6 A-42 Education Program Description-Electric and Gas

7

8 **Q10. Were these exhibits prepared by you or under your direction?**

9 A10. Yes, they were.

10

11 **Q11. Who is presenting testimony for DTE's 2026-2029 EWR Plan?**

12 A11. The Company will present its case through nine witnesses, in addition to myself.

13 The DTE witnesses are:

14

15 **Mr. Toben Galvin**, self-employed evaluation expert and President of Skytop  
16 Consulting LLC, who will confirm the evaluation approach of the EWR programs,  
17 provide guidance on how the emerging programs should be evaluated and support  
18 the use of a deemed value for Net-to-Gross (NTG) ratios;

19

20 **Ms. Rebecca Malfroid**, Marketing Program Manager, who will be providing an  
21 overview of the cost-effectiveness calculations including the Utility Systems  
22 Resource Cost Test (USRCT) results;

23

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1           **Mr. Jose Goncalves**, Manager, Residential programs, who will be providing an  
2           overview of the residential program portfolio for the 2026-2029 EWR Plan, the  
3           estimated energy savings, costs by program, and residential program descriptions;

4

5           **Mr. Thac Nguyen**, Manager, Commercial and Industrial (C&I) programs, who will  
6           be providing an overview of the C&I Portfolio for the 2026-2029 EWR Plan, the  
7           estimated energy savings, costs by program, and C&I program descriptions;

8

9           **Mr. Kevin Stewart**, Manager, Residential and C&I Pilot programs, who will be  
10          providing an overview of the pilot program for the 2026-2029 EWR Plan, including  
11          details on estimated energy savings and costs, as well as information about the pilots  
12          currently under consideration;

13

14          **Mr. Frank Sirwaitis**, Senior Strategist, Corporate Energy Forecasting, who will  
15          provide DTE Electric's current electric sales forecast for the period 2025 - 2029 and  
16          explain the basis for this forecast, support actual weather normalized sales for 2008  
17          through 2024, and support the economic outlook assumptions;

18

19          **Mr. George Chapel**, Principal Marketing Specialist, Gas Supply and Planning, who  
20          will describe DTE Gas's natural gas sales market forecast for the plan period 2025  
21          - 2029 and show how that demand is changing over time;

22

23          **Ms. Reema Biel**, Manager, Regulatory Tax, who will provide calculations of the  
24          deferred tax component of EWR prior year capitalized costs;

25

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1           **Mr. Eddie Smith III**, Manager Regulatory Affairs, who will provide the  
2           calculations of revenue requirements by customer class for program years 2026-  
3           2029 and will provide support for the calculation of the EWR surcharges that DTE  
4           Electric and DTE Gas are proposing to facilitate the annual revenue recovery for  
5           program years 2026-2029.

6

7           **Q12. How is the remainder of your testimony organized?**

8           A12. My testimony consists of the following sections:

9           Section A – 2026-2029 EWR Plan Overview

10          Section B – Program Administration

11          Section C – Energy Savings Goals

12          Section D – Spending and Program Flexibility

13          Section E – Recovery Mechanism

14          Section F – Financial Incentive Mechanism

15          Section G – Summary

16

17          **SECTION A: 2026-2029 EWR PLAN OVERVIEW**

18          **Q13. Why is DTE proposing a 2026-2029 EWR Plan?**

19          A13. DTE is proposing its 2026-2029 EWR Plan with the following intents:

20           1) To comply with the requirement to submit a four-year plan after 2025, as set  
21           forth in PA 229.

22           2) To affirm adjustments to the portfolio mix of existing programs, the addition of  
23           new programs, and the removal of existing programs. These adjustments may  
24           be a result of changes in market conditions, energy efficiency baselines, or  
25           market saturation.

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1 3) To affirm adjustments to gross energy savings. In this 2026-2029 EWR Plan,  
2 DTE intends to continue applying a deemed Net-to-Gross (NTG) factor of 0.92  
3 to the energy savings of most programs.

4 4) To describe DTE's proposed 2026-2029 financial incentive mechanism.  
5

6 **Q14. What was the planning process DTE used to develop the 2026-2029 EWR**  
7 **Plan?**

8 A14. The planning process for the 2026-2029 EWR Plan is consistent with the process  
9 DTE used in preparing previous EWR plans. The planning process involved four  
10 steps:

11 1) The first step was to develop an initial program measure mix built on  
12 experience, stakeholder feedback, and program objectives;

13 2) The second step involved estimating program size parameters and defining  
14 objectives related to the portfolio's average measure life and spending levels  
15 related to income-qualified programs (i.e., a minimum and maximum range of  
16 units per year by program);

17 3) The third step involved optimizing the program portfolio mix to reflect a  
18 portfolio that best meets the energy savings goals; and

19 4) The final step analyzed the output derived from the previous three steps to  
20 verify cost-effectiveness.  
21

22 **Q15. What objectives were considered when developing the 2026-2029 EWR Plan?**

23 A15. The 2026-2029 EWR Plan was designed to meet energy savings levels specified by  
24 PA 229 and program objectives. There were several key considerations:

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- 1 1. Offer a diverse portfolio of programs that provide participation opportunities
- 2 for all customers;
- 3 2. Ensure the portfolio provides opportunities for income-qualified customers
- 4 and fund them at least at levels stated in legislation;
- 5 3. Continue to provide customers a mix of EWR programs that have been
- 6 successfully implemented in previous EWR plans and make program
- 7 adjustments to account for changes in market conditions and market
- 8 saturation;
- 9 4. Streamline programs to make participation for customers and participating
- 10 contractors easier;
- 11 5. Ensure the portfolio is cost-effective as determined by the Utility Systems
- 12 Resource Cost Test (USRCT);
- 13 6. Provide a pilot structure that encourages the development of new energy
- 14 efficiency offerings and approaches;
- 15 7. Educate customers on the benefits of using energy more efficiently;
- 16 8. Provide a Health and Safety structure that supports income-qualified
- 17 programs by removing barriers caused by critical structural inadequacies;
- 18 and
- 19 9. Continue to provide a program to develop a workforce and contractors
- 20 capable of delivering energy waste reduction and health and safety measures.

21

22 **Q16. Is DTE proposing to modify the EWR program structure from what was**  
23 **approved in prior EWR plans?**

24 A16. No. The primary structure of the 2026-2029 EWR Plan follows previous filings.

25 The plan categorizes programs into six primary groups, as listed below:

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- 1 1. Residential Programs;
- 2 2. Income-Qualified Programs;
- 3 3. Commercial & Industrial Programs;
- 4 4. Education Programs;
- 5 5. Pilot Programs; and
- 6 6. Utility Shared Savings

7

8 Further details of Residential, Income-Qualified, and Health and Safety programs  
9 are covered in the testimony of Witness Goncalves. Further details of the Pilot  
10 program are covered in the testimony of Witness Stewart. Further details of C&I  
11 platforms and programs are covered in the testimony of Witness Nguyen.

12

13 **Residential Programs**

14 **Q17. What Residential Programs are included in the 2026-2029 EWR Plan?**

15 A17. The following Residential Programs are included in the 2026-2029 EWR Plan:

- 16 1. Appliance Recycling (DTE Electric only)
- 17 2. Residential Building Envelope
- 18 3. Multifamily Residential
- 19 4. School Program
- 20 5. Home Energy Reports
- 21 6. Multifamily Strategic Energy Management
- 22 7. Emerging Measures and Approaches
- 23 8. Residential Shared Savings

24 Witness Goncalves provides additional details of the Residential Programs except  
25 for Residential Shared Savings, which is discussed later in my testimony.

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1            **Income-Qualified Programs**

2    **Q18. What Income-Qualified Programs are included in the 2026-2029 EWR Plan?**

3    A18. The following Income-Qualified Programs are included in the 2026-2029 EWR  
4    Plan:

- 5            1. Income-Qualified Energy Efficiency Assistance
- 6            2. Income-Qualified Multifamily Units
- 7            3. Income-Qualified School Program
- 8            4. Income-Qualified New Homes Construction
- 9            5. Income-Qualified Shared Savings
- 10           6. Health and Safety

11           Witness Goncalves provides additional details of the Income-Qualified Programs,  
12           except for Income-Qualified Shared Savings, which is discussed later in my  
13           testimony.

14

15    **Q19. What Health and Safety program is included in the 2026-2029 EWR Plan?**

16    A19. The objective of the Health and Safety program is to provide structural repairs  
17           and/or renovations that are barriers to the installation of energy efficient measures  
18           in Income-Qualified programs. Witness Goncalves provides additional details of  
19           the Health and Safety program.

20

21    **Q20. Has the Commission provided guidance on Health and Safety program savings  
22           limitations?**

23    A20. Yes. The Commission found in Case No. U-21567 that the deemed savings limits  
24           for Health and Safety program should be limited to a percentage of the legislative  
25           minimum savings requirement.

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1 **Q21. What level of spending was approved for the Health and Safety program in**  
2 **the Company's 2024-2025 Amended EWR Plan?**

3 A21. On November 21, 2024, the MPSC approved for the Company to spend up to 3%  
4 of its portfolio budget to support the Health and Safety program for the 2024-2025  
5 EWR plan.

6

7 **Q22. What are the planned energy savings for the Health and Safety program?**

8 A22. The planned electric energy savings for the Health and Safety program are 4% of  
9 the legislative minimum saving requirement, which is 4% of the 1.5% of the  
10 previous year's forecasted sales. The planned electric energy savings for the Health  
11 and Safety program is 27 GWh for 2026, 27 GWh for 2027, 27 GWh for 2028, and  
12 27 GWh for 2029, as displayed in Exhibit A-1 Line 16.

13

14 The planned gas energy savings for the Health and Safety program are 4% of the  
15 legislative minimum savings requirement, which is 4% of the 0.875% of the  
16 previous year's forecasted sales. The planned gas energy savings for the Health  
17 and Safety program are 68 MMcf for 2026, 67 MMcf for 2027, 67 MMcf for 2028,  
18 and 66 MMcf for 2029, as displayed in Exhibit A-2 Line 15.

19

20 **Q23. Why is the Company asking for the Health and Safety program budget to be**  
21 **4% of the spend to achieve the legislative minimum savings requirement?**

22 A23. To sustain the level of critically needed Health and Safety program services  
23 provided to Income-Qualified customers, enabling them to participate in the EWR  
24 Income-Qualified energy savings programs, the percent needs to be at 4% to be

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1 comparable to the actual dollar spending levels found in the Company's 2024-2025  
2 EWR plan.

3

4 **Commercial and Industrial (C&I) Programs**

5 **Q24. What C&I Programs are included in the 2026-2029 EWR Plan?**

6 A24. The following C&I Programs are included in the 2026-2029 EWR Plan:

- 7 1. Large Business Program  
8 2. Small Business Program  
9 3. Mid-Stream Program  
10 4. Multifamily Common Areas  
11 5. Emerging Measures and Approaches  
12 6. C&I Shared Savings  
13 7. Self-Direct (DTE Electric only)

14 Witness Nguyen provides additional details of the C&I Programs except for C&I  
15 Shared Savings, which is discussed later in my testimony.

16

17 **Education Program**

18 **Q25. What Education program is included in the 2026-2029 EWR Plan?**

19 A25. The Education program includes general education and awareness of EWR to DTE  
20 Electric and DTE Gas customers through marketing efforts using electronic, social,  
21 print, broadcast, and other media as deemed appropriate.

22

23 **Q26. What is DTE's approach to the Education program in the 2026-2029 EWR**  
24 **Plan?**

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1 A26. Exhibit A-42 provides an overview of Education Programs in the 2026-2029 EWR  
2 Plan. Education programs will be used to provide general education and awareness  
3 of EWR to DTE customers through targeted marketing efforts across digital, social,  
4 print, broadcast and other marketing channels as deemed appropriate. Education  
5 funding will not be used to promote specific EWR programs, but to generally  
6 educate customers on the benefits of energy efficiency and direct them towards  
7 resources to learn more about what they can do to manage their energy use, save  
8 money, and be more environmentally conscious. Education funding may also be  
9 used to support the growth and adoption of energy-efficient technologies and  
10 measures through education campaigns for participating contractors, community  
11 partners and other stakeholders or in support of workforce development.

12

13 **Q27. Is DTE planning to carry forward its educational heat pump initiative into the**  
14 **2026-2029 EWR Plan?**

15 A27. Yes. DTE plans to continue the work started in 2022 with other utilities in the State  
16 of Michigan to build an educational initiative on heat pump technology in a  
17 collaborative manner. The Michigan Heat Pump Collaborative (MIHPC) was  
18 established with the goal of educating stakeholders on heat pump technology,  
19 products and installation best practices for heating, cooling, and water heating  
20 applications. DTE plans to continue its participation and investment in the 2026-  
21 2029 plan years.

22

23 **Q28. Has the Commission provided guidance on Education program savings**  
24 **limitations?**

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No.

1 A28. Yes. The Commission found in Case No. U-21567 that the deemed savings limits  
2 for Education programs should be limited to a percentage of the legislative  
3 minimum savings requirement.

4

5 **Q29. In previous Company EWR plans, what percentage of spending and savings**  
6 **did the Education program represent?**

7 A29. The Education program represented 3% of total spending and savings.

8

9 **Q30. What are the planned energy savings for the Education program?**

10 A30. The planned electric energy savings for the Education program is 3% of the  
11 legislative minimum saving requirement, which is 3% of the 1.5% of the previous  
12 year's forecasted sales. The planned electric energy savings for the Education  
13 program are 20 GWh for 2026, 20 GWh for 2027, 20 GWh for 2028, and 20 GWh  
14 for 2029, as displayed in Exhibit A-1.

15

16 The planned gas energy savings for the Education program is 3% of the legislative  
17 minimum savings requirement, which is 3% of the 0.875% of the previous year's  
18 forecasted sales. The planned gas energy savings for the Education program are 51  
19 MMcf for 2026, 50 MMcf for 2027, 50 MMcf for 2028, and 50 MMcf for 2029, as  
20 displayed in Exhibit A-2.

21

22 **Q31. How was the Education program budget derived?**

23 A31. The Education program budget was calculated to be 3% of the cost that would be  
24 needed for the Company to achieve the legislative minimum savings requirements.

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No.

1           **Pilot Program**

2   **Q32. What is the objective of DTE’s Pilot Program in this the 2026-2029 EWR Plan?**

3   A32. The objectives of the Pilot Program are to make current programs as effective as  
4       possible for customers, develop new program designs, explore new marketing  
5       strategies and approaches, and investigate the energy savings impact of emerging  
6       technologies. Witness Stewart provides additional details of the Pilot program.

7  
8   **Q33. Has the Commission provided guidance on Pilot program savings limitations?**

9   A33. Yes. The Commission found in Case No. U-21567 that the deemed savings limits  
10       for Pilot programs should be limited to a percentage of the legislative minimum  
11       savings requirement.

12  
13   **Q34. In previous Company EWR plans, what percentage of spending and savings**  
14       **did the Pilot program represent?**

15   A34. The Pilot program represented 5% of total spending and savings up until 2020-2021  
16       EWR Plan, when the pilot budget increased to 6% with the increased budget going  
17       to the health and safety pilot. This increase to 6% was perpetuated in the 2022-  
18       2023 EWR Plan and in the 2024-2025 EWR Plan spending increased to 7% of total  
19       spending and savings with 2% of that amount dedicated to Health and Safety  
20       spending.

21  
22   **Q35. What are the planned energy savings for the Pilot Program?**

23   A35. The planned electric energy savings for the Pilot Program is 5% of the legislative  
24       minimum saving requirement, which is 5% of the 1.5% of the previous year’s  
25       forecasted sales. The planned electric energy savings for the Pilot Program are 33

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1 GWh for 2026, 33 GWh for 2027, 33 GWh for 2028, and 33 GWh for 2029, as  
2 displayed in Exhibit A-1.

3  
4 The planned gas energy savings for the Pilot Program is 5% of the legislative  
5 minimum savings requirement, which is 5% of the 0.875% of the previous year's  
6 forecasted sales. The planned gas energy savings for the Pilot Program are 85  
7 MMcf for 2026, 84 MMcf for 2027, 84 MMcf for 2028, and 83 MMcf for 2029, as  
8 displayed in Exhibit A-2.

9

10 **Q36. How was the Pilot budget derived?**

11 A36. The Pilot program budget was calculated to be 5% of the cost that would be needed  
12 for the Company to achieve the legislative minimum savings requirements.

13

14 **Utility Shared Savings**

15 **Q37. What are "Utility Shared Savings?"**

16 A37. Each year, utilities in Michigan perform EWR-related work that generates both  
17 electric and gas savings at premises where they only provide single fuel service.  
18 Utility Shared Savings are those savings that are currently being created by an  
19 "originating" utility but remain unquantified and unclaimed by the utility providing  
20 the relevant fuel service (the "receiving" utility).

21

22 **Q38. Which projects and activities are considered "eligible" when quantifying**  
23 **Utility Shared Savings?**

24 A38. Utility Shared Savings-eligible projects must occur in the originating utility's  
25 single-fuel service territory and generate savings of the opposite fuel type (e.g., the

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No.

1 project must occur in a utility's electric-only service territory but generate gas  
2 savings).

3 **SECTION B: PROGRAM ADMINISTRATION**

4 **Q39. Has DTE's plan for administering EWR programs changed from what had**  
5 **been previously approved?**

6 A39. No. DTE plans to continue using independent contractors selected through a  
7 competitive bidding process to coordinate daily program activities in the field. DTE  
8 will also continue to employ staff to manage the contractors and perform other  
9 administrative tasks. DTE Electric and DTE Gas will continue to manage their  
10 programs in conjunction using a combined staff.

11

12 **Q40. How does DTE select contractors for program implementation?**

13 A40. DTE's EWR program management team, in partnership with its Supply Chain  
14 management team, will utilize a Request for Proposal (RFP) process to select the  
15 best contractor at a competitive cost. DTE will continue to utilize the RFP process  
16 as contract terms expire.

17

18 **Q41. Is supplier diversity a part of DTE's overall strategy for EWR program**  
19 **implementation?**

20 A41. Yes. EWR programs support DTE's supplier diversity efforts<sup>1</sup>. These efforts are  
21 centered on DTE's commitment to help develop suppliers that are owned by  
22 minorities, women, veterans, members of the LGBTQ+ community and people  
23 with disabilities. DTE's EWR programs have contributed to the growth of some of

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<sup>1</sup> For more information visit: [Who We Are | DTE Energy](#)

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1 these firms servicing the energy efficiency industry. The DTE EWR programs will  
2 continue to partner with firms with advocacy, training, mentoring, and business  
3 opportunities and development experiences.

4

5 **Q42. In 2023, what percentage of total EWR spend was invested with minority- and**  
6 **women-owned firms?**

7 A42. In 2023, 64% or \$146 million of EWR dollars were invested with minority- and/or  
8 women-owned firms. The Company plans to continue this approach towards EWR  
9 implementation in the 2026-2029 EWR Plan. Updates regarding the level of  
10 investment with minority- and women-owned firms are provided in the annual  
11 report of DTE's EWR reconciliation filings.

12

13 **Q43. Is DTE open to continued collaboration with other utilities administering**  
14 **EWR programs and mutually beneficial research or evaluation?**

15 A43. Yes, if other utilities are agreeable to this coordination. DTE has partnered with  
16 Consumers Energy on the Multifamily program, School program, Energy  
17 Efficiency Assistance program, Residential Building Envelope program, Michigan  
18 Heat Pump Collaborative, Shared Savings and various market research efforts.  
19 DTE has also partnered with Efficiency United on the School program and  
20 statewide EWR forums. In addition, DTE will continue to explore new  
21 opportunities to expand our collaboration with energy efficiency program providers  
22 in Michigan to deliver programs jointly and to share costs. The benefit of this  
23 flexibility in program delivery is to provide Michigan customers with programs that  
24 are more cost-effective and improve customer and participating contractor  
25 experiences.

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1 **SECTION C: ENERGY SAVINGS GOALS**

2 **Q44. What are the annual energy saving targets for DTE from 2026 through 2029?**

3 A44. The energy savings targets for DTE Electric are:

- 4 • 2026: 2.0% of 2025 planned retail sales
- 5 • 2027: 2.0% of 2026 planned retail sales
- 6 • 2028: 2.0% of 2027 planned retail sales
- 7 • 2029: 2.0% of 2028 planned retail sales

8

9 The table below outlines planned retail sales figures supported by Witness Sirwaitis  
10 used to calculate the annual energy savings targets.

11

12 **Table 1.- Forecasted Electric Sales and Annual Energy Saving Targets**

13

|   | 2026          | 2027          | 2028          | 2029          |
|---|---------------|---------------|---------------|---------------|
| <b>Previous Year's Retail Sales (GWh)</b> | <b>44,544</b> | <b>44,333</b> | <b>44,431</b> | <b>44,561</b> |
| <b>Savings Targets (%)</b>                | <b>2.00%</b>  | <b>2.00%</b>  | <b>2.00%</b>  | <b>2.00%</b>  |
| <b>Savings Targets (GWh)</b>              | <b>891</b>    | <b>887</b>    | <b>889</b>    | <b>891</b>    |

14

15 The energy savings targets for DTE Gas are:

- 16 • 2026: 1.05% of 2025 planned retail sales
- 17 • 2027: 1.05% of 2026 planned retail sales
- 18 • 2028: 1.05% of 2027 planned retail sales
- 19 • 2029: 1.05% of 2028 planned retail sales

20

21 The table below outlines planned retail sales figures supported by Witness Chapel  
22 used to calculate the annual energy savings targets.

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1           **Table 2.-       Forecasted Gas Sales and Annual Energy Saving Targets**

2

|  | 2026           | 2027           | 2028           | 2029           |
|--|----------------|----------------|----------------|----------------|
| <b>Previous Year's Retail Sales (MMcf)</b> | <b>193,437</b> | <b>191,573</b> | <b>191,489</b> | <b>189,991</b> |
| <b>Savings Targets (%)</b>                 | <b>1.05%</b>   | <b>1.05%</b>   | <b>1.05%</b>   | <b>1.05%</b>   |
| <b>Savings Targets (MMcf)</b>              | <b>2,031</b>   | <b>2,012</b>   | <b>2,011</b>   | <b>1,995</b>   |

3

4   **Q45. Is DTE proposing any changes in the methodology used to calculate its annual**  
5       **energy savings target?**

6   A45. No. The methodology used for 2026-2029 is the same method used in previous  
7       EWR plans. DTE used service area weather normalized retail sales as a basis for  
8       setting its energy savings target. Choice sales were included in the energy savings  
9       calculation in the same manner as prior plans.

10   **Q46. Does the 2026-2029 EWR Plan achieve the annual energy saving targets?**

11   A46. Yes. The planned electric energy savings for the 2026-2029 EWR Plan are: 891  
12       GWh for 2026; 887 GWh for 2027; 889 GWh for 2028; 891 GWh for 2029, as  
13       shown in Exhibit A-1.

14

15       The planned gas energy savings for the 2026-2029 EWR Plan are: 2,031 MMcf for  
16       2026; 2,012 MMcf for 2027; 2,011 MMcf for 2028; 1,995 MMcf for 2029, as  
17       shown in Exhibit A-2. Exhibit A-1 and Exhibit A-2 provide a detailed breakdown  
18       of expected net electric and gas savings by program, respectively.

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1 **Q47. What approach did DTE use to develop the planned energy savings for its**  
2 **2026-2029 EWR Plan?**

3 A47. The plan portfolio is built by packaging relevant measures and programs for DTE  
4 customers. To determine the energy savings for prescriptive measures, DTE used  
5 the Michigan Energy Measures Database (“MEMD”), which was developed in  
6 conjunction with the Commission Staff and other utilities specifically for the  
7 Michigan market. In the MEMD, non-weather sensitive measure savings estimates  
8 are standardized throughout the state. For weather sensitive measures, a weighting  
9 calculation tool allows weighting the energy savings from measures based on the  
10 mix of weather station locations throughout the DTE’s service territory, vintage,  
11 building type, and system. Except for custom measures or measures included in the  
12 Behavior Reference Manual (BRM), this plan uses the MEMD for savings  
13 calculations, measure lifetimes, and incremental cost estimates. The BRM is a  
14 statewide database that provides the basis for determining savings resulting from  
15 EWR programs designed to achieve energy savings by motivating customers to  
16 adopt behaviors that result in more efficient energy consumption.

17

18 **Q48. How will DTE verify the 2026-2029 energy savings?**

19 A48. Energy savings will be verified by an independent third-party evaluator. For  
20 prescriptive programs the evaluation will use a three-step approach: (1) an audit of  
21 reported EWR gross savings as reported by DTE compared to the values in the  
22 MEMD and BRM, including a review of a statistically valid sample of applications  
23 to determine the audited gross savings; (2) application of the appropriate  
24 installation rate adjustment factor (IRAF) to determine verified gross savings; and  
25 (3) application of appropriate NTG ratio to each program to determine verified net

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1 savings. Thus, the verified net savings will include any adjustments for  
2 inconsistencies in program tracking data, corrections for MEMD algorithms and  
3 inputs, corrections based on any errors found in the application sample, as well as  
4 the application of IRAF and NTGR values. The Company will utilize other savings  
5 measurement approaches for programs delivering non-prescriptive measures or  
6 measures included in the BRM (for example custom savings analysis performed by  
7 a third-party evaluator) in determining energy savings. Company Witness Galvin  
8 provides additional detail on DTE's 2026-2029 EWR verification efforts.

9

10 **Q49. Will the Company continue to employ independent evaluation, measurement,**  
11 **and verification (EM&V) of its EWR programs?**

12 A49. Yes. DTE will continue to engage an independent third-party EM&V contractor to  
13 review programs, provide metrics such as verification adjustments, monitor free  
14 ridership levels, validate year-end energy savings totals and provide process  
15 evaluations for the programs. In addition, EM&V work may include market  
16 assessment studies, evaluation of pilot results, and evaluation of financial incentive  
17 metrics.

18

19 **Q50. Are energy savings from the self-direct customers incorporated in the 2026-**  
20 **2029 EWR Plan?**

21 A50. Yes. Projected energy savings provided to DTE Electric from self-direct customer  
22 plans are incorporated into the Company's 2026-2029 EWR Plan. The projected  
23 energy savings from self-direct customer plans will be counted as energy savings  
24 toward the Company's goals during annual reconciliations. Per Section 93(7) of  
25 PA 229:

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1 “ A self-directed energy waste reduction plan shall be incorporated into the  
2 relevant electric provider’s energy waste reduction plan. The self-directed plan  
3 and information submitted by the customer under subsection (9) are  
4 confidential and exempt from disclosure under the freedom of information act,  
5 1976 PA 442, MCL 15.231 to 15.246. Projected energy savings from measures  
6 implemented under a self-directed plan shall be attributed to the relevant  
7 provider’s energy waste reduction programs for the purposes of determining  
8 annual incremental energy savings achieved by the provider under section 77..”

9

10 In instances where a customer amends or self-reports a change to their plan, the  
11 changed energy savings will be incorporated into the subsequent year’s program  
12 energy savings results. The projected self-direct energy savings incorporated into  
13 the 2026-2029 EWR Plan are 3.5 GWh for 2026, 3.5 GWh for 2027, 3.5 GWh for  
14 2028, and 3.5 GWh for 2029, as shown on Exhibit A-1.

15

16 **Q51. Is DTE Electric proposing any changes in its approach towards self-direct**  
17 **customers?**

18 A51. No. The Company will continue to use the same approach approved in its previous  
19 EWR plan related to the self-direct option for customers.

20

21 **Q52. Are self-direct customers exempt from surcharges associated with the**  
22 **program?**

23 A52. Yes, in part. All customer sites that choose to self-direct will continue to be exempt  
24 from being billed the EWR surcharge other than the portion which funds income-  
25 qualified programs.

26

27 **Q53. Can self-direct customers participate in DTE Electric’s EWR program?**

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No.

1 A53. No. Self-direct customers may not participate nor benefit from the DTE Electric  
2 EWR program for the years their self-direct plan is in effect. In addition, self-direct  
3 customers or self-direct sites of customers may not participate in any DTE Electric  
4 pilot programs.

5

6 **SECTION D: SPENDING AND PROGRAM FLEXIBILITY**

7 **Q54. Has the cost structure for EWR programs changed from the 2026-2029 EWR**  
8 **Plan?**

9 A54. For the most part, no. The only changes are the addition of Health and Safety costs  
10 and Workforce Development costs. Cost elements for the 2026-2029 EWR Plan  
11 include, but are not limited to, the following:

- 12 1) Direct costs of programs including incentives and rebates;
- 13 2) Costs for third party administrators or implementation contractors;
- 14 3) Incremental expenditures on material and media for customer education;
- 15 4) Incremental expenditures on services, materials, and incentives for pilot  
16 programs;
- 17 5) Health and Safety costs;
- 18 6) Workforce Development costs;
- 19 7) EM&V costs;
- 20 8) Program infrastructure costs such as IT services and products; and
- 21 9) Labor expenditures for administering and supporting the programs.

22

23 **Q55. What is the planned annual spend for the 2026-2029 EWR Plan?**

24 A55. The total spend for all electric programs is summarized in Table 3, below. They  
25 represent a summary of costs from Exhibit A-1.

Line  
No.

1           **Table 3.                           Total Spending of All Electric EWR Programs (\$M)<sup>1</sup>**

| <b>Category</b>                | <b>2026</b>     | <b>2027</b>     | <b>2028</b>     | <b>2029</b>     |
|--------------------------------|-----------------|-----------------|-----------------|-----------------|
| Residential Programs           | \$31.35         | \$34.35         | \$38.76         | \$40.24         |
| Income-Qualified Programs      | 60.13           | 60.29           | 60.48           | 60.60           |
| C&I Programs                   | 97.82           | 99.65           | 100.72          | 102.50          |
| Pilot Program                  | 7.92            | 8.13            | 8.37            | 8.51            |
| Education Program              | 4.75            | 4.88            | 5.02            | 5.11            |
| EM&V Program                   | 8.67            | 8.86            | 9.06            | 9.27            |
| Workforce Development          | 0.63            | 0.65            | 0.67            | 0.68            |
| <b>Total Spend<sup>1</sup></b> | <b>\$211.28</b> | <b>\$216.81</b> | <b>\$223.07</b> | <b>\$226.90</b> |

<sup>1</sup> Totals in table may not sum due to rounding

2

3           The total spend for all gas programs is summarized in Table 4, below. They  
4           represent a summary of costs from Exhibit A-2.

5

6           **Table 4.                           Total Spending of All Gas EWR Programs (\$M)<sup>2</sup>**

| <b>Category</b>                | <b>2026</b>    | <b>2027</b>    | <b>2028</b>    | <b>2029</b>    |
|--------------------------------|----------------|----------------|----------------|----------------|
| Residential Programs           | \$11.71        | \$11.83        | \$12.19        | \$12.79        |
| Income-Qualified Programs      | 20.82          | 20.81          | 20.83          | 20.85          |
| C&I Programs                   | 12.44          | 12.26          | 12.40          | 12.22          |
| Pilot Program                  | 2.09           | 2.09           | 2.12           | 2.14           |
| Education Program              | 1.26           | 1.25           | 1.27           | 1.28           |
| EM&V Program                   | 1.74           | 1.77           | 1.81           | 1.86           |
| Workforce Development          | 0.15           | 0.15           | 0.15           | 0.15           |
| <b>Total Spend<sup>2</sup></b> | <b>\$50.21</b> | <b>\$50.16</b> | <b>\$50.77</b> | <b>\$51.28</b> |

<sup>2</sup> Totals in table may not sum due to rounding

7

8   **Q56. Has PA 229 provided direction related to the level of investment in helping**  
9   **income-qualified customers reduce energy waste?**

Line  
No.

1 A56. Yes. PA 229 provides that an electric provider's annual expenditures to implement  
2 the low-income EWR programs and measures shall be at least 25% of total EWR  
3 electric spending; and a natural gas provider's annual expenditures to implement  
4 the low-income EWR programs and measures shall be at least 35% of total EWR  
5 gas spending.

6

7 If the provider's low-income levels are under these percentages, providers are  
8 directed to incrementally increase their percentage of low-income spending to  
9 adhere to these levels by 2029.

10

11 **Q57. What percentage of the annual spending does the low-income programs**  
12 **represent?**

13 A57. For the electric EWR portfolio the percentage of low-income spend is  
14 28% in 2026, 28% in 2027, 27% in 2028, and 27% in 2029, exceeding the  
15 legislative requirement in all years.

16

17 For the gas EWR portfolio, the percentage of low-income spend is 41% in 2026,  
18 41% in 2027, 41% in 2028, and 41% in 2029.the gas, exceeding the legislative  
19 requirement in all years.

20

21 **Q58. What customers are eligible to participate in the Health and Safety program?**

22 A58. The Health and Safety program is only made available to income-qualified  
23 customers.

Line  
No.

1 **Q59. Since only income-qualified customers can participate in the Health and Safety**  
2 **programs, is all the Health and Safety spend counted as income-qualified**  
3 **spend?**

4 A59. Yes.

5

6 **Q60. How are the Income-Qualified programs, Pilot program, Workforce**  
7 **Development and EM&V costs allocated between customer rate classes?**

8 A60. The Income-Qualified programs, Pilot program, Workforce Development and  
9 EM&V costs are allocated based on the estimated annual spend levels between the  
10 residential and C&I programs. The DTE Electric Income-Qualified programs, Pilot  
11 program, Workforce Development and EM&V costs are split between C&I  
12 secondary and C&I primary rate classes based on historical and projected incentive  
13 costs for these customers. Exhibit A-3 calculates the allocation percentages for  
14 distributing these costs between residential, C&I secondary and C&I primary rate  
15 classes. These allocation percentages are applied in Exhibit A-5 to distribute cost  
16 between customer rate classes.

17

18 The DTE Gas Income-Qualified programs, Pilot program, Workforce Development  
19 and EM&V costs are allocated based on the estimated annual spend levels between  
20 the residential and C&I/EUT programs. Exhibit A-4 calculates the allocation  
21 percentages for distributing these costs between residential and C&I/EUT rate  
22 classes. The allocation percentages of program costs between C&I and EUT is  
23 supported in Witness Smith's testimony. These allocation percentages are applied  
24 in Exhibit A-6 to distribute cost between customer rate classes.

Line  
No.

1 **Q61. How are Education program costs allocated between customer rate classes?**

2 A61. DTE Electric utilizes a cost tracker to monitor the actual expenses of its Education  
3 Program, differentiating between residential and C&I customer classes. The cost  
4 tracker for 2024 is the basis for allocating Education program costs between  
5 residential and C&I in DTE's 2026-2029 EWR Plan. As detailed in Exhibit A-3,  
6 the Education costs allocated to the residential and C&I customer classes are 73%  
7 and 27%, respectively.

8

9 DTE Gas also utilizes a cost tracker to monitor the actual expenses of its Education  
10 Program, differentiating between residential and C&I/EUT customer classes. The  
11 cost tracker for 2024 is the basis for allocating Education program costs between  
12 residential and C&I/EUT in DTE's 2026-2029 EWR Plan. As detailed in Exhibit  
13 A-4, the Education costs allocated to the residential and C&I/EUT customer classes  
14 are 73% and 27%, respectively.

15

16 **Q62. What Workforce Development program is included in the 2026-2029 EWR**  
17 **Plan?**

18 A62. The objective of the Workforce Development effort is to bolster capacity in the  
19 market of energy efficiency. The effort has an emphasis on equity and inclusion  
20 by building workforce initiatives that engage new or existing contractors to offer  
21 energy efficiency services throughout DTE's service territory. Witness Goncalves  
22 provides additional details in his testimony related to the Workforce Development  
23 program.

24

25 **Q63. What is the budget for the Workforce Development programs?**

Line  
No.

1 A63. The electric budget to support the Workforce Development efforts are: \$634K in  
2 2026, \$650K in 2027, \$669K in 2028, and \$681K in 2029, as displayed in Exhibit  
3 A-1.

4

5 The natural gas budget to support the Workforce Development efforts is: \$151K in  
6 2026, \$150K in 2027, \$152K in 2028, and \$154K in 2029, as displayed in Exhibit  
7 A-2.

8

9 **Q64. Is the Company proposing to capitalize any new program costs from the from**  
10 **the 2026-2029 EWR Plan?**

11 A64. No. The 2026-2029 EWR Plan reflects zero new capital costs and will treat EWR  
12 program costs as O&M. DTE Electric will continue to amortize approved capital  
13 costs from 2019 through 2021 over the 5-year amortization period. DTE Gas will  
14 continue to amortize approved capital costs from 2020 through 2021 over the 5-  
15 year amortization period.

16

17 **Q65. What is DTE reserving regarding spend flexibility?**

18 A65. The Company reserves the ability to change program spend within a customer class  
19 and increase spend above the filed amounts for 2026-2029. In the April 12, 2018  
20 Order in Case No U-18262, the Commission reaffirmed its determination in the  
21 June 3, 2010 Order in Case No. U-15806, that providers may change spending for  
22 programs within a customer class by up to 30% without the need to file a Plan  
23 Amendment.

Line  
No.

1 In addition to the 30% program class spend change control limit, DTE may need to  
2 increase spend above planned amounts. The purpose of increasing spend above the  
3 Plan amounts would be to ensure program continuity in those future years in cases  
4 where programs have become oversubscribed, to provide an ability to adjust  
5 incentive levels as needed for unanticipated market response, or to initiate  
6 infrastructure improvements to enhance customer experience.

7

8 **Q66. Is the Company proposing to modify its cost allocation between DTE Electric**  
9 **and DTE Gas from the previous EWR Plan?**

10 A66. No. The approach will remain the same. Costs, to the extent possible, will be  
11 directly charged. If that is not possible, the next approach will be to charge the  
12 separate companies based on estimated effort or time allocation. When direct  
13 charging or estimating is not practical for shared spending areas, costs will be  
14 allocated based on annual spending budgets for the program.

15

16 **Q67. Is the 2026-2029 EWR Plan cost-effective?**

17 A67. Yes. A USRCT score has been calculated based on the costs and energy savings  
18 from the 2026-2029 EWR Plan excluding income-qualified programs and as  
19 required by PA 229. As shown in Witness Malfroid's Exhibit A-12 the USRCT  
20 score for the electric portfolio without income-qualified programs is 3.19 and thus  
21 cost-effective. As shown in Witness Malfroid's Exhibit A-13 the USRCT score for  
22 the gas portfolio without income-qualified programs is 2.38 and thus cost-effective.  
23 Please refer to Witness Malfroid's testimony for additional details regarding the  
24 USRCT calculation.

Line  
No.

1 **SECTION E: RECOVERY MECHANISM**

2 **Q68. What are the funding levels requested by DTE for the 2026-2029 EWR Plan?**

3 A68. The funding levels requested by DTE Electric for the 2026-2029 EWR Plan are the  
4 sum of the revenue recoveries calculated by Witness Smith for the residential, C&I  
5 secondary and C&I primary classes and shown on Exhibit A-36. Table 5 reflects  
6 the levelized requested funding levels for the 2026-2029 Plan years.

7

8 **Table 5. Electric EWR Plan Levelized Requested Funding Levels**

9

| <b>Year</b> | <b>Amount<br/>(\$ millions)</b> |
|-------------|---------------------------------|
| 2026        | \$225.8                         |
| 2027        | \$226.1                         |
| 2028        | \$226.7                         |
| 2029        | \$227.0                         |

10 The funding levels requested by DTE Gas for the 2026-2029 EWR Plan are the sum  
11 of the revenue recoveries calculated by Witness Smith for the residential, C&I, and  
12 EUT classes and shown on Exhibit A-33. Table 6 reflects the levelized requested  
13 funding levels for the 2026-2029 Plan years.

14

15 **Table 6. Gas EWR Plan Levelized Requested Funding Levels**

16

| <b>Year</b> | <b>Amount<br/>(\$ millions)</b> |
|-------------|---------------------------------|
| 2026        | \$52.4                          |
| 2027        | \$52.6                          |

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|      |        |
|------|--------|
| 2028 | \$52.1 |
| 2029 | \$51.5 |

1

2 **Q69. What recovery mechanism will DTE use to fund the 2026-2029 EWR Plan?**

3 A69. DTE plans to continue the surcharge design methodology as approved in previous  
4 EWR plans, which has been consistent over the history of the surcharge. This  
5 methodology is discussed by Witness Smith for DTE Electric and DTE Gas and  
6 used to calculate a surcharge for each customer class that is levelized across all  
7 months of the plan, January 2026 through December 2029. Surcharges for all  
8 classes are developed on a levelized basis to keep the surcharge consistent over the  
9 plan’s years.

10

11 **Q70. Will the structure of surcharges change with the 2026-2029 EWR Plan?**

12 A70. No. As discussed in the testimony of Company Witness Smith, electric residential  
13 surcharges will be applied based on kWh usage each month. Electric surcharges  
14 for C&I secondary and C&I primary customers will be charged on a per meter per  
15 month basis. Section 89 (2) of PA 342 states that electric providers of EWR  
16 programs recover actual costs of implementing their approved plans in this manner.

17

18 Residential, C&I, and EUT gas surcharges will be applied based on ccf usage each  
19 month. Section 89 (2) of PA 342 states that gas providers of EWR programs recover  
20 actual costs of implementing their approved plans in this manner.

21

22 **Q71. How will DTE ensure, to the extent feasible, that the revenues collected from**  
23 **a customer class are spent on programs that benefit that customer class?**

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- 1 A71. DTE has established specific accounting reports and tracking systems for customer  
2 incentives which enable monitoring of customer class spending. Reconciliation of  
3 under or over recoveries will continue to be performed on a class basis each year  
4 and included in the annual reconciliations filed with the Commission. As part of  
5 the monitoring and reconciliation process, DTE will continue to ensure, to the  
6 extent feasible, that the EWR program offerings are designed and positioned such  
7 that the revenues collected from a rate class are spent to benefit that customer class  
8 in a cost-effective, reasonable and prudent way.  
9
- 10 **Q72. How does DTE plan to handle EWR over/under recoveries for program costs**  
11 **covered under the 2024-2025 EWR Plan?**
- 12 A72. The projected cumulative over/under recoveries related to actual program costs  
13 from the 2024-2025 EWR Plan are included in the derivation of the total revenue  
14 requirements for 2026 through 2029. Further details of over/under recoveries for  
15 program costs are discussed in the testimony of Company Witness Smith.  
16
- 17 **Q73. How does DTE plan to handle the residual over/under recovery from the 2026-**  
18 **2029 EWR Plan?**
- 19 A73. DTE will continue to rollover any over/under recoveries into future EWR  
20 reconciliations and plans. When, and if, an EWR program comes to an end, DTE  
21 will recommend treatment of residual over/under recovery amounts including  
22 recovery of unamortized capitalized costs.

Line  
No.

1 **SECTION F: FINANCIAL INCENTIVE MECHANISM**

2 **Q74. Is DTE proposing a financial incentive mechanism for the 2026-2029 EWR**  
3 **Plan?**

4 A74. Yes. The Company's proposed financial incentive mechanisms define the program  
5 outcomes that allow the Company to earn the maximum financial incentive award  
6 detailed in PA 229. The basis for the financial incentive mechanism for reaching  
7 and exceeding legislative minimums, as detailed in Exhibit A-7 for DTE Electric  
8 and Exhibit A-8 for DTE Gas.

9

10 **Q75. How is the financial incentive to be calculated?**

11 A75. The financial incentive is calculated based on a sliding scale method to determine  
12 the financial incentive payment for exceeding savings goals. A detailed calculation  
13 of the financial incentive mechanism is provided in Exhibit A-7 for DTE Electric  
14 and Exhibit A-8 for DTE Gas.

15

16 **Q76. Does PA 229 provide direction related to the average measure life that**  
17 **providers are expected to achieve to qualify for a financial incentive?**

18 A76. Yes. In addition to the annual incremental savings, for a provider to get a financial  
19 incentive PA 229 expresses that there is an expectation that electric providers need  
20 to have an average measure life of at least 8 years and natural gas providers need  
21 to have an average measure life of at least 10 years.

22

23 **Q77. Has the company designed its EWR measure offerings in a manner to qualify**  
24 **for a financial incentive as described in PA 229?**

25 A77. Yes.

Line  
No.

1 **Q78. What is the weighted average measure life for the 2026-2029 EWR Plan?**

2 A78. The weighted average measure life is calculated by weighting measure life by net  
3 savings. The electric weighted average measure life of the 2026-2029 EWR Plan  
4 is 9.37 years for 2026, 9.50 years for 2027, 9.59 years for 2028, and 9.69 years for  
5 2029; as shown in Exhibit A-1. The gas weighted average measure life of the 2026-  
6 2029 EWR Plan is 12.35 years for 2026, 12.43 years for 2027, 12.50 years for 2028,  
7 and 12.60 years for 2029; as shown in Exhibit A-2.

8

9 **Q79. How should DTE Gas calculate the spend that would qualify for the additional**  
10 **2.5% financial incentive as outlined in Section 75 of PA 229?**

11 A79. DTE Gas will use the methodology below to split the spend between what is spent  
12 to reduce space heating and spend that does not reduce space heating.

13

14 DTE Gas will track EWR natural gas programs' spending for incentives used for  
15 measures that reduce space heating load and for measures that do not reduce space  
16 heating load. The incentive spend would then be counted in the respective two  
17 categories. DTE Gas will also calculate the spend proportion between these two  
18 groupings to create a ratio for each program.

19

20 *PSHLR = Program Space Heating Load Reduction*

21

$$22 \quad PSHLR \text{ Incentive Ratio}_i = \frac{\text{Space Heating Load Incentive}_i}{\text{Total Incentive}_i}$$

23

24 Then DTE Gas will identify all administrative spending on natural gas programs.

25 The program level incentive space heating ratio previously calculated will be

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1 applied to each of the program’s implementation and administrative spending to  
2 divide the spend into space heating and non-space heating.

3

$$4 \quad \textit{PSHLR Spend}_i$$

$$5 \quad \quad \quad = \textit{PSHLR Incentive}_i$$

$$6 \quad \quad \quad + (\textit{PSHLR Incentive Ratio}_i * \textit{Implementation Spend}_i)$$

7

8 For natural gas programs and administrative activities without related incentive  
9 spend (EM&V, Pilots, Education, Health and Safety, Workforce Development,  
10 etc.), the provider will calculate a natural gas portfolio level weighted average space  
11 heating load ratio. This ratio will be created using the program level space heating  
12 load ratios previously calculated and weighted by the total spend for those programs.  
13 This portfolio level space heating ratio load will be applied to the spend for programs  
14 without incentive ratios to divide that spend into space heating load and non-space  
15 heating load.

16

$$17 \quad \textit{Portfolio Space Heating Load Reduction Ratio}$$

$$18 \quad \quad \quad = \frac{\sum_{i=1}^n \textit{Program Spend}_i * \textit{PSHLR Incentive Ratio}_i}{\sum_{i=1}^n \textit{Program Spend}_i}$$

$$19 \quad \textit{Non-Standard PSHLR Spend}$$

$$20 \quad \quad \quad = \textit{Non-Standard Program Spend}$$

$$21 \quad \quad \quad * \textit{Portfolio Space Heating Load Reduction Ratio}$$

$$22 \quad \textit{Total Space Heating Spend}$$

$$23 \quad \quad \quad = \textit{Non-Standard PSHLR Spend} + \sum_{i=1}^n \textit{PSHLR Spend}_i$$

Line  
No.

1 **SECTION G: ADDITIONAL FUNDING SOURCES**

2 **Q80. Does the 2026-2029 EWR Plan consider the effects of the Inflation Reduction**  
3 **Act?**

4 A80. No. While the Inflation Reduction Act (IRA) and associated funds will likely help  
5 drive the uptake of energy efficiency measures, it is unclear how these may impact  
6 energy savings opportunities from utility programs. Fully understanding the  
7 impacts on the long-term opportunities for utility driven energy efficiency  
8 improvements and net EWR savings will take time, especially since the specific  
9 guidance and rules are still being specified and developed for the IRA provisions<sup>2</sup>.  
10 While the legislation will affect the energy efficiency landscape in Michigan, it is  
11 too early to quantify the impacts, let alone develop plans and forecasts upon net-  
12 utility EWR program savings.

13

14 **Q81. Is DTE intending to offer educational resources to customers about energy**  
15 **efficiency-related IRA tax credits?**

16 A81. DTE may share information with customers and collaborate with program partners  
17 to raise awareness about tax credits associated with energy-efficient measures.  
18 However, it is important to note that any information provided is solely for  
19 awareness purposes and should not be interpreted as tax advice or relied upon as  
20 such, and the same would be communicated to customers.

---

<sup>2</sup> For example, energy efficiency rebates available through the HOMES rebate program (Sec 50121) will be administered through State Energy Offices. There are multiple requirements to qualify, and the specific guidance and rules are under development.

Line  
No.

1 **Q82. Does DTE plan to partner with EGLE or other agencies to support customers**  
2 **receiving additional funding sources for their energy efficient projects?**

3 A82. Yes. DTE will continue collaborations and efforts to help EWR participants to  
4 leverage additional funding sources from federal, state, and/or private sources, such  
5 as EGLE.

6

7 **SECTION G: SUMMARY**

8 **Q83. Does DTE’s 2026-2029 EWR Plan meet the EWR plan requirements of PA**  
9 **229?**

10 A83. Yes. In brief, the testimony and exhibits in this filing demonstrate that the 2026-  
11 2029 EWR Plan:

- 12 1. Offers programs for each customer class, including income-qualified customers  
13 as described in Section A – 2026-2029 EWR Plan Overview;
- 14 2. Provides practical and effective administration of the proposed programs as  
15 described in Section B – Program Administration;
- 16 3. Includes a process for obtaining an independent expert evaluation to verify  
17 incremental energy savings as described in Section C – Energy Savings Goals;
- 18 4. Demonstrates that proposed programs and funding are sufficient to achieve the  
19 applicable EWR standard as described in Section C – Energy Savings Goals;
- 20 5. Specifies the method used to calculate incremental energy savings as described  
21 in Section C – Energy Savings Goals;
- 22 6. Specifies necessary funding levels as described in Section D – Spending and  
23 Program Flexibility;
- 24 7. Is cost-effective under the USRCT test as described in Section D – Spending  
25 and Program Flexibility;

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- 1 8. Describes how the program costs will be recovered as described in Section E –  
2 Recovery Mechanism;
- 3 9. Assures to the extent feasible that charges collected from a particular class are  
4 spent on programs that benefit that class as described in Section E – Recovery  
5 Mechanism;
- 6 10. For each year the level of income-qualified spending is at or exceeding the levels  
7 expected by 2029 as directed in PA 229 as described in Section D – Spending  
8 and Program Flexibility;
- 9 11. A Health and Safety program is being offered enabling income-qualified  
10 customers to participate in income-qualified programs as described in Section  
11 A: 2026-2029 EWR Plan Overview;
- 12 12. A Workforce Development program is being continued to help develop  
13 Michigan’s economy and ability to deliver energy efficiency programs as  
14 described in Section D – Spending and Program Flexibility; and
- 15 13. Proposes a financial incentive mechanism as described in PA 229 – Section F –  
16 Financial Incentive Mechanism.
- 17
- 18 DTE is confident that the approach and design of the EWR programs as presented  
19 in this filing will result in significant customer benefits. DTE has taken a careful  
20 approach to control costs and maintains a capable staff to help manage the  
21 contractors implementing the programs. DTE believes that the EWR program, as  
22 outlined in this filing and if approved with the requested flexibilities, is positioned  
23 to succeed in meeting all the program objectives in a cost-effective, reasonable and  
24 prudent way.

Line  
No.

1    **Q84. Does this complete your direct testimony?**

2    A84. Yes, it does.

3

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter, on the Commission's own )  
motion, regarding the regulatory reviews, )  
revisions, determinations, and/or approvals )  
necessary for **DTE ELECTRIC** )  
**COMPANY** and **DTE GAS COMPANY** to )  
fully comply with Public Act 295 of 2008, as )  
as amended \_\_\_\_\_ )

Case No. U-21681  
(Paperless e-file)

EXHIBITS  
OF  
JASON R. KUPSER

| Line No.                                     | (a)<br>Energy Optimization Programs                           | (b)<br>Source         | (c)<br>USRCT Results (1) | (d)<br>CCE Results \$/kWh (1) | (e)<br>2026     |                | (g)<br>2027     |                | (i)<br>2028     |                | (k)<br>2029     |                |
|--|---|-----------------------|--------------------------|-------------------------------|-----------------|----------------|-----------------|----------------|-----------------|----------------|-----------------|----------------|
|  |   |                       |                          |                               | Net MWh Savings | Cost           | Net MWh Savings | Cost           | Net MWh Savings | Cost           | Net MWh Savings | Cost           |
| <b>Residential</b>                           |   |                       |                          |                               |                 |                |                 |                |                 |                |                 |                |
| 1  | Appliance Recycling   |                       | 1.45                     | \$ 0.05                       | 28,954          | \$ 8,837,285   | 22,132          | \$ 10,740,531  | 23,641          | \$ 11,875,046  | 23,952          | \$ 12,300,601  |
| 2  | Residential Building Envelope                                 |                       | 2.14                     | \$ 0.04                       | 17,278          | 11,523,596     | 18,195          | 12,037,988     | 19,988          | 14,960,065     | 20,637          | 15,673,610     |
| 3  | Multifamily Residential                                       |                       | 2.83                     | \$ 0.02                       | 774             | 392,416        | 847             | 416,992        | 886             | 460,558        | 902             | 480,093        |
| 4  | School Program  |                       | 3.44                     | \$ 0.02                       | 3,455           | 743,913        | 3,946           | 914,063        | 3,992           | 964,672        | 3,992           | 979,846        |
| 5  | Home Energy Reports   |                       | 1.29                     | \$ 0.05                       | 106,000         | 6,298,898      | 106,000         | 6,613,843      | 106,000         | 6,773,400      | 106,000         | 6,985,400      |
| 6  | Multifamily Strategic Energy Management                       |                       | 1.33                     | \$ 0.05                       | 1,191           | 211,607        | 1,191           | 215,548        | 1,256           | 231,870        | 1,272           | 239,730        |
| 7  | Emerging Measures and Approaches                              |                       | 0.00                     | \$ -                          | -               | -              | -               | -              | -               | -              | -               | -              |
| 8  | Residential Shared Savings                                    |                       | 0.00                     | \$ -                          | 2,577           | -              | 2,577           | -              | 2,577           | -              | 2,577           | -              |
| 9  | Administrative and Infrastructure                             |                       |                          |                               |                 | 3,340,969      |                 | 3,409,479      |                 | 3,489,676      |                 | 3,580,702      |
| 10   | <b>Residential Program Subtotal</b>                           |                       | 1.43                     | \$ 0.06                       | 160,229         | \$ 31,348,684  | 154,888         | \$ 34,348,444  | 158,340         | \$ 38,755,287  | 159,332         | \$ 40,239,982  |
| <b>Income-Qualified</b>                      |   |                       |                          |                               |                 |                |                 |                |                 |                |                 |                |
| 11   | Income-Qualified attributed to Energy Efficiency Assistance   |                       |                          |                               | 4,156           | \$ 30,000,000  | 4,207           | \$ 30,000,000  | 4,150           | \$ 30,000,000  | 4,146           | \$ 30,000,000  |
| 12   | Income-Qualified attributed to Multifamily Units              |                       |                          |                               | 14,467          | 21,880,273     | 14,634          | 21,897,560     | 14,670          | 21,878,352     | 14,306          | 21,774,230     |
| 13   | Income-Qualified attributed to School Program                 |                       |                          |                               | 1,614           | 413,002        | 1,541           | 370,707        | 1,446           | 360,993        | 1,614           | 432,735        |
| 14   | Income-Qualified attributed to New Home Construction          | 3                     |                          |                               | 91              | 514,746        | 91              | 519,619        | 91              | 524,972        | 91              | 530,600        |
| 15   | Income-Qualified attributed to Shared Savings                 |                       |                          |                               | 773             | -              | 773             | -              | 773             | -              | 773             | -              |
| 16   | Health and Safety   |                       |                          |                               | 26,727          | 6,338,494      | 26,600          | 6,504,424      | 26,658          | 6,692,176      | 26,737          | 6,807,139      |
| 17   | Income-Qualified Administrative and Infrastructure            |                       |                          |                               |                 | 981,900        |                 | 1,002,035      |                 | 1,025,604      |                 | 1,052,357      |
| 18   | <b>Income-Qualified Program Total</b>                         |                       | 0.70                     | \$ 0.11                       | 47,828          | \$ 60,128,415  | 47,846          | \$ 60,294,345  | 47,788          | \$ 60,482,097  | 47,667          | \$ 60,597,060  |
| <b>Commercial &amp; Industrial (C&amp;I)</b> |   |                       |                          |                               |                 |                |                 |                |                 |                |                 |                |
| 19   | Large Business Program  |                       | 5.49                     | \$ 0.01                       | 421,026         | \$ 65,632,552  | 420,292         | \$ 66,523,914  | 417,727         | \$ 66,851,760  | 417,373         | \$ 67,907,498  |
| 20   | Small Business Program  |                       | 4.85                     | \$ 0.01                       | 77,363          | 11,319,198     | 77,363          | 11,428,803     | 77,363          | 11,549,209     | 78,072          | 11,751,007     |
| 21   | Mid-Stream Program  |                       | 9.27                     | \$ 0.01                       | 120,198         | 12,681,873     | 122,253         | 13,345,385     | 123,258         | 13,766,582     | 124,483         | 14,067,036     |
| 22   | Multifamily Common Areas                                      |                       | 2.89                     | \$ 0.02                       | 302             | 94,112         | 328             | 97,103         | 330             | 101,435        | 330             | 102,215        |
| 23   | Emerging Measures and Approaches                              |                       | 0.00                     | \$ -                          | -               | -              | -               | -              | -               | -              | -               | -              |
| 24   | C&I Shared Savings  |                       | 0.00                     | \$ -                          | 7,017           | -              | 7,017           | -              | 7,017           | -              | 7,017           | -              |
| 25   | Self Direct   |                       | 117.91                   | \$ 0.00                       | 3,472           | 31,000         | 3,472           | 31,000         | 3,472           | 31,000         | 3,472           | 31,000         |
| 26   | Administrative and Infrastructure                             |                       |                          |                               |                 | 8,063,413      |                 | 8,228,763      |                 | 8,422,316      |                 | 8,642,008      |
| 27   | <b>C&amp;I Program Total</b>                                  |                       | 3.88                     | \$ 0.02                       | 629,378         | \$ 97,822,149  | 630,723         | \$ 99,654,970  | 629,167         | \$ 100,722,302 | 630,747         | \$ 102,500,766 |
| <b>Other Programs and Costs</b>              |   |                       |                          |                               |                 |                |                 |                |                 |                |                 |                |
| 28   | Pilot Program   |                       | 3.57                     | \$ 0.02                       | 33,408          | \$ 7,923,117   | 33,250          | \$ 8,130,530   | 33,323          | \$ 8,365,220   | 33,421          | \$ 8,508,924   |
| 29   | Education Program   |                       | 3.83                     | \$ 0.02                       | 20,045          | 4,753,870      | 19,950          | 4,878,318      | 19,994          | 5,019,132      | 20,052          | 5,105,355      |
| 30   | Evaluation, Measurement & Verification (EM&V)                 |                       |                          |                               |                 | 8,673,047      |                 | 8,857,094      |                 | 9,059,277      |                 | 9,271,846      |
| 31   | Workforce Development   |                       |                          |                               |                 | 633,849        |                 | 650,442        |                 | 669,218        |                 | 680,714        |
| 32   | <b>Other Programs and Costs Total</b>                         |                       |                          |                               | 53,453          | \$ 21,983,884  | 53,199          | \$ 22,516,385  | 53,317          | \$ 23,112,846  | 53,473          | \$ 23,566,839  |
| 33   | <b>Total Costs &amp; Energy Savings</b>                       | L10 + L14 + L30 + L35 |                          |                               | 890,888         | \$ 211,283,131 | 886,657         | \$ 216,814,144 | 888,612         | \$ 223,072,532 | 891,219         | \$ 226,904,647 |
| 34   | <b>Portfolio (excluding Income-Qualified) USRCT &amp; CCE</b> |                       | 3.19                     | \$ 0.02                       |                 |                |                 |                |                 |                |                 |                |
| 35   | Legislative Savings Reference (1.5% EWR Savings)              | (2)                   |                          |                               | 668,166         |                | 664,993         |                | 666,459         |                | 668,415         |                |
| 36   | Weighted Average Measure Life                                 | (3)                   |                          |                               | 9.37            |                | 9.50            |                | 9.59            |                | 9.69            |                |
| 37   | Lifetime Savings  | (4)                   |                          |                               | 8,346,774       |                | 8,421,049       |                | 8,524,169       |                | 8,632,251       |                |

Notes:

- (1) Exhibit A-12
- (2) Legislative savings reference supported in Witness Kupser's testimony
- (3) Weighted Average Measure Life of the Portfolio is calculated by weighting measure life by first year net energy savings
- (4) Lifetime Savings is calculated as Weighted Average Measure Life (line 39) x First Year Net Energy Savings (line 36)

| Line No.  | (a)<br>DTE Gas Energy Waste Reduction Programs                | (b)<br>Source       | (c)<br>USRCT Results (1) | (d)<br>CCE Results \$/Ccf (1) | (e) 2026         |                      | (f) 2027         |                      | (g) 2028         |                      | (h) 2029         |                      |
|---|---|---------------------|--------------------------|-------------------------------|------------------|----------------------|------------------|----------------------|------------------|----------------------|------------------|----------------------|
|   |   |                     |                          |                               | Net Mcf Savings  | Cost (\$000)         | Net Mcf Savings  | Cost (\$000)         | Net Mcf Savings  | Cost (\$000)         | Net Mcf Savings  | Cost (\$000)         |
| <b>Residential</b>  |   |                     |                          |                               |                  |                      |                  |                      |                  |                      |                  |                      |
| 1   | Residential Building Envelope                                 |                     | 3.08                     | \$ 0.13                       | 279,779          | \$ 7,177,552         | 290,759          | \$ 7,194,169         | 297,075          | \$ 7,391,731         | 308,349          | \$ 7,557,004         |
| 2   | Multifamily Residential                                       |                     | 0.81                     | \$ 0.51                       | 27,176           | 1,641,401            | 27,177           | 1,612,479            | 27,491           | 1,654,154            | 30,077           | 1,895,461            |
| 3   | School Program  |                     | 2.73                     | \$ 0.16                       | 38,969           | 584,560              | 44,694           | 671,769              | 46,897           | 717,734              | 46,897           | 728,717              |
| 4   | Home Energy Reports   |                     | 1.07                     | \$ 0.40                       | 265,000          | 1,073,322            | 265,000          | 1,086,500            | 265,000          | 1,139,500            | 265,000          | 1,298,500            |
| 5   | Multifamily Strategic Energy Management                       |                     | 1.22                     | \$ 0.35                       | 13,095           | 146,414              | 13,095           | 149,041              | 13,095           | 151,927              | 11,549           | 136,666              |
| 6   | Emerging Measures and Approaches                              |                     | 0.00                     | \$ -                          | -                | -                    | -                | -                    | -                | -                    | -                | -                    |
| 7   | Residential Shared Savings                                    |                     | 0.00                     | \$ -                          | 20,190           | -                    | 20,190           | -                    | 20,190           | -                    | 20,190           | -                    |
| 8   | Administrative and Infrastructure                             |                     |                          |                               |                  | 1,090,513            |                  | 1,112,875            |                  | 1,139,051            |                  | 1,168,763            |
| 9   | <b>Residential Program Total</b>                              |                     | <b>1.61</b>              | <b>\$ 0.25</b>                | <b>644,208</b>   | <b>\$ 11,713,761</b> | <b>660,914</b>   | <b>\$ 11,826,834</b> | <b>669,747</b>   | <b>\$ 12,194,098</b> | <b>682,061</b>   | <b>\$ 12,785,111</b> |
| <b>Income-Qualified</b>   |   |                     |                          |                               |                  |                      |                  |                      |                  |                      |                  |                      |
| 10  | Income-Qualified attributed to Energy Efficiency Assistance   |                     |                          |                               | 77,848           | \$ 12,000,000        | 80,859           | \$ 12,000,000        | 77,801           | \$ 12,000,000        | 77,744           | \$ 12,000,000        |
| 11  | Income-Qualified attributed to Multifamily                    |                     |                          |                               | 73,215           | 6,187,224            | 72,010           | 6,252,383            | 69,169           | 6,260,324            | 69,796           | 6,241,293            |
| 12  | Income-Qualified attributed to School Program                 |                     |                          |                               | 29,583           | 328,261              | 23,863           | 268,927              | 23,302           | 265,959              | 28,356           | 326,689              |
| 13  | Income-Qualified attributed to New Home Construction          |                     |                          |                               | 2,895            | 399,409              | 2,806            | 388,934              | 2,717            | 378,516              | 2,361            | 330,637              |
| 14  | Income-Qualified attributed to Shared Savings                 |                     |                          |                               | 2,091            | -                    | 2,091            | -                    | 2,091            | -                    | 2,091            | -                    |
| 15  | Health and Safety   |                     |                          |                               | 67,703           | 1,673,509            | 67,051           | 1,672,159            | 67,021           | 1,692,471            | -                | 1,709,415            |
| 16  | Income-Qualified Administrative and Infrastructure            |                     |                          |                               |                  | 226,825              |                  | 231,476              |                  | 236,921              |                  | 243,101              |
| 17  | <b>Income-Qualified Program Total</b>                         |                     | <b>0.81</b>              | <b>\$ 0.50</b>                | <b>253,335</b>   | <b>\$ 20,815,228</b> | <b>248,680</b>   | <b>\$ 20,813,878</b> | <b>242,101</b>   | <b>\$ 20,834,190</b> | <b>180,347</b>   | <b>\$ 20,851,134</b> |
| <b>Commercial &amp; Industrial (C&amp;I) and End User Transport (EUT)</b> |   |                     |                          |                               |                  |                      |                  |                      |                  |                      |                  |                      |
| 18  | Large Business Program  |                     | 5.46                     | \$ 0.08                       | 797,215          | \$ 8,813,065         | 766,242          | \$ 8,554,319         | 763,161          | \$ 8,634,443         | 730,899          | \$ 8,377,501         |
| 19  | Small Business Program  |                     | 1.79                     | \$ 0.25                       | 39,709           | 994,807              | 39,709           | 1,015,752            | 39,709           | 1,038,762            | 39,708           | 1,062,954            |
| 20  | Mid-Stream Program  |                     | 4.54                     | \$ 0.09                       | 81,561           | 1,459,049            | 81,561           | 1,467,268            | 81,561           | 1,476,298            | 81,561           | 1,485,791            |
| 21  | Multifamily Common Areas                                      |                     | 2.71                     | \$ 0.15                       | 3,995            | 94,525               | 4,651            | 115,701              | 4,651            | 116,444              | 5,175            | 132,649              |
| 22  | Emerging Measures and Approaches                              |                     | 0.00                     | \$ -                          | -                | -                    | -                | -                    | -                | -                    | -                | -                    |
| 23  | C&I Shared Savings  |                     | 0.00                     | \$ -                          | 75,660           | -                    | 75,660           | -                    | 75,660           | -                    | 75,660           | -                    |
| 24  | Administrative and Infrastructure                             |                     |                          |                               |                  | 1,081,153            |                  | 1,103,323            |                  | 1,129,275            |                  | 1,158,731            |
| 25  | <b>C&amp;I and EUT Program Total</b>                          |                     | <b>3.18</b>              | <b>\$ 0.13</b>                | <b>998,140</b>   | <b>\$ 12,442,599</b> | <b>967,823</b>   | <b>\$ 12,256,364</b> | <b>964,742</b>   | <b>\$ 12,395,221</b> | <b>933,003</b>   | <b>\$ 12,217,626</b> |
| <b>Other Programs and Costs</b>   |   |                     |                          |                               |                  |                      |                  |                      |                  |                      |                  |                      |
| 26  | Pilot Program   |                     | 2.34                     | \$ 0.18                       | 84,629           | \$ 2,091,886         | 83,813           | \$ 2,090,198         | 83,776           | \$ 2,115,588         | 83,121           | \$ 2,136,768         |
| 27  | Education Program   |                     | 2.34                     | \$ 0.18                       | 50,777           | 1,255,131            | 50,288           | 1,254,119            | 50,266           | 1,269,353            | 49,873           | 1,282,061            |
| 28  | Evaluation, Measurement & Verification (EM&V)                 |                     |                          |                               |                  | 1,736,036            |                  | 1,772,875            |                  | 1,813,345            |                  | 1,855,894            |
| 29  | Workforce Development   |                     |                          |                               |                  | 150,616              |                  | 150,494              |                  | 152,322              |                  | 153,847              |
| 30  | <b>Other Programs and Costs Total</b>                         |                     |                          |                               | <b>135,406</b>   | <b>\$ 5,233,669</b>  | <b>134,101</b>   | <b>\$ 5,267,687</b>  | <b>134,042</b>   | <b>\$ 5,350,609</b>  | <b>132,993</b>   | <b>\$ 5,428,571</b>  |
| 31  | <b>Total Costs &amp; Energy Savings</b>                       | L9+ L13 + L26 + L31 |                          |                               | <b>2,031,089</b> | <b>\$ 50,205,256</b> | <b>2,011,518</b> | <b>\$ 50,164,763</b> | <b>2,010,632</b> | <b>\$ 50,774,118</b> | <b>1,928,404</b> | <b>\$ 51,282,442</b> |
| 32  | <b>Portfolio (excluding Income-Qualified) USRCT &amp; CCE</b> |                     | <b>2.38</b>              | <b>\$ 0.17</b>                |                  |                      |                  |                      |                  |                      |                  |                      |
| 33  | Legislative Savings Target (Mcf)                              | (2)                 |                          |                               | 1,692,574        |                      | 1,676,265        |                      | 1,675,526        |                      | 1,662,418        |                      |
| 34  | Weighted Average Measure Life                                 | (3)                 |                          |                               | 12.35            |                      | 12.43            |                      | 12.50            |                      | 12.60            |                      |
| 35  | Lifetime Savings (Mcf)  | (4)                 |                          |                               | 25,087,496       |                      | 24,997,103       |                      | 25,133,880       |                      | 24,289,997       |                      |

Notes:

- (1) Exhibit A-13
- (2) Legislative savings target calculation supported in Witness Kupser's testimony
- (3) Weighted Average Measure Life of the Portfolio is calculated by weighting measure life by first year net energy savings.
- (4) Lifetime Savings is calculated as Weighted Average Measure Life (line 35) X First Year Net Energy Savings (line 32)

**Michigan Public Service Commission  
DTE Electric Company  
2026 - 2029 Energy Waste Reduction Plan  
Customer Class Cost Allocation Percentages-Electric**

Case No.: U-21681  
Exhibit: A-3  
Witness: J.R Kupser  
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|                 | (a)   | (b)                         | (c)                          | (d)                          | (e)                          | (f)                          | (g)                                  |
|-----------------|---|-----------------------------|------------------------------|------------------------------|------------------------------|------------------------------|--------------------------------------|
| <b>Line No.</b> | <b>Allocation 1 - Residential and Commercial &amp; Industrial (C&amp;I) Customer Class Allocation</b> | <b>Source</b>               | <b>2026 Cost</b>             | <b>2027 Cost</b>             | <b>2028 Cost</b>             | <b>2029 Cost</b>             | <b>2026 - 2029 Total</b>             |
| 1               | Residential Program Costs   | A-1, Sum of Lines 1-8       | \$ 28,007,715                | \$ 30,938,965                | \$ 35,265,611                | \$ 36,659,280                | \$ 130,871,571                       |
| 2               | Residential Education Costs (1)   | A-1, Line 29 * 73%          | 3,470,325                    | 3,561,172                    | 3,663,966                    | 3,726,909                    | 14,422,373                           |
| 3               | Total   | Line 1 + Line 2             | <u>\$ 31,478,041</u>         | <u>\$ 34,500,137</u>         | <u>\$ 38,929,577</u>         | <u>\$ 40,386,189</u>         | <u>\$ 145,293,944</u>                |
| 4               | C&I Program Costs   | A-1, Sum of Lines 19-25     | \$ 89,758,735                | \$ 91,426,206                | \$ 92,299,985                | \$ 93,858,757                | \$ 367,343,684                       |
| 5               | C&I Education Costs (1)   | A-1, Line 29 * 27%          | 1,283,545                    | 1,317,146                    | 1,355,166                    | 1,378,446                    | 5,334,302                            |
| 6               | Total   | Line 4 + Line 5             | <u>\$ 91,042,280</u>         | <u>\$ 92,743,352</u>         | <u>\$ 93,655,151</u>         | <u>\$ 95,237,203</u>         | <u>\$ 372,677,986</u>                |
| 7               | Total Residential & C&I Program Costs   | Line 3 + Line 6             | <u><u>\$ 122,520,321</u></u> | <u><u>\$ 127,243,489</u></u> | <u><u>\$ 132,584,728</u></u> | <u><u>\$ 135,623,392</u></u> | <u><u>\$ 517,971,930</u></u>         |
|                 | <u>Allocation Percentage</u>  |                             |                              |                              |                              |                              |                                      |
| 8               | Residential   | Line 3 ÷ Line 7             |                              |                              |                              |                              | 28.1%                                |
| 9               | C&I   | Line 6 ÷ Line 7             |                              |                              |                              |                              | 71.9%                                |
| 10              | Total   | Line 8 + Line 9             |                              |                              |                              |                              | <u>100%</u>                          |
|                 | <b>Allocation 2 - C&amp;I Secondary and C&amp;I Primary Customer Class Allocation</b>                 |                             |                              |                              |                              |                              | <b>Primary/ Secondary Allocation</b> |
| 11              | C&I Secondary   | (2)                         |                              |                              |                              |                              | 61.9%                                |
| 12              | C&I Primary   | (2)                         |                              |                              |                              |                              | 38.1%                                |
| 13              | Total   | Line 11 + Line 12           |                              |                              |                              |                              | <u>100%</u>                          |
|                 | <b>Summary - Allocation Percentages Residential, C&amp;I Secondary and C&amp;I Primary</b>            | <b>Source</b>               |                              |                              |                              |                              | <b>Summary Allocation</b>            |
| 14              | Residential   | Line 8                      |                              |                              |                              |                              | 28.1%                                |
| 15              | C&I Secondary   | Line 9 * Line 11            |                              |                              |                              |                              | 44.6%                                |
| 16              | C&I Primary   | Line 9 * Line 12            |                              |                              |                              |                              | 27.4%                                |
| 17              | Total   | Line 14 + Line 15 + Line 16 |                              |                              |                              |                              | <u>100.0%</u>                        |

Notes:

(1) Witness Kupser's testimony supports Education cost allocation

(2) The allocation percentages on Lines 11 and 12 were calculated using the count of projects between primary and secondary in the Company's 2024 EWR programs.

Michigan Public Service Commission  
DTE Gas Company  
2026 - 2029 Energy Waste Reduction Plan  
Customer Class Cost Allocation Percentages-Gas

Case No.: U-21681  
Exhibit: A-4  
Witness: J.R Kupser  
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|          | (a)  | (b)                     | (c)                  | (d)                  | (e)                  | (f)                  | (g)  |
|----------|--|-------------------------|----------------------|----------------------|----------------------|----------------------|--|
| Line No. | Allocation 1 - Residential, Commercial & Industrial (C&I) and End User Transport (EUT) Customer Class Allocation | Source                  | 2026 Cost            | 2027 Cost            | 2028 Cost            | 2029 Cost            | 2026 - 2029 Total                                      |
| 1        | Residential Program Costs  | A-2, Sum of Lines 1-7   | \$ 10,623,249        | \$ 10,713,959        | \$ 11,055,047        | \$ 11,616,348        | \$ 44,008,602  |
| 2        | Residential Education Program Costs (1)  | A-2, Line 27 * 73%      | 916,246              | 915,507              | 926,628              | 935,905              | 3,694,285  |
| 3        | Total  | Line 1 + Line 2         | <u>\$ 11,539,494</u> | <u>\$ 11,629,466</u> | <u>\$ 11,981,674</u> | <u>\$ 12,552,252</u> | <u>\$ 47,702,887</u>                                   |
| 4        | C&I and EUT Program Costs  | A-2, Sum of Lines 18-23 | \$ 11,361,446        | \$ 11,153,041        | \$ 11,265,947        | \$ 11,058,895        | \$ 44,839,329  |
| 5        | C&I and EUT Education Program Costs (1)  | A-2, Line 27 * 27%      | 338,885              | 338,612              | 342,725              | 346,156              | 1,366,379  |
| 6        | Total  | Line 4 + Line 5         | <u>\$ 11,700,332</u> | <u>\$ 11,491,653</u> | <u>\$ 11,608,672</u> | <u>\$ 11,405,052</u> | <u>\$ 46,205,708</u>                                   |
| 7        | Total Residential & C&I/EUT Program Costs  | Line 3 + Line 6         | <u>\$ 23,239,826</u> | <u>\$ 23,121,119</u> | <u>\$ 23,590,346</u> | <u>\$ 23,957,304</u> | <u>\$ 93,908,595</u>                                   |
|          | Allocation Percentage  |                         |                      |                      |                      |                      | <b>Residential/<br/>C&amp;I and EUT<br/>Allocation</b> |
| 8        | Residential  | Line 3 ÷ Line 7         |                      |                      |                      |                      | 51%  |
| 9        | C&I/EUT  | Line 6 ÷ Line 7         |                      |                      |                      |                      | 49.2%  |
| 10       | Total  | Line 8 + Line 9         |                      |                      |                      |                      | <u>100.0%</u>  |

Notes:

(1) Witness Kupser's testimony supports Education program cost allocation

| Line No.                              | (a)<br>Description                   | (b)<br>Source                  | (c)<br>Allocation (3) | (d)<br>2026<br>Cost | (e)<br>2027<br>Cost | (f)<br>2028<br>Cost | (g)<br>2029<br>Cost |
|---------------------------------------|--------------------------------------|--------------------------------|-----------------------|---------------------|---------------------|---------------------|---------------------|
| <b>Residential Customer Class</b>     |                                      |                                |                       |                     |                     |                     |                     |
| 1                                     | Program Costs to be Capitalized      | (1)                            |                       | \$ -                | \$ -                | \$ -                | \$ -                |
| <b>Program Costs to be Expensed</b>   |                                      |                                |                       |                     |                     |                     |                     |
| 2                                     | Program Costs                        | A-1, Line 10 - Line 9          |                       | \$ 28,007,715       | \$ 30,938,965       | \$ 35,265,611       | \$ 36,659,280       |
| 3                                     | Pilot Program                        | A-1, Line 28 * Col. (c)        | 28.1%                 | 2,222,478           | 2,280,658           | 2,346,490           | 2,386,800           |
| 4                                     | Educational Program                  | A-3, Line 2                    |                       | 3,470,325           | 3,561,172           | 3,663,966           | 3,726,909           |
| 5                                     | Residential Income-Qualified Program | A-1, Line 18 * Col. (c)        | 28.1%                 | 16,866,347          | 16,912,892          | 16,965,557          | 16,997,805          |
| 6                                     | Administration & Infrastructure      | A-1, Line 9                    |                       | 3,340,969           | 3,409,479           | 3,489,676           | 3,580,702           |
| 7                                     | EM&V                                 | A-1, Line 30 * Col. (c)        | 28.1%                 | 2,432,837           | 2,484,463           | 2,541,176           | 2,600,803           |
| 8                                     | Workforce Development                | A-1, Line 31 * Col. (c)        | 28.1%                 | 177,798             | 182,453             | 187,719             | 190,944             |
| 9                                     | <b>Total Expenses</b>                | Sum of Lines 2 through 8       |                       | \$ 56,518,469       | \$ 59,770,082       | \$ 64,460,195       | \$ 66,143,243       |
| 10                                    | <b>Total</b>                         | Line 1 + Line 9                |                       | \$ 56,518,469       | \$ 59,770,082       | \$ 64,460,195       | \$ 66,143,243       |
| <b>C&amp;I Primary Customer Class</b> |                                      |                                |                       |                     |                     |                     |                     |
| 11                                    | Program Costs to be Capitalized (2)  | (2)                            | 38.1%                 | \$ -                | \$ -                | \$ -                | \$ -                |
| <b>Program Costs to be Expensed</b>   |                                      |                                |                       |                     |                     |                     |                     |
| 12                                    | Program Costs (2)                    | A-1, (Line 27 - 26) * Col. (c) | 38.1%                 | \$ 34,162,341       | \$ 34,796,984       | \$ 35,129,546       | \$ 35,722,818       |
| 13                                    | Pilot Program                        | A-1, Line 28 * Col. (c)        | 27.4%                 | 2,169,674           | 2,226,472           | 2,290,740           | 2,330,092           |
| 14                                    | Educational Program                  | A-3, Line 5 * Col. (c)         | 38.1%                 | 488,520             | 501,308             | 515,779             | 524,639             |
| 15                                    | Residential Income-Qualified Program | A-1, Line 18 * Col. (c)        | 27.4%                 | 16,465,623          | 16,511,062          | 16,562,476          | 16,593,958          |
| 16                                    | Administration & Infrastructure      | A-1, Line 27 * Col. (c)        | 38.1%                 | 3,068,950           | 3,131,883           | 3,205,549           | 3,289,164           |
| 17                                    | EM&V                                 | A-1, Line 30 * Col. (c)        | 27.4%                 | 2,375,035           | 2,425,435           | 2,480,801           | 2,539,011           |
| 18                                    | Workforce Development                | A-1, Line 31 * Col. (c)        | 27.4%                 | 173,574             | 178,118             | 183,259             | 186,407             |
| 19                                    | <b>Total Expenses</b>                | Sum of Lines 12 through 18     |                       | \$ 58,903,718       | \$ 59,771,262       | \$ 60,368,150       | \$ 61,186,089       |
| 20                                    | <b>Total</b>                         | Line 11 + Line 19              |                       | \$ 58,903,718       | \$ 59,771,262       | \$ 60,368,150       | \$ 61,186,089       |
| <b>C&amp;I Secondary Class</b>        |                                      |                                |                       |                     |                     |                     |                     |
| 21                                    | Program Costs to be Capitalized (2)  | (2)                            | 61.9%                 | \$ -                | \$ -                | \$ -                | \$ -                |
| <b>Program Costs to be Expensed</b>   |                                      |                                |                       |                     |                     |                     |                     |
| 22                                    | Program Costs (2)                    | A-1, (Line 27 - 26) * Col. (c) | 61.9%                 | \$ 55,596,394       | \$ 56,629,222       | \$ 57,170,439       | \$ 58,135,940       |
| 23                                    | Pilot Program                        | A-1, Line 28 * Col. (c)        | 44.6%                 | 3,530,966           | 3,623,400           | 3,727,990           | 3,792,033           |
| 24                                    | Educational Program                  | A-3, Line 5 * Col. (c)         | 61.9%                 | 795,025             | 815,838             | 839,387             | 853,807             |
| 25                                    | Residential Income-Qualified Program | A-1, Line 18 * Col. (c)        | 44.6%                 | 26,796,444          | 26,870,392          | 26,954,064          | 27,005,298          |
| 26                                    | Administration & Infrastructure      | A-1, Line 27 * Col. (c)        | 61.9%                 | 4,994,463           | 5,096,881           | 5,216,767           | 5,352,844           |
| 27                                    | EM&V                                 | A-1, Line 30 * Col. (c)        | 44.6%                 | 3,865,174           | 3,947,196           | 4,037,299           | 4,132,031           |
| 28                                    | Workforce Development                | A-1, Line 31 * Col. (c)        | 44.6%                 | 282,477             | 289,872             | 298,239             | 303,363             |
| 29                                    | <b>Total Expenses</b>                | Sum of Lines 22 through 28     |                       | \$ 95,860,944       | \$ 97,272,800       | \$ 98,244,186       | \$ 99,575,315       |
| 30                                    | <b>Total</b>                         | Line 21 + Line 29              |                       | \$ 95,860,944       | \$ 97,272,800       | \$ 98,244,186       | \$ 99,575,315       |

Notes:

(1) Residential program costs assumes there will be no capitalization of program costs

(2) C&I program costs assumes there will be no capitalization of program costs

(3) Allocation factors from Exhibit A-3

Michigan Public Service Commission  
DTE Gas Company  
2026 - 2029 Energy Waste Reduction Plan  
Customer Class Cost-Gas

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Exhibit: A-6  
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| Line No.                            | (a)<br>Description                   | (b)<br>Source              | (c)<br>Allocation (3) | (d)<br>2026<br>Cost  | (e)<br>2027<br>Cost  | (f)<br>2028<br>Cost  | (g)<br>2029<br>Cost  |
|-------------------------------------|--------------------------------------|----------------------------|-----------------------|----------------------|----------------------|----------------------|----------------------|
| <b>Residential Customer Class</b>   |                                      |                            |                       |                      |                      |                      |                      |
| 1                                   | Program Costs to be Capitalized      | (1)                        |                       | \$ -                 | \$ -                 | \$ -                 | \$ -                 |
| <b>Program Costs to be Expensed</b> |                                      |                            |                       |                      |                      |                      |                      |
| 2                                   | Program Costs                        | A-2, Line 9 - Line 8       |                       | \$ 10,623,249        | \$ 10,713,959        | \$ 11,055,047        | \$ 11,616,348        |
| 3                                   | Pilot Program                        | A-2, Line 26 * Col. (c)    | 50.8%                 | 1,062,618            | 1,061,761            | 1,074,658            | 1,085,417            |
| 4                                   | Educational Program                  | A-4, Line 2                |                       | 916,246              | 915,507              | 926,628              | 935,905              |
| 5                                   | Residential Income-Qualified Program | A-2, Line 17 * Col. (c)    | 50.8%                 | 10,573,542           | 10,572,856           | 10,583,174           | 10,591,781           |
| 6                                   | Administration & Infrastructure      | A-2, Line 8                |                       | 1,090,513            | 1,112,875            | 1,139,051            | 1,168,763            |
| 7                                   | EM&V                                 | A-2, Line 28 * Col. (c)    | 50.8%                 | 881,857              | 900,570              | 921,128              | 942,741              |
| 8                                   | Workforce Development                | A-2, Line 29 * Col. (c)    | 50.8%                 | 76,509               | 76,447               | 77,375               | 78,150               |
| 9                                   | <b>Total Expenses</b>                | Sum of Lines 2 through 8   |                       | <u>\$ 25,224,532</u> | <u>\$ 25,353,975</u> | <u>\$ 25,777,061</u> | <u>\$ 26,419,105</u> |
| 10                                  | <b>Total</b>                         | Line 1 + Line 9            |                       | <u>\$ 25,224,532</u> | <u>\$ 25,353,975</u> | <u>\$ 25,777,061</u> | <u>\$ 26,419,105</u> |
| <b>C&amp;I Customer Class</b>       |                                      |                            |                       |                      |                      |                      |                      |
| 11                                  | Program Costs to be Capitalized      | (2)                        |                       | \$ -                 | \$ -                 | \$ -                 | \$ -                 |
| <b>Program Costs to be Expensed</b> |                                      |                            |                       |                      |                      |                      |                      |
| 12                                  | Program Costs                        | A-2, Line 18 - 23          |                       | \$ 11,361,446        | \$ 11,153,041        | \$ 11,265,947        | \$ 11,058,895        |
| 13                                  | Pilot Program                        | A-2, Line 26 * Col. (c)    | 49.2%                 | 1,029,267            | 1,028,437            | 1,040,930            | 1,051,351            |
| 14                                  | Educational Program                  | A-4, Line 5                |                       | 338,885              | 338,612              | 342,725              | 346,156              |
| 15                                  | Residential Income-Qualified Program | A-2, Line 17 * Col. (c)    | 49.2%                 | 10,241,686           | 10,241,022           | 10,251,016           | 10,259,353           |
| 16                                  | Administration & Infrastructure      | A-2, Line 24               |                       | 1,081,153            | 1,103,323            | 1,129,275            | 1,158,731            |
| 17                                  | EM&V                                 | A-2, Line 28 * Col. (c)    | 49.2%                 | 854,179              | 872,305              | 892,218              | 913,153              |
| 18                                  | Workforce Development                | A-2, Line 29 * Col. (c)    | 49.2%                 | 74,107               | 74,047               | 74,947               | 75,697               |
| 19                                  | <b>Total Expenses</b>                | Sum of Lines 12 through 18 |                       | <u>\$ 24,980,724</u> | <u>\$ 24,810,788</u> | <u>\$ 24,997,057</u> | <u>\$ 24,863,337</u> |
| 20                                  | <b>Total</b>                         | Line 11 + Line 19          |                       | <u>\$ 24,980,724</u> | <u>\$ 24,810,788</u> | <u>\$ 24,997,057</u> | <u>\$ 24,863,337</u> |

Notes:

- (1) Residential program costs assume zero capital expenditures
- (2) C&I program costs assume zero capital expenditures
- (3) Allocation factors from Exhibit A-4

| Line No. | (a)                                  | (b)              | (c)             |
|----------|--------------------------------------|------------------|-----------------|
|          | Legislative First Year Savings Tiers |                  |                 |
| 1        |                                      | Minimum (1.5%+)  |                 |
| 2        |                                      | YR 2026          | 668,167         |
| 3        |                                      | YR 2027          | 664,994         |
| 4        |                                      | YR 2028          | 666,460         |
| 5        |                                      | YR 2029          | 668,416         |
| 6        |                                      | Maximum (2.17+%) |                 |
| 7        |                                      | YR 2026          | 966,614         |
| 8        |                                      | YR 2027          | 962,023         |
| 9        |                                      | YR 2028          | 964,145         |
| 10       |                                      | YR 2029          | 966,974         |
| 11       |                                      |                  |                 |
| 12       |                                      | % Savings        | % Incentive     |
| 13       | Tier 1                               | <b>1.50%</b>     | <b>+ 15.00%</b> |
| 14       |                                      | 1.51%            | 15.16%          |
| 15       |                                      | 1.52%            | 15.31%          |
| 16       |                                      | 1.53%            | 15.47%          |
| 17       |                                      | 1.54%            | 15.63%          |
| 18       |                                      | 1.55%            | 15.78%          |
| 19       |                                      | 1.56%            | 15.94%          |
| 20       |                                      | 1.57%            | 16.09%          |
| 21       |                                      | 1.58%            | 16.25%          |
| 22       |                                      | 1.59%            | 16.41%          |
| 23       |                                      | 1.60%            | 16.56%          |
| 24       |                                      | 1.61%            | 16.72%          |
| 25       |                                      | 1.62%            | 16.88%          |
| 26       |                                      | 1.63%            | 17.03%          |
| 27       |                                      | 1.64%            | 17.19%          |
| 28       |                                      | 1.65%            | 17.34%          |
| 29       | Tier 2                               | <b>1.66%</b>     | <b>+ 17.50%</b> |
| 30       |                                      | 1.67%            | 17.65%          |
| 31       |                                      | 1.68%            | 17.79%          |
| 32       |                                      | 1.69%            | 17.94%          |
| 33       |                                      | 1.70%            | 18.09%          |
| 34       |                                      | 1.71%            | 18.24%          |
| 35       |                                      | 1.72%            | 18.38%          |
| 36       |                                      | 1.73%            | 18.53%          |
| 37       |                                      | 1.74%            | 18.68%          |
| 38       |                                      | 1.75%            | 18.82%          |
| 39       |                                      | 1.76%            | 18.97%          |
| 40       |                                      | 1.77%            | 19.12%          |
| 41       |                                      | 1.78%            | 19.26%          |
| 42       |                                      | 1.79%            | 19.41%          |
| 43       |                                      | 1.80%            | 19.56%          |
| 44       |                                      | 1.81%            | 19.71%          |
| 45       |                                      | 1.82%            | 19.85%          |
| 46       | Tier 3                               | <b>1.83%</b>     | <b>+ 20.00%</b> |
| 47       |                                      | 1.84%            | 20.15%          |
| 48       |                                      | 1.85%            | 20.29%          |
| 49       |                                      | 1.86%            | 20.44%          |
| 50       |                                      | 1.87%            | 20.59%          |
| 51       |                                      | 1.88%            | 20.74%          |
| 52       |                                      | 1.89%            | 20.88%          |
| 53       |                                      | 1.90%            | 21.03%          |
| 54       |                                      | 1.91%            | 21.18%          |
| 55       |                                      | 1.92%            | 21.32%          |
| 56       |                                      | 1.93%            | 21.47%          |
| 57       |                                      | 1.94%            | 21.62%          |
| 58       |                                      | 1.95%            | 21.76%          |
| 59       |                                      | 1.96%            | 21.91%          |
| 60       |                                      | 1.97%            | 22.06%          |
| 61       |                                      | 1.98%            | 22.21%          |
| 62       |                                      | 1.99%            | 22.35%          |
| 63       | Tier 4                               | <b>2.00%</b>     | <b>+ 22.50%</b> |
| 64       |                                      | 2.01%            | 22.65%          |
| 65       |                                      | 2.02%            | 22.79%          |
| 66       |                                      | 2.03%            | 22.94%          |
| 67       |                                      | 2.04%            | 23.09%          |
| 68       |                                      | 2.05%            | 23.24%          |
| 69       |                                      | 2.06%            | 23.38%          |
| 70       |                                      | 2.07%            | 23.53%          |
| 71       |                                      | 2.08%            | 23.68%          |
| 72       |                                      | 2.09%            | 23.82%          |
| 73       |                                      | 2.10%            | 23.97%          |
| 74       |                                      | 2.11%            | 24.12%          |
| 75       |                                      | 2.12%            | 24.26%          |
| 76       |                                      | 2.13%            | 24.41%          |
| 77       |                                      | 2.14%            | 24.56%          |
| 78       |                                      | 2.15%            | 24.71%          |
| 79       |                                      | 2.16%            | 24.85%          |
| 80       | Tier 5                               | <b>2.17%</b>     | <b>+ 25.00%</b> |

| Line No. | (a)                                  | (b)                    | (c)   |
|----------|--------------------------------------|------------------------|---|
|          | Legislative First Year Savings Tiers |                        | Space Heating Load Reduction Spend Percentage |
| 1        | Minimum (0.875%+)                    |                        |   |
| 2        | YR 2026                              | 1,692,575              |   |
| 3        | YR 2027                              | 1,676,266              |   |
| 4        | YR 2028                              | 1,675,527              |   |
| 5        | YR 2029                              | 1,662,419              |   |
| 6        | Maximum (1.25%+)                     |                        |   |
| 7        | YR 2026                              | 2,417,964              |   |
| 8        | YR 2027                              | 2,394,665              |   |
| 9        | YR 2028                              | 2,393,610              |   |
| 10       | YR 2029                              | 2,374,883              |   |
| 11       |                                      |                        |   |
| 12       | % Savings                            | % Incentive            | % Spend      % Incentive                      |
| 13       | <b>Tier 1</b>                        | <b>0.875% + 10.00%</b> | <b>67.0%</b> <b>2.50%</b>                     |
| 14       |                                      | 0.880%                 | 10.40%  |
| 15       |                                      | 0.885%                 | 10.80%  |
| 16       |                                      | 0.890%                 | 11.20%  |
| 17       |                                      | 0.895%                 | 11.60%  |
| 18       |                                      | 0.900%                 | 12.00%  |
| 19       |                                      | 0.905%                 | 12.40%  |
| 20       |                                      | 0.910%                 | 12.80%  |
| 21       |                                      | 0.915%                 | 13.20%  |
| 22       |                                      | 0.920%                 | 13.60%  |
| 23       |                                      | 0.925%                 | 14.00%  |
| 24       |                                      | 0.930%                 | 14.40%  |
| 25       |                                      | 0.935%                 | 14.80%  |
| 26       |                                      | 0.940%                 | 15.20%  |
| 27       |                                      | 0.945%                 | 15.60%  |
| 28       |                                      | 0.950%                 | 16.00%  |
| 29       |                                      | 0.955%                 | 16.40%  |
| 30       |                                      | 0.960%                 | 16.80%  |
| 31       |                                      | 0.965%                 | 17.20%  |
| 32       |                                      | 0.970%                 | 17.60%  |
| 33       |                                      | 0.975%                 | 18.00%  |
| 34       |                                      | 0.980%                 | 18.40%  |
| 35       |                                      | 0.985%                 | 18.80%  |
| 36       |                                      | 0.990%                 | 19.20%  |
| 37       |                                      | 0.995%                 | 19.60%  |
| 38       | <b>Tier 2</b>                        | <b>1.000% + 20.00%</b> |   |
| 39       |                                      | 1.005%                 | 20.05%  |
| 40       |                                      | 1.010%                 | 20.10%  |
| 41       |                                      | 1.015%                 | 20.15%  |
| 42       |                                      | 1.020%                 | 20.20%  |
| 43       |                                      | 1.025%                 | 20.25%  |
| 44       |                                      | 1.030%                 | 20.30%  |
| 45       |                                      | 1.035%                 | 20.35%  |
| 46       |                                      | 1.040%                 | 20.40%  |
| 47       |                                      | 1.045%                 | 20.45%  |
| 48       |                                      | 1.050%                 | 20.50%  |
| 49       |                                      | 1.055%                 | 20.55%  |
| 50       |                                      | 1.060%                 | 20.60%  |
| 51       |                                      | 1.065%                 | 20.65%  |
| 52       |                                      | 1.070%                 | 20.70%  |
| 53       |                                      | 1.075%                 | 20.75%  |
| 54       |                                      | 1.080%                 | 20.80%  |
| 55       |                                      | 1.085%                 | 20.85%  |
| 56       |                                      | 1.090%                 | 20.90%  |
| 57       |                                      | 1.095%                 | 20.95%  |
| 58       |                                      | 1.100%                 | 21.00%  |
| 59       |                                      | 1.105%                 | 21.05%  |
| 60       |                                      | 1.110%                 | 21.10%  |
| 61       |                                      | 1.115%                 | 21.15%  |
| 62       |                                      | 1.120%                 | 21.20%  |
| 63       |                                      | 1.125%                 | 21.25%  |
| 64       |                                      | 1.130%                 | 21.30%  |
| 65       |                                      | 1.135%                 | 21.35%  |
| 66       |                                      | 1.140%                 | 21.40%  |
| 67       |                                      | 1.145%                 | 21.45%  |
| 68       |                                      | 1.150%                 | 21.50%  |
| 69       |                                      | 1.155%                 | 21.55%  |
| 70       |                                      | 1.160%                 | 21.60%  |
| 71       |                                      | 1.165%                 | 21.65%  |
| 72       |                                      | 1.170%                 | 21.70%  |
| 73       |                                      | 1.175%                 | 21.75%  |
| 74       |                                      | 1.180%                 | 21.80%  |
| 75       |                                      | 1.185%                 | 21.85%  |
| 76       |                                      | 1.190%                 | 21.90%  |
| 77       |                                      | 1.195%                 | 21.95%  |
| 78       |                                      | 1.200%                 | 22.00%  |
| 79       |                                      | 1.205%                 | 22.05%  |
| 80       |                                      | 1.210%                 | 22.10%  |
| 81       |                                      | 1.215%                 | 22.15%  |
| 82       |                                      | 1.220%                 | 22.20%  |
| 83       |                                      | 1.225%                 | 22.25%  |
| 84       |                                      | 1.230%                 | 22.30%  |
| 85       |                                      | 1.235%                 | 22.35%  |
| 86       |                                      | 1.240%                 | 22.40%  |
| 87       |                                      | 1.245%                 | 22.45%  |
| 88       | <b>Tier 3</b>                        | <b>1.250% + 22.50%</b> |   |

# DTE ELECTRIC AND DTE GAS

## Education Programs

| Program Element            | Educational Programs   |
|----------------------------|--|
| <b>Objective</b>           | The objective of the Education Program is to provide residential and business customers with information and resources to raise awareness about energy efficiency, its environmental benefits, and educate them on how to use energy more efficiently to better manage their energy consumption and costs. The Education Program will continue to provide the basis for more program specific efforts aimed at getting customers to participate in DTE's Energy Waste Reduction portfolio of programs.   |
| <b>Target Market</b>       | The target markets are all residential and small to medium business customer segments served by DTE's EWR Programs. Additionally, educational efforts on customer and contractor awareness include initiative focused on contractor training, product knowledge, applicability, impacts to their business model and other considerations, and the education initiative focused on heat pump technology for product distributors, contractors, and customers.   |
| <b>Program Duration</b>    | Program was launched in 2009 and is an ongoing element of the program portfolio.   |
| <b>Program Description</b> | <p>The Education Program will provide information to raise awareness about energy efficiency and conservation, giving customers valuable information on the benefits of actively participating in energy efficiency behaviors and improvements using tools and resources for customers to implement these actions at their home or business.</p> <p>The Education Program is aimed at increasing customer awareness of energy and cost savings opportunities as well as the long-term environmental benefits associated with energy efficiency and conservation. The educational information will be delivered through a variety of communication channels throughout DTE's service area.</p> <p>The Education Program may increase customer participation in the programs by raising customer awareness of the benefits of energy efficiency and conservation programs, how to enroll in programs and rebates, educating them about how much energy and cost savings they can expect, actions to implement no-cost/low-cost energy saving tactics, and the long-term environmental benefits associated with these actions.</p> <p>The energy efficiency educational tools and resources made available to customers include; dedicated web pages, blogs and online videos, the DTE appliance and electronics Comparison Tool, the online Energy Efficient Interactive Home, and printed brochures and handouts outlining programs, rebates and tips. These engaging tools and resources enable customers to take direct action to educate themselves on energy efficiency tactics and implement them in their homes or businesses.</p> <p>The Education Program will be primarily focused on direct marketing to DTE customers but will also make it easy for contractors and community partners to support the energy efficiency efforts by providing easy access to sharable educational materials.</p> |

|                                       |  |
|---------------------------------------|--|
|                                       | <p>Program education and information will be provided through a variety of different communication channels. The following are examples of communication channels that might be considered.</p> <ul style="list-style-type: none"> <li>• Web Content</li> <li>• Social Media (Facebook, Twitter, LinkedIn, YouTube, Instagram, Nextdoor, Pinterest, TikTok)</li> <li>• DTE Energy and/or Industry Conferences</li> <li>• Television Advertising</li> <li>• Radio Advertising</li> <li>• Digital Advertising</li> <li>• Print Advertising</li> <li>• Direct Mail</li> <li>• Email and Electronic Newsletters</li> <li>• Bill Inserts and Messages</li> <li>• Community Events and Sponsorships</li> <li>• On-site event activation</li> <li>• Trade Publication Advertising</li> <li>• Case Studies</li> </ul>  |
| <p><b>Eligible Measures</b></p>       | <p>The Education Program is not designed to specifically promote eligible measures but do support and promote energy efficiency and conservation messages throughout DTE's service territory.</p>  |
| <p><b>Implementation Strategy</b></p> | <p>The Education Program educates our customers on the benefits of energy efficiency and conservation efforts. The Education program will provide general information on energy efficiency and conservation in support of specific marketing messages.</p> <p>Started in 2022 in collaboration with other Michigan utilities (Michigan Heat Pump Collaborative), the Education Program will build on its efforts to generate customer awareness and contractor knowledge around new and upcoming technologies, with an initial focus on heat pump technology for space and water heating. The program is taking that two-pronged approach to ensure customers understand the benefits these products present in the comfort, air quality and efficiency of their home, but also take into consideration the applicability of this and other efficiency products in their specific home. The second part of the approach is focused on contractor training, product knowledge, applicability, impacts to their business model, and other considerations that may be preventing this and other technologies from growing in the Michigan market.</p> |
| <p><b>Marketing Strategy</b></p>      | <p>The marketing strategy for the Education Program is to: provide general information about energy efficiency and conservation, communicate how readily available and accessible program participation and customer rebates are, enable customers to understand the benefits of participating and, encourage adoption of energy saving tactics at their home or business. Cost savings and the long-term environmental benefits are also frequently communicated.</p>   |
| <p><b>Estimated Participation</b></p> | <p>The number of verified customer touches made by the Education Programs will be a measure of how many customers are impacted by the program.</p>   |

|                         |  |         |         |         |         |
|-------------------------|--|---------|---------|---------|---------|
| <b>Estimated Budget</b> | The estimated budget for Education Program, including Administrative costs, is shown below.  |         |         |         |         |
|                         | Year   | 2026    | 2027    | 2028    | 2029    |
|                         | Electric Budget (\$Thousands)  | \$4,754 | \$4,878 | \$5,019 | \$5,105 |
|                         | Gas Budget (\$Thousands)   | \$1,255 | \$1,254 | \$1,269 | \$1,282 |
| <b>Savings Targets</b>  | The estimated energy and capacity savings from the Education Program will be a percentage of the annual savings that is proportional to the amount spent to achieve legislative minimum savings, up to 3%. |         |         |         |         |
|                         | Year   | 2026    | 2027    | 2028    | 2029    |
|                         | Annual MWh saved   | 20,045  | 19,950  | 19,994  | 20,052  |
|                         | Annual MCF saved   | 50,777  | 50,288  | 50,266  | 49,873  |

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter, on the Commission's own )  
motion, regarding the regulatory reviews, )  
revisions, determinations, and/or approvals )  
necessary for **DTE ELECTRIC** )  
**COMPANY** and **DTE GAS COMPANY** to )  
fully comply with Public Act 295 of 2008, as )  
amended. )

Case No. U-21681  
(Paperless e-file)

QUALIFICATIONS  
AND  
DIRECT TESTIMONY  
OF  
TOBEN GALVIN

**DTE ELECTRIC COMPANY AND DTE GAS COMPANY**  
**QUALIFICATIONS AND DIRECT TESTIMONY OF TOBIN GALVIN**

Line  
No.

1 **Q1. What is your name, business address and by whom are you employed?**

2 A1. My name is Toben Galvin. My business address is: PO Box 20, Richmond, VT  
3 05487. I am President of Skytop Consulting LLC.

4

5 **Q2. On whose behalf are you testifying?**

6 A2. I am testifying on behalf of DTE Electric Company (DTE Electric) and DTE Gas  
7 Company (DTE Gas) (collectively, DTE).

8

9 **Q3. What is your educational background?**

10 A3. I have a Bachelor of Arts degree in Anthropology from Grinnell College and a  
11 Master of Science degree in Resource Economics from the University of Florida.

12

13 **Q4. What is your current and prior work experience?**

14 A4. For the past 23 years I have been employed in the energy efficiency industry as a  
15 management consultant, evaluator, and implementation contractor for utilities, non-  
16 profits, and state government on all matters related to energy efficiency demand-  
17 side management (“DSM”) program planning, design and evaluation. I work  
18 currently as President of Skytop Consulting LLC, a consulting firm specializing in  
19 evaluation, measurement and verification (EM&V), program design, and  
20 implementation support for energy efficiency programs for electric and natural gas  
21 utilities across the United States.

22

23 Prior to Skytop Consulting, I was Director, Energy Programs, at Guidehouse Inc., a  
24 global energy consulting firm, where I worked from 2010 - July 2020. From 2007-

Line  
No.

1 2010, I worked for Summit Blue Consulting LLC, and before that from 2002-2006  
2 I worked at both Efficiency Maine and Efficiency Vermont. Throughout my career  
3 I have specialized on energy efficiency program evaluation, program design, and  
4 implementation support for electric and natural gas utilities across the United States  
5 (including Michigan) and internationally. In these roles, I have assisted some of the  
6 largest utilities in the country with impact evaluation, process evaluation, market  
7 effects research, codes and standards, net-to-gross (NTG) research, and measure  
8 characterization. Program design support activities included emerging technology  
9 assessments, design planning, implementation support, baseline studies, potential  
10 studies, benefit-cost analysis, and best practices and benchmarking research. From  
11 2006 to 2007, I was Deputy Director of energy programs for Efficiency Maine /  
12 Maine Public Utilities Commission. In this role, I co-directed the implementation  
13 of Efficiency Maine's energy efficiency portfolio, which included management of  
14 implementation contractors, evaluators, and reporting to state government,  
15 specifically the utilities and energy committee of the Maine State Legislature. My  
16 energy career started with the Vermont Energy Investment Corporation (VEIC) /  
17 Efficiency Vermont, from 2002-2005, where I worked on evaluation support and  
18 measure characterization for the Efficiency Vermont Technical Reference Manual,  
19 prepared reports for the Vermont Department of Public Service, assisted with  
20 determination of NTG ratios for energy efficiency programs, and consulted on  
21 energy efficiency design and evaluation projects for utilities in New England.

22  
23 Over the course of my career, I have provided energy efficiency evaluation and  
24 program design consulting services to electric and natural gas utilities such as: DTE  
25 Energy, Consumers Energy, Lansing Board of Water & Light, Commonwealth

Line  
No.

1 Edison, Public Service Electric & Gas, PSE&G Long Island, National Grid,  
2 Efficiency Vermont, Efficiency Maine, Efficiency Nova Scotia, Tucson Electric  
3 Power, JEA, Consolidated Edison, PECO, Washington Gas, North Shore & Peoples  
4 Gas, New York State Energy Research & Development Agency, New York Power  
5 Authority, and Wabash Valley Power Association.

6 **Q5. Do you hold any certifications or are you a member of any professional**  
7 **organizations?**

8 A5. Yes. I have been a member of the Association of Energy Service Professionals and  
9 have presented and/or published over 20 papers for industry conferences including  
10 the American Council for an Energy Efficient Economy (National Conference on  
11 Energy Efficiency as a Resource, Summer Study Conferences, Market  
12 Transformation Conferences), Association of Energy Service Professionals Annual  
13 Conferences, and the International Energy Program Evaluation Conferences.

14  
15 **Q6. What are your current duties and responsibilities?**

16 A6. I provide energy efficiency evaluation planning and implementation guidance,  
17 expert evaluation support, and evaluation oversight and market research  
18 consulting services for utilities.

19  
20 **Q7. Have you previously provided support in cases before the MPSC?**

21 A7. Yes. I provided Evaluation Measurement & Verification (EM&V) testimony  
22 support in the following cases:

23 U-20876 2022- 2023 DTE Electric EWR Plan

24 U-20881 2022-2023 DTE Gas EWR Plan

Line  
No.

1 **Q8. Have you been involved in any prior regulatory proceedings outside of**  
2 **Michigan?**

3 A8. Yes, I have previously testified and/or submitted reports in the following state  
4 regulatory cases related to energy efficiency portfolio planning and evaluation  
5 strategy:

- 6 • “Development of PECO Energy Company’s Act 129 Energy Efficiency and  
7 Conservation Plan and Principal Summary Findings”. Direct testimony  
8 supporting PECO’s petition for approval of its Phase II EE&C Plan.  
9 Submitted to Pennsylvania Public Utility Commission. Docket No. M-  
10 2009-2093215. November 1, 2012. And updated testimony submitted for  
11 PECO’s Phase III Act 129 Plan, November 30, 2016.
- 12 • “Review of the Efficiency Maine Trust Triennial Plan 2011-2013. Presented  
13 to the Maine Public Utilities Commission. Augusta, ME. June, 2010.
- 14 • “Benchmarking of Vermont’s 2008 Electric Energy Efficiency Programs”.  
15 Presented to the Vermont Department of Public Service. Montpelier, VT.  
16 May, 2010.
- 17 • “Southern Maryland Electric Cooperative Demand Side Management Plan  
18 for 2009-2015”. EmPower Maryland Case No. 9157. Live testimony  
19 presented to the Maryland Public Service Commission. Baltimore, MD,  
20 November, 2008.
- 21 • “Maine Public Utilities Commission Draft Staff Report Docket No. 2006-  
22 446: Inquiry into New Conservation Programs and Developing a Plan for  
23 Using Increases in the Conservation Fund.” Live testimony presented to the  
24 Maine Public Utilities Commission. Augusta, ME, February, 2007

Line  
No.

1 **Purpose of Testimony**

2 **Q9. What is the purpose of your testimony?**

3 A9. I am providing EM&V related policy testimony for DTE's 2026-2029 EWR Plan,  
4 in accordance with the requirements set forth in Public Act 229 of 2024 (PA 229),  
5 Section 71(3)(i). Specifically, I will:

6 1) Confirm that summary evaluation plans are applicable and proper for assessing  
7 energy impacts and for improving the operations of the programs in the  
8 Company's 2026-2029 EWR Plan, including the approach for both current and  
9 emerging EWR programs;

10 2) Review the evaluation budget for this plan;

11 3) Comment on the ability of the proposed program plans to achieve their energy  
12 savings goals;

13 4) Provide testimony on DTE's 2026-2029 EWR planned evaluation efforts; and

14 5) Recommend the continued use of a deemed NTG value of 0.92 for most of the  
15 portfolio, with exceptions for measures whose savings values or estimates have  
16 been derived through a billing analysis or measures for income-qualified  
17 customers.

18

19 **Q10. Are you sponsoring any exhibits in this proceeding?**

20 A10. Yes. I am sponsoring the following exhibits:

| 21 Exhibit | Description                             |
|------------|---|
| 22 A-9     | Summary Program Evaluation Plans        |
| 23 A-10    | Net Energy Savings Adjustments-Electric |
| 24 A-11    | Net Energy Savings Adjustments-Gas      |

Line  
No.

1 **Q11. Were these exhibits prepared by you or under your direction?**

2 A11. Yes, they were.

3

4 **Q12. In your opinion, will the summary evaluation plans filed by DTE in its 2026-**  
5 **2029 EWR Plan accurately and reliably document the savings achieved by**  
6 **DTE's proposed programs?**

7 A12. Yes. I have reviewed the summary evaluation plans for the 2026-2029 cycle (see  
8 Exhibit A-9), and they are consistent with the rigor and quality of prior evaluation  
9 efforts, and in alignment with evaluation best practices for energy efficiency  
10 programs. These evaluation plans describe the array of methods and protocols third-  
11 party evaluators will use to verify energy and demand savings and will serve as an  
12 important resource for assessing the reliability of the Michigan Energy Measures  
13 Database (MEMD) estimates. These summary evaluation plans will need to be  
14 supported with detailed implementation-level plans that follow industry protocols  
15 for accuracy, independence, and bias free results. The approaches I have reviewed  
16 provide a reasonable and cost-effective approach to reliably documenting the  
17 impacts of the programs and the portfolio as a whole.

18

19 **Q13. Have you reviewed the program plans proposed by DTE in its 2026-2029 EWR**  
20 **Plan?**

21 A13. Yes, I have.

22

23 **Q14. In your opinion, are these programs capable of reaching their energy savings**  
24 **goals?**

Line  
No.

1 A14. Yes. DTE is proposing a broad and comprehensive suite of proven energy  
2 efficiency programs, combining both established and highly successful DSM  
3 programs, with more nascent programs to capture new and emerging opportunities.  
4 DTE's experienced and professional management of DSM program operations and  
5 third-party implementation contractors will help to ensure program savings goals  
6 are achieved while emphasizing the highest levels of customer and contractor  
7 satisfaction. DTE's proposed energy efficiency programs are designed to encourage  
8 customers and contractors who would not have taken the program-incented or  
9 recommended action(s) in the absence of the program, to take action and capture  
10 the net energy efficiency potential.

11

12 The program plans are similar to previously approved DTE programs. They are also  
13 consistent with other energy efficiency programs implemented across the country  
14 that routinely capture similar levels of savings. In addition, DTE's programs are  
15 consistent with the level of savings achieved from leading programs in other states.  
16 With respect to program design and evaluation, DTE works with some of the  
17 leading experts in the field who draw on a deep wealth of industry knowledge to  
18 ensure all aspects of new and established programs follow best practices whenever  
19 possible.

20

21 I have also reviewed the savings associated with the measures offered by DTE's  
22 programs and compared those to the MEMD. The projected energy savings are  
23 consistent with the MEMD for both non-weather sensitive and weather sensitive  
24 measures for DTE's customers use conditions.

Line  
No.

1 If the DTE 2026-2029 programs are appropriately funded, implemented, and  
2 managed, then I fully expect the programs to be successful in reaching their  
3 objectives to the extent that the market is capable of supporting these energy  
4 efficiency initiatives and the economy allows those investments to proceed.  
5 However, the health of the Michigan economy can influence energy efficiency  
6 investments and constitutes the largest uncertainty to a program's success, even if  
7 well implemented.

8

9 **Q15. Are DTE's evaluation contractor(s) capable of conducting reliable studies of**  
10 **these programs?**

11 A15. Yes. DTE's current independent evaluation contractor, Guidehouse, is one of the  
12 leading evaluation firms, globally, and is very experienced in this field. They have  
13 performed the evaluation of DTE's portfolio since 2012. DTE will continue to use  
14 an independent evaluation contractor (EC) to evaluate the portfolio. Periodically,  
15 DTE will issue a Request for Proposal to potential ECs, soliciting a bid on a Scope  
16 of Work for contracting EWR evaluation work. The EWR EM&V team, along with  
17 the Company's Supply Chain Management team, will then interview and evaluate  
18 each EC's responses submitted prior to selecting an EC, ensuring the EC's  
19 experience and abilities are capable of performing the evaluation work.

20

21 **Q16. Are the evaluation approaches used for assessing the DTE portfolio capable of**  
22 **providing reliable estimates of the program savings achievements?**

23 A16. Yes, the evaluation plans I have reviewed, combined with the capabilities of DTE's  
24 independent evaluation contractor, will provide reliable estimates of program  
25 savings. DTE's evaluation contractor will follow standard evaluation protocols and

Line  
No.

1 frameworks which guide much of the industry’s evaluation planning efforts. These  
2 protocols were developed to ensure transparency and quality within the evaluation  
3 process and to provide objective and reliable gross and net energy savings  
4 estimates. DTE’s evaluation contactor(s) will continue to follow these protocols  
5 and frameworks in the detailed evaluation planning process and in the  
6 implementation of these studies.

7 The key evaluation protocols that help guide most program evaluation efforts in the  
8 United States for energy efficiency programs are the U.S. Department of Energy’s  
9 (USDOE) Uniform Methods Evaluation Protocols (UMP)<sup>1</sup>. Reference to the UMP  
10 evaluation protocols will be used to help guide the DTE detailed evaluation plans  
11 prepared by the evaluation consulting team prior to launching the associated  
12 evaluation efforts.

13

14 **Q17. What is an installation rate adjustment factor and how is it determined?**

15 A17. An installation rate adjustment factor (IRAF) is a ratio of verified gross savings to  
16 utility reported savings. It represents an average percentage of reported measures  
17 confirmed by the independent evaluator as properly installed, functioning and, if  
18 applicable, utilized by the customer. The analysis is based on a statistically  
19 significant sample of firsthand verification observations, and the resulting IRAF  
20 values are weighted based on the claimed savings for each measure.

21

22 **Q18. How will DTE apply the IRAF adjustments shown in Exhibits A-10 and A-11?**

---

<sup>1</sup> <https://www.nrel.gov/docs/fy18osti/70472.pdf>

Line  
No.

1 A18. The numbers shown on Exhibits A-10 and A-11 for IRAF adjustments are the actual  
2 weighted average values from the 2023 evaluation that will be applied in the 2025  
3 reconciliation and are used as preliminary estimates for 2026-2029. The Company  
4 applies the evaluated IRAF completed for the year prior to the year being reconciled  
5 as the basis for adjusting energy savings values for reconciliation purposes. Thus,  
6 the IRAF values from the program year 2024 evaluation (which will be completed  
7 in 2025), will be utilized for the 2026 program year. Going forward, each program  
8 years' gross energy savings will be adjusted, prospectively, in similar fashion.  
9 Applying the IRAF prospectively allows the Company to manage its portfolio with  
10 some certainty concerning the adjustments made to its energy savings at the end of  
11 a program year.

12

13 **Q19. What is a Net-to-Gross (NTG) ratio and how is it determined?**

14 A19. A Net-to-Gross ratio is a ratio of verified net savings to verified gross savings. The  
15 net savings reflect customer reported influence of the utility program on their  
16 energy use behavior.

17

18 Typically, net savings is defined as:

19 
$$\text{Net savings} = (\text{evaluated verified gross savings}) - (\text{free-rider savings}) +$$
  
20 
$$(\text{participant spillover savings}) + (\text{market effects}).$$

21

22 This definition allows for the counting of all savings achieved by the programs  
23 within a portfolio and allows for the attribution of savings to the program that the  
24 program caused while not counting savings that would have been achieved without  
25 the program. Evaluations that are conducted based on this definition and in which

Line  
No.

1 the evaluations are funded to document effects for each of these definitional  
2 components can be expected to have higher NTG values.

3

4 **Q20. What experience do you have conducting NTG analysis?**

5 A20. I have been working as an energy efficiency program design and evaluation  
6 professional since 2002. I have been involved with design, implementation, and  
7 analysis of NTG studies. I have monitored how the NTG approaches and the results  
8 of that analysis change over time, responding to program changes, market changes,  
9 as well as policy changes associated with the NTG assessment approach and the  
10 definitions that have been established in state and national evaluation protocols.

11

12 **Q21. Are NTG ratios across the country determined using consistent definitions and**  
13 **approaches?**

14 A21. No. In my experience, approaches to conducting NTG research and what elements  
15 are included can vary significantly and often is a function of policy and/or  
16 evaluation methods employed. The definition used to specify net savings, and the  
17 selection of the evaluation approaches used to quantify NTG ratios can vary  
18 significantly. This causes variance in NTG values across the country which are  
19 driven by differences in how NTG values are defined, and the evaluation  
20 approaches used to establish NTG ratios; therefore, producing different values  
21 where the differences have little to do with the program or its impact in the market.

22

23 **Q22. Can you share your professional opinion on the use of deemed NTG ratios?**

24 A22. Yes. Deemed NTG values are appropriate for almost all programs and measures,  
25 when programs are well designed, and baseline efficiency is regularly updated

Line  
No.

1 and/or appropriately defined. Mature programs, such as those delivered by DTE,  
2 generate spillover and market effects which are difficult, complex, and costly to  
3 fully capture. If accurately captured, these effects would offset or outweigh the free  
4 ridership effects, resulting in NTG values greater than 1.0. Given the variance, cost  
5 and effort required to continually evaluate these impacts, it is not recommended  
6 (nor is it common practice in the industry) to spend ratepayer funds on such studies.  
7 As such, deemed values should be set conservatively at levels close to 1.0.

8

9 **Q23. Do you have a recommendation for a deemed NTG value for the energy**  
10 **efficiency programs?**

11 A23. Yes. I recommend using a deemed NTG value of 0.92 for the appropriate measure  
12 components of the portfolio, which is a conservative number and excludes a  
13 significant part of the unmeasured program-induced savings achieved as a result of  
14 changing the future behaviors of participants. This behavior change often results in  
15 the replication of those energy saving actions outside of the program. In addition,  
16 when mid-term and longer-term spillover induced savings are added, the NTG  
17 value is again increased. Setting a deemed NTG value of 0.92, while being  
18 conservative, recognizes that the programs provide savings for; A) their current  
19 participants, B) for the replicated behaviors of participants as they take similar  
20 actions in the future, and for C) others as the participant's actions are replicated by  
21 non-participating members within their communication circles. As such, for the  
22 2026-2029 cycle, I recommend continuing with the deemed NTG value of 0.92 for  
23 all programs, except for the income qualified programs which have a deemed NTG  
24 of 1.0 or the measures in which the savings are calculated as part of a billing  
25 analysis and therefore are already net savings. These are the same values DTE has

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No.

1 proposed, and the commission has approved in the 2020-2021, 2022-2023, and  
2 2024-2025 Biennial Plan Filings.

3

4 **Q24. How will DTE apply the NTGRs shown in Exhibits A-10 and A-11?**

5 A24. The numbers shown on Exhibits A-10 and A-11 are weighted average program  
6 level NTGRs adopted for EWR planning purposes. Measure level NTGRs will be  
7 applied in the 2026-2029 EWR reconciliations.

8

9 **Q25. Does this complete your direct testimony?**

10 A25. Yes, it does

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter, on the Commission's own )  
motion, regarding the regulatory reviews, )  
revisions, determinations, and/or approvals )  
necessary for **DTE ELECTRIC** )  
**COMPANY** and **DTE GAS COMPANY** to )  
fully comply with Public Act 295 of 2008, as )  
amended )

Case No. U-21681  
(Paperless e-file)

EXHIBITS  
OF  
TOBEN GALVIN

## **Summary Evaluation Plans**

DTE 2026 – 2029 Energy Waste Reduction – U-21681  
Energy Waste Reduction Program Portfolio

Prepared by

Toben Galvin, President, Skytop Consulting LLC

June 30, 2025

For

**DTE Electric Company and DTE Gas Company**

This document presents the Summary Evaluation Plans established for the purpose of guiding the independent evaluation efforts for DTE Electric and DTE Gas (DTE) 2026–2029 Energy Waste Reduction (EWR) Program Portfolio. This plan focuses on the electric and gas measures evaluation.

These plans are designed to guide the detailed evaluation planning process of DTE's independent evaluation contractor(s). The Summary Evaluation Plan is provided to ensure that the DTE 2026-2029 EWR program evaluation efforts employ data collection activities and analysis efforts required to meet rigorous evaluation standards and protocols and deliver reliable findings that can be used to support progress tracking and reporting objectives. The evaluation contractor(s) selected by DTE to implement the 2026-2029 EWR cycle's independent evaluation efforts will develop detailed evaluation plans for each program. Those plans will include the program-specific data collection components outlined in this Summary Plan and specify how the analysis efforts will be structured to provide DTE with reliable estimates of energy impacts. The analysis efforts to be used are presented in this Summary Evaluation Plan, however the evaluation contractor is encouraged to supplement the activities described below, to the extent allowed within the evaluation budget, when such efforts address necessary needs of a dynamic industry. This Summary Evaluation Plan should be considered a minimum approach plan to be supplemented via the detailed evaluation planning process undertaken each year by the selected evaluation contractor(s).

The following Summary Evaluation Plans are designed to adhere to the evaluation community's current versions of evaluation protocols, as appropriate and cost-effective, with specific reference to the U.S. Department of Energy's (USDOE) Uniform Methods Protocols (UMP) for Evaluation (<https://www.energy.gov/eere/about-us/ump-protocols>). The UMP presents different types of whole facility and end-use M&V (measurement and verification) approaches to be incorporated into the DTE detailed evaluation plans prepared by the evaluation consulting team prior to launching the associated evaluation efforts.

These referenced protocols and frameworks are designed to guide the planning and implementation of reliable program evaluation results required to support DTE's understandings of the effects of their Energy Waste Reduction Plan's programs. The Summary Evaluation Plans are designed to guide the evaluation of each program included in the DTE plan. To

ensure that evaluation efforts are independent and reliable, all of DTE's 2026-2029 EWR program cycle detailed evaluation plans will comply with the approaches, the data collection methods and the analysis standards described in these referenced documents, as applicable and cost-effective.

The following Summary Electric and Gas Energy Impact Evaluation Plans are presented below:

### **Overall Electric and Gas Plan Guidance**

The evaluations of DTE's Energy Waste Reduction Plan programs, or bundles of smaller program initiatives into an aggregated "platform" program, are designed and implemented to assess the program's net energy impacts within 10% absolute precision at a confidence level of 90% for each reporting period, where cost-efficient, ensuring the results of each program's evaluation produce accurate and rigorous results.

To support this requirement and to help support the evaluations included in this Summary Evaluation Plan the following evaluation requirements are provided:

**Sampling:** The evaluations conducted by DTE will follow the sampling guidance presented in the Uniform Methods Protocol, Chapter 11, Sample Design Cross-Cutting Protocol (October 2017). This framework presents generally accepted guidance on sampling strategies needed to evaluate energy efficiency programs and discusses a range of sampling approaches that are typically applied to energy efficiency programs. Sampling for DTE evaluations will be conducted targeting 90% confidence and 10% absolute precision. This provision ensures all key data sources used to determine impact estimates are unbiased and representative of the greater population of participants affected by the program. It also requires that all impact findings be based on levels of confidence that are reflective of the population served by the programs such that identical studies conducted on that same program, using the same methods, would replicate the evaluation's findings within the specified limits of the sample confidence. That is, the impact estimates must be statistically representative of the impacted population. However, DTE's third-party evaluator(s) must also consider the costs associated with achieving this sample precision level in the context of the intended use of the results as well as an individual program's overall impact within the portfolio. As a result, the third-party evaluator may determine to retain the 90/10 program-level precision requirement, relax the requirement, or make it more stringent based on the specific information need and use of the study's results. In the event the 90/10 confidence/precision level is adjusted, DTE's third-party evaluator must document the reason for doing so in the respective evaluation plan.

**Net-to-Gross Adjustments and Associated Baselines:** The evaluations conducted by DTE's third-party evaluator(s) will follow the analysis practices for net-to-gross (NTG) assessment presented in the USDOE's UMP, Chapter 23, Estimating Net Savings. This protocol presents generally accepted guidance on assessing NTG strategies needed to evaluate net energy savings and discusses a range of approaches that are typically applied to energy efficiency programs. The evaluation contractor will specify the NTG approach selected for each program to be evaluated, however those approaches must follow the practices and approaches covered by the UMP, which may include the coordination between pre-participation energy use baseline approaches and the selection of the associated NTG approaches. The evaluation contractor will incorporate into their detailed plan how they intend to deal with free riders using standard

practice and/or code baselines (if applicable) and determine the appropriate practice for applying net adjustments or for identifying the energy use associated with an applied baseline practice.

In Michigan, net savings are defined as those that would not have occurred in the absence of the program, and thus evaluation studies, when possible within the scope and budgets allocated to the evaluation tasks, should incorporate the savings association with spillover (short and longer term).

**Uncertainty:** The evaluations conducted by DTE's third-party evaluator(s) will be conducted to provide the greatest estimation accuracy for the portfolio as a whole and for each program in the portfolio within the budgets allocated. This means that the programs with the highest estimated gross savings and those with the greatest risk of energy impact estimation error will also receive the highest levels of evaluation focus allowed within the evaluation budget, while providing reliable evaluation results across the portfolio in the 2026-2029 Energy Waste Reduction portfolio. Evaluation contractors will rely on the California Evaluation Framework, June 2004, Chapter 12, Uncertainty, or equivalent for guidance on evaluation estimation accuracy and resource allocation.

**Verification Efforts:** Structuring product installation and use verification efforts into the impact evaluation for each program is essential to assessing verified gross savings and to confirm technology use conditions. Verification efforts can be costly when they are conducted on-site by energy-use assessment experts, or relatively inexpensively when they are incorporated into program-specific interviews and surveys. Verification efforts are typically conducted via these two approaches, via the evaluation effort's contacts with those responsible for the installation and use of the program-covered equipment. This Summary Evaluation Plan does not specify program-by-program verification efforts; however, each program evaluation will employ a product installation and use conditions verification effort. The exact nature of this effort for each program is best incorporated into the detailed evaluation plans submitted by the evaluation contractor. Each plan submitted to DTE for review and approval will specify an approach (or combination of approaches) for its verification efforts of each program or platform. These efforts will be used to estimate verified gross energy savings to support a comparison between verified savings levels and the ex-ante projected savings from DTE's program tracking data.

**Metered Data:** The programs offered by DTE are designed to change energy use within participant's homes or businesses. These changes are often reflected in the utility's metered data. DTE maintains at least hourly data for each customer account that can be utilized by the contractors. Likewise, evaluation contractors may use data loggers and equipment specific submetering consistent with IPMVP protocols to monitor the energy use and operation for pieces of equipment or groups of equipment. The evaluation contractor will present and discuss the selection of metered data to be used in the evaluation and justify its selection.

This Summary Evaluation Plan does not specify when or where utility meter data or end-use metering will be employed to support the 2026-2029 EWR evaluation effort. These decisions are typically included in the detailed evaluation plans developed for each individual program (or program grouping) and are based on the risk of estimation error at the program or portfolio level linked to the evaluation budgets and the need for high-resolution evaluation results. While metered data is not specified in this Summary Evaluation Plan, it is expected that the evaluation contractor will employ utility or end-use meters on programs, or parts of programs in which high-

resolution energy estimates are needed. These programs are typically the programs with the largest energy savings forecasts and thus have the highest uncertainty around the estimation error bands. While this Summary Evaluation Plan does not specify when or where metering will be used to support the impact estimate, the evaluation contractor will specify the programs, the types of customers and the equipment on which utility meters or end-use meters will be used to help estimate the energy savings achieved by the programs being evaluated. Metered data will typically be used for assessing the pre and/or post-program participant condition or used to calibrate the pre-program energy use condition for comparison with the post-program condition under the use or weather and use conditions associated with each participant.

**Engineering and Simulation Modeling:** The process of energy impact estimations that does not rely on metered data can be based on the use of engineering analysis of the difference between the pre- and post-program conditions tailored to the *as-used* conditions. The estimation process can also use building or equipment simulation modeling approaches in which the pre-and/or post-program condition can be modeled by applying calibrated energy impact models to identify the gross difference in energy use. Calibration is performed by incorporating utility meter or end-use meter data and weather data as required. These estimates are often supported by the verification results (to confirm assumed conditions) that are incorporated into the model or the engineering assessment. This Summary Evaluation Plan does not specify which program evaluation plan will employ which types of assessment approaches, however the detailed evaluation plans developed by the evaluation contractor will specify which analytical approach (or combination of approaches) will be employed to evaluate each program, the data to be used in that approach, and the technologies evaluated according to each approach.

**Process Evaluations:** Each program will have at least one process evaluation over the plan cycle unless specified by DTE that a process evaluation is not required for any specific program. Process evaluations focus on the efficiency and effectiveness of the program's design, structure and operations in a way that the results of a study can be used to not only document the operations of the programs, but also be used to guide future program improvements. As a result, process evaluations focus on issues specific to each program and the needs of DTE and its implementation contractor(s) to maintain efficient and effective programs. Process evaluation activities may include surveys with program participants, non-participants, trade allies, and other program stakeholders to gather insights into their satisfaction with the program design, rebate levels, and other program-related experiences. The process evaluations of DTE's portfolio will be designed and conducted in consultation with the independent evaluation contractors. The process evaluations will be designed to address specific researchable issues identified during the evaluation planning process. These can include such items as the efficiency of operations, the ability of program activity to impact the targeted market, the ability of the tracking system to support the program's management, reporting, the effectiveness of messaging and outreach, and oversight needs. There are numerous additional areas of focus for any given process evaluation. These topics (researchable questions) include those listed in the California Evaluation Framework or the NY Evaluation Guidance and can be used to help guide the evaluation planning process. The implementation of the process evaluation efforts will focus on addressing each of the important researchable issues as agreed to with DTE and incorporated into the final detailed program-specific process evaluation plans submitted to and approved by DTE. The DTE process evaluation efforts will be consistent with the California Evaluation Framework, June 2004, Chapter 8, Process Evaluations, and the California Evaluation Protocols, April 2006, Process Evaluation Protocol, or the NY Evaluation Guidance, wherever possible. The methods presented in these documents are standard operating procedures for the

evaluation field and provide significant latitude to the evaluation efforts pertaining to their design and operational procedures.

**Market Effects Evaluations:** Market effects evaluations are not specified in this Summary Evaluation Plan and are not included in the evaluation budgets allocated to the evaluation efforts. However, to the extent possible, without increasing evaluation costs, the program evaluations should be designed to collect information on the effects of the programs on the way the energy efficient product markets stock, price and sell the type of energy efficient equipment covered in the Energy Waste Reduction Portfolio, including trends with number of engaged contractors, average project size, etc.

**Impact Evaluations:** The evaluation activities for the 2026-2029 Energy Waste Reduction portfolio are not limited to those impact evaluation efforts described below in this Summary Evaluation Plan. The independent evaluator may also suggest additional impact evaluation tasks and approaches, to be reviewed and approved by DTE. Evaluation contractors are encouraged to modify this evaluation plan overview to reflect additional current or best practices to the extent that they improve or enhance the ability of the evaluation efforts to provide reliable and accurate program impact estimations. The final detailed evaluation plans will be reviewed by DTE and assessed for their ability to provide reliable energy impact evaluation findings.

The following sections provide program-specific energy impact evaluation guidance and are in addition to the process evaluation efforts planned for each program and to be presented in the detailed evaluation plans submitted by the evaluation contractor(s).

## **Residential Programs**

### **Appliance Recycling Program**

The DTE Appliance Recycling Program provides rebates for collection and recycling of inefficient yet still operable refrigerators, freezers, dehumidifiers and room air-conditioners. The evaluation process will use methods that align with the most recent U.S. DOE Uniform Methods Protocol, for Refrigerator Recycling Evaluation Protocol 2017 <https://www.nrel.gov/docs/fy17osti/68563.pdf>. This protocol is now standard practice for evaluating recycling or appliance pick-up/turn-in programs that are designed to remove inefficient appliances from participant's homes. The results from the application of the U.S. DOE protocol allow the DTE program impacts to be compared with other programs within Michigan and across the country. Energy impacts are based on the pre-program use of the recycled equipment as they apply to the individual paths associated with the use and disposition of the equipment, in the "as would have been used" condition, in the absence of the program. The use of this protocol produces more reliable net savings estimates than other program evaluation methods which act to limit the assessment to only the in-home participant's savings. To accomplish this study, the evaluation may include:

- Participant surveys
- Interviews with recycling contractors and their key operations staff responsible for enrollment and participation in service offerings
- Tracking system review, verification, and deemed savings tracking accuracy

- Interviews with program managers

The participant surveys will help identify the “as would have been used” conditions, the market disposition paths count and the disposition in the absence of the program. The interviews with contractors and key management staff will assess the program’s influence on participation and energy savings actions and to help assess the recycling efforts that ensure the units are not placed back in use. Tracking system reviews will identify types and size of units and counts for baseline conditions. Program manager interviews will help identify the operational approaches that need to be assessed for energy impacts.

### **Residential Building Envelope (RBE) Program**

The Residential Building Envelope (RBE) program encourages customers to install energy-efficient equipment in their homes, make energy efficiency retrofits, or build new high efficiency homes. The program focuses on the following market areas:

#### *ENERGY STAR® Products*

The Energy Star channel serves residential customers through retail and online offerings. The channel provides customer downstream incentives as well as midstream and upstream incentives to stock and sell program-discounted energy efficient products such as Wi-Fi enabled thermostats, advanced power strips, room A/C, and small electronics and appliances, such as televisions, clothes washers and dryers, computers and monitors, smart power strips, and thermostatic showerheads.

The evaluation of this channel may use the following efforts:

- In-store observations of sales approaches in participating and non-participating stores
- Interviews with participating and non-participating retail managers responsible for product sales
- Intercept surveys with customers
- Trade ally interviews
- Interviews with program design and implementation managers
- Tracking system reviews and verification efforts
- The use of DTE mail in and on-line records to identify and contact participants and if possible, the use of trade ally web or purchase tracking approaches for identifying customers for interviews or surveys to understand use conditions and associated behaviors
- Tracking system review, verification, and deemed savings tracking accuracy

The evaluation may focus its efforts on in-store data collection using both observations of sales approaches and the characteristics of those sales approaches and their relation to channel incentives and services. The evaluation approach might also, when possible and if customer records can be acquired, examine sales and anticipated use of the program-covered products for a sample of retail and web customers buying program covered products, and assess the customer’s key drivers for their purchase decisions to assess the program’s impact on those decisions. The evaluation will also interview a sample of participating and non-participating

retail trade allies to assess the impact of the channel on retail sales and sales approaches. Lastly, the evaluation will interview program design and key implementation managers to assess the strategies and approaches leading to the programmatic efforts to acquire net energy savings purchase behavior.

#### *Heating, Ventilation, and Air Conditioning (HVAC)*

The Residential HVAC channel provides customer down-stream and distributor / contractor midstream incentives for the early replacement or replace-on-failure of program covered HVAC equipment instead of less efficient equipment. The channel also covers tune-ups and HVAC-related equipment including central AC units, AC tune-ups, heat pumps, high-efficiency furnaces and gas water heaters, tankless natural gas water heaters, and high efficiency gas boilers. The channel works via contractors as well as direct appeals to customers. The evaluation may focus on:

- Participant surveys
- Interviews with HVAC contractors and distributors
- Interviews with program implementation managers, key stakeholders and operators including those responsible for market interaction strategies, program design and contractor outreach efforts
- Tracking system review, verification, and deemed savings tracking accuracy
- Interviews with program managers

Surveys will be used to assess current use and use conditions and the influence of the channel on participant purchase decisions. Contractor and distributor interviews may be conducted to assess the influence of the channel on stocking, customer interaction, and sales practices. The evaluation will interview program design and key implementation managers to assess the strategies and approaches leading to the programmatic efforts to acquire net energy savings purchase behavior via contractor networks, customer decisions and other efforts. Tracking system reviews will be conducted to support verification and installation assessment efforts. Program manager interviews will identify all routes on which the evaluation should focus their energy impact assessments (and help focus the process evaluation's objectives).

#### *Audit and Weatherization (AW)*

The DTE Audit and Weatherization channel is designed to acquire energy savings within the participant population by encouraging customers to install weatherization and insulation measures. It has two participation paths, prescriptive and performance. The prescriptive path allows participants who want to do it themselves without the need of a specialist, while the performance path utilizes trade ally specialists to assess and install a more complete set of measures or equipment in the home. Incentives and educational efforts are the primary tools used by DTE in achieving this objective. The evaluation approach for this program may consist of:

- Participant surveys
- Interviews with installation contractors and their key management staff responsible for participation in service offerings
- Interviews with program implementation stakeholders and operators
- Tracking system review, verification, and deemed savings tracking accuracy
- Interviews with program managers

Participant surveys will be used to assess current use and use conditions and the influence of the channel on participant participation, energy education, product selection, choice and purchase decisions, and to assess the degree to which the channel influences those considerations and decisions. Contractor and contractor management interviews will be conducted to assess the influence of the channel on customer acquisition, interaction and education, product offerings and customer decision processes. Tracking system reviews will be conducted to verify installations. Lastly, the evaluation will interview program design and key implementation managers to assess the strategies and approaches leading to the programmatic efforts to achieve energy savings and help focus the process evaluation's objectives.

#### *New Homes Construction (NHC)*

The New Home Construction channel is designed to encourage the construction of highly efficient homes by incentivizing above-code, higher efficiency designs and materials. The channel involves the coordination between builders, inspectors, and customers throughout the construction process.

The evaluation will include a process and impact assessment. The process evaluation will focus on assessing operational performance and providing recommendations for cost effective channel changes that contribute effectiveness or efficiencies to the channel's operations. The energy impact evaluation will address savings by estimating energy impacts from an "as would have been built" condition, assuming the building code as the energy baseline and calibrating that baseline via interviews with channel participating builders, inspectors, and customers making construction decisions. The evaluation may consist of:

- Surveys or interviews with customers making building decisions
- Interviews with program managers
- Interviews with builders, inspectors and contractors involved in the construction decision process
- Tracking system review, verification, and deemed savings tracking accuracy

Engineering calculations or building model assessment based on the difference between the "as would have been built", and the "as built" condition as determined through field verification, with the applicable building code serving as the baseline modified for the "as would have been built" condition.

#### **Multifamily Residential**

The Multifamily Program provides prescriptive rebates for building owners towards the installation of high efficiency lighting, refrigerators, HVAC upgrades and tune-ups, and weatherization measures in tenant units. The impact evaluation will consist of the following:

- Interviews with property managers
- Interviews with program implementation contractors
- Tracking system review, verification, and deemed savings tracking accuracy
- On-site verification to verify measure installation and operation.

The interviews with DTE program managers, multifamily property managers and the implementation contractors will identify all ways in which savings are expected (and help focus the process evaluation needs). The tracking system reviews will identify participants and actions to be assessed.

### **School Program**

The School Program works with grades 4 – 12 students and with senior citizens and teaches about energy and ways to save energy. The program curriculum on energy saving ideas and technologies can be delivered via in-person classroom sessions or via on-line webinar presentations. The program distributes kits with measures that students take home to install in their homes that reduce energy use. The program focuses on water heating and air sealing measures. The program also encourages interaction between parent and student to achieve additional savings beyond those in the kit. The evaluation may consist of the following efforts:

- Participant Surveys for parents of students receiving kits
- Teacher interviews
- Interviews with implementation contractor
- Review of kit contents and their energy savings potential
- Tracking system review, verification, and deemed savings tracking accuracy
- Interviews with program managers

The participant (take home) surveys will focus on which measures were installed from the kits and what additional actions were taken by the students and their parents. The teacher interviews and the implementation contractor interview will focus on the degree of participation and the distribution of kits. The review of the kit contents will identify the measures on which direct savings are to be estimated from kit use. Tracking system reviews will be conducted to verify numbers of students served and technology and education received that can be expected to drive savings. Interviews with program managers will help identify the types of actions taken and the energy saving approaches that must be assessed.

### **Home Energy Reports (HER) Program**

The Home Energy Reports (HER) program provides information to large populations of customers via a periodic Home Energy Report detailing customer's comparative level of energy use. The report also provides recommendations on how to control energy use and provides references to other opportunities DTE offer to help the customer save energy.

The program will be evaluated by following the impact evaluation protocol presented in evaluation protocol *The USDOE Uniform Methods Project: Methods for Determining Energy Efficiency Savings for Specific Measures*, 2020, Chapter 17: *Residential Behavior Evaluation Protocol*. This is a rigorous protocol and is designed to identify small levels of energy savings from large populations where experimental design is employed. Particular attention will be

employed by the evaluation contractor to match the DTE program with the appropriate opt-in and opt-out program evaluation method.

Savings from behavior programs similar to HER are typically in the 1% to 2% range, which requires an evaluation based on metered analysis of a large population of participants compared to a randomly assigned control group using regression analysis. An important component of an evaluation of an experimental design is to first verify the equivalence of the participant and control group. The evaluator will verify there are no statistically significant differences in pre-program energy consumption, or customer demographic and housing characteristics if data are available. Once the experimental design has been verified and validated, the evaluator can use the methods described in Chapter 17 to estimate savings.

The process evaluation will assess customer satisfaction and experience as well as the operations of the program and the adequacy of the style and content of the report and make recommendations that can be expected to cost effectively improve program performance.

### **Multifamily Strategic Energy Management (SEM)**

The Multifamily SEM Program offers Multifamily properties innovative, low to no-cost approaches to saving energy. The program also provides tools and education that promote action around reducing energy in multifamily residences, builds lasting relationships with multifamily property managers, and achieve persistent energy savings. The impact evaluation will consist of the following:

- Interviews with property managers
- Interviews with program implementation contractors
- Tracking system review, verification, and deemed savings tracking accuracy
- On-site observations and verification efforts and selected M&V
- Billing analysis if circuits can be isolated, verified or calibrated modeling or engineering analysis of building systems and impacts

The interviews with DTE program managers, multifamily property managers and the implementation contractors will identify all ways in which savings are expected (and help focus the process evaluation needs). The tracking system reviews will identify participants and actions to be assessed.

### **Residential Emerging Measures and Approaches Program**

DTE utilizes an approach for testing new programs or technologies which suggest a promise for further development and deployment as standard parts of the EWR portfolio. When new programs or technologies are incorporated into the EWR portfolio they will be evaluated using approaches that assure accurate and unbiased results. Depending on the size of the new program areas that are commercialized, evaluation methods may vary. For example, if the new program areas added to the portfolio represent initially a very small amount of savings and budget, then this program area may receive more limited evaluation initially. While it is not

possible to develop summary evaluation plans for programs or initiatives that may be developed in the future, it is possible to establish a general framework for planning those evaluations for use when they are needed.

When new programs or technologies are placed in the EWR portfolio they will be evaluated in accordance the industry standard approaches and protocols referenced above, recognizing the unique aspects of these emerging measures and approaches. The Emerging Measures and Approaches program is a “test program” designed to test new measures and approaches to offering measures across sectors. This program may have components with significant savings, or components with limited savings, however it is important to understand what and how savings are being provided if emerging approaches are to be incorporated into larger offerings.

This evaluation may conduct a process evaluation to assess a limited, but targeted scope of researchable issues to be defined by DTE in concert with their evaluation contactor that focus on potential operational approaches, and “program roll-out and scaling” issues for those equipment or approaches that may provide potential for cost effective savings. The impact evaluation will be based on modeling, metering, or engineering assessment of impacts informed by participant interviews on use and use conditions. The evaluation will be focused on providing DTE with decision quality information allowing assessment of future program or measure potentials. The evaluation may consist of:

- Surveys or interviews with participants
- Interviews with program managers
- Interviews with trade allies and key stakeholders
- Assessment of billing data if measures can be isolated, or calibrated engineering estimations or calibrated modeling assessments, with metering, measuring and verification as required for rigor
- On-site visits if needed to calibrate impact estimates
- Tracking system review, verification, and deemed savings tracking accuracy

### **Residential Shared Savings Program**

Each year, utilities in Michigan perform EWR-related work that generates both electric and gas savings at premises where they only provide single fuel service. Utility Shared Savings are those savings that are currently being created by an “originating” utility but remain unquantified and unclaimed by the utility providing the relevant fuel service (the “receiving” utility). Utility Shared Savings eligible projects must occur in the originating utility’s single-fuel service territory and generate savings of the opposite fuel type (e.g., the project must occur in a utility’s electric-only service territory but generate gas savings). For the purposes of this exhibit, Utility Shared Savings represents savings created by an originating utility (such as Consumers Energy) in areas where the originating utility and DTE have overlapping service territory and the originating utility provides single fuel service.

DTE’s evaluation approach for claiming shared savings requires DTE’s evaluator to review data provided by Consumers Energy’s third-party evaluation contractors after it had undergone a data tracking audit. To determine Verified Net Utility Shared Savings, the evaluator will use a three step approach:

- Step 1: The jurisdictional allocation identifies which projects are eligible for shared savings and includes mapping the “originating” utility’s projects and comparing that against the “receiving” utility’s service territory map. To determine project eligibility based on utility jurisdiction, Consumers Energy’s evaluators will map all single-fuel projects against a map of DTE’s electric and gas service territories. Consumers Energy projects that are within DTE’s service territory and create matching unclaimed saving are eligible for shared savings. For example, a prescriptive insulation project in Consumers Energy electric-only territory is eligible for shared savings only if that project also was within DTE gas service territory.
- Step 2: To account for residential customers that use propane as their primary fuel, DTE’s evaluator will apply a delivered fuels adjustment factor. This factor is based on estimates from the U.S. Energy Information Administration of the number of Michigan households (approximately 320,000) using propane as their primary heating fuel and represents approximately 8% of the households in the state. To account for this, gas Utility Shared Savings values resulting from Residential and Income-Qualified programs will be reduced by 8%.
- Step 3: To determine Verified Gross Utility Shared Savings, DTE’s evaluator will apply measure-level installation rate adjustment factors to account for measures that were not installed and operating. The installation rate adjustment factors will be provided by Consumers Energy’s evaluators and are based on their most recent evaluation of Consumers Energy’s EWR programs. Consistent with DTE’s commercialized EWR programs, the evaluator will apply a deemed NTGR of 0.92 to determine Verified Net Utility Shared Savings. Behavior and/or any custom savings are not included in the shared savings calculations, as only measures with deemed electric and gas savings values are applicable for shared savings currently.

### **Income-Qualified Programs**

#### **Income-Qualified Attributed to Energy Efficiency Assistance**

The Energy Efficiency Assistance (EEA) Program provides no-cost energy efficiency improvements in participant’s homes. The program covers higher cost items such as furnace replacements or repairs, refrigerator replacements and weatherization, as well as low-cost items such as LED bulbs, water measures, pipe insulation and thermostats among other actions.

Eligibility is for all income-qualified customers living in a single-family dwelling (1-2 units) receiving service from DTE. Specifically, the target market is customers with household incomes at or below 250% Federal Poverty Level (FPL) or 80% Area Median Income. Active enrollment in the DTE Low Income Self Sufficiency Plan or Michigan state income-qualified public assistance programs (SNAP, WIC, LIHEAP, etc.), or residing in a low-income census tract may also qualify the customer for the program.

The evaluation may consist of the following activities:

- Participant surveys
- Interviews with contractors, Community Action Agencies (CAAs), Non-Profit Organizations (NPOs)
- Tracking system review, verification, and deemed savings tracking accuracy
- Interviews with program managers
- On-site verification to verify measure installation and operation

The evaluations will survey program participants to confirm installation and use conditions to feed the impact estimate. Interviews with contractors, CAAs and NPOs will be conducted to confirm the program coverage and participation levels. Tracking systems will be reviewed to assess the accuracy and counts of participation and to support the impact estimates. Interviews with program managers will help identify the types of actions taken and the energy saving approaches that must be assessed.

#### **Income-Qualified attributed to Multifamily Units**

DTE will target income-qualified multifamily properties and provide services and measures for both in-unit and common area spaces. In-unit no cost measures will include measures that are offered in the non-income-qualified multifamily program as well as more impactful measures such as refrigerators. Additionally, DTE will continue to encourage deeper energy savings measures by working with property owners and incentivizing the installation of building envelope measures, namely insulation and air sealing. Enhanced service offerings include a Level 1 assessment for income-qualified multifamily property owners to successfully identify energy efficiency projects that would lower their energy use.

Eligible properties include income-qualified multifamily dwellings with 3 or more units which would meet one of the following guidelines: 1. Participation in an affordable housing program for example LIHTC, USDA, MSHDA or HUD; 2. Location in a HUD qualified low income census tract; 3. Rent roll documentation that rents charged are affordable to households that meet 80% of the area median income and 80% of median market rent; 4. Tenant income information at 250% of the Federal Poverty Level or at or below 80% of the median income.

The evaluation may consist of the following activities:

- Participant surveys
- Interviews with contractors, Community Action Agencies (CAAs), Non-Profit Organizations (NPOs)
- Tracking system review, verification, and deemed savings tracking accuracy
- Interviews with program managers
- On-site verification to verify measure installation and operation

#### **Income-Qualified attributed to School Program**

DTE will extend the Schools program offering to ensure students of income-qualified families receive the same educational benefits offered by the program.

Eligibility includes 4<sup>th</sup> and 6<sup>th</sup> grade and 8<sup>th</sup> through 12<sup>th</sup> grade students and their teachers receiving service from DTE. Schools will be qualified for the Income-Qualified Schools program based on serving a population with at least 70% of students receiving Free and Reduced Lunch (%FRL), or by census tract analysis using the Justice 40 (J40) designation.

The evaluation may consist of the following activities:

- Participant surveys
- Tracking system review, verification, and deemed savings tracking accuracy
- Interviews with program managers
- On-site verification to verify measure installation and operation

#### **Income-Qualified attributed to New Home Construction**

DTE will target construction of affordable housing properties by working with builders and energy raters to drive energy-efficiency construction of new homes. Similar to the New Homes element in the Residential Building Envelope program, this will be achieved by providing performance-based incentives and, prescriptive-based incentives. Similar to existing Income-Qualified programs eligibility will be met for properties that are committed for families that meet income qualifications of 250% or below the Federal Poverty Level (FPL), 80% or below Area Median Income (AMI), active enrollment in the DTE Low Income Self Sufficiency Plan or Michigan state income-qualified public assistance programs (SNAP, WIC, LIHEAP, etc.), or being built in a low-income census tract may also qualify the customer for the program.

The evaluation may consist of the following activities:

- Participant surveys
- Interviews with contractors, Community Action Agencies (CAAs), Non-Profit Organizations (NPOs)
- Tracking system review, verification, and deemed savings tracking accuracy
- Interviews with program managers
- On-site verification to verify measure installation and operation

#### **Income-Qualified attributed to Shared Savings**

Similar to other programs, DTE will evaluate shared savings generated by income-qualified programs. Each year, utilities in Michigan perform EWR-related work that generates both electric and gas savings at premises where they only provide single fuel service. Utility Shared Savings are those savings that are currently being created by an “originating” utility but remain unquantified and unclaimed by the utility providing the relevant fuel service (the “receiving” utility). Utility Shared Savings-eligible projects must occur in the originating utility’s single-fuel service territory and generate savings of the opposite fuel type (e.g., the project must occur in a utility’s electric-only service territory but generate gas savings). For the purposes of this exhibit, Utility

Shared Savings represents savings created by an originating utility (such as Consumers Energy) in areas where the originating utility and DTE have overlapping service territory and the originating utility provides single fuel service.

DTE's evaluation approach for claiming shared savings requires DTE's evaluator to review data provided by Consumers Energy's third-party evaluation contractors after it had undergone a data tracking audit. To determine Verified Net Utility Shared Savings, the evaluator will use a three step approach:

- Step 1: The jurisdictional allocation identifies which projects are eligible for shared savings and includes mapping the "originating" utility's projects and comparing that against the "receiving" utility's service territory map. To determine project eligibility based on utility jurisdiction, Consumers Energy's evaluators will map all single-fuel projects against a map of DTE's electric and gas service territories. Consumers Energy projects that are within DTE's service territory and create matching unclaimed saving are eligible for shared savings. For example, a prescriptive insulation project in Consumers Energy electric-only territory is eligible for shared savings only if that project also was within DTE gas service territory.
- Step 2: To account for residential customers that use propane as their primary fuel, DTE's evaluator will apply a delivered fuels adjustment factor. This factor is based on estimates from the U.S. Energy Information Administration of the number of Michigan households (approximately 320,000) using propane as their primary heating fuel and represents approximately 8% of the households in the state. To account for this, gas Utility Shared Savings values resulting from Residential and Income-Qualified programs will be reduced by 8%.
- Step 3: To determine Verified Gross Utility Shared Savings, DTE's evaluator ) will apply measure-level installation rate adjustment factors to account for measures that were not installed and operating. The installation rate adjustment factors will be provided by Consumers Energy's evaluators and are based on their most recent evaluation of Consumers Energy's EWR programs. Consistent with DTE's commercialized EWR programs, the evaluator will apply a deemed NTGR of 1.0 to determine Verified Net Utility Shared Savings given these are income eligible customers. Behavior and/or any custom savings are not included in the shared savings calculations, as only measures with deemed electric and gas savings values are applicable for shared savings currently.

## **Health and Safety**

DTE will offer incentives, for income-qualified customers, to address structural repair and/or home repair needs that are barriers to the installation of energy efficiency measures through the EEA and Income-Qualified (IQ) Multifamily Programs. Measures will be offered through the implementation of the EEA and IQ Multifamily Programs to ensure consistent delivery and reduce burden on the customer.

DTE's evaluator will verify Health and Safety savings based on deemed savings limits as a percentage of the legislative minimum savings requirement.

## **Commercial and Industrial (C&I) Programs**

### **Large Business Program**

The Large Business Program includes multiple focus areas:

#### **Prescriptive**

The Prescriptive offering provides incentives to C&I customers for energy efficient equipment. The program area covers a wide range of energy consuming equipment including lighting, HVAC, refrigeration, motors, pumps, system controls and others. The program maintains an approved list of qualifying equipment, which indicates the incentives for each type and/or size of equipment. The evaluation shall employ the following activities:

- Surveys or interviews with participants
- Interviews with program managers
- Interviews with program implementation contractors
- Interviews with trade allies
- On-site verification to verify measure installation and operation
- Tracking system review, verification, and deemed savings tracking accuracy

The surveys or interviews with participants and on-site verification will help determine the *as installed and used* conditions and confirm the installed and incented equipment type, size and application as well as assess customer experience with the program. For large projects, the evaluation may use interviews rather than surveys. The interviews with program managers will help identify the range of approaches that need to be assessed and the equipment covered by the program. The interviews with implementation contractors will confirm the program's approach for energy savings and the range of energy savings paths to be assessed. New construction contractors, if any, will be included in the interviews to assess the modifications to their standard construction approaches and equipment selection with their clients. The tracking system reviews will support the verification efforts and focus the impact assessment on the evaluated participants.

#### **Non-Prescriptive**

The Non-Prescriptive offering area provides incentives for energy efficient equipment or process improvements not covered in the prescriptive program. Because this program includes non-typical equipment or non-typical uses of energy efficient equipment, special care should be taken to assess the wide range of projects and technology use conditions covered in this program. This program may require more on-site verification efforts than the other programs in the portfolio. This program may also require on-site metering and/or utility meter analysis if the utility meters are sufficiently segregated to the electrical circuits being affected by the program and the expected impacts are sufficient to allow utility meter analysis. The sampling and assessment strategies for this evaluation should be stratified by size and type of customer and actions to minimize estimation error risks. Care should be taken in the sample design and

selection approach to minimize program-level estimation error. The evaluations may utilize some or all of the following efforts:

- Surveys or interviews with participants
- Interviews with program managers
- Interviews with program implementation contractors
- Tracking system review, verification, and deemed savings tracking accuracy
- On-site verification, with metering where necessary, to verify measure installation and operation
- Assessment of billing data if it can be isolated, or calibrated engineering estimations or calibrated modeling assessments

The surveys and interviews with participants will document the equipment is installed and operating, consistent with the size, quantity, and efficiency levels as reported. The interviews with program managers will help to identify the range of efficiency related actions taken and any observations that should be considered that impact energy savings. Contractor interviews will identify how the equipment is being installed or used to save energy. The tracking system review will support the verification efforts as well as the sampling and sample stratification needs. On-site visits may be required to confirm equipment use, type, and configuration and to support any metering required. Where applicable and cost-effective, on-site metering and verification efforts may be warranted along with billing analysis or calibrated modeling assessments.

### **Retro-commissioning**

DTE's Retro-commissioning (RCx) focuses on maximizing the efficient use of building HVAC systems and their associated controls, among other things. They are more difficult to evaluate than standard energy efficiency programs because every participant has a unique set of building and building use characteristics, as well as equipment and equipment control strategies. Likewise, retro-commissioning projects can range from small, isolated adjustments of only one or a few HVAC controls, to a large multiple staged and coordinated HVAC equipment configuration with multiple control strategies for different parts of a participant's facility. Pre- and post-participation on-site evaluation activities with unique metering, monitoring and verification efforts are often required to reliably assess savings.

The program will be evaluated by following the impact evaluation protocol presented in evaluation protocol "*The USDOE Uniform Methods Project: Methods for Determining Energy Efficiency Savings for Specific Measures*, December 2017, Chapter 16: *Retrocommissioning Evaluation Protocol* (and IPMVP). To the extent allowed by the evaluation budget, the study will be guided by the sampling protocols for retro-commissioning programs discussed in the California Evaluation Protocols. The evaluation may consist of the following:

- Interviews with program managers
- Interviews with program implementation contractors and trade allies
- Interviews with building owners and operators
- Tracking system review, verification, and deemed savings tracking accuracy
- On-site observations and verification efforts and selected M&V
- Verified or calibrated modeling or engineering analysis of building systems and impacts

- Pre/post regression analysis with non-routine adjustments

### **Strategic Energy Management**

Strategic Energy Management (SEM) is a comprehensive building and building systems approach for identifying energy efficiency opportunities within a facility. It provides whole-building operations assessment, and then tailors the actions and equipment that can lower energy use. The evaluation is specifically structured for each participant selected in the evaluation sampling strategy. The sampling strategy will need to be informed by the protocols identified above with respect to sampling, measurement and verification (M&V), analysis and the way in which results are addressed at the program participation population level. These programs are among the most difficult to evaluate because of the numerous energy efficiency configurations that can be selected, the phased-in approach that is often used by participants, and because of the interactive effects of the measures installed and the actions taken. Pre- and post-participation on-site evaluation activities with unique metering, M&V efforts are often required to reliably assess savings. The evaluation will consist of the following:

- Interviews with program managers
- Interviews with program implementation contractors and trade allies
- Interviews with building owners and operators
- Tracking system review, verification, and deemed savings tracking accuracy
- On-site observations and verification efforts and selected M&V
- Billing analysis if circuits can be isolated, verified or calibrated modeling or engineering analysis of building systems and impacts

### **Compressed Air Efficiency for DTE Electric Customers**

The objective of Compressed Air Efficiency is to assist business customers that may not have the understanding or technical capabilities to identify leaks in compressed air systems. The program will educate customers on how the compressed air system uses energy, and that there are potential areas for improvement that would reduce the energy use for that system. A system assessment is completed for the customer to find leaks and then fix or replace them.

The evaluation efforts may include:

- Surveys or interviews with participants
- Interviews with program managers
- Interviews with program implementation contractors
- Tracking system review, verification, and deemed savings tracking accuracy
- On-site observations and verification efforts and selected M&V
- Calibrated engineering estimations or calibrated modeling assessments and potentially billing analysis for larger projects.

### **Steam Trap Efficiency for DTE Gas Customers**

The objective of Steam Trap Efficiency is to assist business customers that may not have the understanding or technical capabilities to identify leaks in steam systems. The program will educate customers on how the system uses energy and where there are potential areas for

improvement that would reduce the energy use for that system. A system assessment is completed for the customer to find leaks and then fix or replace them.

The evaluation efforts may include:

- Surveys or interviews with participants
- Interviews with program managers
- Interviews with program implementation contractors
- Tracking system review, verification, and deemed savings tracking accuracy
- On-site observations and verification efforts and selected M&V
- Calibrated engineering estimations or calibrated modeling assessments and potentially billing analysis for larger projects.

### **Small Business (SB) Program**

The Small Business (SB) program concentrates on small-medium business customers that require additional guidance on their energy efficiency journey. This program's process is to engage small-medium business customers through an energy assessment and provide energy efficiency recommendations based on the assessment findings. The outreach team then explains the assessment and recommendations encouraging the customer to implement the recommendations. If the customer agrees to move forward, the outreach team provides the customer with trade allies that can provide costs for the project and complete the installation. The program covers a wide range of energy consuming equipment including lighting, motors, air conditioning, ventilation, etc. The evaluation efforts include:

- Surveys or interviews with participants
- Interviews with program managers
- Interviews with program implementation contractors
- Tracking system review, verification, and deemed savings tracking accuracy
- On-site verification to verify measure installation and operation
- Calibrated engineering estimations or calibrated modeling assessments and potentially billing analysis for larger projects.

### **Mid-Stream Program**

#### **Mid-Stream Lighting**

Mid-Stream Lighting (MSL) employs a comprehensive marketing plan that is focused on increasing the penetration and use of LED technologies in C&I facilities by impacting point-of-sale decisions. The program also relies on market trade allies to encourage the adoption of program-covered lighting measures. Primary measures include LED lighting, LED retrofit kits, and occupancy sensors. A process and impact evaluation will be conducted that may employ the following activities:

- Surveys or interviews with participants (distributors) and end-users
- Interviews with program managers

- Interviews with market trade allies
- Tracking system review, verification, and deemed savings tracking accuracy
- On-site verification to verify measure installation and operation

### **Mid Stream Food Service**

Mid-Stream Food Service (MSFS) is primarily a gas program; however, the evaluation will be coordinated with the Mid-Stream Lighting and HVAC programs to effect evaluation efficiency. MSFS aims to enhance the adoption of high efficiency cooking and refrigeration equipment by offering incentives to distributors. A process and impact evaluation will be conducted that may employ the following activities:

- Surveys or interviews with participants (distributors)
- Interviews with program managers
- Interviews with market trade allies
- Tracking system review, verification, and deemed savings tracking accuracy
- On-site verification to verify measure installation and operation

### **Mid-Stream HVAC**

Mid-Stream HVAC (MSHVAC) is focused on increasing the penetration and use of heating, ventilation, and air conditioning technologies in C&I facilities by impacting point-of-sale decisions. The program also relies on market trade allies to encourage the adoption of program-covered HVAC measures. This program may be difficult to evaluate because the end-user may not be aware of the program. A process and impact evaluation will be conducted that may employ the following activities:

- Surveys or interviews with participants (distributors)
- Interviews with program managers
- Interviews with market trade allies
- Tracking system review, verification, and deemed savings tracking accuracy
- On-site verification to verify measure installation and operation

### **Multifamily Common Areas**

The Multifamily Common Areas Program provides prescriptive and customer rebates for building owners towards the installation of high efficiency lighting, refrigerators, HVAC upgrades and tune-ups, and weatherization measures in common areas of multifamily buildings (lobbies, hallways, stairwells, parking lots). The impact evaluation will consist of the following:

- Interviews with property managers
- Interviews with program implementation contractors
- Tracking system review, verification, and deemed savings tracking accuracy
- On-site verification to verify measure installation and operation.

The interviews with DTE program managers, multifamily property managers and the implementation contractors will identify all ways in which savings are expected (and help focus the process evaluation needs). The tracking system reviews will identify participants and actions to be assessed.

### **Emerging Measures and Approaches (C&I)**

DTE currently utilizes an approach for testing new programs or technologies which suggest a promise for further development and deployment as standard parts of the EWR portfolio. When new programs or technologies are incorporated into the EWR portfolio they will be evaluated using approaches that assure accurate and unbiased results. Depending on the size of the new program areas that are commercialized, evaluation methods may vary. For example, if the new program areas added to the portfolio represent initially a very small amount of savings and budget, then this program area may receive more limited evaluation initially. While it is not possible to develop summary evaluation plans for programs or initiatives that may be developed in the future, it is possible to establish a general framework for planning those evaluations for use when they are needed.

When new programs or technologies are placed in the EWR portfolio they will be evaluated in accordance the industry standard approaches and protocols referenced above, recognizing the unique aspects of these emerging measures and approaches. The Emerging Measures and Approaches program is a “test program” designed to test new measures and approaches to offering measures across sectors. This program may have components with significant savings, or components with limited savings, however it is important to understand what and how savings are being provided if emerging approaches are to be incorporated into larger offerings.

This evaluation may conduct a process evaluation to assess a limited, but targeted scope of researchable issues to be defined by DTE in concert with their evaluation contactor that focus on potential operational approaches, and “program roll-out and scaling” issues for those equipment or approaches that may provide potential for cost effective savings. The impact evaluation will be based on modeling, metering, or engineering assessment of impacts informed by participant interviews on use and use conditions. The evaluation will be focused on providing DTE with decision quality information allowing assessment of future program or measure potentials. The evaluation may consist of:

- Surveys or interviews with participants
- Interviews with program managers
- Interviews with trade allies and key stakeholders
- Assessment of billing data if measures can be isolated, or calibrated engineering estimations or calibrated modeling assessments, with metering, measuring and verification as required for rigor
- On-site visits if needed to calibrate impact estimates
- Tracking system review, verification, and deemed savings tracking accuracy

### **C&I Shared Savings**

Each year, utilities in Michigan perform EWR-related work that generates both electric and gas savings at premises where they only provide single fuel service. Utility Shared Savings are those savings that are currently being created by an “originating” utility but remain unquantified and unclaimed by the utility providing the relevant fuel service (the “receiving” utility). Utility Shared Savings-eligible projects must occur in the originating utility’s single-fuel service territory and generate savings of the opposite fuel type (e.g., the project must occur in a utility’s electric-only service territory but generate gas savings). For the purposes of this exhibit, Utility Shared Savings represents savings created by an originating utility (such as Consumers Energy) in areas where the originating utility and DTE have overlapping service territory and the originating utility provides single fuel service.

DTE’s evaluation approach for claiming shared savings requires DTE’s evaluator to review data provided by Consumers Energy’s third-party evaluation contractors after it had undergone a data tracking audit. To determine Verified Net Utility Shared Savings, the evaluator will use the following steps:

- Step 1: The jurisdictional allocation identifies which projects are eligible for shared savings and includes mapping the “originating” utility’s projects and comparing that against the “receiving” utility’s service territory map. To determine project eligibility based on utility jurisdiction, Consumers Energy’s evaluators will map all single-fuel projects against a map of DTE’s electric and gas service territories. Consumers Energy projects that are within DTE’s service territory and create matching unclaimed saving are eligible for shared savings. For example, a prescriptive insulation project in Consumers Energy electric-only territory is eligible for shared savings only if that project also was within DTE gas service territory.
- Step 2: To determine Verified Gross Utility Shared Savings, DTE’s evaluator will apply measure-level installation rate adjustment factors to account for measures that were not installed and operating. The installation rate adjustment factors will be provided by Consumers Energy’s evaluators and are based on their most recent evaluation of Consumers Energy’s EWR programs. Consistent with DTE’s commercialized EWR programs, the evaluator will apply a deemed NTGR of 0.92 to determine Verified Net Utility Shared Savings. Behavior and/or any custom savings are not included in the shared savings calculations, as only measures with deemed electric and gas savings values are applicable for shared savings currently.

### **Self-Direct Program**

The Self-Direct Program will not require an evaluation by the independent evaluation contractor. Participants of this program must design, execute, and file their own energy waste reduction plans in order to opt out of paying the EWR surcharge.

Michigan Public Service Commission  
DTE Electric Company  
2026 - 2029 Energy Waste Reduction Plan  
Net Energy Savings Adjustments-Electric

Case No.: U-21681  
Exhibit: A-10  
Witness: T. Galvin  
Page: 1 of 1

|                             | (a)   | (b)                                 | (c)                | (d)                                    |
|-----------------------------|---|-------------------------------------|--------------------|--|
| Line No.                    | DTE Electric - Energy Waste Reduction Programs              | Installation Rate Adjustment Factor | Net-to-Gross Ratio | Total Net Adjustment Col (b) * Col (c) |
| <b>Residential Programs</b> |   |                                     |                    |  |
| 1                           | Appliance Recycling   | 87%                                 | 92%                | 80%                                    |
| 2                           | Residential Building Envelope                               | 97%                                 | 92%                | 89%                                    |
| 3                           | Multifamily Residential                                     | 98%                                 | 92%                | 90%                                    |
| 4                           | School Program  | 48%                                 | 92%                | 45%                                    |
| 5                           | Home Energy Reports   | 100%                                | 100%               | 100%                                   |
| 6                           | Multifamily Strategic Energy Management                     | 100%                                | 92%                | 92%                                    |
| 7                           | Emerging Measures and Approaches                            | 100%                                | 92%                | 92%                                    |
| 8                           | Residential Shared Savings                                  | 100%                                | 92%                | 92%                                    |
| 9                           | Income-Qualified attributed to Energy Efficiency Assistance | 82%                                 | 100%               | 82%                                    |
| 10                          | Income-Qualified attributed to Multifamily Units            | 98%                                 | 100%               | 98%                                    |
| 11                          | Income-Qualified attributed to School Program               | 47%                                 | 100%               | 47%                                    |
| 12                          | Income-Qualified attributed to New Home Construction        | 100%                                | 100%               | 100%                                   |
| 13                          | Income-Qualified attributed to Shared Savings               | 100%                                | 100%               | 100%                                   |
| 14                          | Health and Safety   | 100%                                | 100%               | 100%                                   |
| <b>C&amp;I Programs</b>     |   |                                     |                    |  |
| 15                          | Large Business Program                                      | 100%                                | 92%                | 92%                                    |
| 16                          | Small Business Program                                      | 100%                                | 92%                | 92%                                    |
| 17                          | Mid-Stream Program  | 95%                                 | 92%                | 87%                                    |
| 18                          | Multifamily Common Areas                                    | 98%                                 | 92%                | 90%                                    |
| 19                          | Emerging Measures and Approaches                            | 100%                                | 92%                | 92%                                    |
| 20                          | C&I Shared Savings  | 100%                                | 92%                | 92%                                    |
| 21                          | Self Direct   | 100%                                | 100%               | 100%                                   |
| <b>Other Programs</b>       |   |                                     |                    |  |
| 22                          | Education   | 100%                                | 100%               | 100%                                   |
| 23                          | Pilots  | 100%                                | 100%               | 100%                                   |

**Michigan Public Service Commission  
DTE Gas Company  
2026 - 2029 Energy Waste Reduction Plan  
Net Energy Savings Adjustments-Gas**

Case No.: U-21681  
Exhibit: A-11  
Witness: T. Galvin  
Page: 1 of 1

| Line No.                    | (a)<br>DTE Gas - Energy Waste Reduction Programs            | (b)<br>Installation Rate Adjustment Factor | (c)<br>Net-to-Gross Ratio | (d)<br>Total Net Adjustment Col (b) * Col (c) |
|-----------------------------|---|--|---------------------------|---|
| <b>Residential Programs</b> |   |  |                           |   |
| 1                           | Residential Building Envelope                               | 99%  | 93%                       | 92%   |
| 2                           | Multifamily Residential                                     | 98%  | 92%                       | 90%   |
| 3                           | School Program  | 41%  | 92%                       | 37%   |
| 4                           | Home Energy Reports   | 100%                                       | 100%                      | 100%  |
| 5                           | Multifamily Strategic Energy Management                     | 100%                                       | 92%                       | 92%   |
| 6                           | Emerging Measures and Approaches                            | 100%                                       | 92%                       | 92%   |
| 7                           | Residential Shared Savings                                  | 100%                                       | 92%                       | 92%   |
| 8                           | Income-Qualified attributed to Energy Efficiency Assistance | 96%  | 100%                      | 96%   |
| 9                           | Income-Qualified attributed to Multifamily                  | 98%  | 100%                      | 98%   |
| 10                          | Income-Qualified attributed to School Program               | 41%  | 100%                      | 41%   |
| 11                          | Income-Qualified attributed to New Home Construction        | 100%                                       | 100%                      | 100%  |
| 12                          | Income-Qualified attributed to Shared Savings               | 100%                                       | 100%                      | 100%  |
| 13                          | Health and Safety   | 100%                                       | 100%                      | 100%  |
| <b>C&amp;I/EUT Programs</b> |   |  |                           |   |
| 14                          | Large Business Program                                      | 99%  | 92%                       | 91%   |
| 15                          | Small Business Program                                      | 99%  | 96%                       | 96%   |
| 16                          | Mid-Stream Program  | 88%  | 92%                       | 81%   |
| 17                          | Multifamily Common Areas                                    | 98%  | 92%                       | 90%   |
| 18                          | Emerging Measures and Approaches                            | 100%                                       | 92%                       | 92%   |
| 19                          | C&I Shared Savings  | 100%                                       | 92%                       | 92%   |
| <b>Other Programs</b>       |   |  |                           |   |
| 20                          | Education   | 100%                                       | 100%                      | 100%  |
| 21                          | Pilots  | 100%                                       | 100%                      | 100%  |

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter, on the Commission's own )  
motion, regarding the regulatory reviews, )  
revisions, determinations, and/or approvals )  
necessary for **DTE ELECTRIC** )  
**COMPANY** and **DTE GAS COMPANY** to )  
fully comply with Public Act 295 of 2008, as )  
amended )

Case No. U-21681  
(Paperless e-file)

QUALIFICATIONS  
AND  
DIRECT TESTIMONY  
OF  
REBECCA M. MALFROID

**DTE ELECTRIC COMPANY AND DTE GAS COMPANY**  
**QUALIFICATIONS AND DIRECT TESTIMONY OF REBECCA M. MALFROID**

Line  
No.

1 **Q1. What is your name, business address and by whom are you employed?**

2 A1. My name is Rebecca M. Malfroid (she/her/hers). My business address is: One  
3 Energy Plaza, Detroit, MI 48226. I am employed by DTE Electric Company.

4

5 **Q2. On whose behalf are you testifying?**

6 A2. I am testifying on behalf of DTE Electric Company (DTE Electric) and DTE Gas  
7 Company (DTE Gas) (collectively, DTE).

8

9 **Q3. What is your educational background?**

10 A3. I graduated from Wayne State University with a Bachelor of Science degree in  
11 Mathematics in 2014.

12

13 **Q4. What is your work experience?**

14 A4. In January 2014, I was hired by DTE Electric as a Student Co-op in the Energy  
15 Optimization (EO) Evaluation Measurement and Verification (EM&V) team, and  
16 in September 2014, I was hired as an Associate Marketing Analyst for the same  
17 team within the Business Planning and Development Department. My  
18 responsibilities in this role included supporting the evaluation of the EO programs  
19 through impact and process evaluation, participating in the state EO Collaborative,  
20 and internal reporting. In 2017, I was promoted to the position of Marketing Analyst  
21 for the Energy Waste Reduction (formerly EO) EM&V and my responsibilities  
22 included leading the EM&V efforts for the residential programs, supporting Energy  
23 Waste Reduction (EWR) regulatory filings, participating in the state EWR  
24 Collaborative and technical subcommittee, running cost-effectiveness testing using  
25 DSMore, Demand Side Management Option/Risk Evaluator. In 2018, I was

Line  
No.

1 promoted to Principal Marketing Analyst for the EWR Strategy team. My  
2 responsibilities in this role included running cost-effectiveness testing and building  
3 EWR models for plan filings. One of my key responsibilities was providing support  
4 for EWR witnesses in regulatory filings such as EWR reconciliations, EWR Plans,  
5 as well as the Company's most recent IRP. My duties included drafting testimony,  
6 preparing exhibits, researching, and providing analysis for audit and discovery  
7 requests in such cases. In 2021, I became a Principal Marketing Specialist and my  
8 responsibilities included developing EWR plan modeling sensitivities, running  
9 cost-effectiveness testing for EWR filings, and strategic planning.

10

11 **Q5. What is your current position?**

12 A5. In 2022, I became a Marketing Program Manager. I am responsible for developing  
13 EWR models for planning, running cost-effectiveness testing, regulatory support,  
14 and strategic planning.

15

16 **Q6. Are you a member of any professional organizations?**

17 A6. Yes. I am a member of the Association of Energy Services Professionals (AESP).  
18 AESP is an organization that provides professional development programs, a  
19 network of energy practitioners, and promotes the transfer of knowledge and  
20 experience to promote energy efficiency programs.

21

22 **Q7. Have you previously testified before the Michigan Public Service Commission**  
23 **(MPSC or Commission)?**

24 A7. Yes. I provided testimony in the following cases:

25 U-20866 2020 DTE Electric EWR Reconciliation

Line  
No.

|   |         |  |
|---|---------|--|
| 1 | U-20871 | 2020 DTE Gas EWR Reconciliation                  |
| 2 | U-20876 | 2022-2023 DTE Electric EWR Plan                  |
| 3 | U-20881 | 2022-2023 DTE Gas EWR Plan                       |
| 4 | U-21206 | 2021 DTE Electric and DTE Gas EWR Reconciliation |
| 5 | U-21313 | 2022 DTE Electric and DTE Gas EWR Reconciliation |
| 6 | U-21322 | 2024-2025 DTE Electric and DTE Gas EWR Plan      |
| 7 | U-21558 | 2023 DTE Electric and DTE Gas EWR Reconciliation |

Line  
No.

1 **PURPOSE OF TESTIMONY**

2 **Q8. What is the purpose of your testimony?**

3 A8. The purpose of my testimony is to support the Company's approach to determining  
4 cost-effectiveness, including details regarding the method and tools used for the  
5 cost-effectiveness calculation. I also provide the calculation results showing the  
6 2026-2029 EWR plan is cost-effective.

7

8 **Q9. Are you sponsoring any exhibits in this proceeding?**

9 A9. Yes, I support the following exhibits:

| <u>Exhibit</u> | <u>Description</u>                       |
|----------------|--|
| A-12           | Cost-Effectiveness Test Results-Electric |
| A-13           | Cost-Effectiveness Test Results-Gas      |

13

14 **Q10. Were these exhibits prepared by you or under your direction?**

15 A10. Yes, they were.

16

17 **Cost Effectiveness Tests**

18 **Q11. What is the purpose of the cost-effectiveness tests?**

19 A11. Cost-effectiveness tests (CETs) are performed to ensure that energy savings are  
20 achieved in a cost-effective manner for the utility and its customers. As required by  
21 PA 229, EWR plans must meet the Utility System Resource Cost Test (USRCT) to  
22 be approved. Additionally, in accordance with the temporary order in Case No. U-  
23 15800, the plan will also include cost-effectiveness test results for the Total  
24 Resource Cost Test, Rate Impact Measure Test, and Participant Cost Test.

25

Line  
No.

1 **Q12. How did the Company determine the cost-effectiveness of the 2026-2029 EWR**  
2 **Plan?**

3 A12. The DSMore cost analysis tool was used to calculate and report the cost-  
4 effectiveness results of the 2026-2029 EWR Plan using the USRCT. Consistent  
5 with PA 229, the USRCT is defined as the total present value of life cycle avoided  
6 costs, divided by the sum of program costs.

7  
8 **Q13. What inputs are used in running DSMore?**

9 A13. There are two major groups of inputs used in running DSMore: the utility inputs  
10 and the program inputs.

11  
12 Utility input assumptions contain utility specific information, including load shapes,  
13 the commodity and non-commodity cost of electricity, customer energy rates, line  
14 losses, weather, and discount rates.

15  
16 Program input assumptions include information about individual energy efficiency  
17 measures and the programs within which they are being implemented. The major  
18 program inputs include measure type, measure unit, measure size, deemed savings  
19 from the 2025 Michigan Energy Measures Database (MEMD) or custom measure  
20 savings assumptions, the operations/implementation costs, incentive costs,  
21 incremental measure costs, participation levels, measure life, assumed hours of  
22 operation, and applicable time of day or seasonal impact.

23  
24 **Q14. At what level of detail were the CETs calculated?**

Line  
No.

1 A14. CETs were performed at the entire DTE EWR portfolio level and at the individual  
2 program level. The portfolio level includes all EWR programs except for the  
3 income-qualified programs. Other levels include the aggregation of: 1) residential  
4 programs (excluding income-qualified), 2) C&I programs, 3) Pilot programs, and  
5 the 4) Education program. The CET results for each of these aggregated levels are  
6 shown on Lines 1 through 5 on my exhibits A-12 and A-13. The income-qualified  
7 programs were excluded from the aggregations as Section 71(3)(G) of PA 229  
8 specifically excludes low-income in the requirement for cost-effectiveness.

9  
10 CETs were also calculated at the program level. For DTE Electric, these levels  
11 included the income-qualified programs, eight residential programs, and seven C&I  
12 programs. My Exhibit A-12 shows the DTE Electric CET results for the residential  
13 programs on Lines 6 through 13, and for the C&I programs on Lines 14 through 20.  
14 The residential programs include: 1) Appliance Recycling, 2) Residential Building  
15 Envelope, 3) Multifamily Residential, 4) School Program, 5) Home Energy Reports,  
16 6) Multifamily Strategic Energy Management, 7) Residential Emerging Measure  
17 and Approaches and 8) Residential Shared Savings. The C&I programs include: 1)  
18 Large Business Program, 2) Small Business Program, 3) Mid-Stream Program, 4)  
19 Multifamily Common Areas, 5) Commercial Retail Lighting, 6) C&I Emerging  
20 Measures and Approaches, 7) C&I Shared Savings, and 8) Self-Direct.

21  
22 For DTE Gas, USRCT scores were calculated for the income-qualified programs,  
23 seven residential programs, and six C&I programs. My Exhibit A-13, shows the  
24 DTE Gas CET results for the residential programs on Lines 6 through 12, and for  
25 the C&I programs on Lines 13 through 18. The residential programs include: 1)

Line  
No.

1 Residential Building Envelope, 2) Multifamily Residential, 3) Schools, 4) Home  
2 Energy Reports, 5) Multifamily Strategic Energy Management, 6) Residential  
3 Emerging Measure and Approaches, and 7) Residential Shared Savings. The C&I  
4 programs include: 1) Large Business Program, 2) Small Business Program, 3) Mid-  
5 Stream Program, 4) Multifamily Common Areas, 5) C&I Emerging Measures and  
6 Approaches, and 6) C&I Shared Savings.

7

8 **Q15. Is the 2026-2029 EWR Plan cost-effective?**

9 A15. Yes. USRCT scores have been calculated based on the costs and energy savings  
10 from the 2026-2029 EWR Plan excluding income-qualified programs and as  
11 required by PA 229. Application of this test shows that the score is 3.19 for DTE  
12 Electric and 2.38 for DTE Gas. Thus the 2026-2029 EWR Plan is cost-effective for  
13 both DTE Electric and DTE Gas. The EWR electric portfolio excluding income-  
14 qualified USRCT score is shown in Exhibit A-12, line 1, column (b), and the EWR  
15 gas portfolio excluding income-qualified USRCT score is shown in Exhibit A-13,  
16 line 1, column (b).

17

18 **Q16. Does this complete your direct testimony?**

19 A16. Yes, it does.

20

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter, on the Commission's own )  
motion, regarding the regulatory reviews, )  
revisions, determinations, and/or approvals )  
necessary for **DTE ELECTRIC** )  
**COMPANY** and **DTE GAS COMPANY** to )  
fully comply with Public Act 295 of 2008, as )  
amended )

Case No. U-21681  
(Paperless e-file)

EXHIBITS  
OF  
REBECCA M. MALFROID

| Line No.                    | (a)<br>Description   | (b)<br>USRCT | (c)<br>TRC Test | (d)<br>RIM Test | (e)<br>Participant Test | (f)<br>CCE Results \$/kWh (1) |
|-----------------------------|--|--------------|-----------------|-----------------|-------------------------|-------------------------------|
| <b>All Programs</b>         |  |              |                 |                 |                         |                               |
| 1                           | Portfolio - excludes the Income-Qualified Program            | 3.19         | 1.47            | 0.57            | 1.55                    | 0.02                          |
| 2                           | Residential Programs - excludes the Income-Qualified Program | 1.43         | 0.87            | 0.38            | 2.03                    | 0.06                          |
| 3                           | C&I Programs   | 3.88         | 1.63            | 0.62            | 1.47                    | 0.02                          |
| 4                           | Pilot Program  | 3.57         | 3.57            | 0.53            |                         | 0.02                          |
| 5                           | Education Program  | 3.83         | 3.83            | 0.50            |                         | 0.02                          |
| <b>Residential Programs</b> |  |              |                 |                 |                         |                               |
| 6                           | Appliance Recycling  | 1.45         | 1.45            | 0.33            |                         | 0.05                          |
| 7                           | Residential Building Envelope                                | 2.14         | 0.57            | 0.48            | 0.53                    | 0.04                          |
| 8                           | Multifamily Residential                                      | 2.83         | 1.59            | 0.40            | 1.61                    | 0.02                          |
| 9                           | School Program   | 3.44         | 3.44            | 0.37            |                         | 0.02                          |
| 10                          | Home Energy Reports  | 1.29         | 1.29            | 0.31            |                         | 0.05                          |
| 11                          | Multifamily Strategic Energy Management                      | 1.33         | 0.80            | 0.32            | 3.49                    | 0.05                          |
| 12                          | Emerging Measures and Approaches                             |              |                 |                 |                         |                               |
| 13                          | Residential Shared Savings                                   | 0.00         | 0.00            | 0.56            |                         | 0.00                          |
| <b>C&amp;I Programs</b>     |  |              |                 |                 |                         |                               |
| 14                          | Large Business Program                                       | 5.49         | 1.82            | 0.72            | 1.27                    | 0.01                          |
| 15                          | Small Business Program                                       | 4.85         | 1.15            | 0.53            | 1.20                    | 0.01                          |
| 16                          | Mid-Stream Program   | 9.27         | 2.54            | 0.58            | 1.95                    | 0.01                          |
| 17                          | Multifamily Common Areas                                     | 2.89         | 1.00            | 0.48            | 1.05                    | 0.02                          |
| 18                          | Emerging Measures and Approaches                             |              |                 |                 |                         |                               |
| 19                          | C&I Shared Savings   | 0.00         | 0.00            | 0.65            |                         | 0.00                          |
| 20                          | Self Direct  | 117.91       | 117.91          | 0.66            |                         | 0.00                          |
| 21                          | Income-Qualified Programs                                    | 0.70         | 0.86            | 0.30            | 12.48                   | 0.11                          |

Notes:

(1) Cost of Conserved Energy (CCE) calculated from DSMore  
Source: Company Records (Option Value DSMore)

Michigan Public Service Commission  
DTE Gas Company  
2026 - 2029 Energy Waste Reduction Plan  
Cost Effectiveness Test Results-Gas

Case No.: U-21681  
Exhibit: A-13  
Witness: R.M. Malfroid  
Page: 1 of 1

|          | (a)  | (b)   | (c)      | (d)      | (e)              | (f)                       |
|----------|--|-------|----------|----------|------------------|---------------------------|
| Line No. | Description  | USRCT | TRC Test | RIM Test | Participant Test | CCE Results<br>\$/Ccf (1) |
|          | <b>All Programs</b>  |       |          |          |                  |                           |
| 1        | Portfolio - excludes the Income-Qualified Program            | 2.38  | 1.17     | 0.51     | 1.12             | \$0.17                    |
| 2        | Residential Programs - excludes the Income-Qualified Program | 1.61  | 0.72     | 0.37     | 0.88             | \$0.25                    |
| 3        | C&I/EUT Programs   | 3.18  | 1.73     | 0.63     | 1.49             | \$0.13                    |
| 4        | Pilot Program  | 2.34  | 2.34     | 0.48     |                  | \$0.18                    |
| 5        | Education Program  | 2.34  | 2.34     | 0.45     |                  | \$0.18                    |
|          | <b>Residential Programs</b>                                  |       |          |          |                  |                           |
| 6        | Residential Building Envelope                                | 3.08  | 0.72     | 0.42     | 0.60             | \$0.13                    |
| 7        | Multifamily Residential                                      | 0.81  | 0.52     | 0.31     | 0.98             | \$0.51                    |
| 8        | School Program   | 2.73  | 2.73     | 0.42     |                  | \$0.16                    |
| 9        | Home Energy Reports  | 1.07  | 1.07     | 0.34     |                  | \$0.40                    |
| 10       | Multifamily Strategic Energy Management                      | 1.22  | 0.49     | 0.36     | 1.29             | \$0.35                    |
| 11       | Emerging Measures and Approaches                             |       |          |          |                  |                           |
| 12       | Residential Shared Savings                                   | 0.00  | 0.00     | 0.50     |                  | \$0.00                    |
|          | <b>C&amp;I/EUT Programs</b>                                  |       |          |          |                  |                           |
| 13       | Large Business Program                                       | 5.46  | 2.00     | 0.68     | 1.28             | \$0.08                    |
| 14       | Small Business Program                                       | 1.79  | 1.24     | 0.55     | 2.35             | \$0.25                    |
| 15       | Mid-Stream Program   | 4.54  | 2.50     | 0.67     | 1.52             | \$0.09                    |
| 16       | Multifamily Common Areas                                     | 2.71  | 1.92     | 0.61     | 1.57             | \$0.15                    |
| 17       | Emerging Measures and Approaches                             |       |          |          |                  |                           |
| 18       | C&I Shared Savings   | 0.00  | 0.00     | 0.79     |                  | \$0.00                    |
| 19       | Income-Qualified Programs                                    | 0.81  | 0.84     | 0.31     | 3.3              | \$0.50                    |

Notes:

(1) Cost of Conserved Energy (CCE) calculated from DSMore  
Source: Company Records (Option Value DSMore)

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter, on the Commission's own )  
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**COMPANY** and **DTE GAS COMPANY** to )  
fully comply with Public Act 295 of 2008, as )  
amended )

Case No. U-21681  
(Paperless e-file)

QUALIFICATIONS  
AND  
DIRECT TESTIMONY  
OF  
JOSE N. GONCALVES

**DTE ELECTRIC COMPANY AND DTE GAS COMPANY**  
**QUALIFICATIONS AND DIRECT TESTIMONY OF JOSE N. GONCALVES**

Line  
No.

1 **Q1. What is your name, business address and by whom are you employed?**

2 A1. My name is Jose N. Goncalves (he/him/his). My business address is: One Energy  
3 Plaza, Detroit, MI 48226. I am employed by DTE Electric Company within the  
4 Business Planning and Development department; my title is Manager Residential  
5 and Income Qualified Programs Energy Waste Reduction (EWR).

6

7 **Q2. On whose behalf are you testifying?**

8 A2. I am testifying on behalf of DTE Electric Company (DTE Electric) and DTE Gas  
9 Company (DTE Gas) (collectively, DTE).

10

11 **Q3. What is your educational and work background?**

12 A3. I graduated from Central Michigan University with a Bachelor of Science in  
13 Biology in 2007. In 2010, I graduated from The College of Charleston with a  
14 Master of Science in Environmental Studies. Prior to my employment with DTE  
15 Electric, I worked for ICF International from 2011 to 2017 in various and increasing  
16 roles from field analyst to Program Manager responsible for implementing several  
17 EWR programs including residential HVAC and Audit & Weatherization. Since  
18 joining DTE Electric, I have taken on different roles from Principal Marketing  
19 Specialist, Principal Supervisor, and Manager within the EWR organization.

20

21 **Q4. What are your current job responsibilities?**

22 A4. As Manager of the Residential and Income Qualified Energy Waste Reduction  
23 (EWR) programs, I am responsible for developing residential electric and gas  
24 product offerings that support DTE's overall energy efficiency program strategies.

Line  
No.

1 **Q5. Are you a member of any professional organizations?**

2 A5. Yes. I am a member of the Association of Energy Services Professionals (AESP).  
3 AESP is an organization that provides professional development programs, a  
4 network of energy practitioners, and promotes the transfer of knowledge and  
5 experience to promote energy efficiency programs. I am also a current member of  
6 the Consortium for Energy Efficiency (CEE) serving on the Gas Topic and HVAC  
7 committees. CEE is the United States and Canadian consortium of gas and electric  
8 efficiency program administrators whose goal is to accelerate the development and  
9 availability of energy-efficient products and services.

10

11 **Q6. Have you previously testified before the Michigan Public Service Commission**  
12 **(MPSC or Commission)?**

13 A6. Yes. I provided testimony in the following cases:

14 U-20866 2020 DTE Electric EWR Reconciliation

15 U- 20871 2020 DTE Gas EWR Reconciliation

16 U-21322 2024-2025 DTE Electric and DTE Gas EWR Plan

17

18 **Purpose of Testimony**

19 **Q7. What is the purpose of your testimony?**

20 A7. The purpose of my testimony in this 2026-2029 EWR Plan filing is to:

21 1) Provide an overview of DTE's residential EWR programs planned for the  
22 period 2026-2029.

23 2) Describe program adjustments between the 2026-2029 EWR Plan and the  
24 currently approved 2024-2025 EWR Plan, as amended (Case No. U-21322).

Line  
No.

- 1 3) Provide an updated program description for each of the residential programs.  
2 Each program description highlights the target markets, eligible measures,  
3 implementation, and marketing strategies, estimated participation, and an  
4 estimated program budget and respective energy savings for the 2026-2029  
5 EWR Plan period.  
6 4) Describe the methodology used to establish a balanced residential portfolio with  
7 an estimated budget and projected energy savings.

8

9 **Q8. Are you sponsoring any exhibits in this proceeding?**

10 A8. Yes. I am supporting the following exhibits:

11

12 Exhibit Description

13 A-14 Residential and Income Qualified Portfolio, Program Descriptions,  
14 Measures and Incentives

15

16 **Q9. Were these exhibits prepared by you or under your direction?**

17 A9. Yes, they were.

18

19 **Q10. What is DTE's objective in developing programs for its residential customers?**

20 A10. The objective of DTE's residential programs is to continue to build customer  
21 awareness regarding the benefits of energy efficiency, to encourage customers to  
22 participate in the various EWR offerings and services and make long-term  
23 commitments to reduce their energy usage. These objectives are accomplished  
24 through education and by offering a diverse portfolio of programs to create value  
25 for customers through a range of participation options.

Line  
No.

1 **Q11. Does DTE plan to make any program adjustments from the currently**  
2 **approved 2024-2025 EWR plan?**

3 A11. Yes. DTE will continue to offer residential programs similar to those currently  
4 being delivered in the 2024-2025 EWR Plan and proposes to make a few program  
5 modifications to refine and adjust programs in response to market conditions,  
6 efficiency standards, and technology changes, such as:

7 1. The Schools program will expand its offering and incorporate a similar offering  
8 for income-qualified customers through education campaigns and energy  
9 efficiency measures for schools in income-qualified areas.

10 2. Introduce an Income-Qualified New Homes Construction program to  
11 encourage adoption of high efficiency products and solutions from a whole  
12 home perspective early in the process to drive deeper and longer impacting  
13 energy savings in affordable housing construction.

14 3. Re-inserting windows as a measure in EWR portfolio of offerings for residential  
15 customers, specifically in the Residential Building Envelope program given  
16 their long-lasting impact and energy savings.

17

18 More information on these modifications can be found in my Exhibit A-14.

19

20 **Q12. What is DTE's approach to providing program offerings for its residential**  
21 **customers?**

22 A12. DTE's approach is to maintain a balanced portfolio by offering energy efficiency  
23 programs to all residential customers while including a broad array of technologies  
24 that may appeal to various customers. DTE will offer the following program  
25 elements:

Line  
No.

- 1) Incentives for single family homeowners to purchase low-cost measures such as thermostats, qualified energy-efficient appliances, room air conditioning equipment, and consumer electronics;
- 2) Incentives for single family homeowners to retire old, working and inefficient appliances (refrigerators, freezers, etc.) that represent some of the highest loads and consumption levels in the home;
- 3) Incentives for single family homeowners to install energy-efficient heating and cooling equipment;
- 4) Incentives for single family homeowners for weatherization and insulation measures that reduce energy consumption for both heating and cooling;
- 5) Incentives for energy-efficient heating and cooling equipment, weatherization and insulation measures and low-cost energy-efficient products to customers residing in multifamily complexes;
- 6) Incentives for home assessments to educate customers on their home's needs and the benefits of undertaking energy efficiency upgrades as a whole home approach;
- 7) Comprehensive measures and service offerings to DTE's income-qualified customers through coordination with multiple partners (including multifamily complexes) and through a direct to customer delivery approach
- 8) Energy efficiency education and distribution of kits provided through schools;
- 9) Home energy reports that provide customer's usage comparison and tips to become more energy-efficient through behavioral changes;
- 10) Incentives to build and renovate homes beyond existing building codes to be more energy-efficient;

Line  
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- 1 11) Incentives for home repair measures that remove barriers caused by  
2 conditions that would otherwise prevent installation of energy efficiency  
3 measures, through the Health and Safety Program; and  
4 12) New emerging measures and approaches program offerings to be identified  
5 through the Company's pilot efforts.

6

7 **Q13. What is the overall portfolio of programs DTE plans to offer its residential**  
8 **customers?**

9 A13. DTE plans to continue offering a variety of residential programs for electric and  
10 gas, as highlighted below and described in more detail in my Exhibit A-14, titled  
11 "Residential Portfolio, Program Descriptions, Measures and Incentives, and  
12 Education":

- 13 • Appliance Recycling (electric only)
- 14 • Residential Building Envelope Program
  - 15 ○ ENERGY STAR® Appliances at retail
  - 16 ○ Online Marketplace
  - 17 ○ Heating Ventilation Air Conditioning (HVAC)
  - 18 ○ Audit & Weatherization
  - 19 ○ New Homes and Major Renovations
- 20 • Multifamily
- 21 • Multifamily Strategic Energy Management
- 22 • Schools
- 23 • Home Energy Report
- 24 • Emerging Measures and Approaches
- 25 • Income-Qualified Energy Efficiency Assistance

Line  
No.

- 1 • Income-Qualified Multifamily
- 2 • Income-Qualified Schools
- 3 • Income-Qualified New Home Construction
- 4 • Income-Qualified Health and Safety
- 5

6 **Q14. What is DTE’s Appliance Recycling Program?**

7 A14. The Appliance Recycling Program (ARP) is designed to decrease the number of  
8 working, yet inefficient primary and/or secondary refrigerators, freezers, room air  
9 conditioners, dehumidifiers, small refrigerators, and small freezers in the residential  
10 market. ARP focuses on producing cost-effective, long-term annual energy savings  
11 by educating customers on how much energy these inefficient appliances use and  
12 provide instant rebates to encourage customers to dispose of their inefficient  
13 primary and/or secondary appliances in an environmentally safe manner. See  
14 Exhibit A-14 for additional details on ARP.

15

16 **Q15. What is DTE’s Residential Building Envelope (RBE) Program?**

17 A15. The Residential Building Envelope (RBE) Program is designed to continue  
18 providing residential customers with a wide variety of energy efficient measures  
19 and delivery channels encompassing several program elements under a singular  
20 platform. The structure of the RBE program reflects an evolution in residential  
21 offerings to align with current and upcoming market conditions, combining home  
22 product offerings into a single program. The program consists of five elements that  
23 have historically been implemented as singular programs, or elements of a program.  
24 The five elements are:

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- 1 1. ENERGY STAR® Appliances - DTE will continue to increase market share of  
2 qualified products sold through retail sale channels by providing primarily  
3 upstream incentives to manufacturers to decrease customer costs, provide  
4 information and education to increase consumer awareness and acceptance of  
5 energy-efficient technologies. DTE will continue to offer customer rebates on  
6 energy-efficient appliances, such as ENERGY STAR® room air conditioners,  
7 clothes washers, pool pumps, dehumidifiers, air purifiers and advanced power  
8 strips as well as consumer electronics products. DTE will also continue to offer  
9 customer rebates for insulation products sold through retail channels.  
10
- 11 2. Online Marketplace – DTE will continue to offer customer rebates on  
12 qualified products such as Wi-fi enabled thermostats, advanced power strips,  
13 air purifiers, pipe insulation, weather stripping, low-flow shower heads and  
14 aerators, through the DTE Marketplace.  
15
- 16 3. HVAC - DTE will continue to offer customer rebates for qualified products  
17 through a network of participating distributors and contractors. HVAC products  
18 such as high efficiency furnaces, high efficiency boilers, water heaters, air  
19 conditioners, heat pumps, heat pump water heaters and Wi-Fi enabled  
20 thermostats. DTE may also elect to use midstream incentives to dealers and  
21 distributors to stock, promote, and sell high-efficiency products and equipment.  
22
- 23 4. Audit & Weatherization - DTE will continue to offer incentives for home  
24 assessments to educate customers on their home’s needs and the benefits of  
25 undertaking energy efficiency upgrades as a whole home approach, these are

Line  
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1 assessments with a Building Performance Institute (BPI) certified auditor that  
2 perform diagnostics of the building envelope such as blower door testing and  
3 infrared imaging. DTE will continue to offer customer rebates for insulation  
4 and weatherization products such as attic, rim joist, wall, basement wall, floor,  
5 knee wall and crawlspace insulation, and air infiltration reduction measures,  
6 through a network of participating distributors and contractors.

7

8 5. New Homes Construction – DTE plans to continue leveraging a network of  
9 participating builders and energy raters to drive energy-efficiency construction  
10 of new homes and major renovations of existing homes. This will be achieved  
11 by providing performance-based incentives and, prescriptive-based incentives  
12 for measures like heat pumps. The network of participating builders and energy  
13 raters is a vital delivery channel for participation giving customers the  
14 opportunity to increase the efficiency of the home from the building phase,  
15 resulting in long-term benefits.

16

17 See Exhibit A-14 for additional measure and implementation details on the  
18 Residential Building Envelope Program.

19

20 **Q16. What is DTE’s Multifamily Program?**

21 A16. The Multifamily program is designed to generate energy savings to multifamily  
22 dwellings with three or more units by installing energy efficient measures. The  
23 program provides incentives for energy efficient measures, in-unit or in common  
24 areas, to existing and for new construction of multifamily projects. The multifamily  
25 program plans to continue implementing a deeper energy savings strategy that

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1 includes incentives for heat pump measures and heat pump water heaters, and  
2 weatherization measures such as insulation and reduction of air infiltration. See  
3 Exhibit A-14 for additional detail on the implementation strategies, measures and  
4 incentives for the Multifamily Program.

5

6 **Q17. What is DTE’s Multifamily Strategic Energy Management Program?**

7 A17. The Multifamily Strategic Energy Management (SEM) Program is designed to  
8 generate savings through educational, operational and maintenance improvements.  
9 The program offers customized technical assistance, educational tools and one-on-  
10 one interactions with property owners/managers, such as workshops, one-on-one  
11 events, energy management coaching and measurement of energy savings to  
12 establish improved energy efficient practices within the property. See Exhibit A-  
13 14 for additional measure and implementation details on the Multifamily SEM  
14 Program.

15

16 **Q18. What is DTE’s School Program?**

17 A18. The Schools Program is designed to provide energy education to students to  
18 influence families’ energy behaviors. The program is designed for students in 4th  
19 through 12th grades, who will be provided with education and a “take-home”  
20 energy efficiency kit that (1) raises awareness about how individual actions impact  
21 usage, and (2) provides low-cost products that can provide reductions in energy  
22 consumption. All educational materials and take-home efficiency kits are offered  
23 free of charge to the schools and their students. The Schools Program also includes  
24 a similar offering for senior citizens through education campaigns and energy

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1 efficiency measures at senior citizen centers. See Exhibit A-14 for additional detail  
2 on the implementation strategies, measures and incentives for the Schools Program.

3

4 **Q19. What is DTE's Home Energy Report Program?**

5 A19. The Home Energy Report (HER) program seeks to change customer behavior to  
6 cause a reduction in energy usage through the delivery of home energy reports to  
7 randomly selected customers. These reports display a comparison of usage to  
8 similar homes and trend analysis of customer energy usage. It also provides specific  
9 and relevant efficiency recommendations to these customers. This makes it easier  
10 for each customer to act on the recommendations and to participate in programs  
11 most relevant to them. See Exhibit A-14 for additional detail on the HER Program.

12

13 **Q20. What is DTE's Emerging Measures and Approaches Program?**

14 A20. In the Residential portfolio, Emerging Measures and Approaches include measures  
15 or program approaches that have been developed by the Pilot program and will then  
16 be accounted for as part of the Residential portfolio for savings and spend. Whereas  
17 many piloted measures and approaches that are adopted by the Residential portfolio  
18 are incorporated into the existing Residential programs' offerings, this transition  
19 will allow DTE an opportunity to create an entry point for Residential new program  
20 pilots as they too become commercialized and incorporated into the Residential  
21 portfolio. Through the Emerging Measures and Approaches process, DTE may  
22 continue to add programs to the Residential portfolio.

23

24 **Q21. What is DTE's Income-Qualified Program?**

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No.

1 A21. The Income-Qualified program is designed to reduce the energy use of DTE’s  
2 Income-Qualified customers through improvements to their existing home at no  
3 cost to them. The program is available for all income-qualified customers -  
4 homeowners, renters, and multifamily building owners. The Income-Qualified  
5 program will meet its objectives through the contribution of the following sub-  
6 programs:

7

8 1) Energy Efficiency Assistance (EEA) – DTE will continue to work with its many  
9 partners, including local Community Action Agencies, government agencies  
10 and nonprofit organizations to help eligible customers make energy-saving  
11 improvements to their existing homes at no cost. In addition to working with  
12 participating partners, DTE will continue to implement a direct to customer  
13 approach to increase the program’s capacity to drive long-term energy savings  
14 for eligible customers.

15

16 2) Multifamily - DTE will target income-qualified multifamily properties and  
17 provide services and measures for both in-unit and common area spaces. In-  
18 unit no cost measures will include measures that are offered in the non-income-  
19 qualified multifamily program as well as more impactful measures such as  
20 refrigerators. Additionally, DTE will continue to encourage deeper energy  
21 savings measures by working with property owners and incentivizing the  
22 installation of building envelope measures, namely insulation and air sealing.  
23 Enhanced service offerings include a Level 1 assessment for income-qualified  
24 multifamily property owners to successfully identify energy efficiency projects  
25 that would lower their energy use.

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1 3) Schools – DTE will extend the Schools program offering to ensure students of  
2 income-qualified families receive the same educational benefits offered by the  
3 program.

4

5 4) New Homes – DTE will target construction of affordable housing properties by  
6 working with builders and energy raters to drive energy-efficiency construction  
7 of new homes. Similar to the New Homes element in the Residential Building  
8 Envelope program, this will be achieved by providing performance-based  
9 incentives and, prescriptive-based incentives.

10

11 5) Health and Safety – DTE will offer incentives, for income-qualified  
12 customers, to address structural repair and/or home repair needs that are  
13 barriers to the installation of energy efficiency measures through the EEA and  
14 Multifamily Programs. Measures will be offered through the implementation  
15 of the EEA and Multifamily Programs to ensure consistent delivery and  
16 reduce burden on the customer.

17

18 See Exhibit A-14 for additional details on the implementation strategies, including  
19 whole home assessments, measures and incentives for EEA, IQ Multifamily, IQ  
20 Schools, IQ New Homes and Health and Safety programs.

21

22 **Q22. Is DTE planning to encourage comprehensive energy efficient improvements**  
23 **through its Income-Qualified Programs?**

24 A22. Yes. The income-qualified Energy Efficiency Assistance (EEA) Program plans to  
25 continue engaging partners on the benefits of improving homes as a system. The

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1 EEA Program will encourage energy assessments as the first step in identifying  
2 energy efficiency improvement needs of a home using Building Performance  
3 Institute's (BPI) standards and diagnostic tools (e.g., blower door testing). The EEA  
4 program introduced a whole home assessment component in the 2022 program year  
5 and will continue it in the 2026-2029 plan.

6

7 The Multifamily Program also will continue engaging property owners, managers  
8 and landlords on the benefits of building level improvements, including insulation  
9 and air infiltration reduction.

10

11 The addition of the IQ New Homes Program will also drive the market towards  
12 comprehensive and long-term energy savings by encouraging the adoption of  
13 energy efficiency measures from the construction phase. The inclusion of both  
14 prescriptive and performance-based incentives encourages adoption of energy  
15 efficiency at the building level, not just at the measure level.

16

17 **Q23. Does DTE plan to continue outreach and engagement strategies to implement**  
18 **the EEA Program, such as a neighborhood approach?**

19 A23. Yes. The EEA Program is planning to continue awareness and engagement  
20 strategies that promote the benefits of the program at the neighborhood level. The  
21 implementation component will include energy assessments, home repair through  
22 the Health & Safety Program if needed, and installation of energy efficiency  
23 measures, including insulation, air sealing and HVAC among others. Awareness  
24 and engagement strategies may include partnership with local community

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1 organizations to promote the program through canvassing campaigns, outreach  
2 events, email and direct mail communications.

3

4 **Q24. Is DTE planning to continue collaboration with other Company departments**  
5 **to promote its EWR programs to income qualified customers?**

6 A24. Yes. DTE’s EWR team will continue to collaborate with DTE’s Revenue  
7 Management and Protection department to offer customers participating in rate  
8 assistance programs, such as the Low-Income Self-Sufficiency Plan (LSP) and  
9 Shutoff Protection Plan (SPP) information regarding EWR programs.

10

11 **Q25. Is DTE planning to carry forward its workforce development initiative into**  
12 **the 2026-2029 EWR Plan?**

13 A25. Yes. DTE is planning to continue the workforce development and mentorship  
14 initiative, launched in 2022, with an emphasis on equity and inclusion to bolster  
15 participating trade contractor engagement and growth in the space of energy  
16 efficiency. The initiative will continue to promote the value of energy efficiency  
17 and develop trainings designed to encourage growth of participation in DTE’s EWR  
18 programs.

19

20 **Q26. Is DTE planning to collaborate with external groups on future design and**  
21 **implementation of its workforce development initiative?**

22 A26. Yes. DTE plans to continue being an active participant in the Michigan Public  
23 Service Commission’s (MPSC) Workforce Development working group. DTE  
24 plans to leverage learnings from future needs assessments studies conducted  
25 through the Workforce Development working group to assist with the shape and

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1 design of workforce development strategies for future years. DTE may work with  
2 third parties, and the workgroup, to drive awareness of careers in energy efficiency  
3 industry, including but not limited to potential pathways with Department of  
4 Corrections.

5

6 **Q27. Are DTE's proposed programs and investments sufficient to ensure the**  
7 **achievement of the energy savings target?**

8 A27. Yes. Many programs contained in this filing have been operating successfully since  
9 2009 and continue to demonstrate strong customer interest and participation which  
10 has helped drive performance to achieve the energy savings target.

11

12 See Exhibits A-1 and A-2 in Witness Kupser's testimony for additional detail in  
13 program budget and savings.

14

15 **Q28. Will DTE change its implementation approach in its 2026-2029 EWR Plan**  
16 **from the currently approved 2024-2025 EWR Plan?**

17 A28. No. With respect to the existing programs offered under DTE's approved 2024-  
18 2025 EWR Plan, DTE will continue to deliver a variety of programs by hiring  
19 Implementation Contractors to execute the plan as needed.

20

21 **Q29. What approach will DTE use to make changes to its residential portfolio**  
22 **spending?**

23 A29. DTE will use the same approach regarding spend changes in its residential portfolio  
24 as in the 2024-2025 EWR Plan. That process involves having the flexibility to  
25 reallocate budgets between programs, adjust incentive levels, and add new and/or

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No.

1 related measures to the residential programs to respond quickly to market  
2 conditions. For example, DTE may find it necessary to move funds from one  
3 program to another to avoid having to suspend a program that is very successful in  
4 the market. This flexibility was exercised in the past and has allowed DTE to  
5 maintain market momentum and meet customer expectations. Program flexibility  
6 is further discussed in Witness Kupser's testimony.

7

8 **Q30. Does this complete your direct testimony?**

9 A30. Yes, it does.

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter, on the Commission's own )  
motion, regarding the regulatory reviews, )  
revisions, determinations, and/or approvals )  
necessary for **DTE ELECTRIC** )  
**COMPANY** and **DTE GAS COMPANY** to )  
fully comply with Public Act 295 of 2008, as )  
amended )

Case No. U-21681  
(Paperless e-file)

EXHIBITS  
OF  
JOSE N. GONCALVES

## **DTE ELECTRIC AND DTE GAS**

# Residential Portfolio, Program Descriptions, Measures and Incentives.

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| Table 1. Measures, Incentives and Estimated Units for Residential and Income Qualified<br>Programs ..... | 35 |

---

This exhibit A-14 provides description and implementation strategies for each program for residential customers.

Common to all programs referenced below, with exception to behavioral Home Energy Reports, the Evaluation Measurement and Validation (EM&V) approach is as follows.

|                                  |  |
|----------------------------------|--|
| <b>EM&amp;V<br/>Requirements</b> | <p>An independent EM&amp;V contractor will perform the evaluation of the program, which will have an energy impact evaluation and a process evaluation.</p> <p>As part of the impact evaluation, the EM&amp;V contractor will determine audited deemed savings based on a review of program tracking data to ensure that appropriate MEMD values are applied and that supporting documentation is accurately recorded. The impact evaluation will also include primary data collection to assess measure installation, as well as free ridership and spillover. These efforts will support the development of an Installation Rate Adjustment Factor (IRAF) and Net-to-Gross ratio (NTG).</p> <p>The process evaluation will provide information on the effectiveness of program processes and implementation, marketing, and the impact of retailer education. The EM&amp;V contractor will conduct in-depth interviews with program and implementation staff, as well as program participants as part of this effort. The process evaluation will include an assessment of participant satisfaction and identify the drivers of satisfaction and dissatisfaction in order to make specific and actionable program improvement recommendations.</p> |
|----------------------------------|--|

**Appliance Recycling Program**

|                                |  |
|--------------------------------|--|
| <b>Program Element</b>         | <b>Appliance Recycling Program</b>   |
| <b>Objective</b>               | The objective of the program is to produce cost-effective, long-term annual energy savings and demand reduction by removing from the utility grid operable, inefficient, and secondary appliances in an environmentally safe manner and to prevent those appliances from being resold in the secondary used appliance market.  |
| <b>Target Market</b>           | All single-family residential customers taking service from DTE Electric are eligible for this program regardless of their choice of supplier. The primary target market will be customers with working inefficient second and third refrigerators and freezers, dehumidifiers, room air conditioners, and small refrigerators and freezers. The program is planning to target multifamily housing in 2026.  |
| <b>Program Duration</b>        | This program was launched in 2009 and is an ongoing element of the program portfolio.  |
| <b>Program Description</b>     | <p>The program will produce cost-effective long-term annual energy savings in the residential market by removing operable, inefficient refrigerators, freezers, dehumidifiers, room air conditioners, small refrigerators and small freezers from the utility grid in an environmentally safe manner.</p> <p>Older refrigerators and freezers can be some of the least efficient electrical appliances in the home. Often these old appliances are used when they are not functioning properly and as a result, use electricity very inefficiently. DTE Electric has contracted with a certified recycling agency that will be responsible for the recycling process of dismantling the refrigerators, freezers, dehumidifiers and room air conditioners, and removing oils and refrigerants.</p> <p>Certain market barriers exist to the replacement of old existing appliances with energy-efficient products, including difficulty in finding places to recycle old appliances, inability to deliver appliances to the drop-off location, lack of financial resources, competition for funds with other household budget items, and lack of awareness/knowledge about the benefits and costs of new energy efficiency measures. The program is designed to minimize these market barriers and encourage customers to dispose of old inefficient appliances and to increase the market share of ENERGY STAR® appliances by offering incentives, convenient scheduling of appointments, cost-free pick-up of qualifying appliances and rebates at the time of pickup.</p> |
| <b>Eligible Measures</b>       | <p>The measures listed below will be in the program offering, but DTE Electric reserves the right to revise the eligible measures as needed to reflect changes in current market conditions, Evaluation Measurement &amp; Verification (EM&amp;V) results, and program experience.</p> <ul style="list-style-type: none"> <li>• Refrigerators (10-30 cubic ft)</li> <li>• Freezers (10-30 cubic ft)</li> <li>• Dehumidifiers</li> <li>• Room air conditioners</li> <li>• Small refrigerators (less than 10 cubic ft)</li> <li>• Small freezers (less than 10 cubic ft)</li> </ul>  |
| <b>Implementation Strategy</b> | DTE Electric will provide program management and oversight, vendor referrals, tracking and reporting oversight, and regulatory review. DTE Electric will utilize an Implementation Contractor(s) (IC) to provide implementation services, including the scheduling, pick-up, and proper disposal of the appliances in an environmentally safe manner, rebate application and incentive processing, incentive payments, education and training, community outreach, tracking, verification, customer support, and marketing.  |

**Michigan Public Service Commission  
DTE Electric and DTE Gas  
Residential Portfolio, Program Descriptions, Measures and  
Incentives.**

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|                                       | <p>Customers will receive an incentive to have their old, working appliance recycled. A dehumidifier, room air conditioner, small refrigerator or small freezer can be scheduled for pick-up in conjunction with a large refrigerator or freezer. Customers participating in a drop off event can drop off small appliances without needing to drop off large appliances.</p>   |          |          |          |      |      |                               |         |          |          |          |
|---------------------------------------|---|----------|----------|----------|------|------|-------------------------------|---------|----------|----------|----------|
| <p><b>Marketing Strategy</b></p>      | <p>The marketing and communications strategy will be designed to inform customers of the availability and benefits of the program and how they can participate. Direct marketing will be the primary source of communication to manage the implementation of this program and scheduling of the appliance pick-up or to generate customer awareness of drop-off events. Marketing activities will include:</p> <ul style="list-style-type: none"> <li>• Brochures that describe the benefits and features of the program including program contact information. The brochures will be available for various public awareness events (presentations, seminars, etc.).</li> <li>• Bill inserts, bill messages and email messages to targeted customers.</li> <li>• Informational content on DTE Electric’s website.</li> <li>• Customer representatives trained to promote the program to their customers.</li> <li>• Presentations to key retailers and supplier groups to actively solicit their participation in the program.</li> <li>• Direct mail to potential customers based on zip code for the appliance pick-up to optimize travel costs.</li> <li>• Specific outreach activities to identify key retailer groups for target marketing.</li> <li>• PR Events, Facebook, Email, streaming videos, high impact displays and Twitter posts</li> <li>• Paid Media; Broadcast Television Advertising</li> </ul> |          |          |          |      |      |                               |         |          |          |          |
| <p><b>Estimated Participation</b></p> | <p>The estimated participation for the program is shown below.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> </tr> </thead> <tbody> <tr> <td># of Participants (Electric)</td> <td>29,000</td> <td>22,000</td> <td>23,500</td> <td>24,000</td> </tr> </tbody> </table>   | Year     | 2026     | 2027     | 2028 | 2029 | # of Participants (Electric)  | 29,000  | 22,000   | 23,500   | 24,000   |
| Year                                  | 2026  | 2027     | 2028     | 2029     |      |      |                               |         |          |          |          |
| # of Participants (Electric)          | 29,000  | 22,000   | 23,500   | 24,000   |      |      |                               |         |          |          |          |
| <p><b>Estimated Budget</b></p>        | <p>The estimated budget for the program is shown below.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> </tr> </thead> <tbody> <tr> <td>Electric Budget (\$Thousands)</td> <td>\$8,837</td> <td>\$10,741</td> <td>\$11,875</td> <td>\$12,301</td> </tr> </tbody> </table>  | Year     | 2026     | 2027     | 2028 | 2029 | Electric Budget (\$Thousands) | \$8,837 | \$10,741 | \$11,875 | \$12,301 |
| Year                                  | 2026  | 2027     | 2028     | 2029     |      |      |                               |         |          |          |          |
| Electric Budget (\$Thousands)         | \$8,837   | \$10,741 | \$11,875 | \$12,301 |      |      |                               |         |          |          |          |
| <p><b>Savings Targets</b></p>         | <p>The estimated net MWh energy savings for the program is shown below.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> </tr> </thead> <tbody> <tr> <td>Annual MWh saved</td> <td>28,954</td> <td>22,132</td> <td>23,641</td> <td>23,952</td> </tr> </tbody> </table>  | Year     | 2026     | 2027     | 2028 | 2029 | Annual MWh saved              | 28,954  | 22,132   | 23,641   | 23,952   |
| Year                                  | 2026  | 2027     | 2028     | 2029     |      |      |                               |         |          |          |          |
| Annual MWh saved                      | 28,954  | 22,132   | 23,641   | 23,952   |      |      |                               |         |          |          |          |

**Residential Building Envelope (RBE) Program**

|                            |   |
|----------------------------|---|
| <b>Program Element</b>     | <b>Residential Building Envelope Program</b>  |
| <b>Objective</b>           | The objective of the RBE program is to encourage residential customers to install energy-efficient equipment in their homes.  |
| <b>Target Market</b>       | All residential customers taking service from DTE are eligible for this program regardless of their choice of supplier.   |
| <b>Program Duration</b>    | In its planned structure as RBE, the program continues to follow the structure originally introduced in 2024. However, the RBE program includes several channels that have been individual programs, many launched as far back as 2009.   |
| <b>Program Description</b> | <p>The program provides incentives to residential customers for a wide variety of energy-efficient measures and delivery channels for new and existing single family homes. The RBE program incorporates several incentives to drive adoption of energy efficiency in homes through the following channels or approaches.</p> <p>ENERGY STAR ® products</p> <ul style="list-style-type: none"> <li>• Retailers to build market share and usage of ENERGY STAR ® products. <ul style="list-style-type: none"> <li>○ Provide midstream incentives to retailers to increase sales of ENERGY STAR ® consumer electronics where many of the products are more efficient than the standard ENERGY STAR ® baseline.</li> <li>○ Provide nationwide retail stores with a hybrid approach by offering a split incentive via midstream for retailers and instant incentives for customers.</li> <li>○ Provide incentives to customers for the installation of products to reduce energy use in the home, such as room air conditioners, electronics, appliances, and insulation.</li> <li>○ Marketing mechanism for retailer and high efficiency product suppliers to promote energy-efficient equipment and products to end users.</li> </ul> </li> <li>• E-commerce through the DTE Marketplace, designed to: <ul style="list-style-type: none"> <li>○ Provide instant incentives and promote energy efficiency products such as Wi-Fi enabled thermostats, advanced power strips, water saving measures, insulation, and others.</li> <li>○ Meet a shift in customer purchasing habits towards web-based retail.</li> <li>○ Provide incentives and information to customers for the installation of products not commonly available at “brick and mortar” retail stores. Examples of such products include advanced power strips, thermostatic water saving showerheads, and others.</li> </ul> </li> </ul> <p>The retailer and E-commerce approaches in the RBE program address several barriers to participation. First barrier is price. Midstream incentives and Marketplace incentives are provided for customers to lower upfront cost of the item and stimulate earlier replacement. Second barrier is retailer participation. Through retailer education, in-field sales support (signs, advertising, etc.) and stimulated market demand, retailers will stock more products, provide special promotions and plan sales strategies around these ENERGY STAR ® products.</p> <p>Heating, Ventilation &amp; Air Conditioning (HVAC)</p> |

- Network of participating distributors and contractors designed to:
  - Provide incentives for customers to purchase higher efficiency equipment as specified within the program.
  - Provide technical information, education and training to contractors and homeowners so that they can understand the benefits of the high efficiency alternatives as the best choice for customers.
  - Provide a marketing mechanism for contractors and equipment distributors to promote high efficiency equipment.
  - Provide incentives for product distributors to encourage stocking of high efficiency equipment, reducing purchasing costs for contractors and removing product availability as a barrier for adoption.

#### Audit & Weatherization

- Promote home assessments to educate customers on improvements that can be undertaken to improve efficiency, comfort, and overall quality of living in their home. The home assessment element of the RBE program incentivizes comprehensive assessments performed by a Building Performance Institute (BPI) certified auditor.
  - Provide incentives for comprehensive energy assessments (CEA) performed by a BPI certified auditor. These energy efficiency professionals provide the required analysis to assure the efficacy of installed measures by conducting “test in” and “test out” analysis of the home. The house is also analyzed to ensure that combustion safety issues are adequately addressed when providing insulation and air sealing measures in the home. Customers will pay a market-based fee for the CEA directly to the participating contractor and will receive incentives from the program. The program offers an incentive for the CEA to encourage customer participation by reducing that initial cost barrier.

The home assessment approach is designed to overcome some of the key barriers in the residential existing homes market – lack of information about how the home uses energy and the actions that will save the most energy and money. The program provides incentives to consumers and makes it as easy as possible to take action towards saving energy.

#### New Homes Construction

- Network of participating builders and energy raters to drive energy efficient construction of new homes using the concept of home as a system resulting in long-term benefits from the onset.
  - Provide incentives for construction of higher efficiency new homes,
  - Provide technical information, education and training to builders and energy raters on the benefits of high efficiency construction as the best choice to consumers.
  - Generate market awareness and ability for customers to identify builders constructing high efficiency homes.
  - Provide a marketing mechanism for builders to promote high efficiency homes.

Certain barriers exist to the adoption of energy-efficient equipment and new construction including lack of investment capital, competition for funds with other home investments or amenities, lack of

|                                       |   |
|---------------------------------------|---|
|                                       | <p>awareness/knowledge about the benefits and costs of energy efficiency measures, lack of education and skills of the contractor, and technology performance uncertainties. If the equipment is installed without efficiency in mind, there might not be the opportunity to make these improvements until years later when the equipment fails. Avoiding this lost opportunity at the time of construction and initial installation allows energy efficiency to be optimized and is usually less costly than equipment replacement later. This program is designed to help overcome these market barriers and encourage greater adoption of energy-efficient homes in the residential market.</p>  |
| <p><b>Eligible Measures</b></p>       | <p>Technologies and measures included in the program may vary over time based on opportunities found in the market. The program measures may include but are not limited to:</p> <ul style="list-style-type: none"> <li>• Clothes Washers and Dryers (including heat pump dryers)</li> <li>• Dehumidifiers</li> <li>• Room Air Conditioners</li> <li>• Air Purifiers</li> <li>• Pool Pumps</li> <li>• Advanced Power Strips</li> <li>• Specialty LED lights</li> <li>• ENERGY STAR® electronics</li> <li>• Wi-Fi enabled Thermostats</li> <li>• Central AC units</li> <li>• Central AC tune-ups</li> <li>• Heat Pump units</li> <li>• Heat Pump (Hybrid) water heaters</li> <li>• High Efficiency Gas Water Heaters</li> <li>• High Efficiency Furnace</li> <li>• High Efficiency Boiler</li> <li>• Heating system tune-ups</li> <li>• Insulation (Attic, Rim Joist, Wall, Basement Wall, Floor, Knee Wall and Crawlspace)</li> <li>• Air Sealing</li> </ul>  |
| <p><b>Implementation Strategy</b></p> | <p>DTE will provide program management and oversight, vendor referrals, tracking and reporting oversight, and regulatory review. DTE will use an Implementation Contractor(s) (IC) to provide implementation services, contractor, distributor and builder training and education, application and incentive processing, incentive payments, tracking, verification, technical support, customer support, and marketing.</p> <p>To make the program effective, the IC works with builders, retailers, equipment distributors and contractors. Those market participants are key in making sure high efficiency equipment is available, and key for selling the high efficiency alternative directly to customers as customers replace or upgrade existing equipment. The IC will be responsible for supporting these market participants with training, marketing/promotion, and program assistance. By having these market participants sell and promote energy-efficient equipment, customers will better understand the benefits of the higher efficiency choices.</p> <p>The incentives for the program may be paid to the customer, builder, distributor, or manufacturer. The implementation of this program will be coordinated between DTE Gas and DTE Electric where territories overlap. For territory that overlaps with another utility provider, the program will coordinate with them as much as possible, depending on the similarity of the programs.</p> |

| <p><b>Marketing Strategy</b></p>      | <p>The marketing and communications strategy is designed to inform homeowners, builders, contractors and equipment distributors of the availability and benefits of the program and how they can participate. The strategy will include outreach to key partners including contractors, equipment distributors, trade associations, and other parties of interest in the market. An important part of the marketing plan will be the content and functionality on DTE’s website, which will direct customers to information about the program.</p> <p>A combination of strategies will be utilized, including local media advertising, outreach and presentations at professional and community forums and events, and direct outreach to key contractors. Marketing and communication plans may include:</p> <ul style="list-style-type: none"> <li>• Education seminars implemented in each market to provide details about how to participate in the program. The seminars will be tailored to the needs of homeowners, contractors, and equipment distributors.</li> <li>• Brochures describing the benefits and features of the program including program application forms and worksheets. These brochures will be mailed upon request and distributed through the program. They will also be available through various public awareness events (presentations, home shows, etc.).</li> <li>• Targeted direct mailings used to educate homeowners on the benefits of the program and explaining how they can apply.</li> <li>• Customer and stakeholder outreach including presentations informing interested parties about the benefits of the program and how to participate.</li> <li>• Print advertisements to promote the program placed in selected local area newspapers and trade publications.</li> <li>• DTE’s website content providing program information resources, contact information, participating contractors, builders, and connection to other relevant service or information resources.</li> <li>• Digital advertisements to generate awareness of the program across digital and social media spaces.</li> <li>• Presence at conferences and public events used to increase general awareness of the program and distribute program promotional materials.</li> <li>• Presentations to customers and other program stakeholders to actively solicit their participation in the program.</li> </ul> <p>The marketing strategy will identify key customer segments and groups for targeted marketing and will prepare specific outreach activities for these customers. DTE will oversee the development of content, messaging, branding, and calls to action of all the marketing and collateral materials used to promote the program.</p> |          |          |          |      |      |                               |          |          |          |          |                         |        |        |        |        |
|---------------------------------------|--|----------|----------|----------|------|------|-------------------------------|----------|----------|----------|----------|-------------------------|--------|--------|--------|--------|
| <p><b>Estimated Participation</b></p> | <p>The estimated participation for the program is shown below.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> </tr> </thead> <tbody> <tr> <td># of Participants (Electric)</td> <td>29,000</td> <td>30,500</td> <td>33,500</td> <td>35,000</td> </tr> <tr> <td># of Participants (Gas)</td> <td>37,000</td> <td>38,500</td> <td>39,500</td> <td>41,000</td> </tr> </tbody> </table>  | Year     | 2026     | 2027     | 2028 | 2029 | # of Participants (Electric)  | 29,000   | 30,500   | 33,500   | 35,000   | # of Participants (Gas) | 37,000 | 38,500 | 39,500 | 41,000 |
| Year                                  | 2026   | 2027     | 2028     | 2029     |      |      |                               |          |          |          |          |                         |        |        |        |        |
| # of Participants (Electric)          | 29,000   | 30,500   | 33,500   | 35,000   |      |      |                               |          |          |          |          |                         |        |        |        |        |
| # of Participants (Gas)               | 37,000   | 38,500   | 39,500   | 41,000   |      |      |                               |          |          |          |          |                         |        |        |        |        |
| <p><b>Estimated Budget</b></p>        | <p>The estimated budget for the program is shown below.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> </tr> </thead> <tbody> <tr> <td>Electric Budget (\$Thousands)</td> <td>\$11,524</td> <td>\$12,038</td> <td>\$14,960</td> <td>\$15,674</td> </tr> </tbody> </table>  | Year     | 2026     | 2027     | 2028 | 2029 | Electric Budget (\$Thousands) | \$11,524 | \$12,038 | \$14,960 | \$15,674 |                         |        |        |        |        |
| Year                                  | 2026   | 2027     | 2028     | 2029     |      |      |                               |          |          |          |          |                         |        |        |        |        |
| Electric Budget (\$Thousands)         | \$11,524   | \$12,038 | \$14,960 | \$15,674 |      |      |                               |          |          |          |          |                         |        |        |        |        |

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|------------------------|--|---------|---------|---------|---------|
|                        | Gas Budget (\$Thousands)   | \$7,178 | \$7,194 | \$7,392 | \$7,557 |
|                        |  |         |         |         |         |
| <b>Savings Targets</b> | The estimated net MWh and net MCF energy savings for the program is shown below. |         |         |         |         |
|                        | Year   | 2026    | 2027    | 2028    | 2029    |
|                        | Annual MWh saved   | 17,278  | 18,195  | 19,988  | 20,637  |
|                        | Annual MCF saved   | 279,779 | 290,759 | 297,075 | 308,349 |

## Multifamily Program

|                            |   |
|----------------------------|---|
| <b>Program Element</b>     | <b>Multifamily Program</b>  |
| <b>Objective</b>           | The objective of the Multifamily Program is to increase the installation of high efficiency measures in multifamily properties and produce immediate energy savings.  |
| <b>Target Market</b>       | Multifamily buildings with three or more units under one continuous roof and taking service from DTE are eligible for this program. This includes both condominiums and apartments.   |
| <b>Program Duration</b>    | This program was launched in 2009 and is an ongoing element of the program portfolio.   |
| <b>Program Description</b> | <p>The program provides Incentives for eligible energy-efficient measures, either in-unit or in common areas, to building owners, managers, or contractors.</p> <p>The program also provides incentives for market rate new construction multifamily projects.</p> <p>The multifamily market has significant barriers to energy efficiency:</p> <ul style="list-style-type: none"> <li>• The primary barrier is that the tenant often pays the energy bill but is not the decision maker in building improvements, including energy efficiency.</li> <li>• For the owner there is little incentive to improve energy efficiency since tenants typically pay the energy bill, except for common areas, which is passed on to tenants through their rent.</li> <li>• Building owners and managers also have various priorities and little time to implement or develop knowledge of energy efficiency measures.</li> <li>• The market is becoming saturated as the larger properties have participated in the program, leaving new construction and smaller, harder to reach properties as potential program supply.</li> </ul> |
| <b>Eligible Measures</b>   | <p>The technologies to be included within this program may vary over time based on opportunities found in the marketplace. The following is a sample of program measures.</p> <p>In-Unit Measures may include:</p> <ul style="list-style-type: none"> <li>• Room air conditioners</li> <li>• Water Heaters, including heat pump water heaters</li> <li>• Wi-Fi enabled or Smart Furnaces</li> <li>• Boilers</li> <li>• Heat Pumps</li> <li>• Aerators and pipe wrap</li> <li>• Appliances</li> </ul> <p>Non-In-Unit Measures may include:</p> <ul style="list-style-type: none"> <li>• LED fixtures and lamps</li> <li>• LED exit signs</li> <li>• LED parking lot and safety lighting</li> <li>• Efficiency focused system controls – occupancy sensors, timers, dimmers</li> <li>• Heating system tune up</li> <li>• Chiller tune up</li> <li>• Wi-Fi enabled or Smart thermostats</li> <li>• Pipe Wrap</li> <li>• Furnaces</li> <li>• Boilers</li> <li>• Water heaters, including heat pump water heaters</li> <li>• Heat Pumps</li> <li>• Insulation</li> </ul>   |

|                                       | <ul style="list-style-type: none"> <li>• Air Sealing</li> <li>• Air conditioners</li> <li>• Windows and doors</li> <li>• Appliances</li> </ul>   |       |       |       |      |      |                       |       |       |       |       |            |       |       |       |       |
|---------------------------------------|--|-------|-------|-------|------|------|-----------------------|-------|-------|-------|-------|------------|-------|-------|-------|-------|
| <p><b>Implementation Strategy</b></p> | <p>DTE will provide program management and oversight, vendor referrals, tracking and reporting oversight, and regulatory review. DTE will utilize an Implementation Contractor(s) (IC) to provide implementation services, including outreach, marketing and building assessments.</p> <p>The IC will be responsible for outreach, training and education, rebate processing, tracking, verification, technical support, customer support, conducting assessment, build collaborations, and marketing. DTE and its IC will work with apartment associations and property management firms to reach building owners that own and operate larger facilities throughout DTE's service territory.</p> <p>The implementation of this program will be coordinated between DTE Gas and DTE Electric where territories overlap. For territory that overlaps with another utility provider, the program will coordinate with them as much as possible, depending on the similarity of the programs.</p>   |       |       |       |      |      |                       |       |       |       |       |            |       |       |       |       |
| <p><b>Marketing Strategy</b></p>      | <p>The marketing and communications strategy will be designed to inform building owners and managers of the availability and benefits of the program and how they can participate in the program. The strategy will include outreach to apartment associations, building owner/management groups and housing authorities. More specifically, the marketing and communications plan will include:</p> <ul style="list-style-type: none"> <li>• Education seminars/meetings to provide details about how to participate in the program. The seminars will be tailored to the needs of building owners, managers and participating contractors.</li> <li>• Fliers that describe the benefits and features of the program including program applications.</li> <li>• Customer and contractor outreach and presentations (e.g. apartment associations and building owner organizations) informing interested parties about the benefits of the program and how to participate.</li> <li>• Website content providing program information resources, contact information, downloadable applications and links to other relevant service and information resources.</li> <li>• Presence at conferences and industry events used to increase general awareness of the program and distribute program promotional materials.</li> <li>• Presentations to key customers and customer groups to actively solicit their participation in the program.</li> <li>• The marketing strategy will identify key customer segments and groups for target marketing and will prepare specific outreach activities for these customers.</li> <li>• Collaborative efforts with other utility providers in areas where DTE only serves gas or electric customers.</li> <li>• Annual contractor kickoff presentation and newsletter to provide participating contractors program updates, education, and relevant content to enable successful outreach efforts.</li> </ul> |       |       |       |      |      |                       |       |       |       |       |            |       |       |       |       |
| <p><b>Estimated Participation</b></p> | <p>The estimated participation for the program is shown below.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> </tr> </thead> <tbody> <tr> <td># of Units (Electric)</td> <td>1,500</td> <td>2,000</td> <td>2,000</td> <td>2,000</td> </tr> <tr> <td># of Units</td> <td>7,500</td> <td>7,500</td> <td>7,500</td> <td>8,000</td> </tr> </tbody> </table>  | Year  | 2026  | 2027  | 2028 | 2029 | # of Units (Electric) | 1,500 | 2,000 | 2,000 | 2,000 | # of Units | 7,500 | 7,500 | 7,500 | 8,000 |
| Year                                  | 2026   | 2027  | 2028  | 2029  |      |      |                       |       |       |       |       |            |       |       |       |       |
| # of Units (Electric)                 | 1,500  | 2,000 | 2,000 | 2,000 |      |      |                       |       |       |       |       |            |       |       |       |       |
| # of Units                            | 7,500  | 7,500 | 7,500 | 8,000 |      |      |                       |       |       |       |       |            |       |       |       |       |

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|-------------------------|--|---------|---------|---------|---------|
|                         | (Gas)  |         |         |         |         |
| <b>Estimated Budget</b> | The estimated budget for the program (residential) is shown below.                             |         |         |         |         |
|                         | Year   | 2026    | 2027    | 2028    | 2029    |
|                         | Electric Budget (\$Thousands)  | \$392   | \$417   | \$461   | \$480   |
|                         | Gas Budget (\$Thousands)   | \$1,641 | \$1,612 | \$1,654 | \$1,895 |
| <b>Savings Targets</b>  | The estimated net MWh and net MCF energy savings for the program (residential) is shown below. |         |         |         |         |
|                         | Year   | 2026    | 2027    | 2028    | 2029    |
|                         | Annual MWh saved   | 774     | 847     | 886     | 902     |
|                         | Annual MCF saved   | 27,176  | 27,177  | 27,491  | 30,077  |

**Multifamily Strategic Energy Management (SEM) Program**

|                                |   |      |      |      |      |
|--------------------------------|---|------|------|------|------|
| <b>Program Element</b>         | <b>Multifamily SEM Program</b>  |      |      |      |      |
| <b>Objective</b>               | The objective is to offer Multifamily properties an innovative, low to no-cost approach to saving energy  |      |      |      |      |
| <b>Target Market</b>           | Multifamily properties with three or more units under one roof, taking service from DTE are eligible for the program.   |      |      |      |      |
| <b>Program Duration</b>        | This program was launched in 2023.  |      |      |      |      |
| <b>Program Description</b>     | <p>In addition to offering multifamily properties an innovative, low to no-cost approach to saving energy the program also provides tools and education that promote action around reducing energy in multifamily residences, builds lasting relationships with multifamily property managers, and achieve persistent energy savings. The program is designed with four main elements:</p> <ul style="list-style-type: none"> <li>• Collaborative group workshops</li> <li>• Energy Management coaching</li> <li>• Measurement of energy savings</li> </ul>   |      |      |      |      |
| <b>Eligible Measures</b>       | The program will provide incentives to the Multifamily property managers on a per kWh of electricity savings and per therm of natural gas savings. All savings achieved through participation in other DTE EWR residential programs will be removed from the final savings measured by the energy model.  |      |      |      |      |
| <b>Implementation Strategy</b> | <p>DTE will provide program management and oversight, vendor referrals, tracking and reporting oversight, and regulatory review. DTE will utilize an Implementation Contractor(s) (IC) to provide implementation services, including outreach, marketing and building walkthrough.</p> <p>The IC will be responsible for recruiting property management firms through local outreach, referrals from past participants, and establishing relationships with local professional associates and industry events. Upon recruitment of participating cohort, the selected multifamily property managers energy champion (designated individual within the multifamily organization that will be the lead participant) will be trained and an energy scan will be conducted in the facility. A model for savings, or engineering calculations, tracking will be created and a register of potential improvements and projects will be shared. Energy savings will be determined in the models or engineering calculations once improvements have been made.</p> <p>Finally, the program will evaluate, report, and celebrate the successes.</p> <p>The implementation of this program will be coordinated between DTE Gas and DTE Electric where their territories overlap. For territory that overlaps with another utility provider, the program will coordinate with them as much as possible, depending on the similarity of the programs.</p> |      |      |      |      |
| <b>Marketing Strategy</b>      | Direct property outreach through energy coaches and outreach team will be the primary source of marketing for the program. The program will also utilize presentations, tip sheets, and email communications to engage with the participants throughout the program.  |      |      |      |      |
| <b>Estimated Participation</b> | The estimated participation for the program is shown below.   |      |      |      |      |
|                                | Year  | 2026 | 2027 | 2028 | 2029 |
|                                | # of Participants (Electric)  | 50   | 50   | 50   | 50   |
|                                | # of Participants (Gas)   | 30   | 30   | 30   | 30   |

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|-------------------------|--|--------|--------|--------|--------|
| <b>Estimated Budget</b> | The estimated budget for the program (residential) is shown below.                             |        |        |        |        |
|                         | Year   | 2026   | 2027   | 2028   | 2029   |
|                         | Electric Budget (\$Thousands)  | \$212  | \$216  | \$232  | \$240  |
|                         | Gas Budget (\$Thousands)   | \$146  | \$149  | \$152  | \$137  |
| <b>Savings Targets</b>  | The estimated net MWh and net MCF energy savings for the program (residential) is shown below. |        |        |        |        |
|                         | Year   | 2026   | 2027   | 2028   | 2029   |
|                         | Annual MWh saved   | 1,191  | 1,191  | 1,256  | 1,272  |
|                         | Annual MCF saved   | 13,095 | 13,095 | 13,095 | 11,549 |

**Schools Program**

|                            |  |
|----------------------------|--|
| <b>Program Element</b>     | <b>Schools Program</b>   |
| <b>Objective</b>           | The Schools program is designed to influence students and their families as well as senior citizens to take actions that can reduce their home energy use and increase efficiency.   |
| <b>Target Market</b>       | 4 <sup>th</sup> , 6 <sup>th</sup> grade and 8 <sup>th</sup> through 12 <sup>th</sup> grade students and their teachers as well as senior citizens in centers receiving service from DTE.   |
| <b>Program Duration</b>    | Program was launched in 2012 and is an ongoing element of the program portfolio. Senior citizens component was added in 2023. An income-qualified component is being added in 2025 (see more information below in the Income-Qualified section).   |
| <b>Program Description</b> | <p>DTE will utilize an Implementation Contractor(s) (IC) to implement a comprehensive energy efficiency education program in its service territory. Grade level presentations will be delivered to students and senior citizens. A take home energy-efficiency kit will be provided to students and senior citizens. School kits and online resources include a “Home Energy Worksheet” that students return to their teacher, submit online or use the postage paid envelope included in the kit to return to IC. The Home Energy Worksheet (1) gathers energy usage data from the household and (2) states that individual energy efficiency devices included in the kit (i.e. energy efficient showerhead, kitchen and bathroom faucet aerators, advanced power strip, window insulation, etc.) were installed. Students can learn to conserve energy resources by using energy more efficiently at home and at school. Teachers also participate in the school program, giving them the opportunity to become “sold” on the value of the program, continue the energy efficiency education, and the opportunity for the program to produce additional energy savings. Senior citizens receive a similar kit and abbreviated version of the Home Energy Worksheet that is completed during the presentation.</p> <p>Approach:</p> <ul style="list-style-type: none"> <li>• Provide quality energy efficiency education correlated to MI Education Academic Standards.</li> <li>• Coordinate with senior centers, recreational centers, and support services centers in DTE service territory to provide live or virtual presentations on using energy efficiently, safely, and wisely.</li> <li>• Gather and report measurable savings garnered from distribution and installation of energy efficiency measures included in kits provided.</li> <li>• Provide branding opportunity for DTE.</li> <li>• Provide non-traditional setting opportunities for DTE’s message of concern for energy efficiency, safety, and the environment.</li> <li>• Support children of customers and schools, and senior citizens in learning about and becoming energy efficient.</li> </ul> <p>In addition to energy efficiency measures, the program kits may include but are not limited to:</p> <ul style="list-style-type: none"> <li>• Home Energy Worksheet</li> <li>• Energy efficiency poster game with installation instructions</li> <li>• Family activity guide</li> <li>• Shower Timer</li> <li>• Plumber’s tape</li> <li>• Flow rate test bag</li> <li>• “Turn It Off” stickers</li> <li>• Mercaptan safety stickers</li> </ul> |
| <b>Eligible Measures</b>   | <p>The technologies to be included within this program may vary over time based on service territory and opportunities found in the marketplace. Measures may include but are not limited to:</p> <ul style="list-style-type: none"> <li>• Faucet aerators</li> <li>• Window insulation kit</li> <li>• Energy efficient showerhead</li> </ul>  |

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|                                       | <ul style="list-style-type: none"> <li>• Water-heater pipe wrap</li> <li>• LED night light</li> <li>• Advanced power strips</li> <li>• Door weatherstripping</li> </ul>   |        |        |        |      |      |                               |        |        |        |        |                          |        |        |        |        |
|---------------------------------------|---|--------|--------|--------|------|------|-------------------------------|--------|--------|--------|--------|--------------------------|--------|--------|--------|--------|
| <p><b>Implementation Strategy</b></p> | <p>DTE will provide program management and oversight, vendor referrals, tracking and reporting oversight, and regulatory review. DTE will utilize an IC to provide implementation services, including outreach, marketing, in school and virtual education and kits purchasing and distribution.</p> <p>The IC will work closely with DTE to identify eligible schools with a focus on selecting a diverse variety of schools. The IC will analyze, by community, relative program participation and effectiveness, particularly in the form of household response. The exact number of schools will depend on how many students participate at each school. The take home energy kits under this program may be offered in collaboration with another utility school's program to maximize program effectiveness.</p> <p>The IC will work with community centers to serve senior citizens in DTE's service territory as well as in collaboration with other utilities.</p> |        |        |        |      |      |                               |        |        |        |        |                          |        |        |        |        |
| <p><b>Marketing Strategy</b></p>      | <p>The program is marketed through an email, direct mail letter, postcards and fliers to school districts and senior centers within DTE's service territory. A grant is offered to participating schools and senior centers for distribution of kits and assistance in collecting data. Families from participating schools are encouraged to complete their Home Energy Worksheet by randomly providing one classroom winner with a gift card when providing a valid adult email on their returned Home Energy Worksheet.</p>  |        |        |        |      |      |                               |        |        |        |        |                          |        |        |        |        |
| <p><b>Estimated Participation</b></p> | <p>The estimated participation for the program is shown below.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> </tr> </thead> <tbody> <tr> <td># of Participants (Electric)</td> <td>19,500</td> <td>25,000</td> <td>25,500</td> <td>25,500</td> </tr> <tr> <td># of Participants (Gas)</td> <td>16,500</td> <td>18,500</td> <td>19,500</td> <td>19,500</td> </tr> </tbody> </table>   | Year   | 2026   | 2027   | 2028 | 2029 | # of Participants (Electric)  | 19,500 | 25,000 | 25,500 | 25,500 | # of Participants (Gas)  | 16,500 | 18,500 | 19,500 | 19,500 |
| Year                                  | 2026  | 2027   | 2028   | 2029   |      |      |                               |        |        |        |        |                          |        |        |        |        |
| # of Participants (Electric)          | 19,500  | 25,000 | 25,500 | 25,500 |      |      |                               |        |        |        |        |                          |        |        |        |        |
| # of Participants (Gas)               | 16,500  | 18,500 | 19,500 | 19,500 |      |      |                               |        |        |        |        |                          |        |        |        |        |
| <p><b>Estimated Budget</b></p>        | <p>The estimated budget for the program is shown below.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> </tr> </thead> <tbody> <tr> <td>Electric Budget (\$Thousands)</td> <td>\$744</td> <td>\$914</td> <td>\$965</td> <td>\$980</td> </tr> <tr> <td>Gas Budget (\$Thousands)</td> <td>\$585</td> <td>\$672</td> <td>\$718</td> <td>\$729</td> </tr> </tbody> </table>  | Year   | 2026   | 2027   | 2028 | 2029 | Electric Budget (\$Thousands) | \$744  | \$914  | \$965  | \$980  | Gas Budget (\$Thousands) | \$585  | \$672  | \$718  | \$729  |
| Year                                  | 2026  | 2027   | 2028   | 2029   |      |      |                               |        |        |        |        |                          |        |        |        |        |
| Electric Budget (\$Thousands)         | \$744   | \$914  | \$965  | \$980  |      |      |                               |        |        |        |        |                          |        |        |        |        |
| Gas Budget (\$Thousands)              | \$585   | \$672  | \$718  | \$729  |      |      |                               |        |        |        |        |                          |        |        |        |        |
| <p><b>Savings Targets</b></p>         | <p>The estimated net MWh and net MCF energy savings for the program is shown below.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> </tr> </thead> <tbody> <tr> <td>Annual MWh saved</td> <td>3,455</td> <td>3,946</td> <td>3,992</td> <td>3,992</td> </tr> <tr> <td>Annual MCF saved</td> <td>38,969</td> <td>44,694</td> <td>46,897</td> <td>46,897</td> </tr> </tbody> </table>   | Year   | 2026   | 2027   | 2028 | 2029 | Annual MWh saved              | 3,455  | 3,946  | 3,992  | 3,992  | Annual MCF saved         | 38,969 | 44,694 | 46,897 | 46,897 |
| Year                                  | 2026  | 2027   | 2028   | 2029   |      |      |                               |        |        |        |        |                          |        |        |        |        |
| Annual MWh saved                      | 3,455   | 3,946  | 3,992  | 3,992  |      |      |                               |        |        |        |        |                          |        |        |        |        |
| Annual MCF saved                      | 38,969  | 44,694 | 46,897 | 46,897 |      |      |                               |        |        |        |        |                          |        |        |        |        |

**Home Energy Report Program**

| <b>Program Element</b>         | <b>Home Energy Report Program</b>   |
|--------------------------------|---|
| <b>Objective</b>               | The objective of the Home Energy Report (HER) Program is to change customers' behavior(s) to cause a reduction in energy usage. The energy reduction outcome will be achieved as results of providing behavior changing treatments to customers. The treatments will be delivered through various channels and program aspects to include, but not limited to, the delivery of home energy reports to selected customers.   |
| <b>Target Market</b>           | All residential customers served by DTE may be targeted by the HER Program.   |
| <b>Program Duration</b>        | The program was launched in 2013 with the HERs treatment and is an ongoing component of the program.  |
| <b>Program Description</b>     | <p>The HER Program provides motivation for customers to change current behavior and practices in their home to more energy efficient behaviors.</p> <p>Customers selected to receive the HER treatment will be provided with home energy reports delivered by mail and email. The reports can display a comparison and trend analysis of customer energy usage to efficient and inefficient similar homes and targets specific and relevant efficiency recommendations to these customers making it easier for each customer to act on the recommendations and to participate in the programs most relevant to them. DTE will assess customers' change in behavior and reduction in energy consumption as a direct result of being influenced by these reports.</p> <p>The home energy report has been updated with a new comparative graph that compares the customer to similar homes and an Efficiency Zone. The Efficiency Zone represents the 20% of similar homes that used the least energy for the period. The report now includes access to a home energy survey that, when completed, provides an expanded home profile specific to the customer.</p> |
| <b>Eligible Measures</b>       | HER measures in the Michigan Behavioral Resource Manual (BRM) to include HER for the various years and energy consumption ranges. HER may include wave(s) evaluated via custom savings approach.  |
| <b>Implementation Strategy</b> | <p>DTE will provide program management and oversight, performance tracking/review and reporting oversight, and regulatory review.</p> <p>DTE will utilize an Implementation Contractor(s) (IC) to provide implementation services, including random selection of customers to receive home energy reports, mailing reports, managing email communications to report recipients, and evaluating performance. Customers will have the opportunity to opt out of the program at any point in time; and if need be, new customers will be added to the list of participants.</p>  |
| <b>Marketing Strategy</b>      | The HER Program is an opt-out program, no marketing will be required to generate participation, but the available marketing modules within the report will be utilized, if needed, to promote other energy efficiency programs.   |
| <b>EM&amp;V Requirements</b>   | An independent EM&V contractor will perform the evaluation of the program, which will have an energy impact evaluation and a process evaluation. As part of the impact evaluation, the EM&V contractor will determine audited deemed savings and custom savings based on a review of program tracking data to ensure that appropriate BRM values are applied, and that supporting documentation is accurately recorded.   |
| <b>Estimated Participation</b> | The estimated participation for the program is shown below.   |

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DTE Electric and DTE Gas  
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|                         |  |           |           |           |           |
|-------------------------|--|-----------|-----------|-----------|-----------|
|                         | Year   | 2026      | 2027      | 2028      | 2029      |
|                         | # of Reports (Electric)  | 3,600,000 | 3,600,000 | 3,600,000 | 3,600,000 |
|                         | # of Reports (Gas)   | 4,700,000 | 4,700,000 | 4,700,000 | 4,700,000 |
| <b>Estimated Budget</b> | The estimated budget for the program is shown below.                             |           |           |           |           |
|                         | Year   | 2026      | 2027      | 2028      | 2029      |
|                         | Electric Budget (\$Thousands)  | \$6,299   | \$6,614   | \$6,773   | \$6,985   |
|                         | Gas Budget (\$Thousands)   | \$1,073   | \$1,087   | \$1,140   | \$1,299   |
| <b>Savings Targets</b>  | The estimated net MWh and net MCF energy savings for the program is shown below. |           |           |           |           |
|                         | Year   | 2026      | 2027      | 2028      | 2029      |
|                         | Annual MWh saved   | 106,000   | 106,000   | 106,000   | 106,000   |
|                         | Annual MCF saved   | 265,000   | 265,000   | 265,000   | 265,000   |

**Emerging Measures and Approaches Program**

| <b>Program Element</b>         | <b>Emerging Measures and Approaches Program</b>  |      |      |      |      |
|--------------------------------|--|------|------|------|------|
| <b>Objective</b>               | The program will further advance pilots to commercialization in new program or program components. The objective is to test and develop new program designs, test new marketing strategies and approaches to most effectively serve the energy needs of customers, and to further assess the energy savings impact and market potential of emerging technologies.  |      |      |      |      |
| <b>Target Market</b>           | All customer segments served by DTE will be served by the Emerging Measures and Approaches Program.  |      |      |      |      |
| <b>Program Duration</b>        | Individual programs added to the emerging category will have their own duration and will depend on the success of pilot programs being considered for future emerging program spend.   |      |      |      |      |
| <b>Program Description</b>     | <p>The program encompasses measures and approaches that are mature or nearly mature from the pilot phase of program development. Some important components include customer research to get the “voice of the customer” and benchmark against “best in class” companies or organizations related to current and future programs and technologies.</p> <p>The program provides incentives to introduce new products to demonstrate proof of product, technology application, technology acceptance, market participation, maximum customer return on investment and positive political impact. The program also will determine product performance, customer satisfaction and energy saving of emerging technologies.</p> |      |      |      |      |
| <b>Eligible Measures</b>       | Individual programs added to the emerging category will have their own measures and will depend on the success of pilot programs being considered for future emerging program spend.   |      |      |      |      |
| <b>Implementation Strategy</b> | Like commercialized programs, DTE will provide program management and oversight, performance tracking/review and reporting oversight, and regulatory review. DTE will utilize an Implementation Contractor(s) (IC) to provide implementation services which may vary depending on the emerging program.  |      |      |      |      |
| <b>Marketing Strategy</b>      | Marketing strategy of Emerging Measures and Approaches Program will be dictated by the technology, the program or marketing approach being tested, but will follow strategies commonly used within the Program the measures, services or approaches are being tested for.  |      |      |      |      |
| <b>Estimated Budget</b>        | The estimated budget for the program is shown below.   |      |      |      |      |
|                                | Year   | 2026 | 2027 | 2028 | 2029 |
|                                | Electric Budget (\$Thousands)  | \$0  | \$0  | \$0  | \$0  |
|                                | Gas Budget (\$Thousands)   | \$0  | \$0  | \$0  | \$0  |
| <b>Savings Targets</b>         | The estimated net MWh and net MCF energy savings for the program is shown below.   |      |      |      |      |
|                                | Year   | 2026 | 2027 | 2028 | 2029 |
|                                | Annual MWh saved   | 0    | 0    | 0    | 0    |
|                                | Annual MCF saved   | 0    | 0    | 0    | 0    |

**Income-Qualified - Energy Efficiency Assistance Program**

| Program Element     | Energy Efficiency Assistance (EEA) Program   |
|---------------------|--|
| Objective           | The objective of the program is to reduce the energy use of income-qualified customers through improvements to their existing home at no cost to them.   |
| Target Market       | All income-qualified customers living in a single-family dwelling (1-2 units) receiving service from DTE. Specifically, the target market is customers with household incomes at or below 250% Federal Poverty Level (FPL) or 80% Area Median Income. Active enrollment in the DTE Low Income Self Sufficiency Plan or Michigan state income-qualified public assistance programs (SNAP, WIC, LIHEAP, etc.), or residing in a low-income census tract may also qualify the customer for the program.   |
| Program Duration    | Program was launched in 2009 and is an ongoing element of the program portfolio.   |
| Program Description | <p>Participation in the EEA program can take place via one of two primary channels.</p> <p>The first channel provides funding to approved participating partners, allowing them to expand their income-qualified services by installing energy-efficient equipment and providing home weatherization services. Through community partnerships, DTE can better support the communities they serve by helping income-qualified customers reduce their energy usage and bills.</p> <p>The second channel, designed to increase the program’s capacity to deliver energy efficiency services, functions by the program working directly with the customer and addressing the energy efficiency needs of their home at no cost to the customer. The program funds the energy efficiency improvements working with trade contractors to perform the work at customer’s home.</p> <p>For income-qualified customers the program is designed to provide funding so customers can receive the following, products and services:</p> <ul style="list-style-type: none"> <li>• Complete weatherization improvements which may include wall insulation, basement insulation, attic insulation, rim band joist and air infiltration reduction. DTE may also provide a “whole home bonus” to encourage projects that take a whole home approach and include multiple measures.</li> <li>• Replace inefficient refrigerators, determined by manufacture date or on-site testing, with high efficiency ENERGY STAR® refrigerators.</li> <li>• Replace inefficient gas water heaters with high efficiency units.</li> <li>• Replace inefficient electric water heaters with high efficiency heat pump water heater units.</li> <li>• Replace inefficient gas heating systems such as furnaces or boilers with high efficiency units.</li> <li>• Encourage the installation of heat pump products, for customers with existing electric based sources for heating, including but not limited to: <ul style="list-style-type: none"> <li>○ Air source heat pump</li> <li>○ Minisplit ductless heat pump</li> <li>○ Minisplit cold-climate heat pump</li> </ul> </li> <li>• Provide technical information, education, and support to participating partners so they can understand and comply with program requirements.</li> <li>• Provide customer-facing education materials, where appropriate.</li> <li>• Identify additional funding sources to deepen impact and bolster program offerings.</li> <li>• Identify and address home conditions that prevent the installation of energy efficiency improvements, through the funding made available in the Health &amp; Safety program as explained later in this exhibit.</li> </ul> |

|                                       |  |
|---------------------------------------|--|
| <p><b>Eligible Measures</b></p>       | <p>The measures to be included in the EEA program may include but are not limited to:</p> <ul style="list-style-type: none"> <li>• ENERGY STAR® qualified LED light bulbs</li> <li>• Refrigerator replacements</li> <li>• Whole home weatherization measures such as insulation, air sealing, doors and windows</li> <li>• Electric Heat Pump Water Heaters</li> <li>• Heat pumps</li> <li>• Dehumidifiers</li> <li>• Air purifiers</li> <li>• Central and window air conditioners</li> <li>• Air Conditioning tune-ups</li> <li>• Programmable or Wi-Fi enabled thermostats</li> <li>• High efficiency water heaters</li> <li>• High efficiency furnaces</li> <li>• High efficiency boilers</li> <li>• Heating system tune-ups</li> <li>• ENERGY STAR® doors and windows</li> <li>• Energy efficient clothes dryers</li> </ul>  |
| <p><b>Implementation Strategy</b></p> | <p>DTE will provide program management and oversight, performance tracking/review and reporting oversight, and regulatory review. DTE will utilize an Implementation Contractor(s) (IC) to provide services, including outreach, marketing, participating partner funding, tracking of spend and savings, and continuously building the infrastructure to support this program.</p> <p>Customer outreach and intake will primarily be performed by approved participating organizations that include non-profit organizations and community action agencies. DTE will coordinate with internal departments to refer customers to the EEA program when appropriate. For example, customers with no working heating system, hot water or refrigeration, or customers on assistance programs, may be referred to the program. For internal referrals, DTE and its IC will coordinate to schedule a whole home assessment for customers to 1) assist with immediate need and 2) learn of additional opportunities to improve the home. DTE will encourage and incentivize program partners to conduct whole home assessments as part of the program.</p> <p>DTE will continue to collaborate with the DTE Revenue Management and Protection department to enroll customers participating in rate assistance programs such as the Low-Income Self-Sufficiency Plan (LSP), Shutoff Protection Plan (SPP) and the Payment Stability Pilot (PSP)<sup>1</sup>.</p> <p>The direct to customer approach is designed to ensure comprehensive energy efficiency is being provided for customers participating in the program, starting with an energy assessment, health and safety measures when required to install energy efficiency, and installation of weatherization (insulation and air sealing), HVAC and water heating measures. This approach also gives program partners who have not expressed interest or ability to expand their services to include weatherization measures, the ability to offer that service to their customers by having DTE’s implementation team coordinate with trade contractors to have the services provided.</p> <p>The implementation of this program will be coordinated between DTE Electric and DTE Gas where their territories overlap. For territory that overlaps with another utility provider, the program will be coordinated with them as appropriate.</p> |
| <p><b>Marketing Strategy</b></p>      | <p>The education and promotional materials will be developed as needed to support each approved participating organization. The marketing and communications strategy for participating partners will be designed to help recruit participants and explain DTE’s involvement in the program.</p>   |

<sup>1</sup> Refer to MPSC Case No. U-20929 for additional information on the PSP.

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|                                | <p>DTE and its IC will continue to test direct install strategies, including a neighborhood-based approach, as part of our customer outreach efforts. This strategy involves working with local community-based organizations for outreach and customer engagement and with local contractors to serve customers with energy efficiency measures directly.</p> <p>The program is designed to address barriers to participation and ensure broader access to program benefits. Such barriers include partner and contractor availability, product price and availability (such as insulation, high-efficiency HVAC equipment, etc.).</p> |              |              |              |      |      |                               |              |              |              |              |                          |              |              |              |              |
|--------------------------------|---|--------------|--------------|--------------|------|------|-------------------------------|--------------|--------------|--------------|--------------|--------------------------|--------------|--------------|--------------|--------------|
| <b>Estimated Participation</b> | <p>The estimated participation for the program is shown below.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> </tr> </thead> <tbody> <tr> <td># of Projects (Electric)</td> <td>1,000</td> <td>1,000</td> <td>1,000</td> <td>1,000</td> </tr> <tr> <td># of Projects (Gas)</td> <td>11,000</td> <td>11,000</td> <td>11,000</td> <td>11,000</td> </tr> </tbody> </table>   | Year         | 2026         | 2027         | 2028 | 2029 | # of Projects (Electric)      | 1,000        | 1,000        | 1,000        | 1,000        | # of Projects (Gas)      | 11,000       | 11,000       | 11,000       | 11,000       |
| Year                           | 2026  | 2027         | 2028         | 2029         |      |      |                               |              |              |              |              |                          |              |              |              |              |
| # of Projects (Electric)       | 1,000   | 1,000        | 1,000        | 1,000        |      |      |                               |              |              |              |              |                          |              |              |              |              |
| # of Projects (Gas)            | 11,000  | 11,000       | 11,000       | 11,000       |      |      |                               |              |              |              |              |                          |              |              |              |              |
| <b>Estimated Budget</b>        | <p>The estimated budget for the EEA program is shown below.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> </tr> </thead> <tbody> <tr> <td>Electric Budget (\$Thousands)</td> <td>\$30,000,000</td> <td>\$30,000,000</td> <td>\$30,000,000</td> <td>\$30,000,000</td> </tr> <tr> <td>Gas Budget (\$Thousands)</td> <td>\$12,000,000</td> <td>\$12,000,000</td> <td>\$12,000,000</td> <td>\$12,000,000</td> </tr> </tbody> </table>  | Year         | 2026         | 2027         | 2028 | 2029 | Electric Budget (\$Thousands) | \$30,000,000 | \$30,000,000 | \$30,000,000 | \$30,000,000 | Gas Budget (\$Thousands) | \$12,000,000 | \$12,000,000 | \$12,000,000 | \$12,000,000 |
| Year                           | 2026  | 2027         | 2028         | 2029         |      |      |                               |              |              |              |              |                          |              |              |              |              |
| Electric Budget (\$Thousands)  | \$30,000,000  | \$30,000,000 | \$30,000,000 | \$30,000,000 |      |      |                               |              |              |              |              |                          |              |              |              |              |
| Gas Budget (\$Thousands)       | \$12,000,000  | \$12,000,000 | \$12,000,000 | \$12,000,000 |      |      |                               |              |              |              |              |                          |              |              |              |              |
| <b>Savings Targets</b>         | <p>The estimated net MWh and net MCF energy savings for the EEA program is shown below.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> </tr> </thead> <tbody> <tr> <td>Annual MWh saved</td> <td>4,156</td> <td>4,207</td> <td>4,150</td> <td>4,146</td> </tr> <tr> <td>Annual MCF saved</td> <td>77,848</td> <td>80,859</td> <td>77,801</td> <td>77,744</td> </tr> </tbody> </table>   | Year         | 2026         | 2027         | 2028 | 2029 | Annual MWh saved              | 4,156        | 4,207        | 4,150        | 4,146        | Annual MCF saved         | 77,848       | 80,859       | 77,801       | 77,744       |
| Year                           | 2026  | 2027         | 2028         | 2029         |      |      |                               |              |              |              |              |                          |              |              |              |              |
| Annual MWh saved               | 4,156   | 4,207        | 4,150        | 4,146        |      |      |                               |              |              |              |              |                          |              |              |              |              |
| Annual MCF saved               | 77,848  | 80,859       | 77,801       | 77,744       |      |      |                               |              |              |              |              |                          |              |              |              |              |

**Income-Qualified – Multifamily Program**

| Program Element     | Income-Qualified – Multifamily Program   |
|---------------------|--|
| Objective           | The objective of the program is to increase the installation of high efficiency measures in income-qualified multifamily properties.   |
| Target Market       | Income-qualified multifamily dwellings with 3 or more units which would meet one of the following guidelines: 1. Participation in an affordable housing program for example LIHTC, USDA, MSHDA or HUD; 2. Location in a HUD qualified low income census tract; 3. Rent roll documentation that rents charged are affordable to households that meet 80% of the area median income and 80% of median market rent; 4. Tenant income information at 250% of the Federal Poverty Level or at or below 80% of the median income.  |
| Program Duration    | Program was launched in 2019 and is an ongoing element of the program portfolio.   |
| Program Description | <p>The Multifamily Income-Qualified program provides incentives for eligible energy-efficient measures, either in-unit or in common areas, to building owners, managers, or contractors.</p> <p>Prescriptive rebates are substantially increased compared to non-income-qualified incentives to spur saving investment.</p> <p>There are several ways for property managers or owners to participate in the Income-Qualified Multifamily Program:</p> <ol style="list-style-type: none"> <li>1. Program outreach through Energy Advisor (EA). <p>The Energy Advisor contacts a property to determine interest. If the customer is interested, an appointment is setup for the EA to meet with the property representative. The EA does a basic walk through of the property to determine age, type and condition of the property's equipment and building envelope and identifies energy efficient recommendations. The EA meets with the property representative to present the initial recommendations and rebate opportunities, and offer a Level 1 assessment, if needed. If the customer is interested in a Level 1 assessment, an Energy Concierge will schedule an appointment to perform the assessment. During the assessment, comprehensive information about building envelope (insulation, windows, doors, etc.) and the age and condition of equipment (furnaces, AC units, boilers, hot water tanks, appliances, etc.) is collected. The findings are presented to the customer, including potential energy savings, applicable rebates, simple payback and available financing options. If the customer decides to proceed with any of the recommendations, the Energy Concierge will share a list of participating contractors (unless the customer has a contractor(s) they prefer to work with), and maintain involvement until job completion, including inspection of installation and ensuring rebates are paid promptly.</p> </li> <li>2. A participating contractor brings a project from a customer to DTE. <p>Projects received directly from contractors are reviewed and upon confirmation eligibility requirements are met, the program approves the application for rebates (while funding is available in a given program year) through a reservation. When the project is complete, the program will process the final application and pay the rebate promptly. The customer will be contacted to assess their interest in other services the program provides, such as a Level 1 assessment as a follow-up.</p> </li> <li>3. Customer inquiries to DTE about the program. <p>If the building owner/property manager inquires with DTE directly, an Energy advisor will reach out directly with the customer and proceed through the EA process described in 1 above.</p> </li> <li>4. Collaboration with other Income-Qualified programs.</li> </ol> |

|                                 |  |
|---------------------------------|--|
|                                 | <p>DTE plans to continue collaboration with other income-qualified programs such as the Michigan Housing Development Authority (MSDHA), Community Economic Development Association of Michigan (CEDAM), Property Management Associations, Michigan Housing Council, and Housing Commissions to identify potential projects, specifically related to developments receiving financing to encourage and incentivize energy efficient measures within those projects.</p> <p>5. New Construction.<br/> The program also provides rebates for income-qualified new construction installing high energy efficiency equipment.</p> <p>Financing</p> <p>DTE, along with Michigan Saves, may offer financing incentives in the form of interest rate buy downs in addition to rebates for efficient products.</p> <p><u>The multifamily program design is built to address market barriers for adoption of energy efficiency:</u></p> <ul style="list-style-type: none"> <li>• The primary barrier is that the tenant often pays the energy bill and does not own the building so cannot make energy efficiency improvements directly.</li> <li>• For the owner, there is little incentive to improve energy efficiency inside tenant units since tenants typically pay the energy bill except for common areas which is passed on to tenants through their rent.</li> <li>• Building owners and managers have various priorities and limited time to implement or develop knowledge of energy efficiency measures.</li> <li>• Building owners and managers have limited capital budgets to expend on energy efficiency measures.</li> </ul> |
| <p><b>Eligible Measures</b></p> | <p>The technologies to be included within this program may vary over time based on opportunities available in the marketplace. The following is a sample of program measures.</p> <p>In-Unit Measures may include:</p> <ul style="list-style-type: none"> <li>• Room air conditioners</li> <li>• Water Heaters, including heat pump water heaters</li> <li>• Wi-Fi enabled or Smart Thermostats</li> <li>• High Efficiency Furnaces</li> <li>• Boilers</li> <li>• Heat Pumps</li> <li>• Aerators and pipe wrap</li> <li>• Appliances</li> </ul> <p>Non-In-Unit Measures may include:</p> <ul style="list-style-type: none"> <li>• LED fixtures and lamps</li> <li>• LED exit signs</li> <li>• LED parking lot and safety lighting</li> <li>• Efficiency focused system controls – occupancy sensors, timers, dimmers</li> <li>• Heating system tune up</li> <li>• Chiller tune up</li> <li>• Wi-Fi enabled or Smart thermostats</li> <li>• Pipe wrap</li> </ul>  |

|                                       |   |
|---------------------------------------|---|
|                                       | <ul style="list-style-type: none"> <li>• High Efficiency Furnaces</li> <li>• Boilers</li> <li>• Water heaters, including heat pump water heaters</li> <li>• Heat pumps</li> <li>• Insulation</li> <li>• Air Sealing</li> <li>• Air conditioners</li> <li>• Windows and doors</li> <li>• Appliances</li> </ul>   |
| <p><b>Implementation Strategy</b></p> | <p>For the Income-Qualified Multifamily Program, DTE will provide program management and oversight, vendor referrals, tracking and reporting oversight, and regulatory review. DTE will utilize an Implementation Contractor(s) (IC) to provide implementation services, including outreach, marketing and Level 1 building assessments.</p> <p>The IC will also be responsible for training and education, rebate processing, tracking, verification, technical support, customer support, and marketing. DTE and its IC will work with apartment associations and property management firms to reach building owners that own and operate facilities throughout the area.</p> <p>The implementation of this program will be coordinated between DTE Gas and DTE Electric where territories overlap. For territory that overlaps with another utility provider, the program will coordinate with them as much as possible, depending on the similarity of the programs.</p>  |
| <p><b>Marketing Strategy</b></p>      | <p>For the Income-Qualified Multifamily Program, the marketing and communications strategy will be designed to inform building owners and managers of the availability and benefits of the program and how they can participate. The program will continue to market property owners and managers with a focus on deeper energy measures, such as building insulation, infiltration reduction, heat pumps and heat pump water heaters (for electrically heated properties).</p> <p>The strategy will include outreach to building owner/management groups. More specifically, the marketing and communications plan will include:</p> <ul style="list-style-type: none"> <li>• Education seminars/meetings with details on how to participate in the program. The seminars will be tailored to the needs of building owners, building managers and participating contractors.</li> <li>• Fliers that describe the benefits and features of the program including program applications.</li> <li>• Targeted direct mailings to educate building owners on the benefits of the program and explaining how to apply.</li> <li>• Customer, and contractor, outreach and presentations informing interested parties of the benefits of the program and how to participate.</li> <li>• Website content providing program information resources, contact information, downloadable applications and links to other relevant service and information resources.</li> <li>• Presence at conferences and industry events to increase general awareness of the program and distribute program promotional materials.</li> <li>• Presentations to key customers and customer groups to actively solicit their participation in the program.</li> <li>• Identify key customer segments and groups for target marketing and prepare specific outreach activities for these customers.</li> <li>• Collaborative efforts with other utility providers in areas where DTE only serves gas or electric customers.</li> <li>• Yearly contractor kickoff presentation and newsletter to participating contractors on program updates, education, and relevant content to enable successful outreach efforts.</li> </ul> |

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|                                |   |          |          |          |          |
|--------------------------------|---|----------|----------|----------|----------|
| <b>Estimated Participation</b> | The estimated participation for the program is shown below.   |          |          |          |          |
|                                | Year  | 2026     | 2027     | 2028     | 2029     |
|                                | # of Units (Electric)   | 23,000   | 23,000   | 23,000   | 22,500   |
|                                | # of Units (Gas)  | 11,000   | 11,000   | 10,500   | 10,500   |
| <b>Estimated Budget</b>        | The estimated budget for the Multifamily Income-Qualified Program is shown below.                             |          |          |          |          |
|                                | Year  | 2026     | 2027     | 2028     | 2029     |
|                                | Electric Budget (\$Thousands)   | \$21,880 | \$21,898 | \$21,878 | \$21,774 |
|                                | Gas Budget (\$Thousands)  | \$6,187  | \$6,252  | \$6,260  | \$6,241  |
| <b>Savings Targets</b>         | The estimated net MWh and net MCF energy savings for the Multifamily Income-Qualified Program is shown below. |          |          |          |          |
|                                | Year  | 2026     | 2027     | 2028     | 2029     |
|                                | Annual MWh saved  | 14,467   | 14,634   | 14,670   | 14,306   |
|                                | Annual MCF saved  | 73,215   | 72,010   | 69,169   | 69,796   |

**Income-Qualified – Schools Program**

|                            |   |
|----------------------------|---|
| <b>Program Element</b>     | <b>Income-Qualified - Schools Program</b>   |
| <b>Objective</b>           | The Income-Qualified Schools program is designed to influence income-qualified students and their families to take actions that can reduce their home energy use and increase efficiency.   |
| <b>Target Market</b>       | 4 <sup>th</sup> and 6 <sup>th</sup> grade and 8 <sup>th</sup> through 12 <sup>th</sup> grade students and their teachers receiving service from DTE. Schools will be qualified for the Income-Qualified Schools program based on serving a population with at least 70% of students receiving Free and Reduced Lunch (%FRL), or by census tract analysis using the Justice 40 (J40) designation.  |
| <b>Program Duration</b>    | The Schools program was launched in 2012 and is an ongoing element of the program portfolio. The Income-Qualified component is being added in 2025.   |
| <b>Program Description</b> | <p>DTE will utilize an Implementation Contractor(s) (IC) to implement a comprehensive energy efficiency education program in its service territory.</p> <p>Grade level presentations are delivered to students and a take-home energy-efficiency kit provided to students. School kits and online resources include a “Home Energy Worksheet” that students return to their teacher, submit online or use the postage paid envelope included in the kit to return to IC. The Home Energy Worksheet gathers energy usage data from the household and states that individual energy efficiency devices included in the kit (i.e. energy efficient showerhead, kitchen and bathroom faucet aerators, advanced power strip, window insulation, etc.) were installed.</p> <p>Students learn to conserve energy resources by using energy more efficiently at home and at school. Teachers also participate in the school program, giving them the opportunity to become “sold” on the value of the program, continue the energy efficiency education, and the opportunity for the program to produce additional energy savings.</p> <p>Approach:</p> <ul style="list-style-type: none"> <li>• Provide quality energy efficiency education correlated to MI Education Academic Standards.</li> <li>• Gather and report measurable savings garnered from distribution and installation of energy efficiency measures included in kits provided.</li> <li>• Support children of income-qualified customers and schools in learning about and becoming energy efficient.</li> <li>• Provide non-traditional setting opportunities for DTE’s message of concern for energy efficiency, safety, and the environment.</li> <li>• Provide branding opportunity for DTE.</li> </ul> <p>In addition to energy efficiency measures, the program kits may include, but are not limited to:</p> <ul style="list-style-type: none"> <li>• Home Energy Worksheet</li> <li>• Energy efficiency poster game with installation instructions</li> <li>• Family activity guide</li> <li>• Shower timer</li> <li>• Plumber’s tape</li> <li>• Flow rate test bag</li> <li>• “Turn It Off” stickers</li> <li>• Mercaptan safety stickers</li> </ul> |
| <b>Eligible Measures</b>   | <p>The technologies to be included within this program may vary over time based on service territory, income qualification and opportunities found in the marketplace. Measures may include but are not limited to:</p> <ul style="list-style-type: none"> <li>• Faucet aerators</li> <li>• Window insulation kit</li> </ul>  |

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|                                | <ul style="list-style-type: none"> <li>• Energy efficient showerhead</li> <li>• Water-heater pipe wrap</li> <li>• LED night light</li> <li>• Advanced power strips</li> <li>• Door weatherstripping</li> <li>• LED bulbs (income-qualified kits only)</li> <li>• LED dusk-to-dawn PAR bulbs (income-qualified kits only)</li> </ul>   |        |        |        |      |      |                               |        |       |       |        |                          |        |        |        |        |
|--------------------------------|---|--------|--------|--------|------|------|-------------------------------|--------|-------|-------|--------|--------------------------|--------|--------|--------|--------|
| <b>Implementation Strategy</b> | <p>DTE will provide program management and oversight, vendor referrals, tracking and reporting oversight, and regulatory review. DTE will utilize an IC to provide implementation services, including outreach, marketing, in school and virtual education and kits purchasing and distribution.</p> <p>The IC will work closely with DTE to identify eligible schools with a focus on selecting a variety of schools across DTE's service territory. The IC will analyze, by community, relative program participation and effectiveness, particularly in the form of household response. The exact number of schools will depend on how many students participate at each school. The take home energy kits under this program may be offered in collaboration with another utility school's program to maximize program effectiveness.</p> <p>The IC will also work in collaboration with other utilities.</p> |        |        |        |      |      |                               |        |       |       |        |                          |        |        |        |        |
| <b>Marketing Strategy</b>      | <p>The program is marketed through email, direct mail letter, postcards and fliers to school districts within DTE's service territory. A grant is offered to participating schools for distribution of kits and assistance in collecting data. Families from participating schools are encouraged to complete their Home Energy Worksheet by randomly providing one classroom winner with a gift card when providing a valid adult email on their returned Home Energy Worksheet.</p>   |        |        |        |      |      |                               |        |       |       |        |                          |        |        |        |        |
| <b>Estimated Participation</b> | <p>The estimated participation for the program is shown below.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> </tr> </thead> <tbody> <tr> <td># of Kits (Electric)</td> <td>10,000</td> <td>8,500</td> <td>8,000</td> <td>10,000</td> </tr> <tr> <td># of Kits (Gas)</td> <td>11,000</td> <td>9,000</td> <td>9,000</td> <td>10,500</td> </tr> </tbody> </table>   | Year   | 2026   | 2027   | 2028 | 2029 | # of Kits (Electric)          | 10,000 | 8,500 | 8,000 | 10,000 | # of Kits (Gas)          | 11,000 | 9,000  | 9,000  | 10,500 |
| Year                           | 2026  | 2027   | 2028   | 2029   |      |      |                               |        |       |       |        |                          |        |        |        |        |
| # of Kits (Electric)           | 10,000  | 8,500  | 8,000  | 10,000 |      |      |                               |        |       |       |        |                          |        |        |        |        |
| # of Kits (Gas)                | 11,000  | 9,000  | 9,000  | 10,500 |      |      |                               |        |       |       |        |                          |        |        |        |        |
| <b>Estimated Budget</b>        | <p>The estimated budget for the program is shown below.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> </tr> </thead> <tbody> <tr> <td>Electric Budget (\$Thousands)</td> <td>\$413</td> <td>\$371</td> <td>\$361</td> <td>\$433</td> </tr> <tr> <td>Gas Budget (\$Thousands)</td> <td>\$328</td> <td>\$269</td> <td>\$266</td> <td>\$327</td> </tr> </tbody> </table>  | Year   | 2026   | 2027   | 2028 | 2029 | Electric Budget (\$Thousands) | \$413  | \$371 | \$361 | \$433  | Gas Budget (\$Thousands) | \$328  | \$269  | \$266  | \$327  |
| Year                           | 2026  | 2027   | 2028   | 2029   |      |      |                               |        |       |       |        |                          |        |        |        |        |
| Electric Budget (\$Thousands)  | \$413   | \$371  | \$361  | \$433  |      |      |                               |        |       |       |        |                          |        |        |        |        |
| Gas Budget (\$Thousands)       | \$328   | \$269  | \$266  | \$327  |      |      |                               |        |       |       |        |                          |        |        |        |        |
| <b>Savings Targets</b>         | <p>The estimated net MWh and net MCF energy savings for the program is shown below.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> </tr> </thead> <tbody> <tr> <td>Annual MWh saved</td> <td>1,614</td> <td>1,541</td> <td>1,446</td> <td>1,614</td> </tr> <tr> <td>Annual MCF saved</td> <td>29,583</td> <td>23,863</td> <td>23,302</td> <td>28,356</td> </tr> </tbody> </table>   | Year   | 2026   | 2027   | 2028 | 2029 | Annual MWh saved              | 1,614  | 1,541 | 1,446 | 1,614  | Annual MCF saved         | 29,583 | 23,863 | 23,302 | 28,356 |
| Year                           | 2026  | 2027   | 2028   | 2029   |      |      |                               |        |       |       |        |                          |        |        |        |        |
| Annual MWh saved               | 1,614   | 1,541  | 1,446  | 1,614  |      |      |                               |        |       |       |        |                          |        |        |        |        |
| Annual MCF saved               | 29,583  | 23,863 | 23,302 | 28,356 |      |      |                               |        |       |       |        |                          |        |        |        |        |

**Income-Qualified – New Homes Construction Program**

|                            |  |
|----------------------------|--|
| <b>Program Element</b>     | <b>Income-Qualified – New Homes Construction Program</b>   |
| <b>Objective</b>           | The Income-Qualified New Homes Construction program is being designed to encourage adoption of high efficiency building and equipment measures for single-family affordable housing.   |
| <b>Target Market</b>       | New construction of single-family affordable housing properties.   |
| <b>Program Duration</b>    | Program is being piloted in 2025 with expected implementation to begin in 2026.  |
| <b>Program Description</b> | <p>The Income-Qualified New Homes Construction program is being designed to encourage adoption of high efficiency building and equipment measures during the design and construction phases of single-family affordable housing. Similar to existing Income-Qualified programs eligibility will be met for properties that are committed for families that meet income qualifications of 250% or below the Federal Poverty Level (FPL), 80% or below Area Median Income (AMI), active enrollment in the DTE Low Income Self Sufficiency Plan or Michigan state income-qualified public assistance programs (SNAP, WIC, LIHEAP, etc.), or being built in a low-income census tract may also qualify the customer for the program.</p> <p>New Homes Construction</p> <ul style="list-style-type: none"> <li>• Network of participating builders and energy raters to drive energy efficient construction of new homes using the concept of home as a system resulting in long-term benefits from the onset. <ul style="list-style-type: none"> <li>○ Provide incentives for construction of higher efficiency new homes,</li> <li>○ Provide technical information, education and training to builders and energy raters on the benefits of high efficiency construction as the best choice to consumers.</li> <li>○ Generate market awareness and ability for customers to identify builders constructing high efficiency homes.</li> <li>○ Provide a marketing mechanism for builders to promote high efficiency homes.</li> </ul> </li> </ul> <p>Certain barriers exist to the adoption of energy-efficient equipment and new construction including lack of investment capital, competition for funds with other home investments or amenities, lack of awareness/knowledge about the benefits and costs of energy efficiency measures, lack of education and skills of the contractor, and technology performance uncertainties. If the equipment is installed without efficiency in mind, there might not be the opportunity to make these improvements until years later when the equipment fails, even more so in limited-income housing. Avoiding this lost opportunity at the time of construction and initial installation allows energy efficiency to be optimized and is usually less costly than equipment replacement later. This program is designed to help overcome these market barriers and encourage greater adoption of energy-efficient homes in the residential market.</p> |
| <b>Eligible Measures</b>   | <p>Technologies and measures included in the program may vary over time based on opportunities found in the market. The program measures may include but are not limited to:</p> <ul style="list-style-type: none"> <li>• Insulation (Attic, Rim Joist, Wall, Basement Wall, Floor, Knee Wall and Crawlspace)</li> <li>• Air Sealing</li> <li>• Wi-Fi enabled Thermostats</li> <li>• Central AC units</li> <li>• Heat Pump units</li> </ul>  |

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|                                       | <ul style="list-style-type: none"> <li>• Heat Pump (Hybrid) water heaters</li> <li>• High Efficiency Gas Water Heaters</li> <li>• High Efficiency Furnaces</li> </ul>  |      |      |      |      |      |                              |    |    |    |    |                         |    |    |    |    |
|---------------------------------------|--|------|------|------|------|------|------------------------------|----|----|----|----|-------------------------|----|----|----|----|
| <p><b>Implementation Strategy</b></p> | <p>DTE will provide program management and oversight, vendor referrals, tracking and reporting oversight, and regulatory review. DTE will use an Implementation Contractor(s) (IC) to provide implementation services, contractor, distributor and builder training and education, application and incentive processing, incentive payments, tracking, verification, technical support, customer support, and marketing.</p> <p>To make the program effective, the IC will work with builders, retailers, equipment distributors and contractors. Those market participants are key in making sure high efficiency equipment is available, and key for selling the high efficiency alternative directly builders as homes are being built. The IC will be responsible for supporting these market participants with training, marketing/promotion, and program assistance. By having these market participants sell and promote energy-efficient equipment, builders will better understand the benefits of the higher efficiency choices.</p> <p>The incentives for the program may be paid to builder, distributor, or manufacturer. The implementation of this program will be coordinated between DTE Gas and DTE Electric where territories overlap. For territory that overlaps with another utility provider, the program will coordinate with them as much as possible, depending on the similarity of the programs.</p>   |      |      |      |      |      |                              |    |    |    |    |                         |    |    |    |    |
| <p><b>Marketing Strategy</b></p>      | <p>The marketing and communications strategy will be designed to inform prospective homeowners, builders, contractors and equipment distributors of the availability and benefits of the program and how they can participate. The strategy will include outreach to key partners including contractors, equipment distributors, builders, and other parties of interest in the market.</p> <p>Outreach and educational opportunities will be the focus of strategies for engagement and awareness of this new program offering to builders, developers and other stakeholders involved in the construction of affordable new home construction.</p> <ul style="list-style-type: none"> <li>• Brochures describing the benefits and features of the program including program application forms and worksheets. These brochures will be mailed upon request and distributed through the program. They will also be available through various public awareness events (presentations, home shows, etc.).</li> <li>• DTE's website content providing program information resources, contact information, participating contractors, builders, and connection to other relevant service or information resources.</li> <li>• Presence at conferences and public events used to increase general awareness of the program and distribute program promotional materials.</li> </ul> <p>The marketing strategy will identify key customer segments and groups for targeted marketing and will prepare specific outreach activities for these customers. DTE will oversee the development of content, messaging, branding, and calls to action of all the marketing and collateral materials used to promote the program.</p> |      |      |      |      |      |                              |    |    |    |    |                         |    |    |    |    |
| <p><b>Estimated Participation</b></p> | <p>The estimated participation for the program is shown below.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> </tr> </thead> <tbody> <tr> <td># of Participants (Electric)</td> <td>40</td> <td>40</td> <td>40</td> <td>40</td> </tr> <tr> <td># of Participants (Gas)</td> <td>60</td> <td>60</td> <td>50</td> <td>50</td> </tr> </tbody> </table>  | Year | 2026 | 2027 | 2028 | 2029 | # of Participants (Electric) | 40 | 40 | 40 | 40 | # of Participants (Gas) | 60 | 60 | 50 | 50 |
| Year                                  | 2026   | 2027 | 2028 | 2029 |      |      |                              |    |    |    |    |                         |    |    |    |    |
| # of Participants (Electric)          | 40   | 40   | 40   | 40   |      |      |                              |    |    |    |    |                         |    |    |    |    |
| # of Participants (Gas)               | 60   | 60   | 50   | 50   |      |      |                              |    |    |    |    |                         |    |    |    |    |

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|-------------------------|--|-------|-------|-------|-------|
| <b>Estimated Budget</b> | The estimated budget for the program is shown below.                             |       |       |       |       |
|                         | Year   | 2026  | 2027  | 2028  | 2029  |
|                         | Electric Budget (\$Thousands)  | \$515 | \$520 | \$525 | \$531 |
|                         | Gas Budget (\$Thousands)   | \$399 | \$389 | \$379 | \$331 |
| <b>Savings Targets</b>  | The estimated net MWh and net MCF energy savings for the program is shown below. |       |       |       |       |
|                         | Year   | 2026  | 2027  | 2028  | 2029  |
|                         | Annual MWh saved   | 91    | 91    | 91    | 91    |
|                         | Annual MCF saved   | 2,895 | 2,806 | 2,717 | 2,361 |

**Income-Qualified – Health & Safety Program**

|                                |  |
|--------------------------------|--|
| <b>Program Element</b>         | <b>Income-Qualified – Health &amp; Safety (H&amp;S) Program</b>  |
| <b>Objective</b>               | The Health & Safety (H&S) program is designed to address structural repair and/or home repair needs that are barriers to the installation of energy efficiency measures.   |
| <b>Target Market</b>           | Single and multifamily income-qualified customers through the EEA and IQ Multifamily programs with home repair barriers preventing the installation of energy efficiency measures.   |
| <b>Program Duration</b>        | Program has been in place since 2020 when it was launched as a pilot.  |
| <b>Program Description</b>     | The H&S program functions in coordination with the EEA and IQ Multifamily programs by being offered alongside the two programs. EEA provides H&S measures both through its partner channel and through the Direct to Customer channel, reducing the barriers to participate and ensuring consistent delivery specifically around application process and rebate incentive payment infrastructure in place for energy efficiency measures. Similarly, in IQ Multifamily, the program also implements H&S alongside its energy efficiency measures.  |
| <b>Eligible Measures</b>       | <p>Measures included in the program may vary over time based on housing conditions found in the market limiting the installation of energy efficiency for income-qualified customers. The program measures may include but are not limited to:</p> <ul style="list-style-type: none"> <li>• Roof repair</li> <li>• Roof replacement</li> <li>• Mold remediation</li> <li>• Asbestos remediation</li> <li>• Electrical repair</li> <li>• Electrical panel upgrade</li> <li>• Water infiltration repair</li> <li>• Chimney liner</li> <li>• Structural repair</li> </ul>   |
| <b>Implementation Strategy</b> | <p>DTE will provide program management and oversight, vendor referrals, tracking and reporting oversight, and regulatory review. DTE will use an Implementation Contractor(s) (IC) to provide implementation services, partner and contractor training and education, application and incentive processing, incentive payments, tracking, verification, technical support, customer support, and marketing.</p> <p>To make the program effective, the ICs for the EEA and Multifamily programs will implement H&amp;S based on an allocation for the respective programs on a yearly basis. This allocation will be reflective of the need the respective programs have in each of the planned years. The program may also look to collaborate with external initiatives and/or partners with the same H&amp;S objectives to increase the program’s reach.</p> <p>The incentives for the program may be paid to program partner, contractor or property owner. The implementation of this program will be coordinated between DTE Gas and DTE Electric where territories overlap. For territory that overlaps with another utility provider, the program will coordinate with them as much as possible, depending on the similarity of the programs.</p> |
| <b>Marketing Strategy</b>      | The marketing strategy for H&S will follow that of the EEA and IQ Multifamily programs to ensure alignment and consistency in the delivery and outreach in the respective programs.  |

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| <b>Estimated Participation</b> | The estimated participation for the program is shown below.                      |         |         |         |         |
|                                | Year   | 2026    | 2027    | 2028    | 2029    |
|                                | # of Participants (Electric)   | 900     | 900     | 925     | 925     |
|                                | # of Participants (Gas)  | 1,200   | 1,200   | 1,200   | 1,100   |
| <b>Estimated Budget</b>        | The estimated budget for the program is shown below.                             |         |         |         |         |
|                                | Year   | 2026    | 2027    | 2028    | 2029    |
|                                | Electric Budget (\$Thousands)  | \$6,338 | \$6,504 | \$6,692 | \$6,807 |
|                                | Gas Budget (\$Thousands)   | \$1,674 | \$1,672 | \$1,692 | \$1,709 |
| <b>Savings Targets</b>         | The estimated net MWh and net MCF energy savings for the program is shown below. |         |         |         |         |
|                                | Year   | 2026    | 2027    | 2028    | 2029    |
|                                | Annual MWh saved   | 26,727  | 26,600  | 26,658  | 26,737  |
|                                | Annual MCF saved   | 67,703  | 67,051  | 67,021  | 66,497  |

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Table 1. Measures, Incentives and Estimated Units for Residential and Income Qualified Programs

| Measure by Program         | Estimated Electric Savings (Gross kWh) |            |            |            | Estimated Gas Savings (Gross Therms) |      |      |      |
|----------------------------|--|------------|------------|------------|--------------------------------------|------|------|------|
|                            | 2026                                   | 2027       | 2028       | 2029       | 2026                                 | 2027 | 2028 | 2029 |
| <b>Appliance Recycling</b> |  |            |            |            |                                      |      |      |      |
| Dehumidifier recycling     | 186,000                                | 189,000    | 247,500    | 255,000    | 0                                    | 0    | 0    | 0    |
| Freezer recycling          | 3,853,000                              | 2,890,000  | 3,100,000  | 3,100,000  | 0                                    | 0    | 0    | 0    |
| Refrigerator recycling     | 31,500,000                             | 23,500,000 | 25,000,000 | 25,500,000 | 0                                    | 0    | 0    | 0    |
| Room AC recycling          | 255,000                                | 259,000    | 340,000    | 350,000    | 0                                    | 0    | 0    | 0    |
| Small Freezer              | 40,000                                 | 50,000     | 55,000     | 57,000     | 0                                    | 0    | 0    | 0    |
| Small Refrigerator         | 240,000                                | 300,000    | 325,000    | 330,000    | 0                                    | 0    | 0    | 0    |

| Residential Building Envelope | Estimated Electric Savings (Gross kWh) |           |           |           | Estimated Gas Savings (Gross Therms) |         |         |         |
|-------------------------------|--|-----------|-----------|-----------|--------------------------------------|---------|---------|---------|
|                               | 2026                                   | 2027      | 2028      | 2029      | 2026                                 | 2027    | 2028    | 2029    |
| <b>ENERGY STAR® Products</b>  |  |           |           |           |                                      |         |         |         |
| Clothes Washers               | 310,000                                | 310,000   | 320,000   | 320,000   | 7,500                                | 7,000   | 7,500   | 7,500   |
| Clothes Dryers                | 150,000                                | 150,000   | 150,000   | 150,000   | 3,000                                | 3,000   | 3,000   | 3,000   |
| Heat Pump Dryer               | 165,000                                | 150,000   | 165,000   | 165,000   | 0                                    | 0       | 0       | 0       |
| Heat Pump Water Heater        | 60,000                                 | 60,000    | 60,000    | 60,000    | 0                                    | 0       | 0       | 0       |
| Consumer Electronics          | 875,000                                | 875,000   | 875,000   | 875,000   | 0                                    | 0       | 0       | 0       |
| Dehumidifiers                 | 2,750,000                              | 2,750,000 | 2,750,000 | 2,750,000 | 0                                    | 0       | 0       | 0       |
| Pool Pumps                    | 25,000                                 | 25,500    | 25,500    | 25,500    | 0                                    | 0       | 0       | 0       |
| Air Purifiers                 | 3,100,000                              | 3,100,000 | 3,100,000 | 3,100,000 | 0                                    | 0       | 0       | 0       |
| Refrigerators                 | 200,000                                | 200,000   | 200,000   | 200,000   | 0                                    | 0       | 0       | 0       |
| Room Air Conditioners         | 110,000                                | 120,000   | 120,000   | 120,000   | 0                                    | 0       | 0       | 0       |
| Wi-Fi Thermostat              | 575,000                                | 575,000   | 600,000   | 600,000   | 150,000                              | 150,000 | 150,000 | 150,000 |
| Water Saving Measures         | 620,000                                | 630,000   | 630,000   | 630,000   | 230,000                              | 230,000 | 230,000 | 230,000 |
| Window Film                   | 58,000                                 | 55,500    | 59,500    | 59,500    | 115,000                              | 110,000 | 117,500 | 117,500 |
| Weather Stripping             | 1,500                                  | 1,500     | 1,500     | 1,500     | 1,200                                | 1,200   | 1,200   | 1,200   |
| Advanced Power Strips         | 250,000                                | 275,000   | 275,000   | 275,000   | 0                                    | 0       | 0       | 0       |
| LED Night lights              | 84,000                                 | 84,000    | 84,000    | 84,000    | 0                                    | 0       | 0       | 0       |
| Insulation                    | 540,000                                | 550,000   | 550,000   | 550,000   | 385,500                              | 385,500 | 385,500 | 385,500 |
| <b>HVAC</b>                   |  |           |           |           |                                      |         |         |         |
| Heat Pump (Air Source)        | 69,000                                 | 88,000    | 136,500   | 110,000   | 0                                    | 0       | 0       | 0       |
| Heat Pump (Mini-Split)        | 43,000                                 | 69,000    | 73,500    | 83,000    | 0                                    | 0       | 0       | 0       |
| Heat Pump (Ground Source)     | 44,500                                 | 26,500    | 40,500    | 42,000    | 0                                    | 0       | 0       | 0       |
| Heat Pump Water Heater        | 165,000                                | 310,000   | 380,000   | 415,000   | 0                                    | 0       | 0       | 0       |
| Furnace (95%+ AFUE)           | 0                                      | 0         | 0         | 0         | 840,000                              | 765,000 | 770,000 | 730,000 |
| Furnace Tune-up               | 0                                      | 0         | 0         | 0         | 223,000                              | 265,000 | 250,000 | 275,000 |
| High Efficiency Boiler        | 0                                      | 0         | 0         | 0         | 34,000                               | 34,000  | 40,000  | 40,000  |

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|   |           |           |           |           |         |         |         |         |
|---|-----------|-----------|-----------|-----------|---------|---------|---------|---------|
| Boiler Tune-up  | 0         | 0         | 0         | 0         | 10,000  | 8,750   | 8,750   | 10,000  |
| Thermostat  | 1,400,000 | 1,500,000 | 1,400,000 | 1,400,000 | 185,000 | 230,000 | 235,000 | 245,000 |
| Water Heater (Natural Gas)  | 0         | 0         | 0         | 0         | 23,000  | 235,000 | 27,500  | 27,500  |
| Central Air Conditioner   | 4,900,000 | 4,900,000 | 6,400,000 | 6,700,000 | 0       | 0       | 0       | 0       |
| Air Conditioner Tune-up   | 46,500    | 53,500    | 57,500    | 73,000    | 0       | 0       | 0       | 0       |
| <b>Audit &amp; Weatherization</b>   |           |           |           |           |         |         |         |         |
| Insulation (each of Attic, Basement wall, Crawlspace, Floor, Kneewall, Rim Joist, Wall) | 205,000   | 209,500   | 262,500   | 338,000   | 220,000 | 234,000 | 280,000 | 344,000 |
| Infiltration reduction  | 3,200     | 3,900     | 5,700     | 7,500     | 5,200   | 6,700   | 8,200   | 12,400  |
| Duct Insulation   | 0         | 0         | 0         | 0         | 175     | 175     | 200     | 200     |
| Duct Sealing  | 975       | 900       | 1,100     | 1,600     | 375     | 375     | 450     | 475     |
| Wi-Fi Thermostat  | 900       | 900       | 1,100     | 1,400     | 300     | 300     | 350     | 500     |
| Windows   | 1,900,000 | 2,500,000 | 2,600,000 | 2,900,000 | 580,000 | 675,000 | 675,000 | 730,000 |
| <b>New Homes <sup>1</sup></b>   |           |           |           |           |         |         |         |         |
| Homes served by DTE Electric  | 440,000   | 460,000   | 660,000   | 730,000   | 0       | 0       | 0       | 0       |
| Homes served by DTE Gas   | 0         | 0         | 0         | 0         | 180,000 | 190,000 | 200,000 | 210,000 |

| Multifamily                          | Estimated Electric Savings (Gross kWh) |         |         |         | Estimated Gas Savings (Gross Therms) |         |         |         |
|--------------------------------------|--|---------|---------|---------|--------------------------------------|---------|---------|---------|
|                                      | 2026                                   | 2027    | 2028    | 2029    | 2026                                 | 2027    | 2028    | 2029    |
| Heat Pump (Air Source) <1.5 ton      | 30,500                                 | 30,500  | 41,000  | 42,500  | 0                                    | 0       | 0       | 0       |
| Heat Pump (Air Source) >1.5 ton      | 40,500                                 | 40,500  | 54,500  | 56,500  | 0                                    | 0       | 0       | 0       |
| Heat Pump tune-up                    | 3,300                                  | 3,300   | 4,000   | 4,000   | 0                                    | 0       | 0       | 0       |
| Furnace (95%+ AFUE)                  |  | 0       | 0       | 0       | 118,500                              | 115,500 | 119,000 | 139,500 |
| Furnace tune-up                      | 0                                      | 0       | 0       | 0       | 115,000                              | 120,000 | 125,000 | 130,000 |
| Thermostat                           | 8,000                                  | 8,000   | 9,000   | 9,000   | 10,500                               | 8,500   | 8,100   | 7,500   |
| Water Heater (Natural Gas)           | 0                                      | 0       | 0       | 0       | 11,000                               | 11,000  | 11,000  | 11,000  |
| Heat Pump Water Heater               | 88,000                                 | 98,000  | 103,000 | 110,000 | 0                                    | 0       | 0       | 0       |
| Insulation (Roof/Attic, Wall)        | 345,000                                | 380,000 | 380,000 | 380,000 | 27,500                               | 26,500  | 26,500  | 28,500  |
| Infiltration Reduction (30% or more) | 300,000                                | 340,000 | 340,000 | 340,000 | 32,500                               | 30,500  | 30,500  | 33,500  |
| ENERGY STAR Clothes Washer           | 19,000                                 | 21,500  | 28,500  | 28,500  | 0                                    | 0       | 0       | 0       |
| ENERGY STAR Clothes Dryer            | 9,500                                  | 10,500  | 14,000  | 14,000  | 400                                  | 500     | 400     | 400     |
| ENERGY STAR Refrigerator             | 800                                    | 800     | 1,100   | 1,200   | 0                                    | 0       | 0       | 0       |
| Bathroom Exhaust Fan                 | 1,400                                  | 1,400   | 1,900   | 2,100   | 0                                    | 0       | 0       | 0       |

| Multifamily SEM         | Estimated Electric Savings (Gross kWh) |           |           |           | Estimated Gas Savings (Gross Therms) |         |         |         |
|-------------------------|--|-----------|-----------|-----------|--------------------------------------|---------|---------|---------|
|                         | 2026                                   | 2027      | 2028      | 2029      | 2026                                 | 2027    | 2028    | 2029    |
| Multifamily SEM savings | 1,200,000                              | 1,200,000 | 1,300,000 | 1,300,000 | 150,000                              | 150,000 | 150,000 | 130,000 |

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| Income Qualified - Energy Efficiency Assistance | Estimated Electric Savings (Gross kWh) |            |            |            | Estimated Gas Savings (Gross Therms) |         |         |         |
|---|--|------------|------------|------------|--------------------------------------|---------|---------|---------|
|   | 2026                                   | 2027       | 2028       | 2029       | 2026                                 | 2027    | 2028    | 2029    |
| LED Bulbs                                       | 3,500,000                              | 35,000,000 | 35,000,000 | 35,000,000 | 0                                    | 0       | 0       | 0       |
| Infiltration reduction                          | 45,000                                 | 499,000    | 45,000     | 45,000     | 55,500                               | 59,000  | 55,500  | 55,500  |
| Insulation                                      | 550,000                                | 600,000    | 550,000    | 550,000    | 450,000                              | 480,000 | 450,000 | 450,000 |
| Air Purifier                                    | 86,000                                 | 96,000     | 89,000     | 89,000     | 0                                    | 0       | 0       | 0       |
| Dehumidifier                                    | 55,500                                 | 52,500     | 55,500     | 55,500     | 0                                    | 0       | 0       | 0       |
| Thermostat                                      | 79,500                                 | 87,000     | 79,500     | 79,500     | 41,000                               | 44,500  | 41,000  | 41,000  |
| Refrigerator – ENERGY STAR                      | 60,500                                 | 60,500     | 60,500     | 60,500     | 0                                    | 0       | 0       | 0       |
| Room Air Conditioner                            | 10,000                                 | 10,000     | 10,000     | 10,000     | 0                                    | 0       | 0       | 0       |
| Central Air Conditioner                         | 58,000                                 | 67,000     | 58,000     | 58,000     | 0                                    | 0       | 0       | 0       |
| Furnace (95%+ AFUE)                             | 0                                      | 0          | 0          | 0          | 81,000                               | 81,000  | 81,000  | 81,000  |
| Furnace / Air Conditioner Combo                 | 460,000                                | 440,000    | 450,000    | 440,000    | 139,000                              | 139,000 | 139,000 | 139,000 |
| Furnace Tune-up                                 | 0                                      | 0          | 0          | 0          | 23,500                               | 23,500  | 23,500  | 23,500  |
| High Efficiency Boiler                          | 0                                      | 0          | 0          | 0          | 3,700                                | 3,700   | 3,700   | 3,700   |
| Boiler Tune-up                                  | 0                                      | 0          | 0          | 0          | 1,000                                | 1,000   | 1,000   | 1,000   |
| Water Heater                                    | 0                                      | 0          | 0          | 0          | 57,500                               | 56,500  | 57,500  | 56,600  |
| Heat Pump (Air Source)                          | 22,000                                 | 23,000     | 22,000     | 22,000     | 0                                    | 0       | 0       | 0       |
| Ductwork repair/replacement                     | 1,500                                  | 1,500      | 1,500      | 1,500      | 700                                  | 700     | 700     | 700     |
| Attic Hatch                                     | 2,500                                  | 3,000      | 2,750      | 2,750      | 1,300                                | 1,400   | 1,300   | 1,300   |
| ENERGY STAR Door                                | 2,300                                  | 2,500      | 2,300      | 2,300      | 1,300                                | 1,500   | 1,300   | 1,300   |

| Income Qualified – Multifamily             | Estimated Electric Savings (Gross kWh) |           |           |           | Estimated Gas Savings (Gross Therms) |        |        |        |
|--|--|-----------|-----------|-----------|--------------------------------------|--------|--------|--------|
|  | 2026                                   | 2027      | 2028      | 2029      | 2026                                 | 2027   | 2028   | 2029   |
| LED Exit signs                             | 170,000                                | 170,000   | 170,000   | 170,000   | 0                                    | 0      | 0      | 0      |
| LED Stairwell Bi-level control             | 1,100                                  | 1,100     | 1,100     | 1,100     | 0                                    | 0      | 0      | 0      |
| Exterior and Interior common area lighting | 6,400,000                              | 6,400,000 | 6,400,000 | 6,400,000 | 0                                    | 0      | 0      | 0      |
| Interior Occupancy Sensor                  | 950,000                                | 950,000   | 950,000   | 950,000   | 0                                    | 0      | 0      | 0      |
| Exterior Occupancy Sensor                  | 11,000                                 | 11,000    | 11,000    | 11,000    | 0                                    | 0      | 0      | 0      |
| Air Conditioner                            | 340,000                                | 275,000   | 275,000   | 275,000   | 0                                    | 0      | 0      | 0      |
| Room Air Conditioner                       | 17,000                                 | 16,000    | 16,000    | 14,000    | 0                                    | 0      | 0      | 0      |
| Chiller tune-up                            | 43,000                                 | 43,000    | 43,000    | 43,000    | 0                                    | 0      | 0      | 0      |
| Packaged Terminal Heat Pump                | 1,250,000                              | 1,350,000 | 1,350,000 | 1,350,000 | 0                                    | 0      | 0      | 0      |
| Heat Pump (Air Source)                     | 2,700,000                              | 2,600,000 | 2,500,000 | 2,600,000 | 0                                    | 0      | 0      | 0      |
| Heat Pump tune-up                          | 4,300                                  | 5,000     | 5,000     | 3,500     | 0                                    | 0      | 0      | 0      |
| High Efficiency Boiler                     | 0                                      | 0         | 0         | 0         | 13,000                               | 13,000 | 12,500 | 11,000 |
| Boiler Tune-up                             | 0                                      | 0         | 0         | 0         | 20,000                               | 21,000 | 20,000 | 18,000 |

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|                                      |           |           |           |           |         |         |         |         |
|--------------------------------------|-----------|-----------|-----------|-----------|---------|---------|---------|---------|
| Steam Trap                           | 0         | 0         | 0         | 0         | 65,000  | 60,000  | 58,000  | 65,000  |
| Furnace (High efficiency)            | 0         | 0         | 0         | 0         | 100,000 | 100,000 | 100,000 | 110,000 |
| Furnace tune-up                      | 0         | 0         | 0         | 0         | 215,000 | 210,000 | 205,000 | 180,000 |
| Thermostat                           | 125,000   | 125,000   | 125,000   | 140,000   | 14,000  | 14,000  | 14,000  | 13,000  |
| Water Heater (Natural Gas)           | 0         | 0         | 0         | 0         | 23,000  | 23,000  | 23,000  | 19,000  |
| Heat Pump Water Heater               | 2,000,000 | 2,200,000 | 2,300,000 | 1,800,000 | 0       | 0       | 0       | 0       |
| Circulator Pump                      | 41,000    | 41,000    | 41,000    | 37,000    | 0       | 0       | 0       | 0       |
| Pipe Wrap                            | 0         | 0         | 0         | 0         | 140,000 | 130,000 | 110,000 | 135,000 |
| Insulation (Roof/Attic, Wall)        | 195,000   | 190,000   | 190,000   | 190,000   | 84,000  | 89,000  | 89,000  | 86,000  |
| Infiltration Reduction (30% or more) | 83,000    | 85,000    | 85,000    | 84,000    | 83,000  | 87,000  | 88,000  | 85,000  |
| ENERGY STAR Door                     | 300       | 300       | 300       | 300       | 7,500   | 7,500   | 7,000   | 6,000   |
| ENERGY STAR Window                   | 0         | 0         | 0         | 0         | 2,500   | 2,500   | 2,500   | 2,000   |
| ENERGY STAR Clothes Washer           | 35,000    | 35,000    | 35,000    | 28,000    | 0       | 0       | 0       | 0       |
| ENERGY STAR Clothes Dryer            | 31,000    | 31,000    | 31,000    | 25,000    | 0       | 0       | 0       | 0       |
| ENERGY STAR Refrigerator             | 10,500    | 10,500    | 10,500    | 10,500    | 0       | 0       | 0       | 0       |
| Bathroom Exhaust Fan                 | 23,500    | 23,500    | 23,500    | 19,000    | 0       | 0       | 0       | 0       |
| Low Flow Bath Aerator                | 0         | 0         | 0         | 0         | 500     | 500     | 450     | 400     |
| Low Flow Kitchen Aerator             | 153,000   | 15,000    | 153,000   | 153,000   | 6,000   | 3,500   | 3,500   | 6,000   |
| Low Flow Showerhead                  | 0         | 0         | 0         | 0         | 700     | 700     | 700     | 600     |

| School Program                       | Estimated Electric Savings (Gross kWh) |           |           |           | Estimated Gas Savings (Gross Therms) |         |         |         |
|--------------------------------------|--|-----------|-----------|-----------|--------------------------------------|---------|---------|---------|
|                                      | 2026                                   | 2027      | 2028      | 2029      | 2026                                 | 2027    | 2028    | 2029    |
| LED Night light                      | 875,000                                | 1,100,000 | 1,100,000 | 1,100,000 | 0                                    | 0       | 0       | 0       |
| 1.5 gpm Showerhead                   | 2,500,000                              | 2,800,000 | 2,800,000 | 2,800,000 | 315,000                              | 350,000 | 380,000 | 380,000 |
| 1.5 gpm Kitchen Aerator              | 1,300,000                              | 1,400,000 | 1,400,000 | 1,400,000 | 160,000                              | 180,000 | 190,000 | 190,000 |
| 1.0 gpm Bathroom Aerator             | 1,000,000                              | 1,100,000 | 1,100,000 | 1,100,000 | 120,000                              | 140,000 | 145,000 | 145,000 |
| Pipe Wrap                            | 1,400,000                              | 1,500,000 | 1,500,000 | 1,500,000 | 200,000                              | 230,000 | 240,000 | 240,000 |
| Tier 1 Advanced Power Strip          | 375,000                                | 460,000   | 480,000   | 480,000   | 0                                    | 0       | 0       | 0       |
| Weatherstripping                     | 78,000                                 | 99,000    | 102,000   | 102,000   | 73,000                               | 83,000  | 85,000  | 85,000  |
| Window insulation kit - 90.42 sq. ft | 125,000                                | 160,000   | 165,000   | 165,000   | 220,000                              | 250,000 | 270,000 | 270,000 |

| Income Qualified - Schools | Estimated Electric Savings (Gross kWh) |           |         |           | Estimated Gas Savings (Gross Therms) |         |         |         |
|----------------------------|--|-----------|---------|-----------|--------------------------------------|---------|---------|---------|
|                            | 2026                                   | 2027      | 2028    | 2029      | 2026                                 | 2027    | 2028    | 2029    |
| LED bulbs                  | 160,000                                | 140,000   | 135,000 | 160,000   | 0                                    | 0       | 0       | 0       |
| LED Night light            | 440,000                                | 380,000   | 370,000 | 440,000   | 0                                    | 0       | 0       | 0       |
| 1.5 gpm Showerhead         | 1,000,000                              | 1,000,000 | 900,000 | 1,000,000 | 200,000                              | 160,000 | 155,000 | 190,000 |
| 1.5 gpm Kitchen Aerator    | 550,000                                | 550,000   | 500,000 | 550,000   | 110,000                              | 88,000  | 86,000  | 105,000 |

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|--------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1.0 gpm Bathroom Aerator             | 430,000 | 430,000 | 400,000 | 430,000 | 87,000  | 69,000  | 67,000  | 82,000  |
| Pipe Wrap                            | 615,000 | 615,000 | 565,000 | 615,000 | 140,000 | 110,000 | 105,000 | 130,000 |
| Weatherstripping                     | 40,000  | 33,000  | 33,000  | 40,000  | 48,000  | 40,000  | 39,000  | 45,000  |
| Window insulation kit - 90.42 sq. ft | 93,000  | 79,000  | 77,000  | 93,000  | 170,000 | 145,000 | 140,000 | 170,000 |

| Income Qualified – New Homes | Estimated Electric Savings (Gross kWh) |        |        |        | Estimated Gas Savings (Gross Therms) |        |        |        |
|------------------------------|--|--------|--------|--------|--------------------------------------|--------|--------|--------|
|                              | 2026                                   | 2027   | 2028   | 2029   | 2026                                 | 2027   | 2028   | 2029   |
| Homes served by DTE Electric | 91,000                                 | 91,000 | 91,000 | 91,000 | 0                                    | 0      | 0      | 0      |
| Homes served by DTE Gas      | 0                                      | 0      | 0      | 0      | 30,000                               | 29,000 | 28,000 | 24,000 |

| Home Energy Reports | Estimated Electric Savings (Gross kWh) |             |             |             | Estimated Gas Savings (Gross Therms) |           |           |           |
|---------------------|--|-------------|-------------|-------------|--------------------------------------|-----------|-----------|-----------|
|                     | 2026                                   | 2027        | 2028        | 2029        | 2026                                 | 2027      | 2028      | 2029      |
| Home Energy Reports | 106,000,000                            | 106,000,000 | 106,000,000 | 106,000,000 | 2,798,400                            | 2,798,400 | 2,798,400 | 2,798,400 |

<sup>1</sup> New Homes savings are calculated using modeled savings, per home. The incentives are structured as prescriptive plus performance.

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter, on the Commission's own )  
motion, regarding the regulatory reviews, )  
revisions, determinations, and/or approvals )  
necessary for **DTE ELECTRIC** )  
**COMPANY** and **DTE GAS COMPANY** to )  
fully comply with Public Act 295 of 2008, )  
as amended. )

Case No. U-21681  
(Paperless e-file)

QUALIFICATIONS  
AND  
DIRECT TESTIMONY  
OF  
THAC K. NGUYEN

**DTE ELECTRIC COMPANY AND DTE GAS COMPANY**  
**QUALIFICATIONS AND DIRECT TESTIMONY OF THAC K. NGUYEN**

Line  
No.

1    **Q1.    What is your name, business address and by whom are you employed?**

2    A1.    My name is Thac K. Nguyen. My business address is: One Energy Plaza, Detroit,  
3           MI 48226. I am employed by DTE Electric Company with the position of Manager  
4           of Commercial and Industrial programs in the Energy Waste Reduction (EWR)  
5           group.

6  
7    **Q2.    On whose behalf are you testifying?**

8    A2.    I am testifying on behalf of DTE Electric Company (DTE Electric) and DTE Gas  
9           Company (DTE Gas) (collectively, DTE).

10

11   **Q3.    What is your educational background?**

12   A3.    I graduated from the Washington University John M. Olin School of Business with  
13           a Bachelor of Science in Business Administration in 2001.

14

15   **Q4.    What is your work experience?**

16   A4.    In 2001, I was hired by The Detroit Edison Company, which is now known as DTE  
17           Electric. Over the years my roles and responsibilities included managing multiple  
18           residential and Commercial and Industrial (C&I) programs and services. My areas  
19           of work have included Customer Marketing, Customer Research & Information,  
20           Energy Distribution President's Staff, Strategy & Corporate Development, Gas  
21           Field Services, Federal Affairs and Environmental Initiatives. In 2014, I accepted  
22           the position of Principal Marketing Specialist with the Energy Optimization group.  
23           My primary job responsibilities included the program management of the  
24           Company's HVAC (Heating Ventilation and Air Conditioning) Program, Home  
25           Performance Program, and the Insulation and Windows Program. In 2019, I

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1 assumed the position of Principal Supervisor; and in 2021, I was promoted to  
2 Manager in the Energy Waste Reduction group with responsibilities starting in  
3 residential programs including the EWR Contact Center, then pilots, and now  
4 commercial and industrial programs.

5

6 **Q5. What are your current job responsibilities?**

7 A5. As the Manager of Commercial and Industrial programs, I am responsible for the  
8 execution of current electric and gas offerings within the market rate programs and  
9 development of new electric and gas offerings to support DTE Energy's overall  
10 energy efficiency program strategies.

11

12 **Q6. Are you affiliated with any professional organizations?**

13 A6. Yes. I am a member of the Association of Energy Services Professionals (AESP).  
14 AESP is an organization that provides professional development programs, a  
15 network of energy practitioners, and promotes the transfer of knowledge and  
16 experience to promote energy efficiency programs. I am a member of the  
17 Consortium for Energy Efficiency (CEE) engaging on its Emerging Tech  
18 Committee. CEE is the United States and Canadian consortium of gas and electric  
19 efficiency program administrators; whose goal is to accelerate the development and  
20 availability of energy efficient products and services. Finally, I am a Certified  
21 Energy Manager (CEM) by the Association of Energy Engineers (AEE).

22

23 **Q7. Have you previously provided testimony or supported cases before the**  
24 **Michigan Public Service Commission (Commission)?**

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1 A7. Yes. I have sponsored testimony and exhibits before the MPSC in the following  
2 cases:

| 3  | <b><u>Case No.</u></b> | <b><u>Description</u></b>                    |
|----|------------------------|--|
| 4  | U-20703                | 2019 DTE Electric EWR Reconciliation         |
| 5  | U-20708                | 2019 DTE Gas EWR Reconciliation              |
| 6  | U-20836                | 2022 DTE Electric General Rate Case          |
| 7  | U-21206                | 2021 DTE Electric and Gas EWR Reconciliation |
| 8  | U-21297                | 2023 DTE Electric General Rate Case          |
| 9  | U-21313                | 2022 DTE Electric and Gas EWR Reconciliation |
| 10 | U-21322                | 2024-2025 DTE Electric and Gas EWR Plan      |
| 11 | U-21558                | 2023 DTE Electric and Gas EWR Reconciliation |
| 12 |                        |  |

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1 **Purpose of Testimony**

2 **Q8. What is the purpose of your testimony?**

3 A8. The purpose of my testimony in this 2026-2029 EWR Plan filing is to provide an  
4 overview of the programs contained in the DTE C&I portfolio. My testimony will  
5 demonstrate DTE's proposed C&I programs are designed so all C&I customers  
6 have an opportunity to participate and will:

- 7 1) Provide an overview of the objectives in developing programs for C&I  
8 customers.
- 9 2) Describe how the programs are designed to increase the number of  
10 customers participating in the C&I portfolio.
- 11 3) Provide program description, highlights the target markets, eligible  
12 measures, implementation and marketing strategies, estimated participation,  
13 and shows an estimated program budget and respective energy savings for  
14 the plan period.
- 15 4) Describe the C&I Emerging Measures and Approaches.
- 16 5) Describe the Self-Direct program.
- 17 6) Describe the methodology used to establish a balanced C&I portfolio with  
18 an estimated budget and projected energy savings.

19

20 **Q9. Are you sponsoring any exhibits in this proceeding?**

21 A9. Yes. I am supporting the following exhibit:

| 22 | <u>Exhibit</u> | <u>Description</u>   |
|----|----------------|--|
| 23 | A-15           | Commercial and Industrial Portfolio, Program Descriptions, |
| 24 |                | Measures, and Incentives                                   |

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1 **Q10. Was this exhibit prepared by you or under your supervision?**

2 A10. Yes, it was.

3

4 **Q11. What is DTE's overall objective in developing programs for its C&I**  
5 **customers?**

6 A11. The objective of the C&I programs is to continue to build customer awareness  
7 regarding the benefits of energy efficiency, drive customers to participate in the  
8 various energy reduction offerings and make long-term commitments to reduce  
9 their energy usage. This objective is accomplished by creating a diverse portfolio  
10 of programs that provide value for customers through a range of participation  
11 options. DTE strives to have wide and varied program participation and to ensure  
12 all commercial and industrial customers have an opportunity to participate in its  
13 energy efficiency business programs.

14

15 **Q12. Will DTE continue to offer the same C&I programs and energy waste**  
16 **reduction measures that were approved in the previous EWR Plan?**

17 A12. In general, yes. DTE continues to analyze and evaluate potential programs to  
18 include in the C&I Portfolio to improve it and to follow through on its commitment  
19 of having wide and varied business customer participation. All C&I programs will  
20 be discussed later in my testimony.

21

22 **Q13. Is DTE making any significant changes or enhancements to the C&I**  
23 **programs?**

24 A13. Yes. DTE implemented two areas of enhancements. First, to facilitate greater  
25 engagement, some programs are grouped together to encourage continuing

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1 participation. Second, to improve ease of interaction, C&I customers will have a  
2 single-point-of-contact regardless of program participation.

3

4 **Q14. What C&I programs does DTE plan to offer its business customers in the**  
5 **2026-2029 Energy Waste Reduction Plan?**

6 A14. DTE provides its C&I customers with a variety of program options:

- 7 • The Large Business Program includes Prescriptive and Non-Prescriptive  
8 measures, Strategic Energy Management, Retro-Commissioning,  
9 Compressed Air Efficiency (DTE Electric), and Steam Trap Efficiency  
10 (DTE Gas)
- 11 • The Small Business Program
- 12 • The Mid-Stream Program consists of Mid-Stream Lighting (DTE Electric),  
13 Mid-Stream Food Service, and Mid-Stream HVAC
- 14 • The Emerging Measures and Approach Program consists of new measures  
15 that were developed through the C&I Pilot process
- 16 • The Self-Directed Program (DTE Electric) for customers wanting to  
17 manage and implement their own energy efficiency projects

18 The objectives of the programs above will be discussed later in this testimony.

19

20 **Q15. How will DTE implement its C&I Portfolio in the 2026-2029 EWR Plan?**

21 A15. DTE will continue to use implementation contractors (ICs) to implement the  
22 programs. Occasionally, DTE will continue to initiate a Scope of Work for all C&I  
23 programs soliciting a Request for Proposal from potential ICs. The EWR C&I team,  
24 along with Supply Chain Management, will then interview and evaluate each IC  
25 plan submitted prior to selecting an IC. ICs currently provide operational support

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1 including, but not limited to training, application review and processing, rebate  
2 fulfillment, operations call center, track results, and provide marketing for each of  
3 their programs.

4

5 **Q16. How will DTE inform customers about each C&I program?**

6 A16. DTE will continue to use several marketing channels to inform its business  
7 customers about the C&I energy efficiency programs. Key marketing channels  
8 include DTE Major Account Service managers who are directly responsible for  
9 business relationships with assigned C&I customers, the Energy Partnership energy  
10 managers, and participating trade contractors who market energy efficiency  
11 technologies directly to business customers. DTE will also use the annual Michigan  
12 Energy Efficiency Conference presented by DTE Energy and the Engineering  
13 Society of Detroit to promote its EWR programs. Product Knowledge workshops  
14 will be conducted that focus on specific technologies for specific vertical markets.  
15 Other marketing materials and mediums that could potentially be used to promote  
16 the C&I programs include but are not limited to television and radio advertisement,  
17 social media, DTE website, training seminars, and technical engineering support.  
18 Throughout the program year, DTE will present its C&I Portfolio at conferences,  
19 to professional associations/organizations; city, state, and federal government  
20 agencies; vendors, contractors, engineering and architectural firms, and direct to its  
21 business customers.

22

23 **Q17. Will DTE continue to coordinate and collaborate its C&I programs with other**  
24 **energy efficiency service providers?**

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No.

1 A17. Yes. DTE will continue to collaborate and coordinate C&I business programs with  
2 other energy efficiency providers such as Consumers Energy and Michigan Saves.

3

4 **Q18. What is the objective of the DTE C&I Large Business Program?**

5 A18. The objective of the program is to provide C&I business customers with a  
6 comprehensive energy efficiency approach through a single point of contact to take  
7 full advantage of the many offers available. Customers can receive incentives for  
8 installing standard or custom energy-efficient options for numerous measures  
9 including, but not limited to, LED lighting, motors, HVAC, hot water heating,  
10 demand-controlled ventilation, refrigeration, etc. Additional incentives are  
11 available for customers who optimize energy use for their facility, building, systems  
12 and processes. The program enrolls trade contractors to participate in energy  
13 efficiency programs because of their design and installation expertise for the  
14 products or measures that they sell. By working with trade contractor networks,  
15 DTE can focus on contractors that could impact a greater number of C&I business  
16 customers. DTE C&I business customers can also participate directly in the Large  
17 Business Program using their employees to design and install the measures. The  
18 participating trade contractors or the customer will submit a program application,  
19 DTE will review the application and approve it for eligibility. When the project is  
20 completed, DTE will approve the final application, and the customer receives its  
21 incentive for the project. For program cost estimates and target energy savings,  
22 please refer to Witness Kupser's Exhibit A-1, line 19 for electric and Exhibit A-2,  
23 line 18 for gas.

24

25 **Q19. What offers are included in the Large Business Program?**

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1 A19. The Large Business Program is designed to continue providing commercial and  
2 industrial customers with a wide variety of energy-efficient measures and delivery  
3 channels encompassing several elements under a singular program. The structure  
4 of the Large Business Program reflects an evolution in C&I offerings to align with  
5 current and changing market conditions. By combining multiple offers into one  
6 program, customers have greater access to various available solutions. The program  
7 consists of five elements that have historically been implemented as stand-alone  
8 programs. The offers are:

9  
10 1. **Prescriptive** is designed to encourage C&I business customers to install  
11 energy-efficient measures in their existing or new facilities. It provides  
12 incentives for predetermined measures that are in the Michigan Energy  
13 Measures Database (MEMD) to business customers for installing energy-  
14 efficient equipment that meets the program requirements. Customer incentives  
15 are designed to reduce the customer's installation costs thereby removing a  
16 potential barrier to participation. In the Prescriptive program, DTE will  
17 continue to have energy-efficient technology measures that are focused on the  
18 agricultural vertical market, and new construction/major renovation markets.  
19 The Multifamily Common Areas is a subset of the Prescriptive offer because  
20 these are commercial facilities. Property managers and building owners are  
21 encouraged to install energy efficient equipment in their facility common areas  
22 such as hallways, stairwells, lobbies and parking lots by providing them specific  
23 incentives for those measures.

24

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1           2. **Non-Prescriptive** provides custom incentives to C&I business customers for  
2           installing measures that are generally not considered a prescriptive installation  
3           or are innovative and unique energy efficiency equipment and controls that  
4           decrease electric or natural gas energy use. Having a non-prescriptive offering  
5           allows efficiency measures and systems that are not contained in the MEMD to  
6           be installed for situations specific to that customer's application or process.  
7           Incentives are offered on a per kWh or per Mcf basis based on pre-approved,  
8           twelve-month engineering estimates of energy reduced. Custom projects  
9           typically have a simple project payback period greater than one year. These  
10          custom measures may include energy saving equipment or processes,  
11          applications with so much variability in operating characteristics that  
12          standardized savings cannot be assumed across the customer base. This  
13          offering can also include technologies that are new to the market and have not  
14          yet established baseline savings.

15  
16          3. **Retro-Commissioning** targets commercial and industrial buildings by  
17          providing a comprehensive whole building evaluation with the goal of  
18          optimizing building performance by identifying low/no cost operating  
19          improvement recommendations. A Retro-Commissioning project generally  
20          consists of four phases: planning and identification of opportunities,  
21          prioritization, implementation, and verification. Completing these systematic  
22          phases generally takes 12-18 months. Property managers and building owners  
23          can then implement these recommendations, thereby reducing the facilities  
24          operating energy consumption and optimizing systems and processes.  
25          Customers are expected to have a building management system, to provide a

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1 nominal commitment and to implement recommendations that have an 18-  
2 month simple payback or less. In addition to the operational energy saving  
3 recommendations, the Retro-Commissioning evaluation provides customers  
4 with recommendations for energy efficient capital investments which the  
5 customer can implement thereby receiving an incentive through the Prescriptive  
6 and Non-Prescriptive offers.

7

8 4. **Strategic Energy Management (SEM)** is a more comprehensive approach to  
9 all building and facilities systems and processes. SEM is a strategic systematic  
10 approach to improving an existing commercial or industrial facility's  
11 performance. An SEM project will identify the systems and processes in a  
12 facility, identify their deficiencies or operation gaps, and provide  
13 recommendations that the customer can implement to optimize the facility's  
14 energy consumption. Using a whole building approach, SEM looks to identify  
15 continuous operational improvements that will reduce energy use, optimize  
16 facility performance and ultimately reduce the customers' operating costs.  
17 SEM projects consist of several phases and generally take 18-24 months to  
18 complete. In the planning phase, all the facility systems and processes are  
19 identified and analyzed to determine the baseline of energy use. The next phase  
20 determines how the systems and processes were designed to operate, an analysis  
21 is completed to understand the gaps and potential opportunities, and finally a  
22 list of recommendations is developed. Next, the recommendations are  
23 prioritized based on the customer's criteria and implementing threshold, and  
24 finally the operating recommendations are presented to the customer. The  
25 customer then chooses which recommendations will be implemented. During

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1 the implementation phase, generally the highest energy reducing  
2 recommendations are implemented. In the verification phase, the hand-off  
3 process, improvements are reported, and facilities executives are shown how to  
4 sustain proper operation.

5

6 5. **Compressed Air and Steam Traps Efficiencies** assist business customers who  
7 use process air or steam and may not recognize the energy used when operating  
8 a given system. These offers educate customers on how the system uses energy,  
9 and potential areas for improvement that would reduce the energy use of a given  
10 system. A system assessment is completed for the customer to identify energy  
11 waste reduction opportunities and how to fix them. The offers are mainly  
12 focused on identifying leaks within a compressed air system and failed or faulty  
13 steam traps in boiler systems. DTE understands that compressed air systems  
14 and steam traps can be energy intensive, and a source of excessive energy use  
15 thereby often having energy efficiency improvement opportunities. With C&I  
16 businesses that rely on compressed air for operating power tools, automation,  
17 controls, etc. and steam for dry cleaning, commercial laundry, etc. these  
18 programs can be successful in harvesting additional operational energy savings.  
19 By finding and fixing compressed air leaks and repairing steam traps, it will  
20 eliminate customer barriers, increase program participation and allow DTE to  
21 capture greater energy savings.

22

23 **Q20. What is the objective of the DTE C&I Small Business Program?**

24 A20. The objective of the Small Business Program is to provide small to medium  
25 business customers with an opportunity to begin their participation in DTE's energy

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1 efficiency programs. The program is segmented to strategically develop and  
2 implement programs for customers who typically do not have dedicated energy  
3 support staff and/or are not sure how to start implementing energy efficiency. As  
4 such, the program provides a simplified, bundled approach to servicing these  
5 customers while eliminating dead ends and removing barriers to participation. For  
6 program cost estimates and target energy savings, please refer to Witness Kupser's  
7 Exhibit A-1, line 20 for electric and Exhibit A-2, line 19 for gas.

8

9 **Q21. What service is included in the Small Business Program?**

10 A21. The program offers customers the Small Business Assessment, direct installation  
11 of energy efficiency measures, and rebates for installing energy efficient  
12 equipment. Rebates offered include but are not limited to interior/exterior LED  
13 lighting, HVAC systems, and tune-ups and refrigeration measures.

14

15 **Q22. What is the objective of the Small Business Assessment?**

16 A22. The objective of the Small Business Assessment (Assessment) is to reach out,  
17 educate, and assist small business customers with energy efficiency and how to  
18 incorporate it into their facilities. This journey is completed through two segments.  
19 First, the outreach team provides a walk-through energy assessment along with best  
20 practice recommendations. This component of the Assessment provides  
21 engagement through the opportunity to educate customers on best practices for  
22 energy efficiency. It helps business customers understand that they can control their  
23 energy use and operating costs.

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1 While on-site, the Assessment will directly install complimentary energy-saving  
2 products that do not require a licensed contractor such as screw-in LED light bulbs,  
3 pipe wrap, showerheads, faucet aerators, and programmable thermostats. At the  
4 end of the Assessment, the customer will receive a report detailing the results,  
5 recommendations for saving energy specific to their business.

6  
7 Second, as a follow-up to the appointment, the outreach team will collaborate with  
8 the customer to explain the energy efficiency opportunities, rebates, financing, and  
9 more – all to inform the customer on the benefits of implementing the  
10 recommendations. If the customer agrees to move forward, the outreach team  
11 provides the customer with a list of participating trade contractors that can provide  
12 cost estimates for the project and complete the installation. Once the customer  
13 completes the project installation and submits its final application, the incentive  
14 process will provide the customer with an incentive for their completed project.

15

16 **Q23. What is the objective of the DTE C&I Mid-Stream Program?**

17 A23. The objective of the Mid-Stream Program is to incentivize distributors and dealers  
18 to inventory highly efficient or energy savings products and equipment. For the  
19 program electric and gas cost estimates and target energy savings, please refer to  
20 Witness Kupser's Exhibit A-1, line 21 and Exhibit A-2, line 20, respectively.

21

22 **Q24. What offers are included in the Mid-Stream Program?**

23 A24. Customer solutions in the C&I Mid-Stream Program include:

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1           1. **Mid-Stream Lighting** partners with lighting distributors. This delivery channel  
2           provides flexibility and market insight into the ever-changing lighting  
3           technologies. Customers and trade contractors rely on the lighting distributor's  
4           expertise to better understand the various technical applications of lighting  
5           products. By targeting the lighting distributor delivery channel, DTE Electric  
6           can focus on fewer players that can impact on many more customer decisions  
7           in choosing energy-efficient LED lighting. Mid-Stream Lighting has a product  
8           mix including, but not limited to, LED high and low bay, linear tubes, wall-  
9           mounted, exterior wall packs, occupancy sensors, etc. All lighting products  
10          offered in this program are LED and must be either Design Lighting  
11          Consortium (DLC) or ENERGY STAR® rated and listed. By successfully  
12          leveraging the distributor expertise and delivery channel, the Mid-Stream  
13          Lighting program can effectively increase LED adoption and market share.

14

15          2. **Mid-Stream Food Service** targets and enrolls food service equipment  
16          distributors and dealers. Partnering with the food service distributor and dealer  
17          delivery channel allows customers to gain market insight into food service  
18          equipment technologies. Customers and trade contractors use the distributor  
19          and dealer network for their expertise to understand the technical applications  
20          of food service equipment. Enrolling food service dealers and distributors into  
21          this delivery channel allows DTE to focus on fewer players that can impact  
22          many more customer decisions about choosing the higher energy-efficient food  
23          service equipment. Mid-Stream Food Service has a product mix of ENERGY  
24          STAR® rated equipment and California Energy Wise® rated equipment such  
25          as: refrigerators, freezers, dishwashers, fryers, steam cookers, griddles, etc. By

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1 successfully leveraging the distributor and dealer delivery channel, Mid-Stream  
2 Food Service can effectively increase the sales and installation of higher  
3 energy-efficient food service equipment.

4

5 3. **Mid-Stream HVAC** partners with HVAC equipment distributors and  
6 manufacturer representatives. This allows DTE access to their expertise and  
7 higher energy - efficient equipment and technologies. Customers and trade  
8 contractors rely on the distributor and manufacturer representative delivery  
9 channel for their expertise and to understand the technical applications of  
10 HVAC equipment. Enrolling the HVAC distributor and manufacturer  
11 representative delivery channel into the program, DTE can focus on fewer  
12 players that can influence and impact higher energy-efficient HVAC equipment  
13 customer purchases. Mid-Stream HVAC includes equipment that is certified  
14 by the Air-Conditioning, Heating and Refrigeration Institute (AHRI). HVAC  
15 equipment that may be in Mid-Stream HVAC includes, but is not limited to,  
16 rooftop units, chillers, water source heat pumps, boilers, hot water heating, etc.  
17 By successfully leveraging this delivery channel, Mid-Stream HVAC can  
18 effectively increase adoption of higher energy-efficient HVAC equipment.

19

20 **Q25. What is the objective of the DTE C&I Emerging Measures and Approaches**  
21 **Program?**

22 A25. In the C&I Portfolio, Emerging Measures and Approaches include measures or  
23 programmatic approaches that have been developed by the Pilot program and will  
24 then be accounted for as part of the C&I portfolio for savings and spend. Whereas  
25 many piloted measures and approaches that are adopted by the C&I portfolio are

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1 incorporated into the existing C&I programs' offerings, this transition will allow  
2 DTE an opportunity to create an entry point for C&I new program pilots as they  
3 too become commercialized and incorporated into the C&I Portfolio. Through the  
4 Emerging Measures and Approaches process, DTE may continue to add programs  
5 to the C&I Portfolio. For more details, please refer to Exhibit A-15. For the  
6 Emerging Measures and Approaches program electric and gas cost estimates and  
7 target energy savings, please refer to Witness Kupser's Exhibit A-1, line 23 and  
8 Exhibit A-2, line 22, respectively.

9

10 **Q26. What is the objective of the DTE C&I Self-Directed Energy Savings Program?**

11 A26. The objective of the Self-Direct energy savings program is to provide an  
12 opportunity for any eligible DTE Electric customer to provide and implement a  
13 self-directed energy waste reduction plan. The self-direct strategy encourages  
14 customers to take ownership of their energy use so that they can self-implement  
15 energy saving measures that can improve their systems and processes. By  
16 customers participating in these programs, they are making a long-term  
17 commitment to reduce their energy use. For more program details please refer to  
18 Exhibit A-15. The Self-Directed Energy Savings are detailed in Witness Kupser's  
19 Exhibit A-1, line 25.

20

21 **Q27. Does DTE's C&I Portfolio provide programs for all C&I customers?**

22 A27. Yes. The C&I Portfolio is designed to provide all DTE Electric and DTE Gas  
23 business customers with an opportunity to participate in the C&I energy efficiency  
24 programs. The mix of programs provides comprehensive coverages for all DTE  
25 business customers. All programs will continue to work in concert with each other.

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1 The programs have several measures and flexibility so that the very small to the  
2 largest business customers have an opportunity to participate and can take  
3 advantage of the variety of C&I programs.

4

5 **Q28. Will DTE change its C&I program implementation approach?**

6 A28. No. While DTE continues to look for ways to create positive customer experiences,  
7 it will follow the process used in previous EWR Plans. In general, DTE will  
8 continue to use third party Implementation Contractors (ICs) to provide marketing,  
9 customer intake, assist customers in understanding the features and benefits of  
10 selecting higher energy efficiency equipment, eligibility verification, assist in the  
11 completion of program applications, rebate processing, and tracking. However, in  
12 certain cases where DTE has gained experience in some functions originally  
13 sourced to outside contractors, DTE may utilize internal staff to implement  
14 programs. DTE's C&I staff will continue to provide overall strategic direction and  
15 program management. The programs contained within C&I portfolio were  
16 competitively bid, and DTE anticipates this process will continue. DTE will review  
17 how work has been assigned, potentially electing to redistribute it by requesting  
18 proposals for newly developed emerging measures and approaches where work  
19 focus has significantly changed.

20

21 **Q29. What methodology has DTE used to establish a balanced C&I portfolio and**  
22 **budget for the proposed C&I programs?**

23 A29. Given DTE's extensive energy efficiency experience, we are using a similar  
24 approach from previous filing years to develop a balanced 2026-2029 C&I  
25 portfolio. At a high level, the planning approach includes four steps: develop an

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1 initial program by program measure mix based on DTE extensive EWR experience,  
2 market feedback, future potential and savings goal; estimate program size  
3 parameters (i.e., a minimum and maximum range of units per year by program);  
4 optimize the program portfolio mix to reflect a portfolio that best meets DTE's  
5 many objectives; the output from the previous three steps is analyzed through  
6 Demand Side Management Option/Risk Evaluator (DSMore) to verify cost-  
7 effectiveness, which is further described by Witness Malfroid.

8

9 **Q30. What is presented in your Exhibit A-15, titled "Commercial and Industrial**  
10 **Portfolio, Program Descriptions, Measures and Incentives?"**

11 A30. Exhibit A-15 presents DTE's Commercial & Industrial Portfolio Summary. It  
12 explains the overall C&I objectives and strategies, provides details about each C&I  
13 program included as well as the respective program objectives. Exhibit A-15 also  
14 includes implementation and marketing strategies, each program's electric and gas  
15 cost estimates, energy savings targets, anticipated customer participation, and a list  
16 of potential measures and incentives that may be included in the C&I portfolio.

17

18 **Q31. What process will DTE use to adjust its C&I portfolio?**

19 A31. DTE will continue using existing processes to make changes to its C&I programs.  
20 The process provides DTE the flexibility to reallocate program budgets and savings  
21 targets, adjust eligible measures and incentive levels, and to respond to changing  
22 market conditions or approaches. DTE may find it necessary to move funds from  
23 one program to another, within Commission ordered reallocation limits, to avoid  
24 having to suspend a program that is successful in the market because of budget  
25 constraints. This flexibility has been successfully used in the past allowing DTE to

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1 maintain market momentum, introduce new programs to meet customer demand  
2 and maintain satisfaction and expectations with the C&I portfolio.

3

4 **Q32. Does this complete your direct testimony?**

5 A32. Yes, it does.

6

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter, on the Commission's own )  
motion, regarding the regulatory reviews, )  
revisions, determinations, and/or approvals )  
necessary for **DTE ELECTRIC** )  
**COMPANY** and **DTE GAS COMPANY** to )  
fully comply with Public Act 295 of 2008, as )  
amended. )

Case No. U-21681  
(Paperless e-file)

EXHIBITS  
OF  
THAC K. NGUYEN

## **DTE ELECTRIC AND DTE GAS**

# Commercial & Industrial Portfolio, Program Descriptions, Measures and Incentives

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This exhibit A-15 provides description and implementation strategies for each program for commercial and industrial customers.

Common to all programs referenced below is the Evaluation, Measurement, and Validation (EM&V) approach. The EM&V Requirements is as follows.

|                              |   |
|------------------------------|---|
| <b>EM&amp;V Requirements</b> | <p>An independent EM&amp;V contractor will perform the evaluation of the program, which will have an energy impact evaluation and a process evaluation.</p> <p>As part of the impact evaluation, the EM&amp;V contractor will determine audited deemed savings based on a review of program tracking data to ensure that appropriate MEMD values are applied and that supporting documentation is accurately recorded. For custom measures, the approach used by the EM&amp;V contractor to verify savings adheres to industry standard-evaluation protocols including – the International Performance Measurement and Verification Protocol (IMPVP) and the Department of Energy’s Uniform Methods of Project (UMP). The impact evaluation will also include primary data collection to assess measure installation, as well as free ridership and spillover. These efforts will support the development of an Installation Rate Adjustment Factor (IRAF) and Net-to-Gross ratio (NTG).</p> <p>The process evaluation will provide information on the effectiveness of program processes and implementation, marketing, and the impact of retailer education. The EM&amp;V contractor will conduct in-depth interviews with program and implementation staff, as well as program participants as part of this effort. The process evaluation will include an assessment of participant satisfaction and identify the drivers of satisfaction and dissatisfaction in order to make specific and actionable program improvement recommendations.</p> |
|------------------------------|---|

DTE Commercial & Industrial Portfolio Summary Plan

Large Business Program

|                            |   |
|----------------------------|---|
| <b>Objective</b>           | The objective of the program is to provide C&I business customers with a comprehensive energy efficiency approach through a single-point-of-contact to take full advantage of the may offers available. Customers can receive incentives for installing standard or custom energy-efficient options for numerous measures including, but not limited to, LED lighting, motors, HVAC, hot water heating, demand-controlled ventilation, refrigeration, etc. Additional incentives are available for customers who optimize energy use for their facility, building, systems and processes to achieve long-term annual energy savings.  |
| <b>Target Market</b>       | All commercial & industrial customers taking service from either DTE Electric or DTE Gas are eligible to participate in any of the C&I programs, regardless of their choice of supplier. Customers that elect to self-direct an electric energy waste reduction plan are not eligible to participate in any of the other electric energy waste reduction C&I programs.  |
| <b>Program Duration</b>    | In 2009, the C&I program was established and launched. The program has continued to evolve, offering incentives on all MEMD prescriptive measures as well as custom-engineered solutions for complex projects.  |
| <b>Program Description</b> | <p>The Large Business Program enrolls trade contractors to participate because of their design and installation expertise for the products or measures that they sell. By targeting the trade network, DTE can focus on contractors that could impact a greater number of business customers. DTE business customers can also participate in the program using their employees to design and install the measures. The participating trade contractors or the customer will submit a program application, DTE will review the application and approve it for installation. When the project is completed, DTE will approve the final application, and the customer receives their incentive for the project. The Large Business Program includes the following approaches, offers, and/or measures:</p> <ul style="list-style-type: none"> <li>• Prescriptive</li> <li>• Non-Prescriptive</li> <li>• Retro-Commissioning (RCx)</li> <li>• Strategic Energy Management (SEM)</li> <li>• Compressed Air Efficiency for DTE Electric customers</li> <li>• Steam Trap Efficiency for DTE Gas customers</li> </ul> <p>The <b>Prescriptive</b> approach encourages C&amp;I business customers to install energy efficient measures in their existing facilities. It provides predetermined measures and incentives that are in the State of Michigan’s approved Michigan Energy Measures Database (MEMD) to business customers for installing energy efficient equipment. The MEMD incentives were designed to reduce the customers’ installations cost thereby removing barriers to participation. The Prescriptive offer includes Multifamily Common Areas. Energy savings and costs for measures installed in multifamily common areas are included in the C&amp;I Prescriptive approach because they are commercial facilities. Multifamily buildings with three or more units, including apartment buildings and condominiums, are eligible. Property managers and building owners are encouraged to install energy efficient equipment in their facility common areas such as hallways, stairwells, lobbies and parking lots by providing them specific incentives for those measures.</p> <p>The <b>Non-Prescriptive</b> approach provides custom incentives to C&amp;I customers for installing measures that are generally not considered a prescriptive installation or are innovative and unique energy efficiency equipment and controls that decrease energy use. Having a non-prescriptive offering allows energy efficiency measures and systems that are not contained in the MEMD to be installed for situations specific to that customer’s application or process. Incentives are offered on a per kWh or per Mcf based on pre-approved engineering estimates.</p> |

These custom measures may include energy saving equipment or processes, applications with so much variability in operating characteristics that standardized savings cannot be assumed across the customer base. This offering also includes technologies that are new to the market and have not yet established baseline savings. However, measures that are not eligible for a non-prescriptive incentive include but are not limited to; fuel switching (e.g., electric to gas or gas to electric), Combined Heat and Power systems, on-site standby generator and renewable energy projects.

**Retro-Commissioning** is a comprehensive testing of building systems with the goal of improving quality, allowing building deficiencies to be identified and corrected for optimum energy use. RCx is a systematic process to improve an existing commercial and institutional facility's building performance by optimizing the HVAC system. Using a whole building systems approach, retro-commissioning seeks to identify operational improvements that will save energy and increase occupant comfort. A RCx project will consist of generally several phases and take 12-18 months to complete. In the planning phase, the building systems to be analyzed are identified. The next phase determines how those systems are supposed to operate, and a prioritized list of operating deficiencies is prepared. During the implementation phase, the highest priority deficiencies are corrected, and proper operation is verified. In the verification phase, the hand-off process, improvements are reported, and facilities executives are shown how to sustain proper operation. Retro-Commissioning can be one of the most cost-effective means to improve the operating efficiency in commercial buildings.

**Strategic Energy Management (SEM)** is a comprehensive and systematic approach to evaluate and improve the performances of building and facility systems and processes. An SEM project will identify the systems and processes in a facility, identify their deficiencies or operation gaps, and provide recommendations that the customer can implement that will optimize a facility's energy use. Using a whole building or facility approach, SEM looks to identify continuous operating improvements that will reduce energy, increase facility performance, and ultimately reduce the customers' operating costs. A SEM project consists of several phases and typically takes 24 months to complete. In the planning phase, all the facility systems and processes are identified and analyzed to determine the baseline of energy use. The next phase determines how those systems were designed to operate, analyses are completed to understand the gaps and potential opportunity, and finally a list of recommendations is developed. Next the recommendations are prioritized based on the customers' criteria and implementing threshold and finally the operating recommendations are presented to the customer. The customer then chooses which recommendations will be implemented. During the implementation phase, generally the highest energy reducing recommendations are implemented. In the verification phase, the hand-off process, improvements are reported, and facilities executives are shown how to sustain proper operation. SEM can be a cost-effective means of improving the customer's processes and capturing operational energy efficiency improvements.

**Compressed Air Efficiency** targets the compressed air production system in facilities that are major users of compressed air. Compressed air systems are very energy intensive and often have significant energy efficiency opportunities. The objective of this offer is to provide a service to eliminate known customer barriers by detecting air leaks and assisting the customer in reducing energy use and operating costs. Service Providers will perform a compressed air system audit to detect any air leaks, share the findings with the customer encouraging them to fix the leaks. If the customer agrees to make the necessary repairs, the Service Provider will then complete the repair work. By having the Service Provider complete the find and the fix, barriers to customer participation can be removed.

**Steam Trap Efficiency** focuses on locating non-functional steam traps and educating customers on how to reduce energy waste by repairing/replacing them. The offer will educate customers on how the system uses energy and potential areas for improvement that would reduce the energy use of the entire system. A system assessment is completed for the customer to identify energy reduction opportunities and then implement them. By finding and repairing non-functioning steam traps, Steam Trap Efficiency can lower customer barriers, increase participation, and allow DTE to capture previously unrealized energy savings.

|                                |   |
|--------------------------------|---|
| <b>Barriers to Adoption</b>    | <p>Certain customer barriers exist that limit the adoption of energy efficiency measures. These may include, but are not limited to, lack of investment capital or competing capital fund requirements, lack of awareness/knowledge about the benefits and costs of energy efficiency measures, technical understanding of various equipment applications, lack of organizational commitment, insufficient resources or staff, etc. The C&amp;I programs are designed to help all DTE business customers overcome implementation barriers and encourage greater adoption of energy efficiency measures in the C&amp;I vertical markets. The premise of these programs is that through customer engagement and education with the potential participants and leveraging the participating trade contractor community along with distributor/dealer/manufacture rep delivery channels, the risks to broader higher energy efficiency measure installation will be reduced and customers will realize greater energy savings and lower operating costs.</p>  |
| <b>Eligible Measures</b>       | <p>The energy efficient measures that customers could install include, but are not limited to, the following measure categories:</p> <ul style="list-style-type: none"> <li>• LED Lighting, lamps, and fixtures</li> <li>• Lighting controls</li> <li>• HVAC systems &amp; controls</li> <li>• Demand control ventilation</li> <li>• Building Management Systems</li> <li>• Motors, fans and pumps</li> <li>• Variable frequency drives</li> <li>• Compressed air systems</li> <li>• Process electric and natural gas equipment</li> <li>• Refrigeration</li> <li>• New construction/major renovation</li> <li>• No-loss condensate drains</li> <li>• Engineered nozzles</li> </ul>   |
| <b>Implementation Strategy</b> | <p>DTE will provide overall management, tracking and reporting oversight, and regulatory review. Through DTE’s Scope of Work and Request for Proposal process, the Company will select Implementation Contractors that will have day-to-day program responsibility. These responsibilities include, but are not limited to, application and savings processing, incentive payments, tracking, verification, technical support, customer support, and marketing. DTE will assist with marketing and promotion.</p> <p>The key to program success is two-fold:</p> <ul style="list-style-type: none"> <li>• DTE will engage customer participants by using their existing market channels. These market delivery channels may include participating trade contractors, manufacturers, distributors, consultants, architects, engineers, design and build contractors, etc. The program will have resources specifically dedicated to educating, partnering and engaging the important market players within a given program. Because these delivery channels already have relationships with C&amp;I customers, new high efficiency equipment and technology can be offered to customers as a viable option. To support the market participants, the program also includes customer educational and promotional pieces designed to assist facility owners, operators, and decision makers with the information necessary to improve the energy efficiency of the systems in their facilities.</li> <li>• DTE will use internal staff resources, account managers and energy managers, that have relationships with C&amp;I customers and can help identify opportunities to participate in the program. These resources will build customer awareness, educate the customer on opportunities and connect interested customers with the implementation contractor.</li> </ul> <p>Incentives for each technology will be offered to reduce the cost of energy-efficient equipment and will vary based on cost-effectiveness and market response. The program strives to balance the incentive levels to help offset a portion of the incremental equipment cost of the measure to</p> |

|                                       | <p>stimulate the market and obtain energy savings in a cost-effective manner. Market acceptance of a measure, its incremental cost, and its energy savings potential are used to establish incentive levels. Additional guidelines are established such as total incentives available per customer per year to ensure that funds are allocated across all customer segments and opportunities. The implementation of these programs may be coordinated with other energy providers where the service territories overlap.</p>  |       |       |       |      |      |                 |       |       |       |       |            |     |     |     |     |
|---------------------------------------|--|-------|-------|-------|------|------|-----------------|-------|-------|-------|-------|------------|-----|-----|-----|-----|
| <p><b>Marketing Strategy</b></p>      | <p>Marketing and promotional materials will be developed for business customers on the benefits of energy efficiency improvements, including marketing brochures, customer seminars, program promotional material, and website content. As much as possible, marketing, training and promotional efforts will be targeted to specific vertical market or equipment technologies.</p> <p>The marketing and communications strategy will be designed to inform customers of the availability and benefits of each program and how they can participate in each program. The strategy will include outreach to all business customers, relevant professional and trade associations and other interested parties. An important part of a marketing campaign will be content and functionality on the DTE website.</p> <p>Marketing and communications plans for the program will generally include:</p> <ul style="list-style-type: none"> <li>• Workshops conducted to provide <ul style="list-style-type: none"> <li>○ C&amp;I program details</li> <li>○ Participation process</li> <li>○ Tailored to the needs of specific vertical market business owners</li> </ul> </li> <li>• A combination of strategies including potential media advertising, outreach and presentations at professional and community forums and events</li> <li>• Direct outreach to key customers and customer representatives such as: <ul style="list-style-type: none"> <li>○ Brochures describing the benefits and features of the program including application forms and worksheets</li> <li>○ Targeted direct mailings are used to educate customers on the benefits of the program and explain how they can apply</li> <li>○ Customer and trade contractor outreach and presentations informing interested parties about the benefits of the program and how to participate</li> <li>○ Print advertisements to promote the program placed in selected local media including newspapers and trade publications</li> <li>○ Website content providing program information resources, contact information, downloadable application forms and worksheets, and links to other relevant services and information resources</li> <li>○ Presence at conferences and public events used to increase general awareness of the program and distribute program promotional materials</li> <li>○ Presentations to key customers and customer groups to actively solicit their participation in the program</li> </ul> </li> <li>• The marketing strategy will identify key customer segments and vertical markets for target marketing and specific outreach activities to those customers.</li> </ul> |       |       |       |      |      |                 |       |       |       |       |            |     |     |     |     |
| <p><b>Estimated Participation</b></p> | <table border="1"> <thead> <tr> <th>Year</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> </tr> </thead> <tbody> <tr> <td><b>Electric</b></td> <td>4,917</td> <td>4,908</td> <td>4,879</td> <td>4,874</td> </tr> <tr> <td><b>Gas</b></td> <td>595</td> <td>575</td> <td>572</td> <td>550</td> </tr> </tbody> </table>  | Year  | 2026  | 2027  | 2028 | 2029 | <b>Electric</b> | 4,917 | 4,908 | 4,879 | 4,874 | <b>Gas</b> | 595 | 575 | 572 | 550 |
| Year                                  | 2026   | 2027  | 2028  | 2029  |      |      |                 |       |       |       |       |            |     |     |     |     |
| <b>Electric</b>                       | 4,917  | 4,908 | 4,879 | 4,874 |      |      |                 |       |       |       |       |            |     |     |     |     |
| <b>Gas</b>                            | 595  | 575   | 572   | 550   |      |      |                 |       |       |       |       |            |     |     |     |     |

**Michigan Public Service Commission  
DTE Electric and DTE Gas  
Commercial and Industrial Portfolio, Program  
Descriptions, Measures and Incentives**

Case No.: U-21681  
Exhibit: A-15  
Witness: T.K. Nguyen  
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|                                      |                 |             |             |             |             |
|--------------------------------------|-----------------|-------------|-------------|-------------|-------------|
| <b>Estimated Budget (\$000)</b>      | <b>Year</b>     | <b>2026</b> | <b>2027</b> | <b>2028</b> | <b>2029</b> |
|                                      | <b>Electric</b> | \$65,633    | \$66,524    | \$66,852    | \$67,907    |
|                                      | <b>Gas</b>      | \$8,813     | \$8,554     | \$8,634     | \$8,378     |
|                                      |                 |             |             |             |             |
| <b>Estimated Net Savings Targets</b> | <b>Year</b>     | <b>2026</b> | <b>2027</b> | <b>2028</b> | <b>2029</b> |
|                                      | <b>MWh</b>      | 421,026     | 420,292     | 417,727     | 417,373     |
|                                      | <b>Mcf</b>      | 797,215     | 766,242     | 763,161     | 730,899     |
|                                      |                 |             |             |             |             |

## Small Business Program

|                             |   |
|-----------------------------|---|
| <b>Objective</b>            | DTE’s Small Business Program is designed to eliminate barriers for small business customers to implement energy efficiency. To accomplish this, DTE provides a hands-on approach by guiding customers through an on-site assessment; while focusing on education so they can fully understand the benefits of participating. Due to their busy schedules, small business owners tend to need more guidance to participate. Using a concierge-based approach, the program takes the stress out of the process for our small business owners by personalizing their journey and working directly with them to find ways to save energy and money through energy efficiency improvement projects.  |
| <b>Target Market</b>        | DTE defines Small Business customers as those who are not on a primary rate and don’t have an account manager.  |
| <b>Program Duration</b>     | Since 2009, small business customers have been participating in DTE’s energy efficiency programs. Starting in 2014, DTE launched the Business Energy Consultation pilot program within the emerging program to focus on small business customers. From 2014 to 2019, this program’s focus was on site energy assessments, direct installation of complimentary energy efficiency measures and referrals to the appropriate programs. Starting in 2019, DTE redesigned the Small Business program to incorporate trade contractor partners to assist customers with implementing energy efficiency projects. Since then, the program has continued to excel as the contractor network has grown, assisting DTE with achieving wide and varied participation across its portfolio.  |
| <b>Program Description</b>  | <p>The Small Business Program provides customers with an opportunity to begin their energy-efficiency journey. These customers do not have dedicated energy support staff and/or are not sure how to start implementing energy efficiency. As such, the program is strategically designed to provide a concierge-based approach to servicing these customers.</p> <p>Their journey begins with an on-site energy assessment. This component provides engagement through the opportunity to educate customers on best practices for energy efficiency. It helps small business customers understand that they can control their energy use and operating costs. While on-site, the assessment will direct install complimentary energy-saving products that do not require a licensed contractor such as screw-in LED light bulbs, pipe wrap, showerheads, faucet aerators, programmable thermostats. At the end of the assessment, the customer will receive a report detailing the results and recommendations for saving energy specific to their business.</p> <p>As a follow-up to the appointment, the outreach team and concierge will work with the customer to explain the energy efficiency opportunities, rebates, financing, to encourage the customer to implement the recommendations. If the customer agrees to move forward and implement the recommendations, the outreach team can provide the customer with participating trade contractors that can provide the cost estimates for the project, order the material, and complete the installation. Additionally, this process will work with customers who choose to install the measures outside of DTE’s participating contractor network such as self-install/do-it-yourself. When the project is completed, DTE will approve the application, and the customer will receive their incentive for the project.</p> <p>This assessment process is designed to be agile and meets the customer where they are to provide a relationship-based service delivery model. With the addition of skilled trades, DTE can increase its reach to impact a greater number of small-medium business customers. The goal is to create no dead ends and remove barriers to participating by providing a variety of opportunities to participate and engage with energy efficiency.</p> |
| <b>Barriers to Adoption</b> | Small Business customers have unique needs and barriers to participation with energy efficiency. Most customers are often too busy to worry about energy consumption and/or cost.   |

|                                       |   |
|---------------------------------------|---|
|                                       | <p>Business owners perform numerous roles – Accounting, Human Resources, Supply Chain, etc. The day-to-day operation and success of their business are their main focus. Many small business customers are not aware of the programs or where/how to start their energy efficiency journey. This can seem like a daunting task as they do not have the time or expertise to research information that doesn't require immediate attention. Customers don't have the technical understanding of equipment applications and how installing energy-efficient equipment can help their bottom line. Lastly, cost and return on investment are major barriers. There are often competing investments within businesses. Hiring a contractor and undertaking a project is costly and time-consuming. It is imperative for customers to see a quick return on investment for installing energy efficiency upgrades.</p> <p>As such, we have designed the Small Business Assessment around the concierge-based approach. This provides one point of contact for the customer and allows for two-way dialogue to help break down barriers to participation. Through customer engagement and education, DTE can help small business customers overcome uncertainty and encourage greater adoption of energy efficiency. Leveraging the participating trade contractor network along with distributor/dealer/manufacture rep delivery channels in the Mid-Stream programs creates higher energy efficiency measure installation rates and customers will realize greater energy savings and lower operating costs.</p> |
| <p><b>Eligible Measures</b></p>       | <p>Examples of energy efficient measures available through the Small Business Program include, but are not limited to, are as follows:</p> <ul style="list-style-type: none"> <li>• Pipe wraps</li> <li>• Faucet Aerators</li> <li>• Energy Efficient Showerhead</li> <li>• Pre-Rinse Spray Valve</li> <li>• Smart Power Strip</li> <li>• Interior &amp; Exterior LED Lighting lamps, fixtures, and controls</li> <li>• Agriculture-specific LEDs</li> <li>• Lighting controls</li> <li>• HVAC tune ups, systems &amp; controls</li> <li>• ECM Motors</li> <li>• Refrigeration</li> <li>• Food Service Equipment</li> </ul>   |
| <p><b>Implementation Strategy</b></p> | <p>DTE will provide overall program management, tracking and reporting oversight, and regulatory review. Through DTE's Scope of Work and Request for Proposal process, the Company will select Implementation Contractors that will have day-to-day program responsibility.</p> <p>The Small Business Assessment program consists of the following components:</p> <ul style="list-style-type: none"> <li>• On-site energy assessment</li> <li>• Leave behind customer report</li> <li>• Energy efficiency customer education</li> <li>• Direct installs when applicable</li> <li>• Participating contractor referrals</li> <li>• Rebates</li> </ul> <p>For the Small Business Program, DTE will use internal staff resources, account managers, and energy managers, that have relationships with customers and can help identify opportunities to participate in the programs. These resources in combination with marketing and strategic objects will build customer awareness, education, and facilitate a connection for interested customers.</p>  |

**Marketing Strategy**

As aforementioned, this segment has unique barriers to participating. Understanding their motivations is another component to the overall marketing strategy – two of the largest ones being profit and ROI. Additionally, these customers are motivated by many non-energy factors such as business appearance, customer experience, employee safety and retention and product production.

It is imperative that the program uses a layered tactical plan with multiple channels to reach customers at the point in which they are ready to participate. This includes directly marketing to customers as well as using our trade contractor network to increase participation. The Small Business program marketing and communication plan will generally include the following tactics and collateral pieces:

- Direct Outreach
  - Cold knocking in-field
  - Phone/call center campaigns
  - Customer referrals
- Direct Mail
  - General awareness
  - Vertical market specific
  - Move-in transactions
- E-Mail
  - Acquisition (new customers to participate)
  - Reach back campaign focused on the benefits of implementing trade contractor project
  - Move-in
  - Custom segment
- Digital Marketing
  - Paid Social Media
  - Search Engine Optimization (SEO)
  - Program Website
- DTE Marketing channel
  - Energy Smarts Magazine
  - Energy Connections
  - Organic Social Media through DTE channels
- Event Based Marketing
  - Tradeshows
  - Sponsorships
  - Memberships
  - Community engagement
- Collateral/Leave Behinds
  - Business Cards
  - Apparel and Vehicle Branding
  - Case Studies
  - Assessment leave behind report
  - Program fact sheet
  - Door hanger
- Participating Trade Contractor Network
  - Recruitment of new contractors who bring non-participating customers to the program
  - In-person/virtual training and events
  - Participating in contractor newsletter
  - Opportunities for co-branding with the program

The marketing and communications strategy will inform customers of the availability and benefits of each program and how they can participate. As much as possible, these efforts will be targeted to specific vertical markets or equipment technologies. The program will tailor its marketing messaging with previously identified motivations to remove barriers to participation through consistency across delivery channels and partners.

|                                      |                 |             |             |             |             |
|--------------------------------------|-----------------|-------------|-------------|-------------|-------------|
|                                      |                 |             |             |             |             |
| <b>Estimated Participation</b>       | <b>Year</b>     | <b>2026</b> | <b>2027</b> | <b>2028</b> | <b>2029</b> |
|                                      | <b>Electric</b> | 1,180       | 1,180       | 1,180       | 1,191       |
|                                      | <b>Gas</b>      | 1,611       | 1,611       | 1,611       | 1,611       |
|                                      |                 |             |             |             |             |
| <b>Estimated Budget (\$000)</b>      | <b>Year</b>     | <b>2026</b> | <b>2027</b> | <b>2028</b> | <b>2029</b> |
|                                      | <b>Electric</b> | \$11,319    | \$11,429    | \$11,549    | \$11,751    |
|                                      | <b>Gas</b>      | \$995       | \$1,016     | \$1,039     | \$1,063     |
|                                      |                 |             |             |             |             |
| <b>Estimated Net Savings Targets</b> | <b>Year</b>     | <b>2026</b> | <b>2027</b> | <b>2028</b> | <b>2029</b> |
|                                      | <b>MWh</b>      | 77,363      | 77,363      | 77,363      | 78,072      |
|                                      | <b>Mcf</b>      | 39,709      | 39,709      | 39,709      | 39,708      |
|                                      |                 |             |             |             |             |

## Mid-Stream Program

|                             |   |
|-----------------------------|---|
| <b>Objective</b>            | DTE's Mid-Stream Program encourages C&I business customers to install energy-efficient measures in new and existing facilities via instant discounts applied at the point of purchase. The program enrolls distributors, dealers, and manufacturer representatives to leverage their market and supply chain influence with regard to the availability and affordability of energy-efficient products. By moving upstream in the supply chain, DTE can provide greater support to a more targeted segment of market actors that wield a significant amount of influence in product availability.  |
| <b>Target Market</b>        | All commercial & industrial customers taking service from either DTE Electric or DTE Gas are eligible to participate in the C&I Mid-Stream Program Offerings.   |
| <b>Program Duration</b>     | The first C&I mid-stream offer, Mid-Stream Lighting, commercialized in 2016 and has since grown to include Food Service and HVAC.   |
| <b>Program Description</b>  | <p>The objective of a mid-stream delivery channel is to provide program benefits to customers in a streamlined and frictionless method. Working with distributors and manufacturers allows for greater flexibility, market insight, and stronger relationships of understanding and trust, both within their respective industries and with our customers. These offers and approaches establish a simplified benefit delivery method that does not require the customer to submit a program application to receive that benefit after the fact. Instead, the Mid-Stream program, working with product distributors and manufacturers, provides the means necessary to reduce the up-front cost of energy-efficient solutions to our customers, thereby reducing initial investment, any potential financing costs, and the differential cost between an energy-efficient product and a standard product. Successful mid-stream programs motivate participating distributors, equipment dealers and manufacturer representatives to stock greater numbers of energy-efficient equipment so that it is readily available to sell to customers. The Mid-Stream Program can also realize savings that may not otherwise have been captured due to the level of effort necessary to participate in a more traditional downstream program. The Mid-Stream Program includes the following offers:</p> <p><b>Mid-Stream Lighting</b> (DTE Electric only) works with distributors to provide point of sale benefits directly to customers. The program has developed a firm product mix including, but not limited to, linear tubes, wall mounted lighting, exterior wall packs, and occupancy sensors. All lighting products promoted in the program are LED and must be Design Lighting Consortium (DLC) or ENERGY STAR® rated and listed.</p> <p><b>Mid-Stream Food Service</b> has a product mix of ENERGY STAR® or CA Energy Wise-rated equipment including refrigerators, freezers, holding cabinets, fryers, conveyor ovens, steam cookers, and griddles. The program also works with food service and life science equipment distributors to ensure they have the tools and knowledge necessary to directly and accurately educate their customers about the benefits associated with energy-efficient equipment.</p> <p><b>Mid-Stream HVAC (Heating, Ventilation, and Air-Conditioning)</b> focuses on HVAC equipment that is certified by the Air-Conditioning, Heating and Refrigeration Institute (AHRI). HVAC equipment that may be in the Mid-Stream program includes, but is not limited to, unitary split air conditioning systems, chillers, cooling towers, heat pumps, condensing boilers, and domestic hot water boilers.</p> |
| <b>Barriers to Adoption</b> | Businesses may not be aware of the available technologies, costs, or potential for energy savings. Organizations may not prioritize energy efficiency due to other competing interests. High initial costs of energy efficient can be a significant deterrent, even if long term energy savings are substantial.  |

| <p><b>Eligible Measures</b></p>       | <p>Examples of energy efficient measures available through the Mid-Stream Program include, but are not limited, are as follows:</p> <ul style="list-style-type: none"> <li>• LED High Bay Lighting</li> <li>• Variable Refrigerant Flow (VRF) HVAC Unit</li> <li>• Demand Controlled Kitchen Ventilation</li> </ul>  |        |        |        |      |      |                 |        |        |        |        |            |     |     |     |     |
|---------------------------------------|--|--------|--------|--------|------|------|-----------------|--------|--------|--------|--------|------------|-----|-----|-----|-----|
| <p><b>Implementation Strategy</b></p> | <p>DTE will provide overall program management, tracking and reporting oversight, and regulatory review. Through DTE’s Scope of Work and Request for Proposal process, the Company will select Implementation Contractors that will have day-to-day program responsibility.</p> <p>With the Mid-Stream Program, DTE will engage customer participants by using their existing market channels. These market delivery channels primary include participating distributors, but may also include manufacturers, architects, design and build contractors, etc. The program will have resources specifically dedicated to educating the sales force to sell this higher efficiency equipment. In addition, the program will provide distributors with marketing material to be used in store, and online to assist in customer education of the programs and their measures.</p> <p>Incentives for each technology will be offered to reduce the cost of the energy-efficient equipment and will vary based on cost-effectiveness and market response. The C&amp;I Portfolio strives to balance the incentive levels to help offset a portion of the incremental equipment cost of the measure to stimulate the market and obtain energy savings in a cost-effective manner. Market acceptance of a measure, its incremental cost, and its energy savings potential are used to establish incentive levels.</p> |        |        |        |      |      |                 |        |        |        |        |            |     |     |     |     |
| <p><b>Marketing Strategy</b></p>      | <p>The Mid-Stream Program conducts distributor training to provide:</p> <ul style="list-style-type: none"> <li>• C&amp;I program details</li> <li>• Participation process</li> <li>• Tailored to the needs of specific vertical market business owners</li> </ul> <p>The marketing and communications strategy will inform customers of the availability and benefits of each program and how they can participate. As much as possible, these efforts will be targeted to specific vertical markets or equipment technologies. The program will tailor its marketing messaging with previously identified motivations to remove barriers to participation through consistency across delivery channels and partners.</p>  |        |        |        |      |      |                 |        |        |        |        |            |     |     |     |     |
| <p><b>Estimated Participation</b></p> | <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>Year</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> </tr> </thead> <tbody> <tr> <td><b>Electric</b></td> <td>20,919</td> <td>21,276</td> <td>21,451</td> <td>21,665</td> </tr> <tr> <td><b>Gas</b></td> <td>439</td> <td>439</td> <td>439</td> <td>439</td> </tr> </tbody> </table>   | Year   | 2026   | 2027   | 2028 | 2029 | <b>Electric</b> | 20,919 | 21,276 | 21,451 | 21,665 | <b>Gas</b> | 439 | 439 | 439 | 439 |
| Year                                  | 2026   | 2027   | 2028   | 2029   |      |      |                 |        |        |        |        |            |     |     |     |     |
| <b>Electric</b>                       | 20,919   | 21,276 | 21,451 | 21,665 |      |      |                 |        |        |        |        |            |     |     |     |     |
| <b>Gas</b>                            | 439  | 439    | 439    | 439    |      |      |                 |        |        |        |        |            |     |     |     |     |

**Michigan Public Service Commission  
DTE Electric and DTE Gas  
Commercial and Industrial Portfolio, Program  
Descriptions, Measures and Incentives**

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|                                      |                 |             |             |             |             |
|--------------------------------------|-----------------|-------------|-------------|-------------|-------------|
| <b>Estimated Budget (\$000)</b>      | <b>Year</b>     | <b>2026</b> | <b>2027</b> | <b>2028</b> | <b>2029</b> |
|                                      | <b>Electric</b> | \$12,682    | \$13,345    | \$13,767    | \$14,067    |
|                                      | <b>Gas</b>      | \$1,459     | \$1,467     | \$1,476     | \$1,486     |
|                                      |                 |             |             |             |             |
| <b>Estimated Net Savings Targets</b> | <b>Year</b>     | <b>2026</b> | <b>2027</b> | <b>2028</b> | <b>2029</b> |
|                                      | <b>MWh</b>      | 120,198     | 122,253     | 123,258     | 124,483     |
|                                      | <b>Mcf</b>      | 81,561      | 81,561      | 81,561      | 81,561      |
|                                      |                 |             |             |             |             |

**Emerging Measures and Approaches Program**

|                                |   |
|--------------------------------|---|
| <b>Objective</b>               | Emerging Measures and Approaches include measures or programmatic approaches that have been developed by the Pilot program and will then be accounted for as part of the C&I portfolio for savings and spend. Whereas many piloted measures and approaches that are adopted by the C&I portfolio are incorporated into the existing C&I programs' offerings, this transition will allow DTE an opportunity to create an entry point for C&I new program pilots as they too become commercialized and incorporated into the C&I Portfolio.   |
| <b>Target Market</b>           | All customer segments served by DTE will be served by the Emerging Measures and Approaches Program.   |
| <b>Program Duration</b>        | Individual programs added to the emerging category will have their own duration and will depend on the success for future emerging program spend.   |
| <b>Program Description</b>     | The description of these programs varies each year depending on what is in development. The scope greatly varies from one program to the next.  |
| <b>Barriers to Adoption</b>    | <p>The program encompasses measures and approaches that are mature from the pilot phase of program development. Some important components include customer research to get the "voice of the customer" and benchmark against "best in class" companies or organizations related to current and future programs and technologies.</p> <p>The program provides incentives to introduce new products to demonstrate proof of product, technology application, technology acceptance, market participation, maximum customer return on investment and positive political impact. The program also will determine product performance, customer satisfaction and energy saving of emerging technologies.</p> |
| <b>Eligible Measures</b>       | Individual programs added to the emerging category will have their own measures and will depend on the success for future emerging program spend.   |
| <b>Implementation Strategy</b> | Like other commercialized programs, DTE will provide program management and oversight, performance tracking/review and reporting oversight, and regulatory review. DTE will utilize an Implementation Contractor(s) (IC) to provide implementation services which may vary depending on the emerging program.   |
| <b>Marketing Strategy</b>      | Marketing strategy of Emerging Measures and Approaches Program will be dictated by the technology, the program, or marketing approach being tested.   |
| <b>Estimated Participation</b> | Participation in this program will be dictated by the technology, program, or marketing approach being tested.  |

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|                                      |  |
|--------------------------------------|--|
| <b>Estimated Budget (\$000)</b>      | Budgets in this program will be dictated by the technology, program, or marketing approach being tested. |
| <b>Estimated Net Savings Targets</b> | Savings in this program will be dictated by the technology, program, or marketing approach being tested. |

### Self-Directed Program

| <b>Objective</b>               | Self-direct is targeted to large customers to exempt from the mandatory energy waste reduction surcharge(s) and implement their own energy waste reduction plan.   |      |      |      |      |      |      |      |      |          |   |   |   |   |
|--------------------------------|--|------|------|------|------|------|------|------|------|----------|---|---|---|---|
| <b>Target Market</b>           | Customers that elect to self-direct an electric energy waste reduction plan are not eligible to participate in another other electric energy waste reduction program.  |      |      |      |      |      |      |      |      |          |   |   |   |   |
| <b>Program Duration</b>        | Starting in calendar year 2009, the C&I Self-Direct program was established and available to customers who meet the defined requirements to enroll into for the program for the following calendar year.   |      |      |      |      |      |      |      |      |          |   |   |   |   |
| <b>Program Description</b>     | The objective of this program is to provide an opportunity for any eligible electric customer to provide and implement a self-directed energy waste reduction plan. For electric customers, PA 229 continued to ratchet down the customer demand restriction, allowing customers with 1 MW in aggregated annual demand in the preceding year, at all sites to participate in the self-directed plan within an electric provider's territory. All but the largest customers, 2 MW annual peak demand in the preceding year or 10 MW in aggregate, must use an Energy Optimization Service Company (EOSC) to develop and implement their self-directed plan. |      |      |      |      |      |      |      |      |          |   |   |   |   |
| <b>Barriers to Adoption</b>    | Certain customer barriers exist that limit the adoption of energy efficiency measures. These may include, but are not limited to, lack of investment capital or competing capital fund requirements, lack of awareness/knowledge about the benefits and costs of energy efficiency measures, technical understanding of various equipment applications, etc.   |      |      |      |      |      |      |      |      |          |   |   |   |   |
| <b>Eligible Measures</b>       | Customers enrolled in the Self-Directed Program, are not eligible to participate in DTE C&I Electric Programs.   |      |      |      |      |      |      |      |      |          |   |   |   |   |
| <b>Implementation Strategy</b> | DTE will provide overall program management, tracking and reporting oversight, and regulatory review.  |      |      |      |      |      |      |      |      |          |   |   |   |   |
| <b>Marketing Strategy</b>      | The marketing and communications for the Self-Directed Program will be designed to inform customers of the availability and requirements of the program and how they can participate. An important part of a marketing campaign will be content and functionality on the DTE website.  |      |      |      |      |      |      |      |      |          |   |   |   |   |
| <b>Estimated Participation</b> | <table border="1"> <thead> <tr> <th>Year</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> </tr> </thead> <tbody> <tr> <td>Electric</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> </tbody> </table>  |      |      |      | Year | 2026 | 2027 | 2028 | 2029 | Electric | 2 | 2 | 2 | 2 |
| Year                           | 2026   | 2027 | 2028 | 2029 |      |      |      |      |      |          |   |   |   |   |
| Electric                       | 2  | 2    | 2    | 2    |      |      |      |      |      |          |   |   |   |   |

**Michigan Public Service Commission  
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|                                      |                 |             |             |             |             |
|--------------------------------------|-----------------|-------------|-------------|-------------|-------------|
| <b>Estimated Budget (\$000)</b>      | <b>Year</b>     | <b>2026</b> | <b>2027</b> | <b>2028</b> | <b>2029</b> |
|                                      | <b>Electric</b> | \$31        | \$31        | \$31        | \$31        |
|                                      | <b>Gas</b>      | N/A         | N/A         | N/A         | N/A         |
|                                      |                 |             |             |             |             |
| <b>Estimated Net Savings Targets</b> | <b>Year</b>     | <b>2026</b> | <b>2027</b> | <b>2028</b> | <b>2029</b> |
|                                      | <b>MWh</b>      | 3,472       | 3,472       | 3,472       | 3,472       |
|                                      | <b>Mcf</b>      | N/A         | N/A         | N/A         | N/A         |
|                                      |                 |             |             |             |             |

**Michigan Public Service Commission  
DTE Electric and DTE Gas  
Commercial and Industrial Portfolio, Program  
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**Examples of DTE Electric and DTE Gas C&I Program Measures and Savings**

| Large Business Program         | End-Use                   | Gross kWh Savings |             |             |             | Gross Therms Savings |           |           |           |
|--------------------------------|---------------------------|-------------------|-------------|-------------|-------------|----------------------|-----------|-----------|-----------|
|                                |                           | 2026              | 2027        | 2028        | 2029        | 2026                 | 2027      | 2028      | 2029      |
| Prescriptive                   | Compressed Air            | 15,953,623        | 15,953,623  | 15,953,623  | 15,953,623  | 24,959               | 24,959    | 24,959    | 24,959    |
| Prescriptive                   | Cooking                   | 2,515,746         | 2,515,746   | 2,515,746   | 2,515,746   | 6,174                | 6,174     | 6,174     | 6,174     |
| Prescriptive                   | HVAC                      | 76,304,539        | 76,305,332  | 76,305,332  | 76,305,372  | 1,530,384            | 1,523,711 | 1,523,711 | 1,522,595 |
| Prescriptive                   | Lighting                  | 177,769,492       | 177,769,492 | 177,769,492 | 177,769,492 | 0                    | 0         | 0         | 0         |
| Prescriptive                   | Machine Drive             | 10,863,599        | 10,863,599  | 10,863,599  | 10,863,599  | 0                    | 0         | 0         | 0         |
| Prescriptive                   | Other                     | 45,818,011        | 45,818,011  | 45,818,011  | 45,818,011  | 2,451,349            | 2,451,349 | 2,451,349 | 2,451,349 |
| Prescriptive                   | Pools                     | 0                 | 0           | 0           | 0           | 2,333                | 2,333     | 2,333     | 2,333     |
| Prescriptive                   | Process Cooling & Heating | 0                 | 0           | 0           | 0           | 711,999              | 711,999   | 711,999   | 711,999   |
| Prescriptive                   | Refrigeration             | 1,727,535         | 1,727,535   | 1,727,535   | 1,727,535   | 33,517               | 33,517    | 33,517    | 33,517    |
| Prescriptive                   | Ventilation               | 970,457           | 970,457     | 970,457     | 970,457     | 340,333              | 340,333   | 340,333   | 340,333   |
| Prescriptive                   | Water Heating             | 39,226            | 39,226      | 39,226      | 39,226      | 66,307               | 66,307    | 66,307    | 66,307    |
| Multifamily Common Areas       | HVAC                      | 56,043            | 59,524      | 62,270      | 62,270      | 39,673               | 39,644    | 39,644    | 45,778    |
| Multifamily Common Areas       | Lighting                  | 251,953           | 255,007     | 255,007     | 255,007     | 0                    | 0         | 0         | 0         |
| Multifamily Common Areas       | Other                     | 7,709             | 8,210       | 8,438       | 8,565       | 0                    | 0         | 0         | 0         |
| Multifamily Common Areas       | Water Heating             | 19,528            | 40,684      | 40,684      | 40,684      | 7,120                | 14,834    | 14,834    | 14,834    |
| Non-Prescriptive               | Other                     | 49,125,094        | 55,511,356  | 59,932,614  | 65,827,625  | 2,878,110            | 2,640,112 | 2,712,953 | 2,424,900 |
| Strategic Energy Management    | Compressed Air            | 5,441,023         | 4,894,644   | 4,416,562   | 3,961,247   | 0                    | 0         | 0         | 0         |
| Strategic Energy Management    | HVAC                      | 13,206,646        | 11,880,456  | 10,720,039  | 9,614,881   | 0                    | 0         | 0         | 0         |
| Strategic Energy Management    | Other                     | 9,070,428         | 8,159,590   | 7,362,607   | 6,603,575   | 865,519              | 784,377   | 703,234   | 635,616   |
| Retro-Commissioning            | Other                     | 32,439,104        | 29,324,950  | 26,340,552  | 23,667,570  | 219,229              | 189,457   | 162,392   | 148,859   |
| Compressed Air Efficiency      | Compressed Air            | 16,313,766        | 15,025,837  | 13,237,047  | 11,949,118  | 0                    | 0         | 0         | 0         |
| Steam Traps Efficiency         | HVAC                      | 0                 | 0           | 0           | 0           | 72,104               | 72,104    | 72,104    | 72,104    |
|                                |                           |                   |             |             |             |                      |           |           |           |
|                                |                           |                   |             |             |             |                      |           |           |           |
| Small Business Program         | End-Use                   | Gross kWh Savings |             |             |             | Gross Therms Savings |           |           |           |
|                                |                           | 2026              | 2027        | 2028        | 2029        | 2026                 | 2027      | 2028      | 2029      |
| Small Business Program         | Cooking                   | 3,043,232         | 3,043,232   | 3,043,232   | 3,071,151   | -985                 | -985      | -985      | -997      |
| Small Business Program         | HVAC                      | 9,024,650         | 9,024,650   | 9,024,650   | 9,107,445   | 260,748              | 260,748   | 260,748   | 260,748   |
| Small Business Program         | Lighting                  | 63,576,637        | 63,576,637  | 63,576,637  | 64,159,909  | 0                    | 0         | 0         | 0         |
| Small Business Program         | Office Equipment          | 7,934             | 7,934       | 7,934       | 8,007       | 0                    | 0         | 0         | 0         |
| Small Business Program         | Other                     | 11,945            | 11,945      | 11,945      | 12,055      | 0                    | 0         | 0         | 0         |
| Small Business Program         | Refrigeration             | 8,398,645         | 8,398,645   | 8,398,645   | 8,475,697   | 0                    | 0         | 0         | 0         |
| Small Business Program         | Water Heating             | 10,523            | 10,523      | 10,523      | 10,615      | 178,787              | 178,787   | 178,787   | 178,787   |
|                                |                           |                   |             |             |             |                      |           |           |           |
|                                |                           |                   |             |             |             |                      |           |           |           |
| Mid-Stream Program             | End-Use                   | Gross kWh Savings |             |             |             | Gross Therms Savings |           |           |           |
|                                |                           | 2026              | 2027        | 2028        | 2029        | 2026                 | 2027      | 2028      | 2029      |
| Mid-Stream Commercial Lighting | Lighting                  | 124,199,843       | 125,233,235 | 125,955,456 | 127,014,715 | 0                    | 0         | 0         | 0         |
| Mid-Stream Cooking             | Cooking                   | 1,987,849         | 2,380,508   | 2,526,555   | 2,559,226   | 216,725              | 216,725   | 216,725   | 216,725   |
| Mid-Stream Cooking             | Refrigeration             | 319,121           | 330,349     | 372,980     | 383,840     | 0                    | 0         | 0         | 0         |
| Mid-Stream Cooking             | Water Heating             | 1,580             | 1,581       | 1,667       | 1,689       | 0                    | 0         | 0         | 0         |
| Mid-Stream HVAC                | HVAC                      | 10,000,241        | 10,862,572  | 11,236,678  | 11,538,154  | 740,515              | 740,515   | 740,515   | 740,515   |
| Mid-Stream HVAC                | Machine Drive             | 1,497,957         | 1,506,801   | 1,516,218   | 1,553,889   | 0                    | 0         | 0         | 0         |
| Mid-Stream HVAC                | Ventilation               | 52,260            | 52,260      | 52,587      | 53,893      | 0                    | 0         | 0         | 0         |
| Mid-Stream HVAC                | Water Heating             | 0                 | 0           | 0           | 0           | 107,218              | 107,218   | 107,218   | 107,218   |

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter, on the Commission's own )  
motion, regarding the regulatory reviews, )  
revisions, determinations, and/or approvals )  
necessary for **DTE ELECTRIC** )  
**COMPANY** and **DTE GAS COMPANY** to )  
fully comply with Public Act 295 of 2008, as )  
amended )

Case No. U-21681  
(Paperless e-file)

QUALIFICATIONS  
AND  
DIRECT TESTIMONY  
OF  
KEVIN A. STEWART

**DTE ELECTRIC COMPANY AND DTE GAS COMPANY**  
**QUALIFICATIONS AND DIRECT TESTIMONY OF KEVIN A. STEWART**

Line  
No.

1 **Q1. What is your name, business address and by whom are you employed**

2 A1. My name is Kevin A. Stewart. My business address is: One Energy Plaza, Detroit,  
3 Michigan, 48226. I am employed by DTE Electric Company with the position of  
4 Manager of Residential, Commercial and Industrial Pilots in the Energy Waste  
5 Reduction (EWR) group.

6

7 **Q2. On whose behalf are you testifying?**

8 A2. I am testifying on behalf of DTE Electric Company (DTE Electric) and DTE Gas  
9 Company (DTE Gas) (collectively, DTE).

10

11 **Q3. What is your educational background?**

12 A3. I graduated from Michigan State University, Eli Broad School of Business with a  
13 Bachelor of Arts in Business Administration in 1995. In 2004, I graduated from  
14 Wayne State University with a Master of Business Administration.

15

16 **Q4. What is your work experience?**

17 A4. In 2015, I was hired as a Principal Marketing Analyst by DTE Energy. My role  
18 and responsibilities included managing pilot programs for Residential and  
19 Commercial and Industrial (C&I) programs and services. My areas of work  
20 included pilot ideation, business case development, contracting, execution of  
21 program deliverables and completion of pilot programs. In 2017, I accepted the  
22 promotion to Principal Marketing Specialist within the Pilot Team for the DTE  
23 Energy Optimization group. My primary job responsibilities included senior pilot  
24 management for Residential Pilots. In 2025, I assumed the position of Manager for

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1 the EWR Pilot Team where I oversee project development and strategic guidance  
2 to drive the successful initiation, development, contracting, and execution of  
3 Residential and C&I energy-efficiency pilot initiatives.

4

5 **Q5. Do you hold any certifications or are you a member of any professional**  
6 **organizations?**

7 A5. Yes. I am a member of the Association of Energy Services Professionals (AESP).  
8 AESP is an organization that provides professional development programs, a  
9 network of energy practitioners, and promotes the transfer of knowledge and  
10 experience to promote energy efficiency programs. I am a member of the  
11 Consortium for Energy Efficiency (CEE) engaging in its Emerging Tech  
12 Committee. CEE is the United States and Canadian consortium of gas and electric  
13 efficiency program administrators; whose goal is to accelerate the development and  
14 availability of energy efficient products and services.

15

16 **Q6. What are your current duties and responsibilities?**

17 A6. As the Manager of Residential, Commercial and Industrial Pilots, I am responsible  
18 for the development of new electric and gas offerings within the market rate  
19 programs.

20

21 **Q7. Have you previously sponsored testimony before the Michigan Public Service**  
22 **Commission (MPSC or Commission)?**

23 A7. No.

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1 **Purpose of Testimony**

2 **Q8. What is the purpose of your testimony?**

3 A8. The purpose of my testimony in this 2026-2029 EWR Plan filing is to:

4 1) Provide an overview of the approach used by the DTE Pilot Program  
5 (Program) to design and deliver pilots

6 2) Provide estimations for energy savings and associated costs

7 3) Provide information about current pilots and potential pilots for 2026-2029

8

9 **Q9. Are you sponsoring any exhibits in this proceeding?**

10 A9. Yes, I am supporting the following exhibit:

| <u>Exhibit</u> | <u>Description</u>        |
|----------------|---------------------------|
| A-16           | Pilot Program Description |

13

14 **Q10. Was the exhibit prepared by you or under your direction?**

15 A10. Yes, it was.

16

17 **Pilot Program**

18 **Q11. What is the objective of DTE's Pilot Program?**

19 A11. The objective of the Program is to develop promising program designs, investigate  
20 emerging technologies, and test new marketing approaches. The Pilot Program  
21 enables DTE to assess potential energy savings, measure cost effectiveness of new  
22 technologies, and expand how customers can reach EWR's commercialized  
23 programs.

24

25 **Q12. What customer segments are served by DTE's Pilot Program?**

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1 A12. DTE's Pilot Program supports residential, income-qualified, and commercial and  
2 industrial customers.

3

4 **Q13. How is the DTE's Pilot Program delivered?**

5 A13. The Program delivers its pilots through research and experimentation. The Pilot  
6 Program provides resources to introduce new products, to demonstrate proof of  
7 product, technology application, technology acceptance and test new marketing  
8 approaches. The Program also helps determine product performance, customer  
9 satisfaction and energy savings of emerging technologies.

10

11 **Q14. How are pilots developed, managed, and implemented?**

12 A14. To develop and manage pilots, DTE's Pilot Program utilizes implementation  
13 contractors and leverages a structured 5-stage process:

14 1) **Ideation** – A new concept can originate from various sources. It is run  
15 through Ideation using various checklists to ensure the opportunity has  
16 strategic fit.

17 2) **Business Case** – After secondary research is performed and energy savings  
18 potential identified, a framework for the new measure, program or approach  
19 is drafted.

20 3) **Contracting** – During this stage, needs and resources to bring the pilot  
21 forward are identified including timing and costs. Key performance metrics  
22 are codified.

23 4) **Execution** – The pilot is in the field following the roadmap developed in the  
24 prior stage. Key performance metrics are monitored.

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1           **5) Completion** – Post pilot execution, during this stage, the decision is made  
2           to introduce new measures, programs or approaches to the wider market  
3           through the Residential or C&I programs, new or existing, for all eligible  
4           customers.

5

6   **Q15. How is DTE’s Pilot Program funded?**

7   A15. Along with projected spend, the Program’s spending allowance and the  
8       methodology to calculate the Program’s budget is detailed in Witness Kupser’s  
9       testimony including Exhibit A-1 and A-2. The Program funds are spent on  
10      contracted services, participant incentives as well as on the cost of internal  
11      administration to manage the portfolio of pilots.

12

13   **Q16. How is DTE’s Pilot Program energy savings determined?**

14   A16. The Program’s deemed energy savings follow the method prescribed by the  
15      Commission’s November 7, 2024 Order in Case No. U-21567. In that order the  
16      Commission determined that “The percentages of deemed savings awarded as a  
17      percentage of the legislative requirement should be established in a plan filing with  
18      savings capped at the legislative minimum savings level.” The Program’s deemed  
19      savings levels are capped at 5% of the legislative minimum of 1.5% for electric  
20      savings and 5% of the legislative minimum of 0.875% for natural gas savings.  
21      Pilot’s projected savings are detailed in Witness Kupser’s testimony including  
22      Exhibit A-1 and A-2.

23

24   **Q17. What are DTE’s Pilot Program areas of focus?**

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1 A17. The Pilot Program has and will continue to evolve over time as guided by the  
2 changing needs of customers and emerging new technologies. An important  
3 component of the Program is to conduct customer research related to current and  
4 future programs. Examples of new technologies, program concepts, and marketing  
5 approaches under consideration include:

- 6 1) Residential and C&I new construction programs
- 7 2) Residential income-qualified offerings
- 8 3) Advanced cold climate electric and gas heat pumps
- 9 4) Program delivery enhanced through innovative marketing channels  
10 including digital and social media
- 11 5) Developing new marketing approaches to engage and increase small and  
12 medium business participation

13  
14 **Q18. What pilots are planned to carry forward into the 2026-2029 EWR Plan?**

15 A18. In addition to the potential pilots from the areas of focus above, DTE intends to  
16 carry forward the following pilots:

17  
18 C&I New Construction

19 The New Construction pilot offering will promote the design and construction of  
20 high-efficiency commercial and multifamily buildings, including new building  
21 construction, additions, and major renovations of existing buildings. The pilot will  
22 be delivered to provide a mix of technical and financial assistance that will  
23 influence projects early in the design process. This offering will provide incentives  
24 to reduce market barriers for incorporating energy efficiency in construction

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1 projects.

2

3 Residential and C&I Thermal Heat Pumps Pilot

4 The Thermal Heat Pumps Pilot shall demonstrate a new product category for fuel-  
5 fired natural gas heat pump technologies in both commercial and residential  
6 applications and seek to develop measures for the Michigan Efficiency Measure  
7 Database (MEMD). Results shall leverage laboratory performance data sets from  
8 various gas heat pumps, along with new laboratory testing, field demonstrations  
9 and Evaluation Measurement & Verification (EM&V) reporting. The pilot is  
10 focused on emerging equipment that will be commercially available. Pilot results  
11 shall lead to future market development and reporting of technical work papers.

12

13 Manufactured Homes Pilot

14 The pilot will test and evaluate incentivizing manufactured home retailers and  
15 community management companies to manufacture and promote homes that are  
16 above the Federal Manufactured Home Construction and Safety Standard, also  
17 known as the Housing and Urban Development (HUD) Code baseline.

18

19 **Q19. Does this complete your direct testimony?**

20 A19. Yes, it does.

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter, on the Commission's own )  
motion, regarding the regulatory reviews, )  
revisions, determinations, and/or approvals )  
necessary for **DTE ELECTRIC** )  
**COMPANY** and **DTE GAS COMPANY** to )  
fully comply with Public Act 295 of 2008, as )  
amended. )

Case No. U-21681  
(Paperless e-file)

EXHIBITS  
OF  
KEVIN A. STEWART

**DTE Pilot Program**

| Program Element                | DTE Pilot Programs   |
|--------------------------------|--|
| <b>Objective</b>               | The objective of the Pilot Program is to make current programs as effective as possible for customers, develop new program designs, explore new marketing strategies and approaches, and assess the energy saving impact of emerging technologies.   |
| <b>Target Market</b>           | All customer segments served by DTE will be served by the pilot programs. Program design and new marketing approaches will be dependent on the specific technology or program.   |
| <b>Program Duration</b>        | January 2026 to December 2029  |
| <b>Program Description</b>     | <p>The Pilot Program is designed to enhance the effectiveness of the Energy Waste Reduction Programs. The Pilot Program will evolve over time, driven by shifting customer needs and advancing technologies. A key aspect of the program is conducting research to better understand customer preferences and to inform future initiatives.</p> <p>The Energy Waste Reduction Programs are developed to enable all customers to have reasonable access to program benefits. The Pilot Program will help improve the effectiveness and customer reach of the Energy Waste Reduction Programs.</p> <p>The Pilot Program offers incentives to introduce new products, showcasing their proof of concept, service viability, technology application, and market acceptance. Additionally, the programs measure product performance, customer satisfaction, and the energy savings potential of emerging technologies.</p>  |
| <b>Eligible Measures</b>       | <p>Different technologies, programs, and marketing approaches may be considered in the Pilot Program. Below are examples of pilot concepts being considered:</p> <ul style="list-style-type: none"> <li>• Technologies             <ul style="list-style-type: none"> <li>○ Cold climate heat pumps</li> <li>○ Energy controls, monitors, and management for C&amp;I customers</li> <li>○ Various technology demonstrations</li> </ul> </li> <li>• Programs             <ul style="list-style-type: none"> <li>○ Residential and C&amp;I upstream and midstream programs</li> <li>○ Residential income-qualified service offerings</li> <li>○ Cross utility collaboration programs</li> </ul> </li> <li>• New marketing approaches             <ul style="list-style-type: none"> <li>○ Deliver marketing messages through print and electronic media</li> <li>○ Develop new marketing approaches for increasing small business participation</li> </ul> </li> </ul> |
| <b>Implementation Strategy</b> | <p>Implementation strategy considers current programs, market research, vendor recommendations, and industry best practices.</p> <p>The implementation of this program will be coordinated between DTE Electric and DTE Gas where service territories overlap.</p>   |

| <b>Program Element</b>       | <b>DTE Pilot Programs (cont.)</b>  |                          |                               |                          |      |       |       |      |       |       |      |       |       |      |       |       |
|------------------------------|--|--------------------------|-------------------------------|--------------------------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| <b>Marketing Strategy</b>    | Marketing strategy of the Pilot Programs will be driven by the technology, the program or marketing approach being investigated.   |                          |                               |                          |      |       |       |      |       |       |      |       |       |      |       |       |
| <b>EM&amp;V Requirements</b> | Impact and process evaluation will be conducted on each Pilot Program. This research will be conducted by an independent third-party evaluation contractor. To provide validity and additional insight into the research, DTE will work with the evaluation contractor.  |                          |                               |                          |      |       |       |      |       |       |      |       |       |      |       |       |
| <b>Estimated Budget</b>      | <p>The estimated budget for the Pilot Program, including administrative costs, is displayed below.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Electric Budget (\$Thousands)</th> <th>Gas Budget (\$Thousands)</th> </tr> </thead> <tbody> <tr> <td>2026</td> <td>7,923</td> <td>2,092</td> </tr> <tr> <td>2027</td> <td>8,131</td> <td>2,090</td> </tr> <tr> <td>2028</td> <td>8,365</td> <td>2,116</td> </tr> <tr> <td>2029</td> <td>8,509</td> <td>2,137</td> </tr> </tbody> </table> | Year                     | Electric Budget (\$Thousands) | Gas Budget (\$Thousands) | 2026 | 7,923 | 2,092 | 2027 | 8,131 | 2,090 | 2028 | 8,365 | 2,116 | 2029 | 8,509 | 2,137 |
| Year                         | Electric Budget (\$Thousands)  | Gas Budget (\$Thousands) |                               |                          |      |       |       |      |       |       |      |       |       |      |       |       |
| 2026                         | 7,923  | 2,092                    |                               |                          |      |       |       |      |       |       |      |       |       |      |       |       |
| 2027                         | 8,131  | 2,090                    |                               |                          |      |       |       |      |       |       |      |       |       |      |       |       |
| 2028                         | 8,365  | 2,116                    |                               |                          |      |       |       |      |       |       |      |       |       |      |       |       |
| 2029                         | 8,509  | 2,137                    |                               |                          |      |       |       |      |       |       |      |       |       |      |       |       |
| <b>Savings Targets</b>       | The estimated energy and capacity savings from the Pilot Programs will be a percentage of the annual savings proportional amount spent, up to 5% of the legislative minimum saving targets for electric and gas.   |                          |                               |                          |      |       |       |      |       |       |      |       |       |      |       |       |

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter, on the Commission's own )  
motion, regarding the regulatory reviews, )  
revisions, determinations, and/or approvals )  
necessary for **DTE ELECTRIC** )  
**COMPANY** and **DTE GAS COMPANY** to )  
fully comply with Public Act 295 of 2008, as )  
amended. )

Case No. U-21681  
(Paperless e-file)

QUALIFICATIONS  
AND  
DIRECT TESTIMONY  
OF  
FRANK SIRWAITIS

**DTE ELECTRIC COMPANY AND DTE GAS COMPANY**  
**QUALIFICATIONS AND DIRECT TESTIMONY OF FRANK SIRWAITIS**

Line  
No.

1 **Q1. What is your name, business address and by whom are you employed?**

2 A1. My name is Frank J. Sirwaitis (he/him/his). My business address is: One Energy  
3 Plaza, Detroit, Michigan 48226. I am testifying on behalf of DTE Electric  
4 Company (DTE Electric).

5

6 **Q2. What is your present position with the Company?**

7 A2. I am a Senior Strategist in the Corporate Energy Forecasting department.

8

9 **Q3. What is your educational background?**

10 A3. I graduated from the University of Michigan – Dearborn in 2016 with a Bachelor  
11 of Arts in Economics, with a focus in Econometrics.

12

13 **Q4. What work experience do you have?**

14 A4. After graduating from the University of Michigan, I began my professional career  
15 with DTE Electric in January 2017 in the Corporate Energy Forecasting department  
16 with increasing levels of responsibility. In this role, I assist in the development of  
17 electric sales forecasting activities for DTE Electric. These activities include data  
18 collection, statistical analysis of data, forecast model building and interaction with  
19 other departments on forecast-related topics.

20

21 **Q5. What are your duties as Senior Strategist, Corporate Energy Forecasting?**

22 A5. I am responsible for the development of long-term sales forecast (one year or  
23 greater), short-term sales forecast (monthly), and weather-normalization of sales.  
24 Additionally, I have led the development of several initiatives to integrate  
25 Advanced Metering Infrastructure (AMI) data into various processes.

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1 **Q6. Have you received any additional training?**

2 A6. Yes. I have completed several workshops hosted by Itron including Energy  
3 Forecasting 101, Forecasting and Statistically Adjusted End-Use (SAE) Modeling,  
4 and Advanced Forecasting Topics. I have also earned various certifications from  
5 SAS related to Electric Load Forecasting and Programming.

6

7 **Q7. Have you been involved in prior case filings before the Michigan Public**  
8 **Service Commission?**

9 A7. Yes. I sponsored testimony in the following cases:

10 U-20876 2022/2023 EWR Plan

11 U-21050 2022 PSCR Plan

12 U-21259 2023 PSCR Plan

13 U-21322 2024/2025 EWR Plan

14 U-21425 2024 PSCR Plan

15 U-21594 2025 PSCR Plan

Line  
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1 **Purpose of Testimony**

2 **Q8. What is the purpose of your testimony?**

3 A8. The purpose of my testimony is to provide DTE Electric's electric sales forecast  
4 for the period 2025-2029, and to explain the basis for the forecast.

5

6 **Q9. Are you sponsoring any exhibits?**

7 A9. Yes. I am sponsoring the following exhibits:

8 

| <u>Exhibit</u> | <u>Description</u> |
|----------------|--------------------|
|----------------|--------------------|

9 

|      |  |
|------|--|
| A-17 | Annual Sales – Historical and Forecast |
|------|--|

10 

|      |  |
|------|--|
| A-18 | Annual Customer Counts – Historical and Forecast |
|------|--|

11

12 **Q10. Were these exhibits prepared by you or under your direction?**

13 A10. Yes, they were.

14

15 **Q11. How is your testimony organized?**

16 A11. My testimony consists of the following parts:

17 

|                          |
|--------------------------|
| Part I: Economic Outlook |
|--------------------------|

18 

|   |
|---|
| Part II: Forecast Development and Assumptions |
|---|

19 

|                                  |
|----------------------------------|
| Part III: Electric Load Forecast |
|----------------------------------|

20

21 **Part I: Economic Outlook**

22 **Q12. What was the condition of the national economy just prior to the forecast period**  
23 **in 2024?**

24 A12. Real gross domestic product increased at an annualized rate of 1.6% in the first  
25 quarter, 3.0% in the second and 2.8% in the third. Real personal consumption

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1 expenditures increased at an annualized rate of 1.6% in the first quarter, 2.8% in  
2 the second, and 3.5% in the third. Real disposable personal income increased at an  
3 annualized rate of 5.6% in the first quarter, 1.0% in the second, and 0.8% in the  
4 third. The Consumer Price Index for All Urban Consumers (CPI-U) grew at an  
5 annualized rate of 3.8% in the first quarter, 2.8% in the second, and 1.2% in the  
6 third. Seasonally adjusted housing starts declined at an annualized rate of 18.5% in  
7 the first quarter, 17.6% in the second, and 2.7% in the third. Light vehicle  
8 production was 2.7 million in the first quarter and 2.7 million in the second.

9

10 **Q13. What is the outlook for the national economy in 2026 through 2029?**

11 A13. Gross domestic product is expected to increase by 1.7% in 2026, 1.7% in 2027,  
12 1.8% in 2028, and by 1.7% in 2029. Disposable personal income is expected to  
13 increase by 2.9% in 2026, 2.6% in 2027, 2.5% in 2028, and 2.4% in 2029. Personal  
14 consumption expenditures are expected to increase by 2.0% in 2026, 2.3% in 2027,  
15 2.2% in 2028, and 2.0% in 2029. These measures from the national income and  
16 product accounts are in real terms, meaning that inflation has been removed from  
17 them. The CPI-U is forecast to increase by 2.6% in 2026, 2.1% in 2027, 2.3% in  
18 2028, and 2.4% in 2029. Total light vehicle production in the United States is  
19 forecasted to reach 10.72 million units in 2026, 10.52 million in 2027, 10.42 million  
20 in 2028, and 10.63 million in 2029.

21

22 **Q14. What is the outlook for Southeast Michigan's economy in 2026 through 2029?**

23 A14. Total non-farm employment is forecast to decrease by 0.29% in 2026, 0.35% in  
24 2027, 0.12% in 2028 and 0.08% in 2029; natural resources, mining, and  
25 construction employment to increase by 1.1% in 2026, 0.9% in 2027, 1.2% in 2028,

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1 and by 1.4% in 2029; manufacturing employment to decline by 4.0% in 2026, 3.5%  
2 in 2027, 2.8% in 2028, and 1.2% in 2029; total private non-manufacturing  
3 employment to rise by 0.1% in 2026, decline by 0.1% in 2027, rise by 0.2% in  
4 2028, and increase 0.1% in 2029; and government employment to rise by 0.6% in  
5 2026, 0.6% in 2027, 0.5% in 2028, and decline by 0.05% in 2029. Southeast  
6 Michigan auto production is expected to attain levels of 1.26 million vehicles in  
7 2026, 1.47 million in 2027, 1.47 million in 2028, and 1.57 million in 2029.  
8 Population is forecasted to rise by 0.04% in 2026, and decline by 0.10%, 0.16%,  
9 and 0.19% in 2027, 2028, and 2029, respectively.

10

11 **Part II: Forecast Development and Assumptions**

12 **Q15. What is the general approach used in developing the forecast for DTE**  
13 **Electric's service area electric sales and system output?**

14 A15. The general approach reflects widely accepted industry standards for electricity  
15 forecasting, including regression and end-use modeling. This approach has  
16 provided forecasts for DTE Electric service area electric sales with high accuracy  
17 from actual historical annual sales.

18

19 Most customer class sales and customer forecasts are built from linear regression  
20 models that relate monthly sales to economic activity, weather, changes in end-use  
21 saturation, and energy efficiency. The forecast is developed separately for each  
22 major rate classification: Residential, Commercial and Industrial (C&I), and Other.  
23 The residential sales forecast is derived by combining a use-per-customer forecast,  
24 using a statistically adjusted end-use (SAE) specification, with a customer forecast.  
25 Separate models are estimated for small and large C&I customers. Small C&I,

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1 comprised of over 200,000 small business customers, is modeled similarly to  
2 residential, while large C&I, comprised of over 3,000 high consumption large  
3 business customers, is forecasted using econometric models unique to seven super  
4 sectors. The other forecast consists of street lighting and is primarily driven by the  
5 adoption of more efficient lighting. The net system output is forecasted as the sum  
6 of the electric sales values and the projected system losses.

7

8 There are many factors that impact sales and customer forecasts for each customer  
9 class. Examples of forecast drivers include:

- 10 • National, state, and local economic projections provided by sources including,  
11 but not limited to: S&P Global (formerly IHS Markit), and Moody's Analytics.
- 12 • The Energy Information Administration (EIA) Annual Energy Outlook (AEO)  
13 2023 end-use intensity and end-use saturation estimates for the East North  
14 Central Census Division (modified to reflect DTE Electric's end-use  
15 information)
- 16 • Historical weather data from the Detroit Metropolitan Airport, with normal  
17 weather assumptions in the forecast horizon
- 18 • DTE Electric's Energy Waste Reduction (EWR) targets
- 19 • DTE Electric's behind-the-meter distributed generation (DG) projections
- 20 • DTE Electric's electric vehicle (EV) forecast for light-duty and fleet vehicles
- 21 • Large customer load adjustments that would not be reflected in the historical  
22 data or economic projections

23

24 **Q16. Can you please describe the data used to construct forecast models?**

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1 A16. Each model used to forecast sales was estimated with monthly historical  
2 consumption data beginning in January 2006, with estimation ending in June 2024.  
3 Customer count forecast models were estimated with monthly historical customer  
4 count data beginning in January 2012, with estimation ending in June 2024.

5

6 The forecasts for both sales and customers were extended through 2029 and used to  
7 develop the long-term system energy and peak demand forecast.

8

9 A bottom-up hourly load model, described later in my testimony, utilized hourly  
10 historical customer class level data as the basis for developing a suite of load profiles  
11 that were used to forecast the peak demand. The forecast for sales and customers  
12 can be seen in Exhibit A-17 and Exhibit A-18 respectively.

13

14 **Q17. How is weather applied in the load forecast?**

15 A17. Weather is one of the primary variables used in each customer class forecast model.  
16 In each model, actual weather, measured in the form of heating degree days (HDDs)  
17 and cooling degree days (CDDs) is used to understand the unique relationship that  
18 a customer class's energy consumption has with weather. HDDs are calculated by  
19 subtracting average daily temperature from a defined base such as 65 degrees  
20 Fahrenheit. Conversely, CDDs are calculated by subtracting the base from average  
21 daily temperature.

22

23 In regression modeling, a coefficient is calculated to quantify this impact. Once the  
24 coefficient is calculated, it is applied to the weather assumed in the forecast horizon.

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1 In the forecast horizon, normal weather is assumed as the most prudent form of  
2 weather expectations for the future.

3

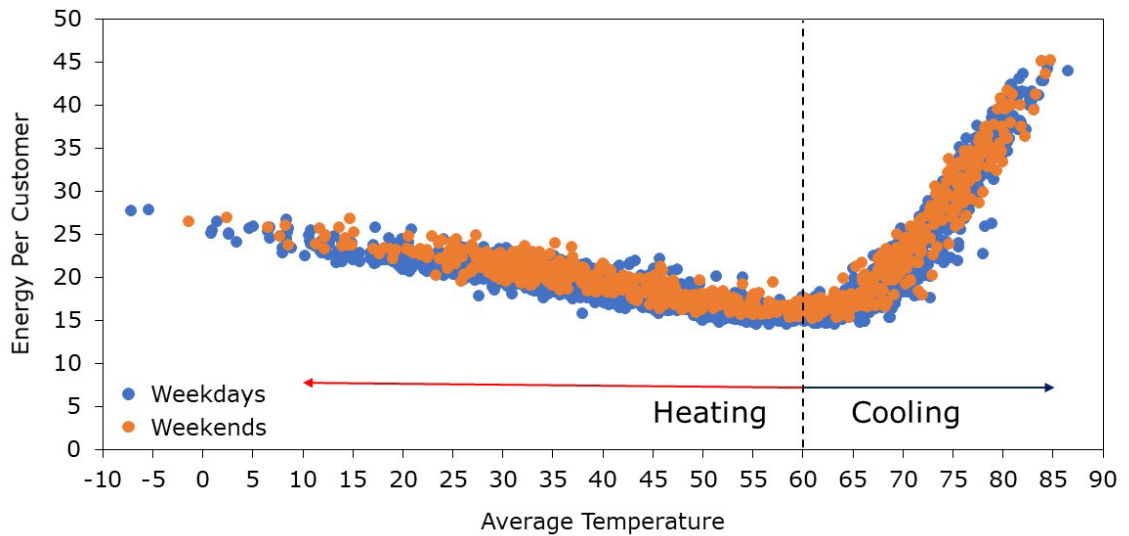
4 **Q18. Can you please describe the HDD and CDD bases used in the forecast?**

5 A18. Yes. As seen in Figures 1 and 2 below, weather impact is different depending on  
6 the customer class. Residential sales are more impacted by weather and typically  
7 begin cooling their buildings at an average temperature of 60 degrees. Small C&I  
8 sales are not as influenced by weather but typically begin cooling their buildings at  
9 an average of 50 degrees. The relationships to weather are also non-linear, creating  
10 a need to utilize multiple HDD and CDD bases to accurately capture the weather  
11 response. HDD and CDD bases, represented by the name and temperature of the  
12 base, for each customer class include:

- 13 • Residential: HDD25, HDD60, CDD60, CDD65, CDD70 and CDD75
- 14 • Small C&I: HDD50, CDD50, CDD60, and CDD70
- 15 • Large C&I (varies by supersector):
  - 16 ▪ Education and Health: CDD50
  - 17 ▪ Transportation, Trade and Utilities (TTU): HDD50 and CDD50
  - 18 ▪ Offices: HDD45 and CDD55
  - 19 ▪ Other Markets: HDD45 and CDD55
  - 20 ▪ Automotive: HDD50 and CDD60
  - 21 ▪ Other Manufacturing: CDD55

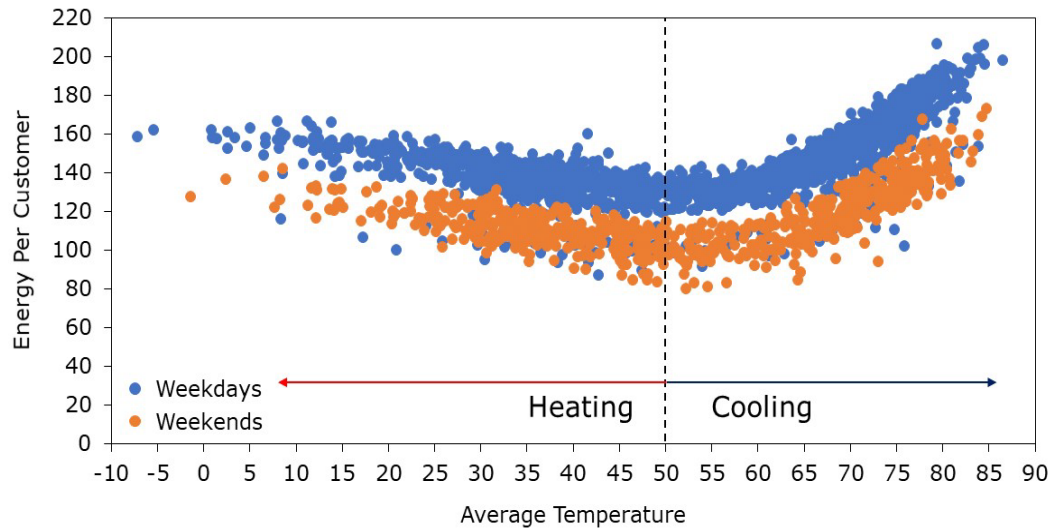
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1 **Figure 1 : Residential Daily Use-Per-Customer vs Temperature**



2 **Figure 2 : Small C&I Daily Use-Per-Customer vs Temperature**

3



4 **Q19. How does DTE Electric define normal weather?**

5 A19. DTE Electric defines normal weather as a 15-year average of historical values,  
6 updated on an annual cadence as recommended by the Commission in Case No. U-  
7 20471. In this instant case, 2009-2023 is the timeframe for normal weather.  
8 Additionally, historical actual sales in my Exhibits were weather normalized with

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1 the same normal weather assumed in the forecast for comparison purposes. Daily  
2 average temperature is converted to HDDs and CDDs for various bases and  
3 averaged across years. As a result, this process calculates and defines normal HDDs  
4 and CDDs for various bases in a given day, month, and year.

5

6 **Q20. How was the residential Class forecast developed?**

7 A20. Electricity sales in the residential class were forecast using the SAE model which  
8 specifies energy use as a function of 22 end-uses, including DG and EV demand,  
9 along with factors that affect the end-use requirements, such as economic activity  
10 and weather. The residential class forecast begins with a standard end-use model,  
11 with appliance saturation projections and average electricity usage per end-use  
12 provided by a Company-conducted residential appliance saturation survey and the  
13 EIA's AEO 2023 for the East North Central region in which DTE Electric operates.  
14 Residential EWR programs are applied directly to the corresponding end-uses in  
15 the SAE model. The combination of appliance saturations and average electricity  
16 per end-use is indexed and calibrated to the Company's usage per customer for a  
17 base year to create an electricity forecast for each end-use.

18

19 Utilization variables, which explain how much an end-use is utilized, are combined  
20 with end-use intensities. For residential, the primary variables used to explain  
21 utilization are weather, real personal income, population, households, and  
22 workplace occupancy. The utilization variables are then combined with the end-  
23 use intensities to compute three explanatory variables that are:

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- 1           • XHeat – An aggregated heating variable that captures changes in heating end-  
2           use saturation and efficiency, and combined with HDDs, economic, and other  
3           factors that impact the utilization of heating equipment.
- 4           • XCool – An aggregated cooling variable that captures changes in cooling end-  
5           use saturation and efficiency, and combined with CDDs, economic, and other  
6           factors that impact the utilization of cooling equipment.
- 7           • XOther – An aggregated base-load variable that captures changes in base-  
8           load end-use saturation and efficiency, and combined with number of days in  
9           a month, economic, and other factors that impact the utilization of base-load  
10          equipment.

11

12          Along with seasonal factors, the resulting explanatory variables are then regressed  
13          against the Company’s residential monthly use per customer sales. The model  
14          effectively acts as the statistical adjustment and calibrates the end-use forecast to  
15          the Company’s historical sales.

16

17          The number of residential customers was forecasted using historical and projected  
18          households for southeast Michigan provided by S&P Global. Customer counts are  
19          modeled using a regression, with households as the primary explanatory variable.  
20          The customer forecast is then multiplied by the use per customer from the SAE  
21          model to produce the total residential class sales forecast.

22

23          **Q21. How was the small C&I forecast developed?**

24          A21. Similar to the residential class forecast, small C&I class sales are also forecast using  
25          an SAE model, utilizing 11 end-uses including DG and EV demand. Additionally,

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- 1 C&I EWR programs are incorporated directly into the SAE model. The small C&I  
2 sales forecast begins with a standard end-use model with saturation projections and  
3 average electricity usage per end-use derived from the EIA's AEO 2023 for the  
4 East North Central region in which DTE Electric operates. Since small C&I  
5 buildings within the DTE Electric service territory consume electricity differently,  
6 the projections are weighted by intensity and prevalence of 11 different building  
7 types as defined by the EIA. To better calibrate these projections to the Company's  
8 service area, employment values are used to give weight to end-use intensities with  
9 the Company's service area employment data. The combination of saturations and  
10 average electricity per end-use is indexed and calibrated to the Company's usage  
11 per customer for a base year to create an electricity forecast for each end-use.
- 12 Utilization variables, which explain how much an end-use is utilized, are combined  
13 with end-use intensities. For small C&I, the primary variables used to explain  
14 utilization are weather, gross state product, non-manufacturing employment and  
15 households. The utilization variables are then combined with the end-use intensities  
16 to compute three explanatory variables that are:
- 17 • XHeat – An aggregated heating variable that captures changes in heating end-  
18 use saturation and efficiency, and combined with HDDs, economic, and other  
19 factors that impact the utilization of heating equipment.
  - 20 • XCool – An aggregated cooling variable that captures changes in cooling end-  
21 use saturation and efficiency, and combined with CDDs, economic, and other  
22 factors that impact the utilization of cooling equipment.
  - 23 • XOther – An aggregated base-load variable that captures changes in base-  
24 load end-use saturation and efficiency, and combined with number of days in

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1 a month, economic, and other factors that impact the utilization of base-load  
2 equipment.

3  
4 Along with seasonal factors, the resulting explanatory variable is then regressed  
5 against the Company's small C&I monthly use per customer sales. The model  
6 effectively acts as the statistical adjustment and calibrates the end-use forecast to  
7 the Company's historical sales.

8  
9 Small C&I customers are modeled using a regression with households used as the  
10 primary variable. The customer forecast is then multiplied by the use per customer  
11 from the SAE model to produce the total smaller C&I class sales forecast.

12

13 **Q22. How was the large C&I forecast developed?**

14 A22. The large C&I forecast begins by disaggregating all primary service sales into  
15 seven distinct super sector markets. Granular market segments defined by the  
16 customer's North American Industry Classification System (NAICS) code are  
17 aggregated into super-sectors defined by the Bureau of Labor Statistics. The seven  
18 super sectors are medical and education, transportation, trade, and utility (TTU),  
19 offices, other markets, automotive, other manufacturing, and steel.

20

21 Econometric models, a commonly used methodology among utility forecasters, are  
22 used to forecast sales for the Company's service territory at the super sector level.  
23 Individual regression equations are applied to all super sectors, using various  
24 explanatory variables such as corresponding super sector employment and gross  
25 state product, automotive production, weather, and cumulative EWR savings, to

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1 drive the forecast. The regression results are evaluated for reasonableness and  
2 validated through various model statistics.

3

4 Regression modeling alone does not account for incremental growth of technologies  
5 such as electric vehicles. Unlike residential and small C&I, large C&I is not modeled  
6 by end-use. Therefore, it is necessary to make post-regression adjustments to the  
7 forecast to incorporate future technology and customer specific closings or  
8 expansions. The two main post regression adjustments include EV growth and large  
9 customer projects that are informed by customer account managers.

10

11 **Q23. What type of DG resources were included in the forecast?**

12 A23. The Company, for purposes of the forecast, is defining DG as customer-sited  
13 resources that are: 1) interconnected to the distribution system on the customer's  
14 side of the utility's service meter and 2) installed to offset site load with incidental  
15 export. For forecasting purposes, the projected additional DG resources were  
16 assumed to be solar photovoltaics (PV).

17

18 **Q24. How was the DG outlook applied to the forecast?**

19 A24. The DG outlook was developed utilizing the Company's residential and non-  
20 residential interconnection history. The forecast begins with a collection of  
21 historical and projected PV economics for both residential and non-residential  
22 customers. Variables such as, but not limited to, capital costs, operating and  
23 manufacturing costs, tax credit schedules, and electricity prices were used to  
24 determine the PV economics. These economics are used as the primary explanatory

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1 variable in a regression model, with the Company's interconnection history as the  
2 dependent variable, to project the levels of DG expected in the future.

3

4 Two separate forecasts are produced for residential and non-residential. The  
5 historical and forecasted DG is applied directly as an additional end-use into the  
6 models for residential and small C&I.

7

8 **Q25. How did the Company forecast the EV registrations?**

9 A25. This EV registration forecast was derived from a combination of a linear trend  
10 forecast developed using recent registration data from S&P Global and a long-term  
11 forecast derived from forecasts published by external industry experts<sup>1</sup>.

12

13 For the linear trend forecast, EV registrations were projected using a trend of EV  
14 registrations in DTE Electric service territory from 2020 through 2023. For the  
15 industry expert forecast, several different projections for new vehicles were  
16 averaged together to obtain a forecast for the state of Michigan. The Michigan EV  
17 forecast is then converted to a DTE Electric EV forecast by applying a factor  
18 representing the percentage of new EVs registered in the DTE Electric service  
19 territory compared to the total registered in the state.

20

21 The final forecast takes both the linear trend and the industry expert projections into  
22 consideration through the application of a weighted average. In the near term, more  
23 weight is applied to the linear trend, while in the longer term more weight is applied  
24 towards the industry expert forecast.

---

<sup>1</sup> Including Bloomberg New Energy Finance, The Electric Power and Research Institute, and the U.S. Energy Information Administration

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1 **Q26. How was the EV outlook applied to the forecast?**

2 A26. For the EV forecast, the cumulative vehicle stock forecast was used as a starting  
3 point to estimate the historical and forecasted load in the Company's service  
4 territory.

5  
6 The EV stock is multiplied by a kWh/vehicle value and the assumed vehicle miles  
7 traveled unique to each vehicle segment to arrive at the load associated with the  
8 forecasted vehicle volumes. Vehicle segments modeled include battery-electric  
9 light-duty vehicles, plug-in hybrid light-duty vehicles, buses, medium-duty trucks,  
10 and heavy-duty trucks.

11  
12 For light-duty vehicles, the Company's appliance saturation survey suggests  
13 approximately 75% of EV charging is done at personal residences while the other  
14 25% is done at non-residential locations, such as workplace or public charging  
15 stations. Therefore, approximately 75% of the light-duty EV sales forecast was  
16 applied to the residential model as an additional end-use while the remaining was  
17 applied to the small and large C&I models as a starting point to the forecast. Over  
18 time, as EV adoption becomes more mainstream, the forecast assumes these  
19 dynamics will shift in favor of more non-residential charging. As public  
20 infrastructure is built out to support direct current (DC) fast charging and consumers  
21 without access to home charging begin to adopt EVs, the boundary between home  
22 and public charging is projected to overlap.

23  
24 For fleet (medium-duty and heavy-duty) vehicles, 100% of the fleet EV sales  
25 forecast was applied to the large C&I model as an incremental adjustment to the

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1 forecast.

2

3 **Q27. How was the Electric Choice sales forecast developed?**

4 A27. The Electric Choice sales forecast was based on 10% of retail sales. Historical class  
5 ratios are applied to the Electric Choice cap and new customer load is added  
6 separately.

7

8 **Part III: Electric Load Forecast**

9 **Q28. What is the Company's electric load forecast for 2025-2029?**

10 A28. The forecast of annual sales for DTE Electric's service area for the years 2025  
11 through 2029 is reflected on Exhibit A-17, Lines 1 through 12. The forecast of full-  
12 service sales, also described as "bundled", and the forecast of Electric Choice sales  
13 are also shown, on Lines 30 through 41 and Lines 17 through 28, respectively.

14

15 **Q29. What is the compound annual growth rate of DTE Electric's service area and  
16 bundled electric sales over the forecast period?**

17 A29. DTE Electric's service area sales are forecasted to increase from weather-  
18 normalized sales of 44,589 GWh in 2024 to 44,620 GWh in 2029. This represents  
19 a 0.0% average annual increase in sales. Bundled sales are forecast to decrease from  
20 weather-normalized sales of 40,290 GWh in 2024 to 40,164 GWh in 2029. This  
21 represents a -0.1% average annual decrease in sales.

22

23 **Q30. What has been the compound annual growth rate of DTE Electric's service  
24 area sales in the recent past?**

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1 A30. On a weather-normalized basis, service area sales decreased from 52,761 GWh in  
2 2008 to 44,589 GWh in 2024. This represents a -1.0% average annual decrease in  
3 sales. Bundled sales decreased from 51,282 GWh in 2008 to 40,290 GWh in 2024,  
4 representing a -1.5% average annual decrease in sales.

5

6 **Q31. What is the outlook for residential class sales?**

7 A31. Service area residential class sales are projected to increase 0.4% annually, on  
8 average, through 2029. This growth rate utilizes 2024 weather-normalized sales as  
9 the base year in its computation. This approach is used in all class growth rate  
10 calculations in my testimony. The 0.6% average annual increase is largely due to  
11 the saturation in LED lighting offsetting less growth than historical years, combined  
12 with uptakes in electric vehicle adoption.

13

14 **Q32. What is the outlook for small C&I class sales?**

15 A32. DTE Electric's service area small C&I class sales will increase 0.3% from 10,790  
16 GWh in 2024 to 10,966 GWh in 2029. Bundled small C&I Class sales will increase  
17 from 9,993 GWh in 2024 to 10,149 GWh in 2029, a 0.3% increase.

18

19 **Q33. What is the outlook for the large C&I class sales?**

20 A33. DTE Electric's service area primary class sales will decrease -0.5% from 18,279  
21 GWh in 2024 to 17,855 GWh in 2029. Bundled Primary Class sales will decrease  
22 from 14,776 GWh in 2024 to 14,215 GWh in 2029, a -0.8% decrease.

23 In the non-manufacturing sector, education and healthcare and other markets are  
24 expected to increase by 0.8% and 0.3% respectively, on average, through 2029.

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1 Transportation, trade and utilities (TTU) and office buildings are expected to  
2 decrease by -1.2% and -0.4% respectively, on average, through 2029. The decrease  
3 in sales in these markets are due to negative or flat employment projections  
4 combined with increased energy waste reduction initiatives targeting commercial  
5 and industrial customers.

6

7 In the manufacturing sector, automotive and other manufacturing are expected to  
8 decrease -0.4% and -1.9% respectively, on average through 2029. These decreases  
9 are attributable to relatively flat automotive production combined with energy  
10 waste reduction efforts. Steel is expected to decrease 0.9% annually, on average,  
11 through 2029.

12

13 **Q34. What is the outlook for Electric Choice sales?**

14 A34. The Electric Choice sales will increase 0.7%, from 4,299 GWh in 2024 to 4,456  
15 GWh in 2029. The forecast for Electric Choice sales by customer classification is  
16 shown on Exhibit A-17, lines 17 through 28.

17

18 **Q35. Does this conclude your direct testimony?**

19 A35. Yes, it does.

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter, on the Commission's own )  
motion, regarding the regulatory reviews, )  
revisions, determinations, and/or approvals )  
necessary for **DTE ELECTRIC** )  
**COMPANY** and **DTE GAS COMPANY** to )  
fully comply with Public Act 295 of 2008, as )  
amended. )

Case No. U-21681  
(Paperless e-file)

EXHIBIT  
OF  
FRANK SIRWAITIS

| Line No. | (a)<br>Description            | (b)            | (c)            | (b)            | (c)            | (d)            | (e)            | (f)            | (g)            | (h)            | (i)            | (j)            | (k)            | (l)            | (m)            | (n)            | (o)            | (p)            | (q)      | (r)    | (s)    | (t)    | (u)    |
|----------|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------|--------|--------|--------|--------|
|          |                               | 2008<br>WN (1) | 2009<br>WN (1) | 2010<br>WN (1) | 2011<br>WN (1) | 2012<br>WN (1) | 2013<br>WN (1) | 2014<br>WN (1) | 2015<br>WN (1) | 2016<br>WN (1) | 2017<br>WN (1) | 2018<br>WN (1) | 2019<br>WN (1) | 2020<br>WN (1) | 2021<br>WN (1) | 2022<br>WN (1) | 2023<br>WN (1) | 2024<br>WN (1) | Forecast |        |        |        |        |
|          |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                | 2025     | 2026   | 2027   | 2028   | 2029   |
| 1        | <b>SERVICE AREA</b>           |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |          |        |        |        |        |
| 2        | RESIDENTIAL                   | 15,896         | 15,520         | 15,415         | 15,581         | 15,252         | 15,390         | 15,369         | 15,239         | 15,398         | 15,180         | 15,115         | 15,088         | 16,210         | 16,187         | 15,664         | 15,271         | 15,322         | 15,336   | 15,358 | 15,415 | 15,535 | 15,608 |
| 3        | SMALL COMMERCIAL & INDUSTRIAL | 10,567         | 10,499         | 10,356         | 10,492         | 10,626         | 10,594         | 10,827         | 11,139         | 11,215         | 11,155         | 11,058         | 10,948         | 10,173         | 10,719         | 10,786         | 10,768         | 10,790         | 10,821   | 10,844 | 10,867 | 10,935 | 10,966 |
| 4        | TOTAL SECONDARY               | 26,463         | 26,019         | 25,772         | 26,073         | 25,878         | 25,984         | 26,196         | 26,378         | 26,613         | 26,335         | 26,173         | 26,036         | 26,383         | 26,906         | 26,451         | 26,040         | 26,111         | 26,157   | 26,202 | 26,282 | 26,470 | 26,573 |
| 5        |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |          |        |        |        |        |
| 6        | LARGE COMMERCIAL & INDUSTRIAL | 23,080         | 19,515         | 21,274         | 21,396         | 21,228         | 21,618         | 21,370         | 21,023         | 21,028         | 20,942         | 20,944         | 20,408         | 17,808         | 18,389         | 18,426         | 18,399         | 18,279         | 18,194   | 17,939 | 17,958 | 17,901 | 17,855 |
| 7        |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |          |        |        |        |        |
| 8        | STREET LIGHTING               | 303            | 302            | 296            | 287            | 282            | 277            | 271            | 291            | 264            | 258            | 224            | 226            | 220            | 216            | 210            | 204            | 199            | 193      | 192    | 191    | 190    | 192    |
| 9        | PUMPING                       | 90             | 77             | 44             | 48             | 4              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0        | 0      | 0      | 0      | 0      |
| 10       | WHOLESALE                     | 2,825          | 2,850          | 2,870          | 2,800          | 673            | 664            | 246            | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0        | 0      | 0      | 0      | 0      |
| 11       |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |          |        |        |        |        |
| 12       | TOTAL                         | 52,761         | 48,763         | 50,256         | 50,604         | 48,065         | 48,543         | 48,082         | 47,692         | 47,905         | 47,535         | 47,341         | 46,671         | 44,412         | 45,511         | 45,086         | 44,642         | 44,589         | 44,544   | 44,333 | 44,431 | 44,561 | 44,620 |
| 13       |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |          |        |        |        |        |
| 14       | RETAIL SALES                  | 49,936         | 45,913         | 47,386         | 47,804         | 47,392         | 47,879         | 47,836         | 47,692         | 47,905         | 47,535         | 47,341         | 46,671         | 44,412         | 45,511         | 45,086         | 44,642         | 44,589         | 44,544   | 44,333 | 44,431 | 44,561 | 44,620 |
| 15       | (SERVICE AREA LESS WHOLESALE) |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |          |        |        |        |        |
| 16       |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |          |        |        |        |        |
| 17       | <b>ELECTRIC CHOICE</b>        |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |          |        |        |        |        |
| 18       | RESIDENTIAL                   | 0              | 0              | 1              | 1              | 1              | 1              | 1              | 1              | 0              | 0              | 0              | 1              | 1              | 1              | 0              | 0              | 0              | 0        | 0      | 0      | 0      | 0      |
| 19       | SMALL COMMERCIAL & INDUSTRIAL | 647            | 844            | 1,176          | 1,186          | 1,103          | 1,054          | 1,035          | 1,000          | 967            | 914            | 913            | 866            | 762            | 825            | 829            | 806            | 796            | 819      | 816    | 812    | 814    | 816    |
| 20       | TOTAL SECONDARY               | 648            | 844            | 1,177          | 1,187          | 1,103          | 1,054          | 1,035          | 1,001          | 968            | 914            | 914            | 866            | 762            | 826            | 829            | 806            | 797            | 819      | 816    | 812    | 814    | 816    |
| 21       |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |          |        |        |        |        |
| 22       | LARGE COMMERCIAL & INDUSTRIAL | 830            | 680            | 3,813          | 4,254          | 4,073          | 4,152          | 4,020          | 3,895          | 3,943          | 3,911          | 3,788          | 3,690          | 3,005          | 3,512          | 3,642          | 3,590          | 3,502          | 3,653    | 3,638  | 3,621  | 3,629  | 3,640  |
| 23       |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |          |        |        |        |        |
| 24       | STREET LIGHTING               | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0        | 0      | 0      | 0      | 0      |
| 25       | PUMPING                       | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0        | 0      | 0      | 0      | 0      |
| 26       | WHOLESALE                     | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0        | 0      | 0      | 0      | 0      |
| 27       |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |          |        |        |        |        |
| 28       | TOTAL                         | 1,478          | 1,524          | 4,990          | 5,441          | 5,176          | 5,207          | 5,055          | 4,896          | 4,911          | 4,825          | 4,702          | 4,556          | 3,767          | 4,338          | 4,471          | 4,396          | 4,299          | 4,473    | 4,454  | 4,433  | 4,443  | 4,456  |
| 29       |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |          |        |        |        |        |
| 30       | <b>BUNDLED</b>                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |          |        |        |        |        |
| 31       | RESIDENTIAL                   | 15,896         | 15,520         | 15,414         | 15,580         | 15,251         | 15,390         | 15,369         | 15,239         | 15,398         | 15,180         | 15,115         | 15,088         | 16,210         | 16,186         | 15,664         | 15,271         | 15,321         | 15,336   | 15,358 | 15,415 | 15,535 | 15,608 |
| 32       | SMALL COMMERCIAL & INDUSTRIAL | 9,919          | 9,655          | 9,180          | 9,305          | 9,524          | 9,540          | 9,792          | 10,139         | 10,247         | 10,241         | 10,145         | 10,082         | 9,411          | 9,894          | 9,957          | 9,962          | 9,993          | 10,002   | 10,028 | 10,055 | 10,121 | 10,149 |
| 33       | TOTAL SECONDARY               | 25,815         | 25,175         | 24,594         | 24,885         | 24,775         | 24,930         | 25,161         | 25,378         | 25,645         | 25,421         | 25,260         | 25,170         | 25,620         | 26,081         | 25,622         | 25,233         | 25,315         | 25,338   | 25,386 | 25,470 | 25,656 | 25,757 |
| 34       |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |          |        |        |        |        |
| 35       | LARGE COMMERCIAL & INDUSTRIAL | 22,250         | 18,836         | 17,461         | 17,141         | 17,155         | 17,465         | 17,350         | 17,128         | 17,085         | 17,031         | 17,156         | 16,719         | 14,804         | 14,877         | 14,784         | 14,809         | 14,776         | 14,541   | 14,301 | 14,337 | 14,272 | 14,215 |
| 36       |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |          |        |        |        |        |
| 37       | STREET LIGHTING               | 303            | 302            | 296            | 287            | 282            | 277            | 271            | 291            | 264            | 258            | 224            | 226            | 220            | 216            | 210            | 204            | 199            | 193      | 192    | 191    | 190    | 192    |
| 38       | PUMPING                       | 90             | 77             | 44             | 48             | 4              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0        | 0      | 0      | 0      | 0      |
| 39       | WHOLESALE                     | 2,825          | 2,850          | 2,870          | 2,800          | 673            | 664            | 246            | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0        | 0      | 0      | 0      | 0      |
| 40       |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |          |        |        |        |        |
| 41       | TOTAL                         | 51,282         | 47,239         | 45,266         | 45,163         | 42,888         | 43,337         | 43,027         | 42,796         | 42,994         | 42,710         | 42,639         | 42,115         | 40,644         | 41,173         | 40,615         | 40,245         | 40,290         | 40,072   | 39,879 | 39,997 | 40,118 | 40,164 |

Notes:  
(1) Weather-Normalized (2009-2023 Normal Weather)

| Line No. | (a)<br>Description            | (b)            | (c)            | (b)            | (c)            | (d)            | (e)            | (f)            | (g)            | (h)            | (i)            | (j)            | (k)            | (l)            | (m)            | (n)            | (o)            | (p)            | (q)            | (r)            | (s)            | (t)            | (u)            |
|----------|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|          |                               | Actual         |                |                |                |                |                |                |                |                |                | Forecast       |                |                |                |                |                |                |                |                |                |                |                |
|          |                               | 2008           | 2009           | 2010           | 2011           | 2012           | 2013           | 2014           | 2015           | 2016           | 2017           | 2018           | 2019           | 2020           | 2021           | 2022           | 2023           | 2024           | 2025           | 2026           | 2027           | 2028           | 2029           |
| 1        | <b>SERVICE AREA</b>           |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| 2        | RESIDENTIAL                   | 1,950,836      | 1,932,360      | 1,922,824      | 1,922,827      | 1,925,966      | 1,935,140      | 1,943,927      | 1,953,780      | 1,966,675      | 1,980,151      | 1,991,879      | 2,003,542      | 2,019,744      | 2,036,329      | 2,047,607      | 2,055,871      | 2,067,781      | 2,079,360      | 2,088,508      | 2,098,424      | 2,106,821      | 2,113,298      |
| 3        | SMALL COMMERCIAL & INDUSTRIAL | 197,156        | 198,031        | 197,811        | 198,257        | 199,583        | 200,245        | 201,018        | 202,093        | 203,487        | 204,556        | 204,955        | 205,744        | 206,954        | 208,957        | 210,158        | 210,829        | 211,410        | 212,614        | 213,918        | 215,049        | 215,914        | 216,537        |
| 4        | TOTAL SECONDARY               | 2,147,992      | 2,130,391      | 2,120,635      | 2,121,084      | 2,125,549      | 2,135,385      | 2,144,945      | 2,155,872      | 2,170,162      | 2,184,707      | 2,196,834      | 2,209,285      | 2,226,698      | 2,245,287      | 2,257,764      | 2,266,701      | 2,279,191      | 2,291,974      | 2,302,427      | 2,313,472      | 2,322,736      | 2,329,834      |
| 5        |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| 8        | LAGE COMMERCIAL & INDUSTRIAL  | 3,511          | 3,637          | 3,522          | 3,477          | 3,424          | 3,357          | 3,306          | 3,203          | 3,198          | 3,164          | 3,162          | 3,152          | 3,134          | 3,117          | 3,089          | 3,079          | 3,065          | 3,060          | 3,060          | 3,060          | 3,060          | 3,060          |
| 9        |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| 10       | STREET LIGHTING               | 871            | 875            | 892            | 886            | 874            | 895            | 898            | 895            | 890            | 1,027          | 1,068          | 1,057          | 1,058          | 1,056          | 1,049          | 1,044          | 1,044          | 1,046          | 1,046          | 1,046          | 1,046          | 1,046          |
| 11       | PUMPING                       | 1,105          | 1,052          | 979            | 945            | 72             | 1              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 12       | WHOLESALE                     | 5              | 5              | 5              | 3              | 2              | 2              | 1              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 13       |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| 14       | TOTAL                         | 2,153,484      | 2,135,960      | 2,126,032      | 2,126,395      | 2,129,921      | 2,139,639      | 2,149,150      | 2,159,970      | 2,174,250      | 2,188,898      | 2,201,064      | 2,213,495      | 2,230,890      | 2,249,460      | 2,261,903      | 2,270,824      | 2,283,300      | 2,296,080      | 2,306,532      | 2,317,578      | 2,326,841      | 2,333,940      |
| 15       |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| 16       | RETAIL SALES                  | 2,153,479      | 2,135,955      | 2,126,028      | 2,126,392      | 2,129,919      | 2,139,637      | 2,149,149      | 2,159,970      | 2,174,250      | 2,188,898      | 2,201,064      | 2,213,495      | 2,230,890      | 2,249,460      | 2,261,903      | 2,270,824      | 2,283,300      | 2,296,080      | 2,306,532      | 2,317,578      | 2,326,841      | 2,333,940      |
| 17       | (SERVICE AREA LESS WHOLESALE) |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| 18       |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| 19       | <b>ELECTRIC CHOICE</b>        |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| 20       | RESIDENTIAL                   | 31             | 22             | 71             | 67             | 58             | 53             | 47             | 44             | 40             | 40             | 38             | 32             | 32             | 24             | 16             | 26             | 21             | 0              | 0              | 0              | 0              | 0              |
| 21       | SMALL COMMERCIAL & INDUSTRIAL | 2,784          | 2,205          | 5,478          | 5,299          | 4,863          | 4,678          | 4,516          | 4,323          | 4,070          | 3,972          | 3,840          | 3,730          | 3,658          | 3,755          | 3,729          | 3,587          | 3,492          | 3,439          | 3,368          | 3,297          | 3,225          | 3,154          |
| 22       | TOTAL SECONDARY               | 2,815          | 2,227          | 5,549          | 5,367          | 4,921          | 4,731          | 4,563          | 4,367          | 4,110          | 4,012          | 3,879          | 3,763          | 3,690          | 3,778          | 3,745          | 3,613          | 3,513          | 3,439          | 3,368          | 3,297          | 3,225          | 3,154          |
| 23       |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| 26       | LAGE COMMERCIAL & INDUSTRIAL  | 168            | 240            | 731            | 769            | 755            | 745            | 734            | 730            | 723            | 717            | 712            | 711            | 700            | 736            | 743            | 727            | 726            | 724            | 724            | 724            | 724            | 724            |
| 27       |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| 28       | STREET LIGHTING               | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 29       | PUMPING                       | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 30       | WHOLESALE                     | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 31       |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| 32       | TOTAL                         | 2,983          | 2,467          | 6,280          | 6,136          | 5,676          | 5,476          | 5,296          | 5,097          | 4,833          | 4,729          | 4,591          | 4,474          | 4,390          | 4,514          | 4,487          | 4,340          | 4,239          | 4,163          | 4,092          | 4,021          | 3,949          | 3,878          |
| 33       |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| 34       | <b>BUNDLED</b>                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| 35       | RESIDENTIAL                   | 1,950,805      | 1,932,338      | 1,922,753      | 1,922,760      | 1,925,908      | 1,935,087      | 1,943,880      | 1,953,736      | 1,966,635      | 1,980,111      | 1,991,840      | 2,003,509      | 2,019,712      | 2,036,306      | 2,047,591      | 2,055,845      | 2,067,759      | 2,079,360      | 2,088,508      | 2,098,424      | 2,106,821      | 2,113,298      |
| 36       | SMALL COMMERCIAL & INDUSTRIAL | <u>194,372</u> | <u>195,826</u> | <u>192,333</u> | <u>192,958</u> | <u>194,720</u> | <u>195,566</u> | <u>196,502</u> | <u>197,770</u> | <u>199,417</u> | <u>200,584</u> | <u>201,115</u> | <u>202,014</u> | <u>203,297</u> | <u>205,203</u> | <u>206,429</u> | <u>207,242</u> | <u>207,919</u> | <u>209,175</u> | <u>210,550</u> | <u>211,752</u> | <u>212,689</u> | <u>213,383</u> |
| 37       | TOTAL SECONDARY               | 2,145,177      | 2,128,164      | 2,115,086      | 2,115,717      | 2,120,628      | 2,130,653      | 2,140,382      | 2,151,506      | 2,166,052      | 2,180,695      | 2,192,956      | 2,205,523      | 2,223,008      | 2,241,508      | 2,254,020      | 2,263,088      | 2,275,678      | 2,288,535      | 2,299,058      | 2,310,176      | 2,319,511      | 2,326,681      |
| 38       |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| 41       | LAGE COMMERCIAL & INDUSTRIAL  | 3,342          | 3,397          | 2,792          | 2,708          | 2,669          | 2,612          | 2,572          | 2,473          | 2,475          | 2,448          | 2,450          | 2,441          | 2,434          | 2,381          | 2,346          | 2,352          | 2,339          | 2,336          | 2,336          | 2,336          | 2,336          | 2,336          |
| 42       |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| 43       | STREET LIGHTING               | 871            | 875            | 892            | 886            | 874            | 895            | 898            | 895            | 890            | 1,027          | 1,068          | 1,057          | 1,058          | 1,056          | 1,049          | 1,044          | 1,044          | 1,046          | 1,046          | 1,046          | 1,046          | 1,046          |
| 44       | PUMPING                       | 1,105          | 1,052          | 979            | 945            | 72             | 1              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 45       | WHOLESALE                     | 5              | 5              | 5              | 3              | 2              | 2              | 1              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              | 0              |
| 46       |                               |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| 47       | TOTAL                         | 2,150,501      | 2,133,493      | 2,119,753      | 2,120,260      | 2,124,245      | 2,134,163      | 2,143,853      | 2,154,873      | 2,169,417      | 2,184,169      | 2,196,473      | 2,209,021      | 2,226,500      | 2,244,946      | 2,257,415      | 2,266,484      | 2,279,061      | 2,291,917      | 2,302,440      | 2,313,557      | 2,322,892      | 2,330,062      |

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter, on the Commission's own )  
motion, regarding the regulatory reviews, )  
revisions, determinations, and/or approvals )  
necessary for **DTE ELECTRIC** )  
**COMPANY** and **DTE GAS COMPANY** to )  
fully comply with Public Act 295 of 2008, as )  
amended )

Case No. U-21681  
(Paperless e-file)

QUALIFICATIONS

AND

DIRECT TESTIMONY

OF

GEORGE H. CHAPEL

**DTE ELECTRIC COMPANY AND DTE GAS COMPANY**  
**QUALIFICATIONS AND DIRECT TESTIMONY OF GEORGE H. CHAPEL**

Line  
No.

1 **Q1. What is your name, business address and by whom are you employed?**

2 A1. My name is George H. Chapel. My business address is One Energy Plaza, Detroit,  
3 Michigan 48226. I am employed by DTE Gas Company (DTE Gas or Company).

4

5 **Q2. On whose behalf are you testifying?**

6 A2. I am testifying on behalf of DTE Gas Company (DTE Gas or the Company).

7

8 **Q3. What is your educational background?**

9 A3. In December 1985, I earned a Bachelor of Science degree from Central Michigan  
10 University with a major in mathematics. In addition, I have attended numerous  
11 industry conferences focusing on natural gas demand forecasting, sharing  
12 knowledge and expertise with a nationwide range of industry peers.

13

14 **Q4. What is your business experience?**

15 A4. In April 1988, I was hired by Michigan Gas Company (MiGas) as a Rates and Gas  
16 Supply Analyst where I performed various duties of increasing responsibility  
17 arising out of the regulation of MiGas as a public utility. In 1993, the assets of  
18 MiGas were rolled in with those of affiliate Southeastern Michigan Gas Company  
19 and Battle Creek Gas Company. These companies were combined to form what is  
20 known today as SEMCO Energy Gas Company (SEMCO). My duties with SEMCO  
21 included demand forecasting, supply planning, supply purchasing, nominating, and  
22 pipeline capacity management.

23

24 In May 1998, I was hired by the Company as a Gas Supply Analyst. My duties in  
25 that capacity included supply purchasing and market analysis. In October 2000, I

Line  
No.

1 was promoted to Manager, Gas Supply. I assumed my current position on January  
2 1, 2003.

3

4 **Q5. What is your current position?**

5 A5. My current position is Manager for Market Forecasting.

6

7 **Q6. What are your responsibilities with DTE Gas as Manager for Market**  
8 **Forecasting?**

9 A6. I am responsible for projecting the Company's rate schedule customer  
10 growth/decline, natural gas supply demand, as well as review and analysis of the  
11 natural gas market.

12

13 **Q7. Have you previously provided testimony before the Michigan Public Service**  
14 **Commission (MPSC or Commission)?**

15 A7. Yes. I sponsored testimony on behalf of SEMCO and its subsidiaries in a variety  
16 of cases before the Commission. These cases included two general rate cases, two  
17 Michigan Residential Conservation Surcharge cases, and several Gas Cost  
18 Reconciliation ("GCR") Plan and Reconciliation proceedings. I have also provided  
19 testimony in numerous regulatory proceedings for DTE Gas including GCR Plan  
20 and Reconciliation proceedings, EWR cases, as well as each of the Company's  
21 general rate cases over the past twenty years. My experience as a GCR and rate  
22 case witness began with SEMCO in 1990 and has continued with little interruption  
23 to the present day for DTE Gas.

Line  
No.

1 **Purpose of Testimony**

2 **Q8. What is the purpose of your testimony?**

3 A8. The purpose of my testimony is to describe DTE Gas’s natural gas sales market  
4 forecast for the Energy Waste Reduction (EWR) plan period of 2026-2029. This  
5 testimony will lay out DTE Gas’s demand forecast for 2026-2029 and show how  
6 that demand is changing over time.

7  
8 **Q9. Are you sponsoring any exhibits in this proceeding?**

9 A9. Yes. I am supporting the following exhibits:

| 10 | <u>Exhibit</u> | <u>Description</u>   |
|----|----------------|--|
| 11 | A-19           | Market Outlook – 2025-2029 Weather Normalized Sales by<br>Rate Class without EWR Program |
| 12 |                |  |
| 13 | A-20           | Market Outlook – 2025-2029 Weather Normalized Sales by<br>Rate Class with EWR Program    |
| 14 |                |  |
| 15 | A-21           | Market Outlook –2025-2029 Projected Average Number<br>of Customers                       |
| 16 |                |  |
| 17 | A-22           | Rate Schedule Historical Volume Normalization  |
| 18 | A-23           | End User Transportation Historical Volume Normalization                                  |

19

20 **Q10. Were these exhibits prepared by you or under your direction?**

21 A10. Yes, they were.

22

23 **MARKET OUTLOOK**

24 **Q11. What is DTE Gas’s natural gas sales forecast for the 2025 through 2029**  
25 **planning period?**

Line  
No.

1 A11. For calendar year 2025, I am forecasting pre-EWR program rate schedule sales  
2 volumes of 159,427 MMcf for DTE Gas's rate schedule sales customers (Exhibit  
3 A-19, page 1 of 1, column (d), line 11). For calendar year 2026, pre-EWR program  
4 rate schedule sales volumes are projected to be 160,153 MMcf (Exhibit A-19, page  
5 1 of 1, column (e), line 11). For calendar year 2027, pre-EWR program rate  
6 schedule sales volumes are projected to be 162,059 MMcf (Exhibit A-19, page 1 of  
7 1, column (f), line 11). For calendar year 2028, pre-EWR program rate schedule  
8 sales volumes are projected to be 162,497 MMcf (Exhibit A-19, page 1 of 1, column  
9 (g), line 11). Finally, for calendar year 2029, pre-EWR program rate schedule sales  
10 volumes are projected to be 162,380 MMcf (Exhibit A-19, page 1 of 1, column (h),  
11 line 11). Rate schedule sales customers include Gas Cost Recovery (GCR), Gas  
12 Customer Choice (GCC), and aggregate customers.

13

14 Pre-EWR forecasted volumes for DTE Gas's End-Use Transportation (EUT)  
15 customers subject to EWR are 141,847 MMcf for 2025 (Exhibit A-19, page 1 of 1,  
16 column (d), line 17), 148,781 MMcf for 2026 (Exhibit A-19, page 1 of 1, column  
17 (e), line 17), 148,781 MMcf for 2027 (Exhibit A-19, page 1 of 1, column (f), 148,781  
18 MMcf for 2028 (Exhibit A-19, page 1 of 1, column (g), and 148,781 MMcf for 2029  
19 (Exhibit A-19, page 1 of 1, column (h), line 17).

20

21 **Q12. What are DTE Gas's current assumptions concerning expected pre-EWR**  
22 **consumption from rate schedule customers?**

23 A12. In this plan, DTE Gas has assumed that normal pre-EWR GCR/GCC customer  
24 consumption behavior will closely resemble that shown in the most recently  
25 completed 24-months ended July 2024.

Line  
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1 **Q13. What are DTE Gas's projected targeted savings from the EWR program from**  
2 **2025 through 2029?**

3 A13. On Exhibit A-19, page 1 of 1, line 23, I have projected cumulative demand  
4 reductions due to the EWR program as follows: 3,454 MMcf in 2025, 5,403 MMcf  
5 in 2026, 7,394 MMcf in 2027, 9,331 MMcf in 2028, and 10,869 MMcf in 2029.  
6 Note that these savings are cumulative through 2029.

7

8 **Q14. What are DTE Gas's forecasted sales, including the targeted savings from the**  
9 **EWR program, from 2025 through 2029?**

10 A14. Please see Exhibit A-20, page 1 of 1. For the rate schedule classes, the targeted  
11 savings from Exhibit A-19, page 1 of 1, line 21 are allocated among the rate  
12 schedule rate classes. Forecasted sales including the EWR targeted savings are  
13 identified by year and by rate class on lines 1 through 11.

14

15 For the EUT classes, the targeted savings from Exhibit A-19, page 1 of 1, line 22  
16 are allocated amongst the Small Transport (ST) and Large Transport (LT) classes of  
17 EUT customers. Forecasted sales including the EWR targeted savings are identified  
18 by year and by rate class on Exhibit A-20 lines 12 through 17.

19

20 **Q15. How are the EUT targeted savings calculated?**

21 A15. EUT targeted savings are calculated as a 1.05% volume reduction against ST and  
22 LT volumes. Larger EUT rate classes (XLT and XXLT) are excluded as they would  
23 significantly increase the annual energy savings target and provide only a small  
24 number of customers unlikely to participate in the program since their volume is  
25 primarily used for electric generation.

Line  
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1 **Q16. What is your projection for average number of natural gas customers from**  
2 **2025 through 2029?**

3 A16. As reflected on Exhibit A-21, column (c), line 18, I project approximately 1.345  
4 million total natural gas rate schedule customers (mean average) during 2025. This  
5 number is expected to increase to approximately 1.354 million customers by 2026,  
6 as shown in column (d), line 18, to approximately 1.364 million customers by 2027,  
7 to approximately 1.371 million customers by 2028, and finally, to 1.380 million  
8 customers by 2029.

9

10 **RESIDENTIAL SINGLE-FAMILY RATE SCHEDULE SALES MARKET**

11 **Q17. How did you develop the forecast for the single-family residential rate**  
12 **schedule sales market, including both GCR and GCC customers?**

13 A17. Single-family residential rate schedule customers are those customers identified as  
14 Rate A. There are two key elements used in projecting volumes in the residential  
15 rate schedule sales market. The first element is the forecast of the number of  
16 customers, by month, in the seven different geographical market areas that DTE  
17 Gas serves. DTE Gas's seven different service regions are as follows: Detroit/Ann  
18 Arbor, Grand Rapids, Muskegon, Traverse City, Alpena, Sault Ste. Marie, and Iron  
19 Mountain.

20

21 The second element is an analysis of the usage per customer per heating degree day  
22 (HDD) at varying degrees of intensity. In this case, the Company is proposing to  
23 use a three-step linear model that was developed for all rate classes to forecast usage  
24 per HDD.

25

Line  
No.

1 The combination of customer count and three-step linear heat load factors for each  
2 respective market area yields the most accurate residential rate schedule sales  
3 market forecast.

4 **Q18. What is a Heating Degree Day?**

5 A18. A Heating Degree Day is a measure of how temperature relates to energy usage for  
6 heating purposes; HDDs give an indication of a customer's likelihood of using their  
7 furnace to heat their home or facility. Basically, the greater the number of HDDs,  
8 the greater the heating demand. Mathematically, HDDs are defined as the greater  
9 of A) 65 minus the average of the daily high and low temperature (in degrees  
10 Fahrenheit), or B) zero. HDDs never have a negative value.

11

12 For instance, if the daily high temperature is 30 degrees and the daily low  
13 temperature is 20 degrees, then the daily average temperature is 25 degrees. The  
14 HDDs for that day then, are:  $65 - 25 = 40$  HDDs. If, on the other hand, the daily  
15 high temperature is 90 degrees and the daily low temperature is 70 degrees, then the  
16 daily average temperature is 80 degrees. The HDDs for that day then, are: 0, since  
17  $65 - 80$  results in a negative value.

18

19 **Q19. How did you develop the forecast of the number of residential customers,**  
20 **including both GCR and GCC?**

21 A19. A forecast for the number of customers by class, by month, is prepared using a  
22 recent three-year historical average growth/loss rate calculated for each of DTE  
23 Gas's seven demand regions. For this forecast, the historical three-year period was  
24 36 months ended July 2024. Once this regional forecast is developed, incremental

Line  
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1 customer growth and losses are projected. Forecasted customer change is  
2 developed through a combination of projected attachments and the 12-month  
3 historical look-back of net non-attachment customer change to the growth/loss rate.  
4 Projected attachments are provided by the Company's Marketing Department and  
5 contains an assessment of how many new customers the Company expects to attach  
6 through marketing efforts in expanding areas.

7 **MULTI-FAMILY RESIDENTIAL, COMMERCIAL, & INDUSTRIAL MARKETS**

8 **Q20. How did you develop the forecast for multi-family residential, commercial,**  
9 **and industrial markets, including GCR, GCC, and Aggregate customers?**

10 A20. The methodology used for forecasting volumes in the multi-family residential (Rate  
11 2A), commercial (GS-1, GS-2), and industrial (GS-1, GS-2) rate schedule markets  
12 is essentially the same as that used for the single-family residential market (Rate  
13 A). The process involves forecasting the number of customers for each year and  
14 calculating the average base load and usage per HDD per customer. As reflected  
15 on Exhibit A-20, page 1 of 1, line 10, with the inclusion of EWR targeted savings,  
16 I am projecting a change in multi-family residential, commercial, and industrial  
17 volumes from 45,574 MMcf in 2025 (column c) to 43,771 MMcf by 2029 (column  
18 g).

19

20 **WEATHER NORMAL PERIOD**

21 **Q21. What is weather normalization and how is it used?**

22 A21. Weather normalization is a technique that estimates what usage would be from a  
23 prior period had normal weather occurred. It adjusts actual volumes from past  
24 periods to eliminate the impact of non-normal weather on the data during that time.

Line  
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1 Weather normalized data is then used as a component to forecast future volumes.  
2 To calculate the forecasted volumes in this EWR Plan, the Company used a 15-year  
3 historical weather-normalized period as a factor.

4

5 **Q22. What 15-year period is DTE Gas utilizing in this plan?**

6 A22. DTE Gas calculates 15-year weather based upon weather from what the Company  
7 experienced during the 15-year period, 2010 to 2024.

8

9 **Q23. Why is DTE Gas proposing to utilize 15-year normal to project forecasted**  
10 **demand requirements in this case?**

11 A23. Consistent with the Commission Order in Case No. U-15985, DTE Gas utilizes the  
12 most recent calendar 15-year weather for its normal weather period in all regulatory  
13 filings.

14

15 **Q24. Is the weather normalization period important for forecasting?**

16 A24. Yes. Weather is one of the primary determinants of natural gas demand. If the  
17 Company can project Heating Degree Days more accurately, then it can more  
18 accurately project demand on its system. Accurate projections lead to optimal  
19 planning, which in turn reduces the gas costs DTE Gas will need to recover from  
20 its customers.

21

22 **HISTORICAL YEAR WEATHER NORMALIZATION**

23 **Q25. How are historical years weather normalized?**

24 A25. Please see Exhibits A-22 and A-23. These exhibits display the weather  
25 normalization for rate schedule customers for calendar year 2024 (Exhibit A-22)

Line  
No.

1 and for normalized deliveries to EUT customers (Exhibit A-23). Rate schedule  
2 normalization is done on Exhibit A-22 collectively for 1) single family residential  
3 customers (residential) and for 2) multi-family, commercial, and industrial  
4 customers (non-residential).

5  
6 The rate schedule normalization technique is the same for both residential and non-  
7 residential. The monthly volumes are normalized by adjusting actual sales given  
8 the actual HDDs experienced juxtaposed with normal HDDs. The calendar year  
9 2024 was warmer-than-normal with respect to HDDs. Normalized sales for 2024,  
10 then, are greater than 2024 actual sales.

11

12 **Q26. What was the 2024 weather normalized consumption for DTE Gas's EUT**  
13 **customers?**

14 A26. The normalized consumption for DTE Gas's EUT customers is summarized on  
15 Exhibit A-23, page 1 of 1, column (c). The 2024 weather normalized EUT volumes  
16 was actual billed consumption, adjusted for estimated normal weather.

17

18 **Q27. Does this complete your direct testimony?**

19 A27. Yes, it does.

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter, on the Commission's own )  
motion, regarding the regulatory reviews, )  
revisions, determinations, and/or approvals )  
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fully comply with Public Act 295 of 2008, as )  
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Case No. U-21681  
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EXHIBITS  
OF  
GEORGE H. CHAPEL

**Michigan Public Service Commission**  
**DTE Gas Company**  
**2026 - 2029 Energy Waste Reduction Plan**  
**Market Outlook 2025-2029 – Weather Normalized Sales by Rate Class without EWR I**  
**Volumes in MMcf**

Case No.: U-21681  
Exhibit No.: A-19  
Witness: G.H. Chapel  
Page No.: 1 of 1

| Line   | (a)<br>Description                                      | (b)<br>Source          | (c)<br>2024 (WN) | (d)<br>2025    | (e)<br>2026    | (f)<br>2027    | (g)<br>2028    | (h)<br>2029    |
|--|---|------------------------|------------------|----------------|----------------|----------------|----------------|----------------|
| <b>Pre-EWR Forecast - Rate Schedule</b>            |   |                        |                  |                |                |                |                |                |
| 1  | Residential - Rate A                                    |                        | 1,059            | 1,054          | 1,045          | 1,035          | 1,031          | 1,016          |
| 2  | Residential - Rate A Heat                               |                        | 109,180          | 111,873        | 112,615        | 113,376        | 114,731        | 114,873        |
| 3  | <b>Single Family Residential Total</b>                  | Line 1 + Line 2        | <b>110,239</b>   | <b>112,928</b> | <b>113,659</b> | <b>114,411</b> | <b>115,762</b> | <b>115,888</b> |
| 4  | Rate 2A - Meter I (Multi-Family)                        |                        | 292              | 298            | 298            | 298            | 300            | 299            |
| 5  | Rate 2A - Meter II (Multi-Family)                       |                        | 3,647            | 3,675          | 3,611          | 4,706          | 3,501          | 3,419          |
| 6  | Rate GS-1   |                        | 2,693            | 2,711          | 2,695          | 2,679          | 2,678          | 2,648          |
| 7  | Rate GS-1 Heat  |                        | 36,131           | 37,143         | 37,163         | 37,182         | 37,401         | 37,226         |
| 8  | Rate GS-2   |                        | 1,086            | 1,056          | 1,114          | 1,171          | 1,235          | 1,286          |
| 9  | Rate S  |                        | 1,606            | 1,616          | 1,612          | 1,611          | 1,620          | 1,613          |
| 10   | <b>Multi-Fam Res/Com/Ind Total</b>                      | Sum of L5 through L9   | <b>45,455</b>    | <b>46,499</b>  | <b>46,493</b>  | <b>47,648</b>  | <b>46,735</b>  | <b>46,492</b>  |
| 11   | <b>Rate Schedule Total</b>                              | Line 3 + Line 10       | <b>155,694</b>   | <b>159,427</b> | <b>160,153</b> | <b>162,059</b> | <b>162,497</b> | <b>162,380</b> |
| <b>Pre-EWR Forecast - End User Transport (EUT)</b> |   |                        |                  |                |                |                |                |                |
| 12   | ST  |                        | 16,676           | 17,361         | 17,228         | 17,252         | 17,276         | 17,300         |
| 13   | LT  |                        | 19,619           | 20,103         | 19,595         | 19,571         | 19,547         | 19,524         |
| 14   | XLT   |                        | 42,083           | 37,458         | 36,615         | 36,615         | 36,615         | 36,615         |
| 15   | XXLT  |                        | 65,152           | 55,953         | 64,369         | 66,557         | 75,342         | 75,342         |
| 16   | SC  |                        | 9,708            | 10,972         | 10,973         | 8,785          | 0              | 0              |
| 17   | <b>EUT Demand Total</b>                                 | Sum of L12 through L16 | <b>153,237</b>   | <b>141,847</b> | <b>148,781</b> | <b>148,781</b> | <b>148,781</b> | <b>148,781</b> |
| 18   |   |                        |                  |                |                |                |                |                |
| 19   | EUT Volume Subject to EWR                               | Line 12 + Line 13      |                  | <b>37,464</b>  | <b>36,824</b>  | <b>36,824</b>  | <b>36,824</b>  | <b>36,824</b>  |
| 20   | <b>Total volumes in MMcf prior to EWR imp</b>           | Line 11 + Line 19      |                  | <b>196,891</b> | <b>196,976</b> | <b>198,883</b> | <b>199,321</b> | <b>199,204</b> |
| <b>Projected Savings</b>                           |   |                        |                  |                |                |                |                |                |
| 21   | Rate Schedule Volume Savings Projection                 |                        | 1,573            | 3,173          | 4,757          | 6,386          | 7,964          | 9,502          |
| 22   | EUT Volume Savings Projection                           |                        | <u>367</u>       | <u>281</u>     | <u>647</u>     | <u>1,008</u>   | <u>1,367</u>   | <u>1,367</u>   |
| 23   | <b>Volume Savings Projection Total</b>                  | Line 21 + Line 22      | 1,939            | 3,454          | 5,403          | 7,394          | 9,331          | 10,869         |
| 24   | Volumes for calculating the Legislative Savings Targets |                        |                  | <b>193,437</b> | <b>191,573</b> | <b>191,489</b> | <b>189,991</b> | <b>188,335</b> |
| <b>Notes:</b>                                      |   |                        |                  |                |                |                |                |                |
|  | (1) Weather Normalized                                  |                        |                  | 193,437        | 191,573        | 198,883        | 199,321        | 199,204        |

**Michigan Public Service Commission  
DTE Gas Company  
2026 - 2029 Energy Waste Reduction Plan  
Market Outlook 2025-2029 – Weather Normalized Sales by Rate Class with EWR Pro  
Volumes in MMcf**

Case No.: U-21681  
Exhibit No.: A-20  
Witness: G.H. Chapel  
Page No.: 1 of 1

| Line No.  | (a)<br>Description                                | (b)<br>Source                                   | (c)<br>2025    | (d)<br>2026    | (e)<br>2027    | (f)<br>2028    | (g)<br>2029    |
|---|---|---|----------------|----------------|----------------|----------------|----------------|
| <b>Forecast w/ EWR - Rate Schedule</b>            |   |   |                |                |                |                |                |
| 1   | Residential - Rate A                              |   | 1,033          | 1,014          | 994            | 980            | 956            |
| 2   | Residential - Rate A Heat                         |   | 109,647        | 109,270        | 108,908        | 109,108        | 108,150        |
| 3   | <b>Single Family Residential - Total</b>          | Line 1 + Line 2                                 | <b>110,680</b> | <b>110,283</b> | <b>109,902</b> | <b>110,089</b> | <b>109,107</b> |
| 4   | Rate 2A - Meter I (Multi-Family)                  |   | 292            | 289            | 287            | 286            | 282            |
| 5   | Rate 2A - Meter II (Multi-Family)                 |   | 3,602          | 3,504          | 4,521          | 3,329          | 3,219          |
| 6   | Rate GS-1   |   | 2,657          | 2,615          | 2,574          | 2,547          | 2,493          |
| 7   | Rate GS-1 Heat                                    |   | 36,404         | 36,059         | 35,717         | 35,568         | 35,048         |
| 8   | Rate GS-2   |   | 1,035          | 1,081          | 1,125          | 1,175          | 1,211          |
| 9   | Rate S  |   | 1,584          | 1,565          | 1,547          | 1,541          | 1,519          |
| 10  | <b>Multi-Fam Res/Com/Ind - Total</b>              | Sum of L4 through L9                            | <b>45,574</b>  | <b>45,112</b>  | <b>45,771</b>  | <b>44,445</b>  | <b>43,771</b>  |
| 11  | <b>Rate Schedule Total</b>                        | Line 3 + Line 10                                | <b>156,254</b> | <b>155,396</b> | <b>155,673</b> | <b>154,533</b> | <b>152,878</b> |
| <b>Forecast w/ EWR - End User Transport (EUT)</b> |   |   |                |                |                |                |                |
| 12  | ST  |   | 17,209         | 16,882         | 16,713         | 16,546         | 16,546         |
| 13  | LT  |   | 19,973         | 19,295         | 19,102         | 18,911         | 18,911         |
| 14  | XLT   |   | 37,458         | 36,615         | 36,615         | 36,615         | 36,615         |
| 15  | XXLT  |   | 55,953         | 64,369         | 66,557         | 75,342         | 75,342         |
| 16  | SC  |   | 10,972         | 10,973         | 8,785          | 0              | 0              |
| 17  | <b>EUT Demand Total</b>                           | Sum of L12 through L16                          | <b>141,566</b> | <b>148,134</b> | <b>147,772</b> | <b>147,414</b> | <b>147,414</b> |
| 18  |   |   |                |                |                |                |                |
| 19  | EUT volumes subject to EWR inc. EWR impact        | Exhibit A-16, p1, L20 -<br>Exhibit A-16, p1 L23 | <b>37,183</b>  | <b>36,177</b>  | <b>35,815</b>  | <b>35,457</b>  | <b>35,457</b>  |
| 20  | <b>Total volumes in MMcf after EWR impact (1)</b> | Line 11 + Line 19                               | <b>193,437</b> | <b>191,573</b> | <b>191,489</b> | <b>189,991</b> | <b>188,335</b> |

Notes:

(1) Line 20 represents the total volumes in MMcf used in calculating the legislative energy savings targets within Witness Kupser's testimony.

**Michigan Public Service Commission**  
**DTE Gas Company**  
**2026 - 2029 Energy Waste Reduction Plan**  
**Market Outlook 2025-2029 – Projected Average Number of Customers-Gas**  
**Projected Average Number of Customers**

Case No.: U-21681  
Exhibit No.: A-21  
Witness: G.H. Chapel  
Page No.: 1 of 1

| <b>Line</b>                                       | <b>(a)<br/>Description</b>               | <b>(b)<br/>Source</b>        | <b>(c)<br/>2025</b> | <b>(d)<br/>2026</b> | <b>(e)<br/>2027</b> | <b>(f)<br/>2028</b> | <b>(g)<br/>2029</b> |
|---|--|------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| <b><u>Forecast - Rate Schedule</u></b>            |  |                              |                     |                     |                     |                     |                     |
| 1   | Residential - Rate A                     |                              | 17,642              | 17,475              | 17,308              | 17,141              | 16,974              |
| 2   | Residential - Rate A Heat                |                              | 1,229,981           | 1,238,726           | 1,247,739           | 1,256,394           | 1,265,271           |
| 3   | <b>Single Family Residential - Total</b> | Line 1 + Line 2              | <b>1,247,623</b>    | <b>1,256,202</b>    | <b>1,265,047</b>    | <b>1,273,535</b>    | <b>1,282,245</b>    |
| 4   | Rate 2A - Meter I (Multi-Family)         |                              | 1,373               | 1,369               | 1,365               | 1,361               | 1,357               |
| 5   | Rate 2A - Meter II (Multi-Family)        |                              | 4,682               | 4,604               | 6,192               | 4,448               | 4,370               |
| 6   | Rate GS-1                                |                              | 4,793               | 4,762               | 4,731               | 4,700               | 4,669               |
| 7   | Rate GS-1 Heat                           |                              | 86,047              | 86,069              | 86,121              | 86,133              | 86,169              |
| 8   | Rate GS-2 Heat                           |                              | 73                  | 77                  | 81                  | 85                  | 89                  |
| 9   | Rate S                                   |                              | 211                 | 211                 | 211                 | 211                 | 211                 |
| 10  | <b>Multi-Fam Res/Com/Ind - Total</b>     | Sum of Lines L4 through L9   | <b>97,179</b>       | <b>97,092</b>       | <b>98,702</b>       | <b>96,938</b>       | <b>96,865</b>       |
| 11  | <b>Rate Schedule Total</b>               | Line 3 + Line 10             | <b>1,344,803</b>    | <b>1,353,294</b>    | <b>1,363,749</b>    | <b>1,370,472</b>    | <b>1,379,111</b>    |
| <b><u>Forecast - End User Transport (EUT)</u></b> |  |                              |                     |                     |                     |                     |                     |
| 12  | ST                                       |                              | 80                  | 439                 | 439                 | 439                 | 439                 |
| 13  | LT                                       |                              | 19                  | 80                  | 80                  | 80                  | 80                  |
| 14  | XLT                                      |                              | 5                   | 19                  | 19                  | 19                  | 19                  |
| 15  | XXLT                                     |                              | 1                   | 5                   | 5                   | 5                   | 5                   |
| 16  | SC                                       |                              | 544                 | 1                   | 1                   | 1                   | 1                   |
| 17  | <b>EUT Forecasted Customers Total</b>    | Sum of Lines L12 through L16 | <b>649</b>          | <b>544</b>          | <b>544</b>          | <b>544</b>          | <b>544</b>          |
| 18  | <b>Customer Count Total</b>              | Line 11 + Line 17            | <b>1,345,451</b>    | <b>1,353,838</b>    | <b>1,364,293</b>    | <b>1,371,016</b>    | <b>1,379,655</b>    |

**Michigan Public Service Commission**  
**DTE Gas Company**  
**2026 - 2029 Energy Waste Reduction Plan**  
**2024 GCR, GCC, & Aggregate Total Volumes**  
**Rate Schedule Historical Volume Normalization-Gas**  
**Weather Normalized Sales by Rate Class**  
**Volumes in MMcf**  
**MMcf @ 14.65**

Case No.: U-21681  
 Exhibit No.: A-22  
 Witness: G.H. Chapel  
 Page No.: 1 of 1

(a) (b) (c)

| Line No. | Description             | Source                | Annual 2024 |
|----------|-------------------------|-----------------------|-------------|
| 1        | A (R)                   |                       | 1,059       |
| 2        | A (RH)                  |                       | 109,180     |
| 3        |                         |                       |             |
| 4        |                         |                       |             |
| 5        | Total Single Family Res | Line 1 + Line 2       | 110,239     |
| 6        |                         |                       |             |
| 7        |                         |                       |             |
| 8        | GS-1 (C)                |                       | 1,884       |
| 9        | GS-1 (CH)               |                       | 36,131      |
| 10       | GS-1 (I)                |                       | 809         |
| 11       | 2A (R)                  |                       | 292         |
| 12       | 2A (RH)                 |                       | 3,647       |
| 13       | GS-2 (C)                |                       | 139         |
| 14       | GS-2 (CH)               |                       | 941         |
| 15       | GS-2 (I)                |                       | 6           |
| 16       | S (CH)                  |                       | 1,606       |
| 17       |                         |                       |             |
| 18       | Total 2A, Com, & Ind    | Sum of L8 through L16 | 45,455      |

**Michigan Public Service Commission**  
**DTE Gas Company**  
**2026 - 2029 Energy Waste Reduction Plan**  
**End User Transportation Historical Volume Normalization-Gas**  
**Weather Normalized Deliveries by Rate Class**  
**Volumes in MMcf**

Case No.: U-21681  
 Exhibit No.: A-23  
 Witness: G.H. Chapel  
 Page No.: 1 of 1

| Line No. | (a)<br>2026 Total Consumption &<br>Forecast | (b)<br>TOTAL |
|----------|---|--------------|
| 1        | ST  | 16,882       |
| 2        | LT  | 19,295       |
| 3        | XLT   | 36,615       |
| 4        | XXLT  | 64,369       |
| 5        | SC  | 10,973       |
| 6        | TOTAL                                       | 148,134      |

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter, on the Commission's own )  
motion, regarding the regulatory reviews, )  
revisions, determinations, and/or approvals )  
necessary for **DTE ELECTRIC** )  
**COMPANY and DTE GAS COMPANY** to )  
fully comply with Public Act 295 of 2008, )  
as amended )

Case No. U-21681  
(Paperless e-file)

QUALIFICATIONS  
AND  
DIRECT TESTIMONY  
OF  
REEMA A. BIEL

**DTE ELECTRIC COMPANY AND DTE GAS COMPANY**  
**QUALIFICATIONS AND DIRECT TESTIMONY OF REEMA A. BIEL**

Line  
No.

1 **Q1. What is your name, business address and by whom are you employed?**

2 A1. My name is Reema A. Biel. My business address is One Energy Plaza, Detroit,  
3 Michigan 48226. I am employed by DTE Energy Corporate Services, LLC.

4

5 **Q2. On whose behalf are you testifying?**

6 A2. I am testifying on behalf of DTE Electric Company (DTE Electric) and DTE Gas  
7 Company (DTE Gas) (collectively, DTE).

8

9 **Q3. What is your educational background?**

10 A3. I have a Bachelor of Accountancy from Walsh College in 1999 and earned my  
11 Certified Public Accounting License in 2003.

12

13 **Q4. What is your work experience?**

14 A4. In 1995, I joined Coopers & Lybrand (“C&L”) individual tax practice primarily  
15 working on income tax compliance. In 1998, C&L merged with Price Waterhouse,  
16 forming PricewaterhouseCoopers (“PwC”) in which I began working in their  
17 Business Compliance Group. In 2005, I was promoted to Tax Manager responsible  
18 for the preparation and review of federal, state and foreign income tax returns for  
19 multi-national corporations. In addition, I was responsible for the review of federal,  
20 state and foreign quarterly and annual tax provision for multi-national companies.

21 I joined DTE Energy Company’s Tax Department in 2007 as a Tax Principal  
22 responsible for the preparation and review of the Company’s federal income tax  
23 returns and forecasts. I was promoted to Regulatory Tax Manager in February 2016  
24 responsible for federal, state, and local income tax accounting and tax forecasting  
25 for all regulatory filings.

Line  
No.

- 1 **Q5. Have you previously sponsored testimony before the Michigan Public Service**  
2 **Commission (MPSC)?**
- 3 A5. Yes, I have sponsored testimony in the following cases:
- |    |         |   |
|----|---------|---|
| 4  | U-20364 | DTE Electric 2018 TRM Reconciliation                |
| 5  | U-20366 | DTE Electric 2018 EWR Reconciliation                |
| 6  | U-20369 | DTE Gas 2018 EWR Reconciliation                     |
| 7  | U-20703 | DTE Electric 2019 EWR Reconciliation                |
| 8  | U-20708 | DTE Gas 2019 EWR Reconciliation                     |
| 9  | U-20711 | DTE Electric 2019 PLD/TRM Reconciliation            |
| 10 | U-20373 | DTE Electric 2020 – 2021 EWR Plan                   |
| 11 | U-20429 | DTE Gas 2020 – 2021 EWR Plan                        |
| 12 | U-20866 | DTE Electric 2020 EWR Reconciliation                |
| 13 | U-20871 | DTE Gas 2020 EWR Reconciliation                     |
| 14 | U-20987 | DTE Electric 2020 PLD/TRM Reconciliation            |
| 15 | U-20881 | DTE Gas 2022-2023 EWR Plan Filing                   |
| 16 | U-20876 | DTE Electric 2022-2023 EWR Plan Filing              |
| 17 | U-21206 | Combined EWR 2021 Reconciliation-DTE Electric & DTE |
| 18 |         | Gas   |
| 19 | U-21307 | DTE Electric 2021 & 2022 TRM Reconciliation         |
| 20 | U-21313 | 2022 DTE Electric and DTE Gas EWR Reconciliation    |
| 21 | U-21322 | 2024-2025 DTE Electric & DTE Gas EWR Plan           |
| 22 | U-21558 | 2023 DTE Electric and DTE Gas EWR Reconciliation    |

Line  
No.

1 **Purpose of Testimony**

2 **Q6. What is the purpose of your testimony?**

3 A6. The purpose of my testimony is to calculate the deferred tax component of Energy  
4 Waste Reduction (EWR) capitalized costs, in support of DTE's 2026-2029 EWR  
5 Plan (2026-2029 EWR Plan).

6

7 **Q7. Are you sponsoring any exhibits in this proceeding?**

8 A7. Yes. I am supporting the following exhibits:

| 9  | <u>Exhibit</u> | <u>Description</u>                         |
|----|----------------|--|
| 10 | A-24           | DTE Electric Calculation of Deferred Taxes |
| 11 | A-25           | DTE Gas Calculation of Deferred Taxes      |

12

13 **Q8. Were these exhibits prepared by you or under your direction?**

14 A8. Yes, they were.

15

16 **Q9. Why are you calculating deferred taxes on Exhibit A-24 for DTE Electric and**  
17 **Exhibit A-25 for DTE Gas?**

18 A9. For DTE Electric, the accumulated deferred tax balances represent the book to tax  
19 difference related to prior year's capital expenditures. The accumulated deferred  
20 tax balances are used by Company Witness Smith as a component of EWR  
21 capitalized costs for Commercial and Industrial (C&I) secondary and C&I primary  
22 customer classes.

23

24 For DTE Gas, the accumulated deferred tax balances represent the book to tax  
25 difference related to prior year's capital expenditures. The accumulated deferred tax

Line  
No.

1 balances are used by Company Witness Smith as a component of EWR capitalized  
2 costs for Commercial & Industrial (C&I) and End-User Transportation customer  
3 classes.

4

5 **Q10. How did you develop the composite tax rate used for DTE Electric and DTE**  
6 **Gas to calculate deferred taxes for the projected years?**

7 A10. For DTE Electric, the 25.9% is a composite tax rate comprised of the federal, state  
8 and local tax rates. The projected rate of 25.9% for 2026 through 2029 (computed  
9 on Witness Smith's Exhibit A-31) is based on the following tax rates: (1) Federal  
10 income tax rate of 21%, (2) Michigan Corporate income tax rate of 5.88%, and (3)  
11 Municipal income tax rate of 0.33%.

12

13 For DTE Gas, the 26.2% is a composite tax rate comprised of the federal, state and  
14 local tax rates. The projected rate of 26.2% for 2026 through 2029 (computed on  
15 Witness Smith's Exhibit A-32) is based on the following tax rates: (1) Federal  
16 income tax rate of 21%, (2) Michigan Corporate income tax rate of 6%, and (3)  
17 Municipal income tax rate of 0.56%.

18

19 **Q11. How are deferred taxes derived for DTE Electric and DTE Gas?**

20 A11. For DTE Electric, the EWR program costs that were capitalized for book purposes  
21 in tax year 2021 and prior were deducted in the year incurred for tax purposes.  
22 Starting in tax year 2022, EWR program costs are deducted in the year incurred for  
23 both book and tax purposes. As a result, there are no deferred taxes related to the  
24 2026 through 2029 EWR program costs. The cumulative deferred tax component  
25 on Lines 16 and 27 of Exhibit A-24, is derived by applying the composite tax rate

Line  
No.

1 to the cumulative difference between the amount deducted for tax purposes and the  
2 book amortization.

3

4 For DTE Gas, the EWR program costs that were capitalized for book purposes in  
5 tax years 2020 and 2021 were deducted in the year incurred for tax purposes.

6 Starting in tax year 2022, EWR program costs are deducted in the year incurred for  
7 both book and tax purposes. As a result, there are no deferred taxes related to the

8 2026 through 2029 EWR program costs. The cumulative deferred tax component

9 on Line 14 of Exhibit A-25, is derived by applying the composite tax rate to the  
10 cumulative difference between the amount deducted for tax purposes and the book

11 amortization.

12

13 **Q12. Does the Tax Cuts and Jobs Act (TCJA) regulatory liability have an impact**  
14 **on DTE's 2026 – 2029 EWR plan filing?**

15 A12. Yes. For DTE Electric, the TCJA regulatory liability related to EWR Program costs  
16 is a component of total deferred taxes on Exhibit A-24, line 31.

17

18 For DTE Gas, EWR Program costs were treated as O&M for book and tax purposes  
19 through 2019. As a result, there were no deferred taxes related to EWR Program

20 costs on December 31, 2017, that needed to be re-measured, and, therefore, no

21 corresponding TCJA regulatory liability was established within the DTE Gas EWR

22 Program.

Line  
No.

1 **Q13. Is the overall methodology for amortizing the TCJA regulatory liability for**  
2 **excess deferred taxes related to DTE Electric consistent with prior**  
3 **Commission orders?**

4 A13. Yes. Amortization started in May 2019 and continues to follow the same overall  
5 methodology approved in DTE Electric's Case No. U-20162.

6 **Q14. Is the amortization of the TCJA regulatory liability reflected as a reduction to**  
7 **DTE Electric's EWR program over/(under)-recovery for this filing?**

8 A14. Yes. The amortization of the TCJA regulatory liability is reflected as a reduction  
9 to the EWR program over/(under) cost recovery on Witness Smith's Exhibit A-26,  
10 line 7. Since the amortization of the TCJA regulatory liability is post tax  
11 adjustments, in order to include it in the pre-tax EWR program over/(under) cost  
12 recovery, it must be grossed up (increased) for taxes.

13

14 **Q15. Does this complete your direct testimony?**

15 A15. Yes, it does.

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter, on the Commission’s own )  
motion, regarding the regulatory reviews, )  
revisions, determinations, and/or approvals )  
necessary for **DTE ELECTRIC** )  
**COMPANY and DTE GAS COMPANY** )  
to fully comply with Public )  
Act 295 of 2008, as amended by Public )  
Act 342 of 2016 )

Case No. U-21681  
(Paperless e-file)

EXHIBITS  
  
OF  
  
REEMA A. BIEL

| Line No. | (a)<br>Description                            | (b)<br>2022  | (c)<br>2023  | (d)<br>2024  | (e)<br>2025  | (f)<br>2026 | (g)<br>2027 | (h)<br>2028 | (i)<br>2029 | (j)<br>Source               |
|----------|---|--------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|-----------------------------|
| 1        | <b>Residential</b>                            |              |              |              |              |             |             |             |             |                             |
| 2        | Federal Tax Deduction 1/                      | -            | -            | -            | -            | -           | -           | -           | -           | Exhibit A-29 p. 1 Line 15   |
| 3        | Book Expense (Amortization)                   | -            | -            | -            | -            | -           | -           | -           | -           | Exhibit A-29 p. 1 Line 30   |
| 4        | Prior Period Adjustment                       | -            | -            | -            | -            | -           | -           | -           | -           | Manual Input                |
| 5        | Annual Timing Difference                      | -            | -            | -            | -            | -           | -           | -           | -           | Line 2 - Line 3 - Line 4    |
| 6        | Cumulative Timing Difference                  | -            | -            | -            | -            | -           | -           | -           | -           | Cumul. Line 5               |
| 7        | Deferred Tax Rate                             | 25.90%       | 25.90%       | 25.90%       | 25.90%       | 25.90%      | 25.90%      | 25.90%      | 25.90%      | Exhibit A-31                |
| 8        | Cumul. Deferred Tax Asset/(Liab.)             | -            | -            | -            | -            | -           | -           | -           | -           | Line 6 x Line 7             |
| 9        | <b>Commercial and Industrial - Secondary</b>  |              |              |              |              |             |             |             |             |                             |
| 10       | Federal Tax Deduction 1/                      | -            | -            | -            | -            | -           | -           | -           | -           | Exhibit A-29 p. 2 Line 15   |
| 11       | Book Expense (Amortization)                   | 7,070,731    | 5,466,265    | 4,390,969    | 10,117,114   | 925,127     | -           | -           | -           | Exhibit A-29 p. 2 Line 30   |
| 12       | Prior Period Adjustment                       | -            | -            | -            | -            | (34,834)    | -           | -           | -           | Manual Input                |
| 13       | Annual Timing Difference                      | (7,070,731)  | (5,466,265)  | (4,390,969)  | (10,117,114) | (890,293)   | -           | -           | -           | Line 10 - Line 11- Line 12  |
| 14       | Cumulative Timing Difference                  | 20,864,641   | 15,398,376   | 11,007,407   | 890,293      | 0           | 0           | 0           | 0           | Cumul. Line 13              |
| 15       | Deferred Tax Rate                             | 25.90%       | 25.90%       | 25.90%       | 25.90%       | 25.90%      | 25.90%      | 25.90%      | 25.90%      | Exhibit A-31                |
| 16       | Cumul. Deferred Tax Asset/(Liab.)             | (5,403,942)  | (3,988,179)  | (2,850,919)  | (230,586)    | (0)         | (0)         | (0)         | (0)         | Line 14 x Line 15           |
| 17       | Deferred Tax Liability Adjustment 2/          |              |              |              |              |             |             |             |             | Manual Input                |
| 18       | TCJA Regulatory Liability - C&I Secondary 3/  | (1,528,190)  | (1,380,598)  | (1,233,007)  | (1,085,415)  | (937,823)   | (790,231)   | (642,639)   | (495,048)   | Calculated                  |
| 19       | C&I Secondary DTL & TCJA Regulatory Liability | (6,932,132)  | (5,368,778)  | (4,083,925)  | (1,316,001)  | (937,823)   | (790,231)   | (642,639)   | (495,048)   | Line 16 + 18                |
| 20       | <b>Commercial and Industrial - Primary</b>    |              |              |              |              |             |             |             |             |                             |
| 21       | Federal Tax Deduction 1/                      | -            | -            | -            | -            | -           | -           | -           | -           | Exhibit A-29 p. 3 Line 15   |
| 22       | Book Expense (Amortization)                   | 13,555,588   | 12,556,841   | 10,254,437   | (195,403)    | 2,283,767   | -           | -           | -           | Exhibit A-29 p. 3 Line 30   |
| 23       | Prior Period Adjustment                       | -            | -            | -            | -            | (20,751)    | -           | -           | -           | Manual Input                |
| 24       | Annual Timing Difference                      | (13,555,588) | (12,556,841) | (10,254,437) | 195,403      | (2,263,016) | -           | -           | -           | Line 21 - Line 22 - Line 23 |
| 25       | Cumulative Timing Difference                  | 24,878,891   | 12,322,050   | 2,067,613    | 2,263,016    | 0           | 0           | 0           | 0           | Cumul. Line 24              |
| 26       | Deferred Tax Rate                             | 25.90%       | 25.90%       | 25.90%       | 25.90%       | 25.90%      | 25.90%      | 25.90%      | 25.90%      | Exhibit A-31                |
| 27       | Cumul. Deferred Tax Asset/(Liab.)             | (6,443,633)  | (3,191,411)  | (535,512)    | (586,121)    | (0)         | (0)         | (0)         | (0)         | Line 25 x Line 26           |
| 28       | Deferred Tax Liability Adjustment 2/          |              |              |              |              |             |             |             |             | Manual Input                |
| 29       | TCJA Regulatory Liability - C&I Primary 3/    | (1,151,867)  | (1,040,620)  | (929,374)    | (818,127)    | (706,880)   | (595,633)   | (484,387)   | (373,140)   | Calculated                  |
| 30       | C&I Primary DTL & TCJA Regulatory Liability   | (7,595,500)  | (4,232,031)  | (1,464,885)  | (1,404,248)  | (706,880)   | (595,634)   | (484,387)   | (373,140)   | Line 27 + 29                |
| 31       | Total DTL & TCJA Regulatory Liability         | (14,527,632) | (9,600,809)  | (5,548,811)  | (2,720,249)  | (1,644,703) | (1,385,865) | (1,127,026) | (868,188)   | Line 8 + 19 + 30            |

Notes:

1/ For tax purposes program costs are 100% expensed.

2/ Deferred Tax Liability Adjustment to agree to Previously Filed Reconciliations

3/ TCJA Amortization was updated to reflect the methodology and amortization period approved in U-20162 Order received in May 2019

Michigan Public Service Commission  
DTE Gas Company  
2026 - 2029 Energy Waste Reduction Plan  
Calculation of Deferred Taxes - Gas  
(\$)

Case No.: U-21681  
Exhibit: A-25  
Witness: R.A. Biel  
Page: 1 of 1

| Line No. | (a)<br>Description                                       | (b)<br>2022 | (c)<br>2023 | (d)<br>2024 | (e)<br>2025 | (f)<br>2026 | (g)<br>2027 | (h)<br>2028 | (i)<br>2029 | (j)<br>Source             |
|----------|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------------------|
| 1        | <b>Residential</b>                                       |             |             |             |             |             |             |             |             |                           |
| 2        | Federal Tax Deduction                                    | -           | -           | -           | -           | -           | -           | -           | -           |                           |
| 3        | Book Expense (Amortization)                              | -           | -           | -           | -           | -           | -           | -           | -           |                           |
| 4        | Annual Timing Difference                                 | -           | -           | -           | -           | -           | -           | -           | -           | Line 2 - Line 3           |
| 5        | Cumulative Timing Difference                             | -           | -           | -           | -           | -           | -           | -           | -           | Cumul. Line 4             |
| 6        | Deferred Tax Rate  | 26.20%      | 26.20%      | 26.20%      | 26.20%      | 26.20%      | 26.20%      | 26.20%      | 26.20%      | Exhibit A-32              |
| 7        | Cumul. Deferred Tax Asset/(Liab.)                        | -           | -           | -           | -           | -           | -           | -           | -           | Line 5 x Line 6           |
| 8        | <b>Commercial and Industrial/End User Transportation</b> |             |             |             |             |             |             |             |             |                           |
| 9        | Federal Tax Deduction                                    | -           | -           | -           | -           | -           | -           | -           | -           | Exhibit A-30 p. 1 Line 12 |
| 10       | Book Expense (Amortization)                              | 1,005,617   | 1,659,605   | 1,043,822   | 652,948     | 116,006     | -           | -           | -           | Exhibit A-30 p. 1 Line 25 |
| 11       | Annual Timing Difference                                 | (1,005,617) | (1,659,605) | (1,043,822) | (652,948)   | (116,006)   | -           | -           | -           | Line 9 - Line 10          |
| 12       | Cumulative Timing Difference                             | 3,472,381   | 1,812,776   | 768,954     | 116,006     | 0           | 0           | 0           | 0           | Cumul. Line 11            |
| 13       | Deferred Tax Rate  | 26.20%      | 26.20%      | 26.20%      | 26.20%      | 26.20%      | 26.20%      | 26.20%      | 26.20%      | Exhibit A-32              |
| 14       | Cumul. Deferred Tax Asset/(Liab.)                        | (909,764)   | (474,947)   | (201,466)   | (30,394)    | (0)         | (0)         | (0)         | (0)         | Line 12 x Line 13         |
| 15       | Total Deferred Tax Liability                             | (909,764)   | (474,947)   | (201,466)   | (30,394)    | (0)         | (0)         | (0)         | (0)         | Line 7 + Line 14          |

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter, on the Commission's own )  
motion, regarding the regulatory reviews, )  
revisions, determinations, and/or approvals )  
necessary for **DTE ELECTRIC** )  
**COMPANY and DTE GAS COMPANY** to )  
fully comply with Public Act 295 of 2008, )  
as amended. )

Case No. U-21681  
(Paperless e-file)

QUALIFICATIONS  
AND  
DIRECT TESTIMONY  
OF  
EDDIE SMITH

**DTE ELECTRIC COMPANY AND DTE GAS COMPANY**  
**QUALIFICATIONS AND DIRECT TESTIMONY OF EDDIE SMITH**

Line  
No.

1   **Q1.   What is your name, business address and by whom are you employed?**

2   A1.   My name is Carl Edward Smith III, “Eddie Smith” (he/him/his), Manager –  
3       Regulatory Affairs – Revenue Requirements at DTE Electric. My business address  
4       is One Energy Plaza, Detroit, Michigan 48226. I am employed by DTE Electric  
5       Company.

6

7   **Q2.   On whose behalf are you testifying?**

8   A2.   I am testifying on behalf of DTE Electric Company (DTE Electric) and DTE Gas  
9       Company (DTE Gas) (collectively, DTE).

10

11   **Q3.   What is your educational background?**

12   A3.   I graduated from Ohio University in 2013 with a Bachelor of Arts (BA) degree in  
13       Sociology and in 2019 with a Master of Public Administration (MPA) degree. I am  
14       currently pursuing a Master of Business Administration (MBA) degree from the  
15       Ross School of Business at the University of Michigan.

16

17   **Q4.   What work experience do you have?**

18   A4.   From 2016 to 2019, I served as the Executive Director of the Southeast Ohio Public  
19       Energy Council (SOPEC), where I managed a Community Choice Aggregation  
20       (CCA) program. In 2019, I moved to Michigan and joined DTE Electric as a Sales  
21       Consultant, and later as a Senior Strategist, for the MIGreenPower program. In  
22       2022, I began working for Future Energy as the Director of Insight, where I oversaw  
23       the Company’s consulting program for vehicle electrification.

Line  
No.

1 In 2023, I began working for Solutions for Energy Efficient Logistics (SEEL, LLC)  
2 as a Portfolio Director, where I led a team of program managers responsible for  
3 implementing five EWR programs for DTE Energy. Later in 2023, I returned to  
4 DTE Electric as the Manager of Product Development and Residential Marketing  
5 for voluntary renewables, where I led a team of product managers, solution  
6 architects, and residential sales professionals for the MIGreenPower program.

7

8 In 2025, I was promoted to Manager in the Regulatory Affairs department at DTE  
9 Energy. In this role, I lead a team of regulatory accountants and consultants, and my  
10 team is responsible for developing revenue requirement and cost-of-service studies  
11 for the Company's electric and gas rate cases, several adjustment clauses cases, and  
12 several reconciliations.

13

14 **Q5. Are you a member of any industry associations?**

15 A5. Yes. I am a member of the Association of Energy Engineers (AEE), a member of  
16 the East Michigan Chapter of the AEE, and a member of the Midwest Renewable  
17 Energy Association (MREA).

18

19 **Q6. Have you completed any industry training programs?**

20 A6. Yes. I am a Certified Energy Manager (CEM), Certified Energy Auditor (CEA),  
21 and Renewable Energy Professional (REP) through the AEE. I also completed the  
22 45th Eastern NARUC Public Utility Rate School, the 39th Grid School, and 14th  
23 Advanced Regulatory Studies Conference through the Institute for Public Utilities  
24 (IPU) at Michigan State University.

Line  
No.

1 **Q7. What is your current position and associated responsibilities?**

2 A7. I currently serve as a Manager in the Regulatory Affairs department, where I am  
3 responsible for leading the team that develops revenue requirement and cost-of-  
4 service studies for the Company's electric and gas rate cases, adjustment clause  
5 cases, and reconciliations.

6

7 **Q8. Have you previously testified before the Michigan Public Service Commission**  
8 **(MPSC or Commission)?**

9 A8. Yes. I provided testimony in Case No. U-21662, which was DTE Electric's 2024  
10 Amended Renewable Energy Plan.

Line  
No.

1 **PURPOSE AND ORGANIZATION OF TESTIMONY**

2 **Q9. What is the purpose of your testimony?**

3 A9. The purpose of my testimony is to support and propose the revenue requirements  
4 and surcharges for the Company's 2026-2029 EWR Plan. Specifically, my  
5 testimony uses program costs provided by DTE Witness Kupser to calculate: (1)  
6 the Energy Waste Reduction (EWR) revenue requirement for Electric, (2) the EWR  
7 revenue requirement for Gas, (3) the EWR surcharges for Electric, and (4) the EWR  
8 surcharges for Gas.

9  
10 **Q10. What does your testimony propose?**

11 A10. My testimony will support and propose the following:

12 1) For DTE Electric, I will show that the total calculated revenue requirement  
13 for the period 2026 through 2029 is \$230.0 million for residential customers,  
14 \$411.6 million for commercial and industrial (C&I) secondary customers,  
15 and \$263.3 million for C&I primary customers.

16 2) For DTE Gas, I will show that the total calculated revenue requirement for  
17 the period 2026 through 2029 is \$111.0 million for residential customers,  
18 and \$97.4 million for Commercial and Industrial (C&I) and End-Use  
19 Transportation (EUT) customers.

20 3) For DTE Electric, I will show base EWR surcharges (without performance  
21 incentives) by customer class that recover the Electric EWR revenue  
22 requirements described above.

23 4) For DTE Gas, I will show base EWR surcharges (without performance  
24 incentives) by customer class that recover the Gas EWR revenue  
25 requirements described above.

Line  
No.

1 **Q11. How is your testimony organized?**

2 A11. My testimony is organized into five sections:

3 1. Purpose and Organization of Testimony

4 2. Proposed EWR Revenue Requirement – Electric

5 3. Proposed EWR Revenue Requirement – Gas

6 4. Proposed EWR Base Surcharges – Electric

7 5. Proposed EWR Base Surcharges – Gas

8

9 **Q12. Are you sponsoring any exhibits in this proceeding?**

10 A12. Yes. I am sponsoring the following exhibits:

11 **DTE Electric**

12 Exhibit Description

13 A-26 Annual Revenue Requirement by Class – Electric

14 A-29 Calculation of Return on Capitalized Costs – Electric

15 A-31 Pre-Tax Rate of Return and Revenue Conversion Factors – Electric

16 A-35 Summary of Energy Waste Reduction Surcharges – Electric

17 A-36 Summary of Proposed EWR Revenues – Electric

18 A-37 Calculation of EWR Surcharges – Electric – Residential

19 A-38 Calculation of EWR Surcharges – Electric – C&I Secondary

20 A-39 Calculation of EWR Surcharges – Electric – C&I Primary

21 A-40 Proposed EWR Surcharge Tariff Sheet – Electric

22

23 **DTE Gas**

24 Exhibit Description

25 A-27 Annual Revenue Requirement by Class – Gas

Line  
No.

- 1 A-28 Revenue Requirement Summary by Class – Gas
- 2 A-30 Calculation of Return on Capitalized Costs – Gas
- 3 A-32 Pre-Tax Rate of Return and Revenue Conversion Factors – Gas
- 4 A-33 Calculation of Energy Waste Reduction Surcharges – Gas
- 5 A-34 Calculation of Income-Qualified Percentage For the C&I/EUT
- 6 Exploratory Program – Gas
- 7 A-41 Proposed Energy Waste Reduction Surcharge Tariff Sheet – Gas

8

9 **Q13. Were these exhibits prepared by you or under your direction?**

10 A13. Yes, they were.

11

12 **PROPOSED EWR REVENUE REQUIREMENT – ELECTRIC**

13 **Q14. What are the components of the revenue requirements for DTE Electric’s**

14 **2026-2029 EWR Plan?**

15 A14. The annual revenue requirement for DTE’s 2026-2029 EWR Plan consists of: (1)

16 the “Return On” capitalized program costs; (2) the “Return Of” capitalized program

17 costs; (3) program costs that will be expensed in the defined program year; and (4)

18 amortization of the TCJA regulatory liability related to the re-measurement of

19 deferred tax liabilities. Also included in the 2026 revenue requirement for this

20 2026-2029 EWR Plan are: (1) the actual over/under recovered cumulative EWR

21 balances as of December 31, 2024; and (2) the 2025 estimated over/under recovered

22 EWR balances with the related carrying charges. DTE is including the 2024

23 balance and estimated 2025 over/under recoveries to minimize the over/under

24 recovery balance going forward.

Line  
No.

1 **Q15. What do you mean by the “Return On” and the “Return Of” capitalized**  
2 **program costs?**

3 A15. As approved in DTE’s initial Energy Optimization (EO) Plan, Case No. U-15806,  
4 certain program costs were capitalized and amortized over a five-year period. The  
5 “Return Of” program costs are the annual amortization amounts of these capitalized  
6 costs that will be recovered over a five-year period. The “Return On” program costs  
7 are the pre-tax rate of return DTE Electric needs to recover the underlying long-term  
8 debt costs and the return on common equity used to finance the unamortized  
9 program costs that were capitalized. For DTE Electric, this 2026-2029 EWR Plan  
10 reflects the Return On and Return Of the unamortized portion of program costs  
11 capitalized since the inception of DTE’s EO plan in 2009.

12

13 **Q16. How are the December 31, 2024 EWR over/under recovery balances**  
14 **determined?**

15 A16. December 31, 2024 EWR over/under recovery balances are the differences between  
16 DTE EWR surcharge revenues realized and actual EWR costs incurred through  
17 2024, inclusive of carrying charges through 2025, for the respective customer  
18 classes. The amounts used in my calculations on Exhibit A-26 are the filed balances  
19 in DTE Electric’s 2024 EWR reconciliation filing, Case No. U-21672.

20

21 **Q17. How are the estimated 2025 EWR over/under recovery balances determined?**

22 A17. The estimated 2025 EWR over/under recovery balance for each class is the  
23 difference between DTE’s estimated EWR surcharge revenues and EWR costs  
24 anticipated to be incurred in 2025.

Line  
No.

1 **Q18. What information is displayed on Exhibit A-26?**

2 A18. Exhibit A-26, titled “Annual Revenue Requirement by Class - Electric”, is a three-  
3 page exhibit that presents the 2026-2029 EWR revenue requirement amounts for  
4 the residential, C&I secondary, and C&I primary customer classes for DTE  
5 Electric. The format and line items included on each page are identical. Page 1  
6 reflects the 2026-2029 EWR revenue requirement amounts for the residential  
7 customer class. Pages 2 and 3 reflect the 2026-2029 EWR revenue requirement  
8 amounts for the C&I secondary and C&I primary customer classes, respectively.  
9 The total annual EWR revenue requirement amounts (line 12 of pages 1, 2 and 3)  
10 are used later in my testimony to derive the levelized EWR surcharges for each  
11 respective customer class for DTE Electric.

12

13 The EWR revenue requirement amounts for the capitalized costs include the Return  
14 On Capitalized Costs (line 2) and Return Of Capitalized Costs (line 3). These  
15 amounts are carried forward from Exhibit A-29 for the respective customer class.  
16 Line 6 reflects the EWR program costs to be expensed in the program year. The  
17 costs for the residential and commercial classes are supported by and detailed on  
18 Exhibit A-5, sponsored by Witness Kupser. Line 7 represents the amortization of  
19 the TCJA regulatory liability related to the re-measurement of deferred tax liabilities  
20 which was provided by Company Witness Biel. Line 8 is the revenue requirement  
21 for the capitalized and expensed program costs, as well as amortization. Line 9  
22 represents the actual cumulative EWR over/under recovery balances as of December  
23 31, 2024. Line 10 represents the 2025 EWR estimated over/under recovery  
24 balances. Line 11 represents estimated 2025 carrying charges on the amounts  
25 reflected on lines 9 and 10. Line 12 is the total EWR revenue requirement that I use

Line  
No.

1 on Exhibits A-37 through A-39 to derive the proposed DTE Electric levelized EWR  
2 base surcharges for the respective customer classes.

3

4 **Q19. Why are you including estimated carrying charges on line 11 of Exhibit A-26?**

5 A19. The balances on line 9 include carrying charges through 2025. The amount on line  
6 10 is the estimated over/under recovered amount for 2025 but does not reflect  
7 carrying charges for 2025. Carrying charges will be accrued on these balances  
8 during 2025. Since these balances are being rolled into the 2026 revenue  
9 requirements, carrying charges are being calculated to reflect an estimate of what  
10 will be incurred through the end of 2025.

11

12 **Q20. How are the estimated carrying charges, shown on line 11 of Exhibit A-26,  
13 calculated for DTE Electric?**

14 A20. The estimated 2025 carrying charges on line 11 are based on a full year's worth of  
15 accrued interest on the 2024 cumulative over/under recovery balances as of  
16 December 31, 2024, and a half year of accrued interest on the 2025 estimated  
17 over/under recovery. The calculation consists of line 9 plus the simple average of  
18 line 10 (line 10/2) multiplied by the average 2025 short-term debt rate of 4.25%.

19

20 **Q21. Have you calculated the Return On capitalized costs for DTE Electric in this  
21 case?**

22 A21. Yes. Exhibit A-29, titled "Calculation of Return On Capitalized Costs - Electric",  
23 is a three-page exhibit that derives the Return On and Return Of DTE Electric's  
24 EWR program costs that were capitalized for the three customer classes. The format  
25 and Line items included on each page are identical. Page 1 reflects the calculation

Line  
No.

1 for the residential customer class. DTE Electric stopped capitalizing residential  
2 program expenses in 2010 and therefore the capitalized costs have been fully  
3 amortized and Return On and Return Of capitalized costs are zero for 2026-2029.

4

5 Pages 2 and 3 reflect the calculation for the C&I secondary and C&I primary  
6 customer classes, respectively. The Return On component (line 4) is based on  
7 average capitalized costs (line 2) multiplied by the pre-tax rate of return (line 3)  
8 derived on Exhibit A-31. Similar to the residential class, the Company stopped  
9 capitalizing new C&I program costs starting in 2022. The Return Of component  
10 (amortization), line 30, is based on a 5-year amortization period assuming half year  
11 convention in the first year and the last year. These amounts are carried forward to  
12 Exhibit A-26.

13

14 **Q22. How are the average capitalized costs, that are shown on line 14 of Exhibit A-**  
15 **29, computed in this 2026-2029 EWR Plan?**

16 A22. Average capitalized costs are computed in this 2026-2029 EWR Plan using the  
17 same approach as prior approved EWR Plan cases. On each of the 3 pages of  
18 Exhibit A-29, ending capitalized costs balances are derived from gross plant (line  
19 8) less accumulated amortization (lines 9 and 10) and accumulated deferred income  
20 taxes (line 12). The accumulated deferred tax balances are supported on Exhibit  
21 A-24, sponsored by Witness Biel. Average capitalized costs, shown on line 14, are  
22 computed as a simple average of the year ending capitalized costs balances shown  
23 on line 13.

Line  
No.

1 **Q23. Why are the accumulated deferred taxes that are shown on line 12 of Exhibit**  
2 **A-29 included in the derivation of DTE Electric’s EWR capitalized costs,**  
3 **rather than as a component of pre-tax cost of capital?**

4 A23. The pre-tax rate of return used in the calculation of the Return On capitalized costs  
5 is based on DTE Electric’s permanent capital structure and does not reflect the  
6 MPSC’s traditional inclusion of accumulated deferred taxes (zero cost financing)  
7 in deriving the rate of return. Therefore, to properly determine EWR’s Return On  
8 capitalized costs, accumulated deferred taxes associated with EWR must be taken  
9 into consideration as a reduction. Absent this deferred tax offset adjustment to each  
10 year’s capitalized costs, it would be necessary to calculate a pre-tax rate of return  
11 for each year to reflect the annual effect of changes in zero cost of capital that result  
12 from deferred taxes.

13

14 **Q24. Have you calculated a Pre-Tax Rate of Return and Revenue Conversion factor**  
15 **for DTE Electric in this case?**

16 A24. Yes. Exhibit A-31, titled “Pre-Tax Rate of Return and Revenue Conversion  
17 Factors”, derives the pre-tax rate of return of 9.43% used in calculating the Return  
18 On capitalized program costs for DTE Electric. The components used in the  
19 calculation are based on DTE Electric’s permanent capital structure as approved by  
20 the MPSC in its most recent general rate case, Case No. U-21534. Column (b),  
21 lines 1 and 2, reflects DTE Electric’s authorized permanent capital structure of 50%  
22 debt and 50% common equity. Column (c), line 1, is DTE Electric’s current long-  
23 term debt rate of 5.50% as provided by DTE’s Treasury Department. Column (c),  
24 line 2 is DTE Electric’s authorized return on common equity of 9.90% from its  
25 most recent general rate case, Case No. U-21534. Column (d) is the weighted cost

Line  
No.

1 of capital based on the 50% debt/50% equity and the cost rates. A conversion factor  
2 is applied to the weighted costs of debt and common equity to derive the pre-tax  
3 return shown in column (f).

4

5 **Q25. What is the basis for using this authorized capital structure in deriving the**  
6 **pre-tax rate of return?**

7 A25. 2008 PA 295 for EO, 2008 PA 295 as amended by 2016 PA 342 for EWR, and  
8 2024 PA 229 for EWR all allow recovery of the incremental cost of implementing  
9 DTE Electric's EWR program. The calculation on Exhibit A-31 reflects DTE  
10 Electric's currently authorized capital structure per the Commission's Order in  
11 Case No. U-21534 and accurately depicts DTE Electric's incremental cost of  
12 capital associated with establishing 2026-2029 EWR base surcharges.

13

14 **Q26. What are the conversion factors in column (e) of Exhibit A-31?**

15 A26. The conversion factors derived on Exhibit A-31 are multiplication factors that  
16 convert the DTE Electric rate of return into a pre-tax rate of return. Each dollar of  
17 revenue the Company receives is subject to the Michigan corporate income tax,  
18 municipal income tax, and federal income tax. The equity conversion factor of  
19 1.3496 is applied to the equity weighted cost and the debt conversion factor of  
20 1.0000 is applied to the debt weighted cost.

21

22 **Q27. How is the equity conversion factor calculated?**

23 A27. The equity conversion factor is calculated in column (c) on lines 4 through 11 of  
24 Exhibit A-31 based on the relationship between pre-tax and after-tax income.  
25 Income tax rates taken into consideration in the calculation include: (1) Michigan's

Line  
No.

1 flat corporate income tax rate of 5.88% that went into effect in January 2012  
2 (adjusted for the DTE Electric's apportionment rate (98.00% X 6.00%) supplied by  
3 the DTE Energy Tax Department), (2) municipal income tax rate of 0.33%, and (3)  
4 the federal income tax rate of 21.00%. The pre-tax income base of 100% on line 4  
5 is adjusted for the impacts of all the defined income taxes on lines 5 through 8. The  
6 resulting after-tax income on line 10 of 74.09% is divided into the pre-tax income  
7 base of 100% on line 4 with the resulting quotient being 1.3496 on line 11, column  
8 (c).

9

10 **Q28. What is the debt conversion factor for DTE Electric?**

11 A28. Given the debt component of the overall Rate of Return is deductible for tax  
12 purposes, there is no need for a debt conversion factor to convert the debt  
13 component to its pre-tax equivalent. Thus, a debt conversion factor of 1.0000 is  
14 applied to the rate of return debt component and it remains unchanged as a pre-tax  
15 debt cost. In prior years, a minor debt gross-up factor for the debt component was  
16 required to reflect the tax effect of the Gross Receipts component of the Michigan  
17 Business Tax. However, effective with Michigan flat corporate income tax rate  
18 that went into effect in January 2012, there is no longer a separate gross receipts  
19 tax component.

20

21 **PROPOSED EWR REVENUE REQUIREMENT – GAS**

22 **Q29. What are the components of the revenue requirements for DTE Gas's 2026-**  
23 **2029 EWR Plan?**

24 A29. The annual revenue requirement for DTE's 2026-2029 EWR Plan consists of: (1)  
25 the "Return On" capitalized program costs; (2) the "Return Of" capitalized program

Line  
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1 costs; and (3) program costs that will be expensed in the defined program year.  
2 Also included in the 2026 revenue requirement for this 2026-2029 EWR Plan are:  
3 (1) the actual over/under recovered cumulative EWR balances as of December 31,  
4 2024; and (2) the 2025 estimated over/under recovered EWR balances with the  
5 related carrying charges. DTE is including the 2024 balance and estimated 2025  
6 over/under recoveries to minimize the over/under recovery balance going forward.

7

8 **Q30. What do you mean by the “Return On” and the “Return Of” capitalized**  
9 **program costs?**

10 A30. As approved in DTE Gas’ initial EO Plan, Case No. U-15890 (first approved EO  
11 Gas Plan), certain program costs were capitalized and amortized over a five-year  
12 period. The “Return Of” program costs are the annual amortization amounts of these  
13 capitalized costs that will be recovered over a five-year period. The “Return On”  
14 program costs are the pre-tax rate of return DTE Gas needs to recover the underlying  
15 long-term debt costs and the return on common equity used to finance the  
16 unamortized program costs that were capitalized. For DTE Gas, this 2026-2029  
17 EWR Plan reflects the Return On and Return Of the unamortized portion of program  
18 costs capitalized beginning in 2020.

19

20 **Q31. How are the December 31, 2024 EWR over/under recovery balances**  
21 **determined?**

22 A31. The December 31, 2024 EWR over/under recovery balances are the differences  
23 between DTE EWR surcharge revenues realized and actual EWR costs incurred  
24 through 2024, inclusive of carrying charges through 2025, for the respective

Line  
No.

1 customer classes. The amounts used in my calculations on Exhibit A-27 are the  
2 filed balances in DTE's 2024 EWR reconciliation filing, Case No. U-21672.

3

4 **Q32. How are the estimated 2025 EWR over/under recovery balances determined?**

5 A32. The estimated 2025 EWR over/under recovery balance for each class is the  
6 difference between DTE's estimated EWR surcharge revenues and EWR costs  
7 anticipated to be incurred in 2025.

8

9 **Q33. What information is displayed on Exhibit A-27?**

10 A33. Exhibit A-27 titled "Annual Revenue Requirement by Class - Gas" is a two-page  
11 exhibit that presents the 2026-2029 EWR revenue requirement amounts for the  
12 residential and C&I/EUT customer classes for DTE Gas. The format and line items  
13 included on both pages are identical. Page 1 reflects the 2026-2029 EWR revenue  
14 requirement for the residential customer class. Page 2 reflects the 2026-2029 EWR  
15 revenue requirement amounts for the C&I and EUT customer classes. The total  
16 EWR revenue requirement amounts (line 11 of pages 1 and 2) are used on Exhibit  
17 A-33 to derive the levelized EWR surcharges for each customer class.

18

19 The EWR revenue requirement amounts for the capitalized costs include the Return  
20 On Capitalized Costs (line 2) and Return Of Capitalized Costs (line 3). These  
21 amounts for the residential customer class reflect zero costs and the amounts for the  
22 C&I and EUT customer classes are carried forward from Exhibit A-30. Line 6  
23 reflects the EWR program costs to be expensed in the program year. The costs for  
24 the residential and C&I/EUT classes are supported by and detailed on Exhibit A-6,  
25 sponsored by Witness Kupser. Line 7 is the revenue requirement for both

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1 capitalized and expensed program costs. Line 8 represents the actual cumulative  
2 EWR over/under recovery balances as of December 31, 2024. Line 9 represents the  
3 2025 EWR forecasted over/under recovery balances. Line 10 represents estimated  
4 2025 carrying charges on the amounts reflected on Lines 8 and 9. Line 11 is the  
5 total EWR revenue requirement used on Exhibit A-33 to derive the proposed DTE  
6 Gas levelized EWR base surcharges for the respective customer class.

7

8 **Q34. Why are you including estimated carrying charges on line 10 of Exhibit A-27?**

9 A34. The balances on line 8 include carrying charges through 2024. The amount on line  
10 9 is the forecasted over/under recovered amount for 2025 but does not reflect  
11 carrying charges for 2025. Carrying charges will be accrued on these balances  
12 during 2025. Since these balances are being rolled into the 2026 revenue  
13 requirements, carrying charges are being calculated to reflect an estimate of what  
14 will be incurred through the end of 2025.

15

16 **Q35. How are the estimated carrying charges, shown on line 10 of Exhibit A-27,**  
17 **calculated for DTE Gas?**

18 A35. The estimated 2025 carrying charges on line 10 are based on a full year's worth of  
19 accrued interest on the 2024 cumulative over/under recovery balances as of  
20 December 31, 2024 and a half year of accrued interest on the 2025 forecasted  
21 over/under recovery. The calculation consists of line 8 plus the simple average of  
22 line 9 (line 9/2) multiplied by the forecasted 2025 short-term debt rate of 4.25%.

23

24 **Q36. What information is displayed on Exhibit A-28?**

Line  
No.

1 A36. Exhibit A-28 entitled “Revenue Requirement Summary by Class - Gas” presents a  
2 summary of the 2026-2029 DTE Gas EWR revenue requirement for the residential  
3 and C&I/EUT customer classes as calculated on Exhibit A-27.

4

5 **Q37. Have you calculated the Return On capitalized costs for DTE Gas in this case?**

6 A37. Yes. Exhibit A-30, titled “Calculation of Return On Capitalized Costs - Gas”, is an  
7 exhibit that derives the Return On and Return Of DTE Gas’s EWR program costs  
8 that were capitalized for the C&I and EUT customer classes. The Return On  
9 component (line 4) is based on average capitalized costs (line 2) multiplied by the  
10 pre-tax rate of return (line 3) derived on Exhibit A-32. The Return Of component  
11 (amortization), line 25, is based on a 5-year amortization period assuming ½ year  
12 convention in the first year and the last year. These amounts are carried forward to  
13 Exhibit A-27.

14

15 Exhibit A-30 reflects amortization of program costs capitalized by DTE Gas during  
16 the years of 2026 through 2029. While the Company was approved to capitalize  
17 program costs as proposed within the 2020-2021 EWR Plan (Case No. U-20429),  
18 as discussed in Witness Kusper’s testimony, the Company stopped capitalizing new  
19 C&I/EUT program costs starting in 2022 for DTE Gas. Program costs capitalized  
20 during through 2021 will continue to be amortized based on the 5-year amortization  
21 period.

22

23 **Q38. How are the average capitalized costs shown on line 11 of Exhibit A-30**  
24 **computed in this 2026-2029 EWR Plan?**

Line  
No.

1 A38. Average capitalized costs are computed in this 2026-2029 EWR Plan using the same  
2 approach that was used in the First Approved EO Plan. On Exhibit A-30, ending  
3 capitalized costs balances are derived from gross plant (line 6) less accumulated  
4 amortization (line 7) and accumulated deferred income taxes (line 9). The  
5 accumulated deferred tax balances are supported on Exhibit A-25, sponsored by  
6 Company Witness Biel. Average capitalized costs, shown on line 11, are computed  
7 as a simple average of the year ending capitalized costs balances shown on Line 10.

8

9 **Q39. Why are the accumulated deferred taxes that are shown on line 9 of Exhibit A-**  
10 **30 included in the derivation of DTE Gas's EWR capitalized costs, rather than**  
11 **as a component of pre-tax cost of capital?**

12 A39. The pre-tax rate of return used in the calculation of the Return On capitalized costs  
13 is based on DTE Gas's permanent capital structure and does not reflect the MPSC's  
14 traditional inclusion of accumulated deferred taxes (zero cost financing) in deriving  
15 the rate of return. Therefore, to properly determine EWR's Return On capitalized  
16 costs, accumulated deferred taxes associated with EWR must be taken into  
17 consideration as a reduction. Absent this deferred tax offset adjustment to each  
18 year's capitalized costs, it would be necessary to calculate a pre-tax rate of return  
19 for each year to reflect the annual effect of changes in zero cost of capital that result  
20 from deferred taxes.

21

22 **Q40. Have you calculated a Pre-Tax Rate of Return and Revenue Conversion factor**  
23 **for DTE Gas in this case?**

24 A40. Yes. Exhibit A-32, titled "Pre-Tax Rate of Return and Revenue Conversion Factors  
25 - Gas", derives the pre-tax rate of return of 9.44% used in calculating the Return On

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1 capitalized program costs. The components used in the calculation are based on  
2 DTE Gas's permanent capital structure as approved by the MPSC in its most recent  
3 general rate case, Case No. U-21291. Column (b), lines 1 and 2 reflect DTE Gas's  
4 authorized permanent capital structure of 50% debt and 50% common equity.  
5 Column (c), line 1, is DTE Gas's cost of long-term debt of 5.60% and is also DTE  
6 Gas's current long-term debt rate as provided by DTE's Treasury Department.  
7 Column (c), line 2 is DTE Gas's authorized return on common equity of 9.80% from  
8 its last general rate case, Case No. U-21291. Column (d) is the weighted cost of  
9 capital based on the capital structure and the cost rates. A conversion factor is  
10 applied to the weighted costs of debt and common equity to derive the pre-tax return  
11 shown in column (f).

12

13 **Q41. What is the basis for using this authorized capital structure in deriving the pre-**  
14 **tax rate of return?**

15 A41. The 2008 PA 295 for EO, 2008 PA 295 as amended by 2016 PA 342 for EWR, and  
16 2024 PA 229 for EWR all allow recovery of the incremental cost of implementing  
17 DTE Gas's EWR program. The calculation on Exhibit A-32 reflects DTE Gas's  
18 currently authorized capital structure per the Commission's Order in Case No. U-  
19 21291 and accurately depicts DTE Gas's incremental cost of capital associated with  
20 establishing 2026-2029 EWR base surcharges.

21

22 **Q42. What are the conversion factors in column (e) of Exhibit A-32?**

23 A42. The conversion factors derived on Exhibit A-32 are multiplication factors that  
24 convert the DTE Gas rate of return into a pre-tax rate of return. Each dollar of  
25 revenue the Company receives is subject to the Michigan corporate income tax,

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1 municipal income tax, and federal income tax. The equity conversion factor of  
2 1.3547 is applied to the equity weighted cost and the debt conversion factor of  
3 1.0000 is applied to the debt weighted cost.

4

5 **Q43. How is the equity conversion factor calculated?**

6 A43. The equity conversion factor is calculated in column (c) on lines 4 through 11 of  
7 Exhibit A-32 based on the relationship between pre-tax and after-tax income.  
8 Income tax rates taken into consideration in the calculation include: (1) Michigan's  
9 flat corporate income tax rate of 6.00% that went into effect in January 2012, (2)  
10 municipal income tax rate of 0.56%, and (3) the federal income tax rate of 21.00%.  
11 The pre-tax income base of 100% on line 4 is adjusted for the impacts of all the  
12 defined income taxes on lines 5 through 8. The resulting after-tax income on line  
13 10 of 73.82% is divided into the pre-tax income base of 100% on line 4 with the  
14 resulting quotient being 1.3547 on line 11, column (c).

15

16 **Q44. What is the debt conversion factor for DTE Gas?**

17 A44. Similar to Electric, given the debt component of the overall Rate of Return is  
18 deductible for tax purposes, there is no need for a debt conversion factor to convert  
19 the debt component to its pre-tax equivalent for DTE Gas. Thus, a debt conversion  
20 factor of 1.0000 is applied to the rate of return debt component and it remains  
21 unchanged as a pre-tax debt cost. In prior years, a minor debt gross-up factor for the  
22 debt component was required to reflect the tax effect of the Gross Receipts  
23 component of the Michigan Business Tax. However, consistent with the Michigan  
24 flat corporate income tax rate that went into effect in January 2012, there is no longer  
25 a separate gross receipts tax component.

Line  
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1 **PROPOSED EWR BASE SURCHARGES – ELECTRIC**

2 **Q45. Are you proposing any changes to how the current residential EWR electric**  
3 **surcharges are designed, developed, or applied to residential customers?**

4 A45. No. This case is updating the amount of the surcharge to reflect the proposed  
5 changes to the EWR programs and respective revenue requirements. The  
6 methodology used to calculate the residential surcharges has not changed from the  
7 methodology used in all preceding plans since the Commission’s approval of the  
8 original Energy Optimization (EO) plan in its June 2, 2009 order in Case No. U-  
9 15806, including the current EWR surcharge approved by the Commission on  
10 November 9, 2023 in the 2024-2025 EWR Plan, Case No. U-21322 and also  
11 approved by the Commission on November 24, 2024 in the 2024-2025 Amended  
12 EWR Plan<sup>1</sup>. The base surcharge remains a levelized amount over all applicable  
13 months.

14

15 **Q46. Are you proposing any changes to how the current commercial and industrial**  
16 **EWR surcharges are designed, developed, or applied?**

17 A46. No. Similar to prior EWR Plans, the Company is proposing a levelized surcharge  
18 across all months of 2026 through 2029. Similar to prior EWR Plans, the Company  
19 is proposing the same usage level breakpoints used in designing the surcharges for  
20 the commercial and industrial secondary and primary voltage classes (the detail for  
21 which is shown on Exhibit A-38, for the secondary class and Exhibit A-39, for the  
22 primary class). The commercial and industrial customer surcharges will continue  
23 to be applied to customers on a per meter basis, necessitating the usage-based

---

<sup>1</sup> The Amended Plan did not alter the surcharge as approved in the November 9, 2023 Order.

Line  
No.

1 structure the Company has consistently applied since the Commission's approval  
2 of the original EO plan in its June 2, 2009 order in Case No. U-15806.

3

4 **Q47. Can you explain the information presented on Exhibits A-35, A-36, A-37, A-  
5 38, and A-39?**

6 A47. Yes. Exhibit A-35, is a summary of the EWR surcharges proposed in this  
7 proceeding for all electric customer groups. These surcharges carry forward to  
8 Exhibit A-40, the Company's proposed electric tariff sheet for illustrative purposes.  
9 Exhibit A-36, summarizes the total base surcharge revenue that will be billed to all  
10 customer classes over the implementation period spanning from 2026 through  
11 2029. This page is a summary of the amounts calculated for the various customer  
12 classes as detailed on Exhibits A-37, A-38, and A-39. The total revenue for all  
13 program offerings is provided on lines 1 through 9. The total revenue on lines 1  
14 through 9 is made up of the revenue for Income-Qualified program offerings as  
15 shown on lines 29 through 37, and revenue for all program offerings other than  
16 Income-Qualified, as shown on lines 15 through 23. These amounts are shown  
17 independently because a customer who opts to self-direct their own EWR plan is  
18 only billed the portion of the EWR surcharge designed to recover the revenue  
19 requirements of the Income-Qualified programs.

20

21 Exhibits A-37, A-38, and A-39 provide the revenue requirements, billing determinants,  
22 proposed surcharges, and total revenue for the various classes. For each of these  
23 categories, the details for the Income-Qualified programs are shown separately from  
24 the details for all other programs. This reflects the fact that the number of customers  
25 within the commercial and industrial classes paying for the Income-Qualified

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1 programs differs from the number of customers paying for all other programs  
2 because some customers may self-direct their own plans. I will address this in more  
3 detail later in my testimony.

4  
5 Exhibit A-37 is the detail for the residential class and shows all inputs used to  
6 determine the proposed base EWR surcharge, and the resulting revenue. The Income-  
7 Qualified program revenue requirements on line 2 were provided by Company Witness  
8 Kupser on Exhibit A-5, and the total revenue requirements on line 3 are calculated by  
9 myself in Exhibit A-26. The billing determinants used in calculating the residential  
10 surcharge are the forecasted service area residential sales for the respective time  
11 periods, provided by Company Witness Siswati's on Exhibit A-17 and are shown on  
12 lines 6 and 7. The basis of this forecast is explained in Witness Siswati's' testimony.  
13 The levelized surcharges are shown on lines 10 and 11, and the annual revenue that  
14 results from applying the levelized surcharge to the forecasted sales each year is shown  
15 on lines 14 and 15, respectively.

16  
17 The detail for the commercial and industrial secondary customers is shown on  
18 Exhibit A-38. The layout and type of information provided is in the same format as  
19 the residential page. However, for this class of customers, the applicable billing  
20 determinants are the number of meters, and all inputs, and the proposed surcharges are  
21 split into three separate sub-levels based on average monthly consumption. This is  
22 done in the same manner, with the same consumption level break points, as in the  
23 current EWR Plan. All the meter counts shown on the exhibit are an annual total,  
24 representing the total number of meters that will be charged in each respective year.  
25 The Income-Qualified program revenue requirements on line 2 were provided by

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1 Witness Kupser on Exhibit A-5, and the total revenue requirements on line 3 were  
2 provided by myself from Exhibit A-26.

3

4 Exhibit A-39 provides the same information for the commercial and industrial  
5 primary classes, the only difference being that there are only two sub-levels within  
6 the class. This structure and these specific usage-based break points are also  
7 consistent with all the previously approved EWR Plan filings. All the meter counts  
8 shown on the exhibit are an annual total, representing the total number of meters that  
9 will be charged in each respective year.

10

11 **Q48. What interest rate was used to calculate the net present value (NPV) of the**  
12 **revenue requirements shown on Exhibits A-37, A-38, and A-39?**

13 A48. To calculate the NPVs, a current forecast of DTE Electric's short-term debt rate  
14 through 2029, as provided by the Company's Treasury department was used. The  
15 annual rates used were 4.00% for 2026 through 2029.

16

17 **Q49. How are the revenues calculated on Exhibits A-37, A-38, and A-39?**

18 A49. The annual revenues for all classes are calculated by multiplying the billing  
19 determinants for each year by the applicable levelized surcharge. For the residential  
20 class (on Exhibit A-37), the total revenue from program offerings other than  
21 Income-Qualified on line 14 is equal to the billing determinants specific to those  
22 programs on line 6, multiplied by the surcharge specific to those programs on line  
23 10. Similarly, the total revenue from Income-Qualified program offerings on line  
24 15 is equal to the respective billing determinants on line 7, multiplied by the  
25 surcharge on line 11.

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1 For both the commercial and industrial secondary and primary classes, the surcharge  
2 used in the calculation of the revenue is specific to the consumption level sub-class.  
3 For example, looking at Exhibit A-38, the total revenue from program offerings  
4 other than Income-Qualified from commercial and industrial secondary customers  
5 with a monthly consumption level between 0 and 850 kWh in 2026 is on line 27,  
6 column (b). This amount is calculated by multiplying the number of meters in 2026  
7 for that sub-class in line 7, column (b) by the levelized surcharge, as shown on line  
8 17. Similarly, on Exhibit A-39, the total revenue in 2026 from program offerings  
9 other than Income-Qualified from commercial and industrial primary customers  
10 with a monthly consumption level between 0 and 11,500 kWh is on line 23, column  
11 (b). This amount was calculated as the number of meters for that sub-class in 2026  
12 in line 7, column (b), multiplied by the levelized surcharge specific to these  
13 programs, which is on line 15.

14

15 **Q50. How was the EWR surcharge calculated for the residential class?**

16 A50. The EWR surcharge for the residential class is a volumetric charge. The surcharge  
17 as shown on Exhibit A-35, line 1, column (c), is a sum of the surcharges for both  
18 Income-Qualified and other than Income-Qualified rates shown on Exhibit A-37,  
19 as discussed above. The EWR surcharge is collected from both full-service and  
20 Electric Choice customers.

21

22 **Q51. How was the EWR surcharge calculated for all other customer classes?**

23 A51. For commercial and industrial classes, the surcharges (summarized on Exhibit A-  
24 35, lines 3 through 19, column c), are implemented on a per meter per month basis.

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1           Therefore, rather than the surcharge being directly reliant on the sales forecast, it is  
2           determined by the forecasted number of meters.

3

4   **Q52. Can you describe how you derived the customer meter counts displayed on**  
5   **Exhibits A-38 and A-39?**

6   A52. Yes. The starting point for determining the number of meters was a current forecast  
7       of the number of full-service and Electric Choice customers for each year, provided  
8       by Witness Siswati's. To translate the customer counts to meter counts, the  
9       customer counts were multiplied by the average number of meters per customer for  
10      both full-service and Electric Choice customers based on historical data. This  
11      relationship is consistent with previous Plan cases.

12

13           After determining this base level of meter counts, adjustments were made for the  
14           number of meters belonging to customers who have elected to self-direct their EWR  
15           program. Customers who are self-directing their plans are only billed a surcharge  
16           to cover the revenue requirements for the Income-Qualified program offerings, so  
17           their meter counts are included in lines 11 through 13 on Exhibit A-38, but excluded  
18           from lines 7 through 9. Similarly, they are included in lines 10 and 11 on Exhibit  
19           A-39, but excluded from lines 7 and 8.

20

21   **Q53. How will the EWR surcharge be applied to commercial and industrial**  
22   **customers?**

23   A53. The amount of the per meter charge is determined by a customer's total monthly  
24       consumption by rate, across all meters. Therefore, a customer's charge may  
25       fluctuate from month to month as their consumption varies. There is a distinct

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1 EWR rate for each of the three defined monthly consumption ranges for secondary  
2 customers, and for two defined monthly consumption ranges for primary  
3 customers. The consumption ranges were proposed by the Company and approved  
4 by the Commission in the original EO plan and have remained constant. Each  
5 month, a customer is billed based on the consumption range in which their total  
6 monthly usage across all meters for an individual rate schedule falls, and the  
7 respective charge will be applied to each meter taking service. Establishing and  
8 maintaining this usage-sensitive rate structure mitigates the fact that if all customers  
9 received a uniform monthly per meter surcharge regardless of usage, the rate impact  
10 would be much more significant to customers with lower consumption levels.

11

12 **Q54. How is the EWR surcharge administered to residential and commercial**  
13 **unmetered customers?**

14 A54. Prior to the issuance of the MPSC's final Order on January 31, 2017 in MPSC Case  
15 No. U-18014 (DTE Electric's general rate case), the EWR surcharge was applied  
16 to unmetered customers as a percentage of their base revenue. The U-18014 Order  
17 approved unmetered surcharges going forward to be based on the kilowatt hours  
18 used. For the residential unmetered outdoor protective lighting service, the EWR  
19 surcharge is a volumetric charge applied to all kilowatt hours, as shown on Exhibit  
20 A-35. For commercial and municipal unmetered services (including outdoor  
21 protective lighting, streetlights, and traffic lights), the charge is determined in the  
22 same manner as for metered customers, with the specific charge being determined  
23 by which consumption level range the total usage for each tariffed rate schedule  
24 service falls in. However, the charges shown on Exhibit A-35, will be applied on  
25 a per customer basis, as opposed to being applied per meter.

Line  
No.

1 **Q55. Can you explain the information presented on Exhibit A-40?**

2 A55. Exhibit A-40 is an illustrative update of the tariff sheet that would be effective upon  
3 Commission approval of the proposed EWR base surcharge. This exhibit is  
4 currently populated with the base surcharges proposed on Exhibits A-35, A-36, A-  
5 37, A-38, and A-39, plus the proposed performance incentive from the 2024 EWR  
6 Reconciliation, Case No. U-21672, that would go into effect in 2026. When the  
7 actual tariff sheet is filed for approval following a Commission Order, the EWR  
8 rate reflected on the sheet will be the total of the base surcharge and the  
9 performance incentive component in effect at the time. I am proposing the base  
10 surcharges be implemented on bills rendered basis effective with the January 2026  
11 billing cycle for all classes.

12

13 **PROPOSED EWR BASE SURCHARGES – GAS**

14 **Q56. What information is displayed on Exhibit A-34?**

15 A56. Exhibit A-34 entitled “Calculation of Income-Qualified Percentage For the  
16 C&I/EUT Exploratory Program (EEP) – Gas” derives the percentage of the  
17 C&I/EUT 2026-2029 EWR revenue requirement that represents income-qualified  
18 programs. The EEP percentage calculated on line 5 is used on Exhibit A-33 to  
19 derive the levelized EWR surcharge for participants in the EEP. Line 2 reflects the  
20 income-qualified EWR program costs expensed in the program year for C&I and  
21 EUT. The income-qualified costs for the C&I/EUT customer class are supported on  
22 Exhibit A-6, sponsored by Witness Kupser. Line 3 is equal to line 2. Line 4  
23 represents the total revenue requirement for C&I/EUT customers before any  
24 offsetting amounts for the 2024 cumulative over/under recovery balances or 2025’s  
25 projected over/under recovery amounts and comes from line 7 of page 2 of Exhibit

Line  
No.

1 A-27. Line 5 is the income-qualified percentage of the total C&I/EUT revenue  
2 requirement, and it is calculated by dividing line 3 by line 4. Line 5 is the EEP  
3 percentage used to derive the proposed EEP surcharge.

4

5 **Q57. How does DTE Gas propose to recover its EWR Revenue Requirement?**

6 A57. DTE Gas plans to assess levelized customer surcharges to recover the 2026 to 2029  
7 EWR revenue requirement. The surcharges are designed to recover from each  
8 customer class the revenue requirement amounts associated with the EWR program  
9 for each respective customer class. These levelized surcharges are derived on  
10 Exhibit A-33.

11

12 **Q58. How were the customer surcharges on Exhibit A-33 derived?**

13 A58. Consistent with the methodology used by DTE Gas in its currently approved EWR  
14 Plan, the customer surcharges in this 2026-2029 EWR Plan were derived based on  
15 the revenue requirement amounts calculated on Exhibit A-27 and the forecasted  
16 billing determinants supported Exhibit A-20, sponsored by Company Witness  
17 Chapel. I am calculating a four-year levelized rate. Column (b), lines 1 through 2,  
18 represent the total revenue requirement for the respective periods for the two  
19 customer classes. Column (c), lines 1 through 3, represent the total billing  
20 determinants, by customer class, for the respective time periods. For this four-year  
21 period, I then calculated the Net Present Value (NPV) of the total revenue  
22 requirement to be collected from each customer class, shown in column (d), on lines  
23 1 through 3, and of the corresponding billing determinants, shown in column (e).  
24 The C&I NPV revenue requirement on line 2 column (d) reflects a reduction for the  
25 EUT revenue requirement amount on line 3. I will discuss the reason for this

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1 reduction in the next Q&A of my testimony. The levelized surcharges were  
2 calculated by dividing the NPV of total revenue requirement for each customer class  
3 by the NPV of the corresponding forecasted billing determinants. The resulting  
4 levelized surcharges, on a per Mcf basis, for each customer's class are shown in  
5 column (f).

6

7 **Q59. How were the EUT and C&I NPV revenue requirements in column (d) on lines**  
8 **2 and 3 of Exhibit A-33 derived?**

9 A59. To maintain an equal percentage rate change for the EUT and C&I rate classes, I  
10 was required to simultaneously solve for the NPV revenue requirement for EUT and  
11 C&I. The NPV revenue requirement for EUT on line 3, column (d), is subtracted  
12 from the NPV of the total revenue requirement of the combined C&I/EUT class to  
13 get the NPV revenue requirement for C&I alone, shown on line 2, column (d). The  
14 sum of line 2 and line 3, column (d), represents the NPV of the total revenue  
15 requirement of the combined C&I/EUT class. The resulting NPV numbers for each  
16 class produce surcharges that reflect an equal percentage change for both C&I and  
17 EUT customers from their currently effective base EWR surcharges, as shown in  
18 column (j).

19

20 **Q60. How was the surcharge on line 6 of Exhibit A-33 for the proposed EEP**  
21 **surcharge calculated?**

22 A60. As directed by Witness Kupser, I derived the EEP surcharge by multiplying the  
23 proposed EUT surcharge on line 3 by the EEP (income-qualified) percentage  
24 calculated on Exhibit A-34. The resulting rate is listed on line 6 of Exhibit A-33.

Line  
No.

1 **Q61. What interest rate did you use to calculate the NPV of total revenue**  
2 **requirement and billing determinants on Exhibit A-33?**

3 A61. I used a discount rate of 4.00% for 2026 through 2029 to calculate the NPVs. These  
4 rates are based on DTE Gas's estimated short-term borrowing costs and were  
5 supplied to me by DTE's Treasury Department.

6

7 **Q62. What does the section under the title "Levelized Revenue Requirement", on**  
8 **Lines 10 through 13 of Exhibit A-33 represent?**

9 A62. Lines 10 through 13 represent the amount of revenue DTE Gas expects to collect  
10 from 2026 through 2029 based on the forecasted volumes for the respective years  
11 and billed at the proposed levelized rates.

12

13 **Q63. What are the levelized surcharges DTE Gas is proposing to implement?**

14 A63. As shown on Exhibit A-33, column (f), DTE Gas is proposing that the Commission  
15 approve the levelized EWR surcharges of \$0.2536/Mcf for residential customers;  
16 C&I surcharges of \$0.4478/Mcf; EUT surcharges of \$0.0289/Mcf, and EEP  
17 surcharges of \$0.0119/Mcf based on the revenue requirements presented in my  
18 testimony for each customer class. Exhibit A-33, column (g) shows these levelized  
19 surcharges converted to \$/Ccf.

20

21 **Q64. What are the amounts listed on columns (h), (i) and (j) of Exhibit A-33?**

22 A64. The amounts listed in column (h) are the Base EWR Surcharges DTE Gas is  
23 currently allowed to collect, as approved by the Commission in Case No. U-21322,  
24 they do not include any performance incentive surcharges. The amounts listed in  
25 column (i) are the absolute change from currently approved base EWR rates if the

Line  
No.

1 proposed EWR rates, shown in column (g), are approved. The amounts shown in  
2 column (j) are the percentage change in the customer classes' surcharges.

3

4 **Q65. What information is presented on Exhibit A-41?**

5 A65. Exhibit A-41 is an illustrative update of the tariff sheet that would be effective upon  
6 Commission approval of the proposed EWR base surcharges. This exhibit is  
7 currently populated with the base surcharges proposed on Exhibit A-33, and  
8 includes the proposed performance incentive from the 2024 EWR Reconciliation,  
9 Case No. U-21672, that would take effect in 2026. When the actual tariff sheet is  
10 filed for approval following a Commission Order, the EWR rate reflected on the  
11 sheet will be the total of the base surcharge and the performance incentive  
12 component in effect at the time. Consistent with prior Commission orders, I am  
13 proposing these surcharges be implemented on a bill rendered basis effective for the  
14 January 2026 billing cycle for all classes.

15

16 **Q66. Does this complete your direct testimony?**

17 A66. Yes, it does.

18

**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter, on the Commission's own )  
motion, regarding the regulatory reviews, )  
revisions, determinations, and/or approvals )  
necessary for **DTE ELECTRIC** )  
**COMPANY and DTE GAS COMPANY** to )  
fully comply with Public Act 295 of 2008, )  
as amended. )

Case No. U-21681  
(Paperless e-file)

EXHIBITS  
OF  
EDDIE SMITH

| Line No. | (a)<br>Description                                     | (b)<br>Source            | (c)<br>2026          | (d)<br>2027          | (e)<br>2028          | (f)<br>2029          | (g)<br>Total          |
|----------|--|--------------------------|----------------------|----------------------|----------------------|----------------------|-----------------------|
| 1        | Capitalized Costs:                                     |                          |                      |                      |                      |                      |                       |
| 2        | Return On Capitalized Costs                            | Exh A-29, Pg 1, Line 4   | \$ -                 | \$ -                 | \$ -                 | \$ -                 | \$ -                  |
| 3        | Return Of Capitalized Costs - Amortization (5-Years)   | Exh A-29, Pg 1, Line 30  | -                    | -                    | -                    | -                    | -                     |
| 4        | Total Revenue Requirement - Capital Costs              | Line 2 + Line 3          | \$ -                 | \$ -                 | \$ -                 | \$ -                 | \$ -                  |
| 5        | Expenses:  |                          |                      |                      |                      |                      |                       |
| 6        | Program Costs to be Expensed                           | Exh A-5, Pg 1 Line 9     | 56,518,469           | 59,770,082           | 64,460,195           | 66,143,243           | 246,891,989           |
| 7        | Amortization of TCJA Regulatory Liability              | n.a. (4)                 | -                    | -                    | -                    | -                    | -                     |
| 8        | Revenue Requirement - Total Costs                      | Line 4 + Line 6 + Line 7 | \$ 56,518,469        | \$ 59,770,082        | \$ 64,460,195        | \$ 66,143,243        | \$ 246,891,989        |
| 9        | Actual Cum. (Over) / Under Recovery as of 12/31/24 (1) | WP ES-E1                 | (2,321,690)          |                      |                      |                      | (2,321,690)           |
| 10       | 2025 Estimated (Over) / Under Recovery                 | WP ES-E2                 | (14,179,191)         |                      |                      |                      | (14,179,191)          |
| 11       | 2025 Estimated Carrying Charges (2)                    | (3)                      | (399,980)            |                      |                      |                      | (399,980)             |
| 12       | Total Revenue Requirement                              | Line 8 thru Line 12      | <u>\$ 39,617,608</u> | <u>\$ 59,770,082</u> | <u>\$ 64,460,195</u> | <u>\$ 66,143,243</u> | <u>\$ 229,991,128</u> |

(1) Filed cumulative ending balance in Case No. U-21672, Exhibit A-18, Pg 1, Line 11

(2) Short-term debt rate provided by DTE Treasury Department

(3) (Line 9 + Line 10 / 2) x 4.25%

(4) No TCJA Amortization for Residential since there was no deferred taxes to remeasure at 12/31/2017.

Michigan Public Service Commission  
DTE Electric Company  
2026 - 2029 Energy Waste Reduction Plan  
Annual Revenue Requirement by Class - Electric  
Commercial and Industrial Secondary  
(\$)

Case No.: U-21681  
Exhibit: A-26  
Witness: E. Smith  
Page: 2 of 3

| Line No. | (a)<br>Description                                     | (b)<br>Source            | (c)<br>2026    | (d)<br>2027   | (e)<br>2028   | (f)<br>2029   | (g)<br>Total   |
|----------|--|--------------------------|----------------|---------------|---------------|---------------|----------------|
| 1        | Capitalized Costs:                                     |                          |                |               |               |               |                |
| 2        | Return On Capitalized Costs                            | Exh A-29, Pg 2, Line 4   | \$ (62,653)    | \$ (81,484)   | \$ (67,565)   | \$ (53,646)   | \$ (265,347)   |
| 3        | Return Of Capitalized Costs - Amortization (5-Years)   | Exh A-29, Pg 2, Line 30  | 925,127        | -             | -             | -             | 925,127        |
| 4        | Total Revenue Requirement - Capital Costs              | Line 2 + Line 3          | \$ 862,474     | \$ (81,484)   | \$ (67,565)   | \$ (53,646)   | \$ 659,779     |
| 5        | Expenses:  |                          |                |               |               |               |                |
| 6        | Program Costs to be Expensed                           | Exh A-5, Pg 1 Line 29    | 95,860,944     | 97,272,800    | 98,244,186    | 99,575,315    | 390,953,245    |
| 7        | Amortization of TCJA Regulatory Liability              | WP RAB-2                 | (199,179)      | (199,179)     | (199,179)     | (199,179)     | (796,717)      |
| 8        | Revenue Requirement - Total Costs                      | Line 4 + Line 6 + Line 7 | \$ 96,524,239  | \$ 96,992,137 | \$ 97,977,442 | \$ 99,322,490 | \$ 390,816,307 |
| 9        | Actual Cum. (Over) / Under Recovery as of 12/31/24 (1) | WP ES-E1                 | 4,721,929      |               |               |               | 4,721,929      |
| 10       | 2025 Estimated (Over) / Under Recovery                 | WP ES-E2                 | 15,517,893     |               |               |               | 15,517,893     |
| 11       | 2025 Estimated Carrying Charges (2)                    | (3)                      | 530,437        |               |               |               | 530,437        |
| 12       | Total Revenue Requirement                              | Line 8 thru Line 12      | \$ 117,294,498 | \$ 96,992,137 | \$ 97,977,442 | \$ 99,322,490 | \$ 411,586,567 |

(1) Filed cumulative ending balance in Case No. U-21672, Exhibit A-18, Pg 1, Line 11  
(2) Short-term debt rate provided by DTE Treasury Department  
(3) (Line 9 + Line 10 / 2) x 4.25%

Michigan Public Service Commission  
DTE Electric Company  
2026 - 2029 Energy Waste Reduction Plan  
Annual Revenue Requirement by Class - Electric  
Commercial and Industrial Primary  
(\$)

Case No.: U-21681  
Exhibit: A-26  
Witness: E. Smith  
Page: 3 of 3

| Line No. | (a)<br>Description                                     | (b)<br>Source            | (c)<br>2026   | (d)<br>2027   | (e)<br>2028   | (f)<br>2029   | (g)<br>Total   |
|----------|--|--------------------------|---------------|---------------|---------------|---------------|----------------|
| 1        | Capitalized Costs:                                     |                          |               |               |               |               |                |
| 2        | Return On Capitalized Costs                            | Exh A-29, Pg 3, Line 4   | \$ 8,140      | \$ (61,418)   | \$ (50,927)   | \$ (40,435)   | \$ (144,640)   |
| 3        | Return Of Capitalized Costs - Amortization (5-Years)   | Exh A-29, Pg 3, Line 30  | 2,283,767     | -             | -             | -             | 2,283,767      |
| 4        | Total Revenue Requirement - Capital Costs              | Line 2 + Line 3          | \$ 2,291,907  | \$ (61,418)   | \$ (50,927)   | \$ (40,435)   | \$ 2,139,127   |
| 5        | Expenses:  |                          |               |               |               |               |                |
| 6        | Program Costs to be Expensed                           | Exh A-5, Pg 1, Line 19   | 58,903,718    | 59,771,262    | 60,368,150    | 61,186,089    | 240,229,219    |
| 7        | Amortization of TCJA Regulatory Liability              | WP RAB-2                 | (150,131)     | (150,131)     | (150,131)     | (150,131)     | (600,522)      |
| 8        | Revenue Requirement - Total Costs                      | Line 4 + Line 6 + Line 7 | \$ 61,045,495 | \$ 59,559,713 | \$ 60,167,093 | \$ 60,995,523 | \$ 241,767,824 |
| 9        | Actual Cum. (Over) / Under Recovery as of 12/31/24 (1) | WP ES-E1                 | 26,262,859    |               |               |               | 26,262,859     |
| 10       | 2025 Estimated (Over) / Under Recovery                 | WP ES-E2                 | (5,704,390)   |               |               |               | (5,704,390)    |
| 11       | 2025 Estimated Carrying Charges (2)                    | (3)                      | 994,953       |               |               |               | 994,953        |
| 12       | Total Revenue Requirement                              | Line 8 thru Line 12      | \$ 82,598,917 | \$ 59,559,713 | \$ 60,167,093 | \$ 60,995,523 | \$ 263,321,247 |

(1) Filed cumulative ending balance in Case No. U-21672, Exhibit A-18, Pg 1, Line 11  
(2) Short-term debt rate provided by DTE Treasury Department  
(3) (Line 9 + Line 10 / 2) x 4.25%

Michigan Public Service Commission  
DTE Gas Company  
2026 - 2029 Energy Waste Reduction Plan  
Annual Revenue Requirement by Class - Gas  
Residential  
(\$)

Case No: U-21681  
Exhibit: A-27  
Witness: E. Smith  
Page: 1 of 2

| Line No. | (a)<br>Description                                     | (b)<br>Source         | (c)<br>2026   | (d)<br>2027   | (e)<br>2028   | (f)<br>2029   | (g)<br>Total   |
|----------|--|-----------------------|---------------|---------------|---------------|---------------|----------------|
| 1        | Capitalized Costs:                                     |                       |               |               |               |               |                |
| 2        | Return On Capitalized Costs                            | (1)                   | \$ -          | \$ -          | \$ -          | \$ -          | \$ -           |
| 3        | Return Of Capitalized Costs - Amortization (5-Years)   | (1)                   | -             | -             | -             | -             | -              |
| 4        | Total Revenue Requirement - Capital Costs              | Line 2 + Line 3       | \$ -          | \$ -          | \$ -          | \$ -          | \$ -           |
| 5        | Expenses:  |                       |               |               |               |               |                |
| 6        | Program Costs to be Expensed                           | Exh A-6, Pg 1, Line 9 | 25,224,532    | 25,353,975    | 25,777,061    | 26,419,105    | 102,774,673    |
| 7        | Revenue Requirement - Program Costs                    | Line 4 + Line 6       | \$ 25,224,532 | \$ 25,353,975 | \$ 25,777,061 | \$ 26,419,105 | \$ 102,774,673 |
| 8        | Actual Cum. (Over) / Under Recovery as of 12/31/24 (2) | WP ES-G1              | \$ 1,469,304  |               |               |               | \$ 1,469,304   |
| 9        | 2025 Estimated (Over) / Under Recovery                 | WP ES-G2              | 6,570,951     |               |               |               | 6,570,951      |
| 10       | 2025 Estimated Carrying Charges (3)(4)                 | (4)                   | 202,078       |               |               |               | 202,078        |
| 11       | Total Revenue Requirement                              | Line 7 thru Line 10   | \$ 33,466,865 | \$ 25,353,975 | \$ 25,777,061 | \$ 26,419,105 | \$ 111,017,006 |

(1) No unamortized capitalized costs in 2026-2029

(2) Filed cumulative ending balance in Case No. U-21672, Exhibit A-29, Pg 1, Line 10

(3) Short-term debt rate provided by DTE Treasury Department

(4) (Line 8 + Line 9 / 2) x 4.25%

Michigan Public Service Commission  
DTE Gas Company  
2026 - 2029 Energy Waste Reduction Plan  
Annual Revenue Requirement by Class - Gas  
Commercial & Industrial / End-Use Transportation  
(\$)

Case No: U-21681  
Exhibit: A-27  
Witness: E. Smith  
Page: 2 of 2

|          | (a)  | (b)                     | (c)           | (d)           | (e)           | (f)           | (g)           |
|----------|--|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Line No. | Description  | Source                  | 2026          | 2027          | 2028          | 2029          | Total         |
| 1        | Capitalized Costs:                                     |                         |               |               |               |               |               |
| 2        | Return On Capitalized Costs                            | Exh A-30, Pg 1, Line 4  | \$ 4,040      | \$ (0)        | \$ (0)        | \$ (0)        | \$ 4,040      |
| 3        | Return Of Capitalized Costs - Amortization (5-Years)   | Exh A-30, Pg 1, Line 25 | 116,006       | -             | -             | -             | 116,006       |
| 4        | Total Revenue Requirement - Capital Costs              | Line 2 + Line 3         | \$ 120,046    | \$ (0)        | \$ (0)        | \$ (0)        | \$ 120,046    |
| 5        | Expenses:  |                         |               |               |               |               |               |
| 6        | Program Costs to be Expensed                           | Exh A-6, Pg 1, Line 19  | 24,980,724    | 24,810,788    | 24,997,057    | 24,863,337    | 99,651,905    |
| 7        | Revenue Requirement - Program Costs                    | Line 4 + Line 6         | \$ 25,100,770 | \$ 24,810,788 | \$ 24,997,057 | \$ 24,863,337 | \$ 99,771,951 |
| 8        | Actual Cum. (Over) / Under Recovery as of 12/31/24 (1) | WP ES-G1                | \$ 5,190,999  |               |               |               | \$ 5,190,999  |
| 9        | 2025 Estimated (Over) / Under Recovery                 | WP ES-G2                | (7,592,273)   |               |               |               | (7,592,273)   |
| 10       | 2025 Estimated Carrying Charges (2)                    | (3)                     | 59,282        |               |               |               | 59,282        |
| 11       | Total Revenue Requirement                              | Line 7 thru Line 10     | \$ 22,758,776 | \$ 24,810,788 | \$ 24,997,057 | \$ 24,863,337 | \$ 97,429,958 |

(1) Filed cumulative ending balance in Case No. U-21672, Exhibit A-29, Pg 1, Line 10  
(2) Short-term debt rate provided by DTE Treasury Department  
(3) (Line 8 + Line 9 / 2) x 4.25%

**Michigan Public Service Commission**  
**DTE Gas Company**  
**2026 - 2029 Energy Waste Reduction Plan**  
**Revenue Requirement Summary by Class - Gas**  
**Summary of All Classes**  
**(\$)**

Case No: U-21681  
 Exhibit : A-28  
 Witness: E. Smith  
 Page: 1 of 1

| Line No. | (a)<br>Description                      | (b)<br>Source           | (c)<br>2026          | (d)<br>2027          | (e)<br>2028          | (f)<br>2029          | (g)<br>Total          |
|----------|---|-------------------------|----------------------|----------------------|----------------------|----------------------|-----------------------|
| 1        | Residential                             | Exh A-27, Pg 1, Line 11 | \$ 33,466,865        | \$ 25,353,975        | \$ 25,777,061        | \$ 26,419,105        | \$ 111,017,006        |
| 2        | C&I/EUT                                 | Exh A-27, Pg 2, Line 11 | <u>22,758,776</u>    | <u>24,810,788</u>    | <u>24,997,057</u>    | <u>24,863,337</u>    | <u>97,429,958</u>     |
| 3        | Total Revenue Requirement - All Classes |                         | <u>\$ 56,225,641</u> | <u>\$ 50,164,763</u> | <u>\$ 50,774,118</u> | <u>\$ 51,282,442</u> | <u>\$ 208,446,963</u> |

Michigan Public Service Commission  
DTE Electric Company  
2026 - 2029 Energy Waste Reduction Plan  
Calculation of Return on Capitalized Costs - Electric Residential  
(\$)

| Line No. | (a)<br>Description                                   | (b)<br>Source                     | (c) - (h)<br>Year |              |              |              |              |              |              |
|----------|--|-----------------------------------|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|
|          |  |                                   | 2024 (1)          | 2025         | 2026         | 2027         | 2028         | 2029         |              |
| 1        | <u>Return on Capitalized Costs</u>                   |                                   |                   |              |              |              |              |              |              |
| 2        | Average Capitalized Costs                            | Line 14                           |                   |              |              |              |              |              |              |
| 3        | Pre-Tax Rate of Return                               | Exh A-31, Pg 1, Line 3 Col (f)    |                   |              |              |              |              |              |              |
| 4        | Return on Capitalized Costs                          | Line 2 x Line 3                   |                   |              |              |              |              |              |              |
| 5        | <u>Ending Capitalized Costs</u>                      |                                   |                   |              |              |              |              |              |              |
| 6        | Plant in Service                                     | Line 15 + prior year              | \$ 3,762,277      | \$ 3,762,277 | \$ 3,762,277 | \$ 3,762,277 | \$ 3,762,277 | \$ 3,762,277 | \$ 3,762,277 |
| 7        | Retired Plant in Service                             | 2024 EWR Rec; Exh A-10 Pg 1 Ln 17 | (3,762,277)       | (3,762,277)  | (3,762,277)  | (3,762,277)  | (3,762,277)  | (3,762,277)  | (3,762,277)  |
| 8        | Gross Plant  | Line 6 + Line 7                   | -                 | -            | -            | -            | -            | -            | -            |
| 9        | Accumulated Amortization                             | Line 30 + prior year              | (3,762,277)       | (3,762,277)  | (3,762,277)  | (3,762,277)  | (3,762,277)  | (3,762,277)  | (3,762,277)  |
| 10       | Retired Accumulated Amortization                     | 2024 EWR Rec; Exh A-10 Pg 1 Ln 21 | 3,762,277         | 3,762,277    | 3,762,277    | 3,762,277    | 3,762,277    | 3,762,277    | 3,762,277    |
| 11       | Net Plant  | Sum Lines 8 to 10                 | -                 | -            | -            | -            | -            | -            | -            |
| 12       | Accumulated Deferred Taxes                           | Exh A-24, Line 7                  | -                 | -            | -            | -            | -            | -            | -            |
| 13       | Ending Capitalized Costs (2)                         | Line 11 + Line 12                 | -                 | -            | -            | -            | -            | -            | -            |
| 14       | Average Capitalized Costs                            | Simple Avg of Line 13             | -                 | -            | -            | -            | -            | -            | -            |
| 15       | Program Costs Capitalized less CWIP (2)              | Exh. A-5, Pg 1, Line 1            | -                 | -            | -            | -            | -            | -            | -            |
| 16       | Program Costs Capitalized                            |                                   | -                 | -            | -            | -            | -            | -            | -            |
| 17       | <b>Amortization Book Expense (1/2 yr convention)</b> |                                   |                   |              |              |              |              |              |              |
| 18       | 2019   | 5 year                            | -                 | -            | -            | -            | -            | -            | -            |
| 19       | 2020   | 5 year                            | -                 | -            | -            | -            | -            | -            | -            |
| 20       | 2021   | 5 year                            | -                 | -            | -            | -            | -            | -            | -            |
| 21       | 2022   | 5 year                            | -                 | -            | -            | -            | -            | -            | -            |
| 22       | 2023   | 5 year                            | -                 | -            | -            | -            | -            | -            | -            |
| 23       | 2024   | 5 year                            | -                 | -            | -            | -            | -            | -            | -            |
| 24       | 2025   | 5 year                            | -                 | -            | -            | -            | -            | -            | -            |
| 25       | 2026   | 5 year                            | -                 | -            | -            | -            | -            | -            | -            |
| 26       | 2027   | 5 year                            | -                 | -            | -            | -            | -            | -            | -            |
| 27       | 2028   | 5 year                            | -                 | -            | -            | -            | -            | -            | -            |
| 28       | 2029   | 5 year                            | -                 | -            | -            | -            | -            | -            | -            |
| 29       | Adjustment   |                                   |                   |              |              |              |              |              |              |
| 30       | <b>Total Amortization</b>                            | Sum of L18:L30                    | \$ -              | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         |

Source:

(1) The details in column (c) are the actual amounts presented in the 2024 EWR Reconciliation, Case No. U-21672

(2) The detail in columns (d)-(h) are the forecasted amounts for 2025-2029

Michigan Public Service Commission  
DTE Electric Company  
2026 - 2029 Energy Waste Reduction Plan  
Calculation of Return on Capitalized Costs - Electric  
Commercial and Industrial - Secondary  
(\$)

| Line No. | (a)<br>Description                                   | (b)<br>Source                     | (c) Year            |                      |                    |                    |                    | (g)<br>2028        | (h)<br>2029 |
|----------|--|-----------------------------------|---------------------|----------------------|--------------------|--------------------|--------------------|--------------------|-------------|
|          |  |                                   | 2024 (1)            | 2025                 | 2026               | 2027               | 2028               |                    |             |
| 1        | <u>Return on Capitalized Costs</u>                   |                                   |                     |                      |                    |                    |                    |                    |             |
| 2        | Average Capitalized Costs                            | Line 14                           | \$ 8,511,374        | \$ 3,283,721         | \$ (664,349)       | \$ (864,028)       | \$ (716,436)       | \$ (568,844)       |             |
| 3        | Pre-Tax Rate of Return                               | Exh A-31, Pg 1, Line 3 Col (f)    | 9.43%               | 9.43%                | 9.43%              | 9.43%              | 9.43%              | 9.43%              |             |
| 4        | Return on Capitalized Costs                          | Line 2 x Line 3                   | <u>\$ 802,682</u>   | <u>\$ 309,678</u>    | <u>\$ (62,653)</u> | <u>\$ (81,484)</u> | <u>\$ (67,565)</u> | <u>\$ (53,646)</u> |             |
| 5        | <u>Ending Capitalized Costs</u>                      |                                   |                     |                      |                    |                    |                    |                    |             |
| 6        | Plant in Service                                     | Line 15 + prior year              | \$ 77,503,392       | \$ 77,503,392        | \$ 77,503,392      | \$ 77,503,392      | \$ 77,503,392      | \$ 77,503,392      |             |
| 7        | Retired Plant in Service                             | 2024 EWR Rec; Exh A-10 Pg 1 Ln 17 | (17,316,708)        | (17,316,708)         | (17,316,708)       | (17,316,708)       | (17,316,708)       | (17,316,708)       |             |
| 8        | Gross Plant  | Line 6 + Line 7                   | 60,186,684          | 60,186,684           | 60,186,684         | 60,186,684         | 60,186,684         | 60,186,684         |             |
| 9        | Accumulated Amortization                             | Line 30 + prior year              | (66,461,151)        | (76,578,265)         | (77,503,392)       | (77,503,392)       | (77,503,392)       | (77,503,392)       |             |
| 10       | Retired Accumulated Amortization                     | 2024 EWR Rec; Exh A-10 Pg 1 Ln 21 | 17,316,708          | 17,316,708           | 17,316,708         | 17,316,708         | 17,316,708         | 17,316,708         |             |
| 11       | Net Plant  | Sum Lines 8 to 10                 | 11,042,241          | 925,126              | (0)                | (0)                | (0)                | (0)                |             |
| 12       | Accumulated Deferred Taxes                           | Exh A-24, Line 17                 | (4,083,925)         | (1,316,001)          | (937,823)          | (790,231)          | (642,639)          | (495,048)          |             |
| 13       | Ending Capitalized Costs (2)(4)                      | Line 11 + Line 12                 | 6,958,316           | (390,874)            | (937,823)          | (790,232)          | (642,640)          | (495,048)          |             |
| 14       | Average Capitalized Costs (4)                        | Simple Avg of Line 13             | 8,511,374           | 3,283,721            | (664,349)          | (864,028)          | (716,436)          | (568,844)          |             |
| 15       | Program Costs Capitalized less CWIP (2)              | Exh. A-5, Pg 1, Line 20           | -                   | -                    | -                  | -                  | -                  | -                  |             |
| 16       | Program Costs Capitalized                            |                                   | -                   | -                    | -                  | -                  | -                  | -                  |             |
| 17       | <b>Amortization Book Expense (1/2 yr convention)</b> |                                   |                     |                      |                    |                    |                    |                    |             |
| 18       | 2019   | 5 year                            | 995,447             |                      |                    |                    |                    |                    |             |
| 19       | 2020   | 5 year                            | 2,070,152           | 1,035,076            |                    |                    |                    |                    |             |
| 20       | 2021   | 5 year                            | 2,730,241           | 2,730,241            | 1,365,121          |                    |                    |                    |             |
| 21       | 2022   | 5 year                            |                     |                      |                    |                    |                    |                    |             |
| 22       | 2023   | 5 year                            |                     |                      |                    |                    |                    |                    |             |
| 23       | 2024   | 5 year                            |                     |                      |                    |                    |                    |                    |             |
| 24       | 2025   | 5 year                            |                     |                      |                    |                    |                    |                    |             |
| 25       | 2026   | 5 year                            |                     |                      |                    |                    |                    |                    |             |
| 26       | 2027   | 5 year                            |                     |                      |                    |                    |                    |                    |             |
| 27       | 2028   | 5 year                            |                     |                      |                    |                    |                    |                    |             |
| 28       | 2029   | 5 year                            |                     |                      |                    |                    |                    |                    |             |
| 29       | Adjustment   |                                   | (1,404,871)         | 6,351,797            | (439,994)          |                    |                    |                    |             |
| 30       | <b>Total Amortization</b>                            | Sum of L18:L29                    | <u>\$ 4,390,969</u> | <u>\$ 10,117,114</u> | <u>\$ 925,127</u>  | <u>\$ -</u>        | <u>\$ -</u>        | <u>\$ -</u>        |             |

Source:

- (1) The details in column (c) are the actual amounts presented in the 2024 EWR Reconciliation, Case No. U-21672
- (2) The detail in columns (d)-(h) are the forecasted amounts for 2025-2029
- (3) Offsetting adjustments made in 2025 to rebalance accumulated amortization between C&I Secondary and Primary
- (4) Negative balance in future years due to TCJA Regulatory Liability

Michigan Public Service Commission  
DTE Electric Company  
2026 - 2029 Energy Waste Reduction Plan  
Calculation of Return on Capitalized Costs - Electric  
Commercial and Industrial - Primary  
(\$)

| Line No. | (a)<br>Description                                   | (b)<br>Source                     | (c) - (h)<br>Year |                |                |                |                |                |  |
|----------|--|-----------------------------------|-------------------|----------------|----------------|----------------|----------------|----------------|--|
|          |  |                                   | 2024 (1)          | 2025           | 2026           | 2027           | 2028           | 2029           |  |
| 1        | Return on Capitalized Costs                          |                                   |                   |                |                |                |                |                |  |
| 2        | Average Capitalized Costs                            | Line 14                           | \$ 4,367,124      | \$ 751,498     | \$ 86,319      | \$ (651,257)   | \$ (540,010)   | \$ (428,764)   |  |
| 3        | Pre-Tax Rate of Return                               | Exh A-31, Pg 1, Line 3 Col (f)    | 9.43%             | 9.43%          | 9.43%          | 9.43%          | 9.43%          | 9.43%          |  |
| 4        | Return on Capitalized Costs                          | Line 2 x Line 3                   | \$ 411,850        | \$ 70,872      | \$ 8,140       | \$ (61,418)    | \$ (50,927)    | \$ (40,435)    |  |
| 5        | <u>Ending Capitalized Costs</u>                      |                                   |                   |                |                |                |                |                |  |
| 6        | Plant in Service                                     | Line 15 + prior year              | \$ 108,257,417    | \$ 108,257,417 | \$ 108,257,417 | \$ 108,257,417 | \$ 108,257,417 | \$ 108,257,417 |  |
| 7        | Retired Plant in Service                             | 2024 EWR Rec; Exh A-10 Pg 1 Ln 17 | (24,717,696)      | (24,717,696)   | (24,717,696)   | (24,717,696)   | (24,717,696)   | (24,717,696)   |  |
| 8        | Gross Plant  | Line 6 + Line 7                   | 83,539,721        | 83,539,721     | 83,539,721     | 83,539,721     | 83,539,721     | 83,539,721     |  |
| 9        | Accumulated Amortization                             | Line 30 + prior year              | (106,169,053)     | (105,973,650)  | (108,257,417)  | (108,257,417)  | (108,257,417)  | (108,257,417)  |  |
| 10       | Retired Accumulated Amortization                     | 2024 EWR Rec; Exh A-10 Pg 1 Ln 21 | 24,717,696        | 24,717,696     | 24,717,696     | 24,717,696     | 24,717,696     | 24,717,696     |  |
| 11       | Net Plant  | Sum Lines 8 to 10                 | 2,088,364         | 2,283,767      | (0)            | (0)            | (0)            | (0)            |  |
| 12       | Accumulated Deferred Taxes                           | Exh A-24, Line 27                 | (1,464,885)       | (1,404,248)    | (706,880)      | (595,634)      | (484,387)      | (373,140)      |  |
| 13       | Ending Capitalized Costs (2)                         | Line 11 + Line 12                 | 623,478           | 879,519        | (706,880)      | (595,634)      | (484,387)      | (373,140)      |  |
| 14       | Average Capitalized Costs (4)                        | Simple Avg of Line 13             | 4,367,124         | 751,498        | 86,319         | (651,257)      | (540,010)      | (428,764)      |  |
| 15       | Program Costs Capitalized less CWIP (2)              | Exh. A-5, Pg 1, Line 11           | -                 | -              | -              | -              | -              | -              |  |
| 16       | Program Costs Capitalized                            |                                   | -                 | -              | -              | -              | -              | -              |  |
| 17       | <b>Amortization Book Expense (1/2 yr convention)</b> |                                   |                   |                |                |                |                |                |  |
| 18       | 2019   | 5 year                            | 2,827,827         |                |                |                |                |                |  |
| 19       | 2020   | 5 year                            | 3,628,037         | 1,814,018      |                |                |                |                |  |
| 20       | 2021   | 5 year                            | 4,342,376         | 4,342,376      | 2,171,188      |                |                |                |  |
| 21       | 2022   | 5 year                            |                   |                |                |                |                |                |  |
| 22       | 2023   | 5 year                            |                   |                |                |                |                |                |  |
| 23       | 2024   | 5 year                            |                   |                |                |                |                |                |  |
| 24       | 2025   | 5 year                            |                   |                |                |                |                |                |  |
| 25       | 2026   | 5 year                            |                   |                |                |                |                |                |  |
| 26       | 2027   | 5 year                            |                   |                |                |                |                |                |  |
| 27       | 2028   | 5 year                            |                   |                |                |                |                |                |  |
| 28       | 2029   | 5 year                            |                   |                |                |                |                |                |  |
| 29       | Adjustment (3)                                       |                                   | (543,803)         | (6,351,797)    | 112,579        |                |                |                |  |
| 30       | <b>Total Amortization</b>                            | Sum of L18:L29                    | \$ 10,254,437     | \$ (195,403)   | \$ 2,283,767   | \$ -           | \$ -           | \$ -           |  |

Source:

- (1) The details in column (c) are the actual amounts presented in the 2024 EWR Reconciliation, Case No. U-21672
- (2) The detail in columns (d)-(h) are the forecasted amounts for 2025-2029
- (3) Offsetting adjustments made in 2025 to rebalance accumulated amortization between C&I Secondary and Primary
- (4) Negative balance in future years due to TCJA Regulatory Liability

Michigan Public Service Commission  
DTE Gas Company  
2026 - 2029 Energy Waste Reduction Plan  
Calculation of Return on Capitalized Costs - Gas  
Commercial & Industrial/End-Use Transportation  
(\$)

Case No.: U-21681  
Exhibit: A-30  
Witness: E. Smith  
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| Line No.   | (a)<br>Description                      | (b)<br>Source         | (c)              |                  | (d)              |                | (e)            |              | (f)          |              | (g)          |              | (h)          |              |
|--|---|-----------------------|------------------|------------------|------------------|----------------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|  |   |                       | 2022 (1)         | 2023             | 2024 (2)         | 2025           | 2026           | 2027         | 2028         | 2029         |              |              |              |              |
| 1  | <u>Return on Capitalized Costs</u>      |                       |                  |                  |                  |                |                |              |              |              |              |              |              |              |
| 2  | Average Capitalized Costs               | Line 11               |                  |                  |                  |                |                | \$ 42,806    | \$ (0)       | \$ (0)       | \$ (0)       | \$ (0)       | \$ (0)       | \$ (0)       |
| 3  | Pre-Tax Rate of Return                  | A-32, Line 3, Col (f) |                  |                  |                  |                | 9.44%          | 9.44%        | 9.44%        | 9.44%        | 9.44%        | 9.44%        | 9.44%        | 9.44%        |
| 4  | Return on Capitalized Costs             | Line 2 x Line 3       |                  |                  |                  |                | \$ 4,040       | \$ (0)       | \$ (0)       | \$ (0)       | \$ (0)       | \$ (0)       | \$ (0)       | \$ (0)       |
| 5  | <u>Ending Capitalized Costs</u>         |                       |                  |                  |                  |                |                |              |              |              |              |              |              |              |
| 6  | Gross Plant                             | Line 12 + prior year  | \$ 5,028,088     | \$ 5,028,088     | \$ 5,028,088     | \$ 5,028,088   | \$ 5,028,088   | \$ 5,028,088 | \$ 5,028,088 | \$ 5,028,088 | \$ 5,028,088 | \$ 5,028,088 | \$ 5,028,088 | \$ 5,028,088 |
| 7  | Accumulated Amortization                | Line 26 + prior year  | (1,555,707)      | (3,215,312)      | (4,259,134)      | (4,912,082)    | (5,028,088)    | (5,028,088)  | (5,028,088)  | (5,028,088)  | (5,028,088)  | (5,028,088)  | (5,028,088)  | (5,028,088)  |
| 8  | Net Plant                               | Line 6 + Line 7       | 3,472,380        | 1,812,775        | 768,953          | 116,006        | -              | -            | -            | -            | -            | -            | -            | -            |
| 9  | Accumulated Deferred Taxes              | Exh A-25 Line 14      | (909,764)        | (474,947)        | (201,466)        | (30,394)       | (0)            | (0)          | (0)          | (0)          | (0)          | (0)          | (0)          | (0)          |
| 10   | Ending Capitalized Costs (2)            | Line 8 + Line 9       | 2,562,616        | 1,337,828        | 567,488          | 85,612         | (0)            | (0)          | (0)          | (0)          | (0)          | (0)          | (0)          | (0)          |
| 11   | Average Capitalized Costs               | Simple Avg of Line 10 | 1,281,308        | 1,950,222        | 952,658          | 326,550        | 42,806         | (0)          | (0)          | (0)          | (0)          | (0)          | (0)          | (0)          |
| 12   | Program costs Capitalized less CWIP (1) | Exh. A-6,Pg 1, Line 1 |                  |                  |                  |                |                |              |              |              |              |              |              |              |
| 13   | Program costs Capitalized               |                       |                  |                  |                  |                |                |              |              |              |              |              |              |              |
| <b>Amortization Book Expense (1/2 yr convention)</b> |   |                       |                  |                  |                  |                |                |              |              |              |              |              |              |              |
| 14   | 2020                                    | 5 year                | 705,339          | 705,339          | 705,339          | 352,670        |                |              |              |              |              |              |              |              |
| 15   | 2021                                    | 5 year                | 300,278          | 300,278          | 300,278          | 300,278        | 150,139        |              |              |              |              |              |              |              |
| 16   | 2022                                    | 5 year                |                  |                  |                  |                |                |              |              |              |              |              |              |              |
| 17   | 2023                                    | 5 year                |                  |                  |                  |                |                |              |              |              |              |              |              |              |
| 18   | 2024                                    | 5 year                |                  |                  |                  |                |                |              |              |              |              |              |              |              |
| 19   | 2025                                    | 5 year                |                  |                  |                  |                |                |              |              |              |              |              |              |              |
| 20   | 2026                                    | 5 year                |                  |                  |                  |                |                |              |              |              |              |              |              |              |
| 21   | 2027                                    | 5 year                |                  |                  |                  |                |                |              |              |              |              |              |              |              |
| 22   | 2028                                    | 5 year                |                  |                  |                  |                |                |              |              |              |              |              |              |              |
| 23   | 2029                                    | 5 year                |                  |                  |                  |                |                |              |              |              |              |              |              |              |
| 24   | Adjustment                              |                       |                  | 653,987          | 38,204           |                |                | (34,133)     |              |              |              |              |              |              |
| 25   | <b>Total Amortization</b>               | Sum of L14:L24        | <u>1,005,617</u> | <u>1,659,605</u> | <u>1,043,822</u> | <u>652,948</u> | <u>116,006</u> | <u>-</u>     | <u>-</u>     | <u>-</u>     | <u>-</u>     | <u>-</u>     | <u>-</u>     | <u>-</u>     |

Source:

(1) The detail in columns (d)-(h) are the forecasted amounts for 2025-2029

(2) The details in column (c) are the actual amounts presented in the 2024 EWR Reconciliation, Case No. U-21672

Michigan Public Service Commission  
DTE Electric Company  
2026 - 2029 Energy Waste Reduction Plan  
Pre-Tax Rate of Return and Revenue Conversion Factors - Electric

Case No: U-21681  
Exhibit: A-31  
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|                 | (a)                | (b)              | (c)                | (d)                   | (e)                      | (f)                           |
|-----------------|--------------------|------------------|--------------------|-----------------------|--------------------------|-------------------------------|
| <b>Line No.</b> | <b>Description</b> | <b>Ratio (1)</b> | <b>Cost (2)(3)</b> | <b>Rate of Return</b> | <b>Conversion Factor</b> | <b>Pre-Tax Rate of Return</b> |
| 1               | Debt               | 50.0%            | 5.50%              | 2.75%                 | 1.0000                   | 2.75%                         |
| 2               | Common Equity      | 50.0%            | 9.90%              | 4.95%                 | 1.3496                   | 6.68%                         |
| 3               | Total              | 100.00%          |                    | 7.70%                 |                          | 9.43%                         |

- (1) Authorized Capital Structure per U-21534 Final Order issued January 23, 2025, DTE Electric's General Rate Case  
(2) Cost of Equity authorized per U-21534 Final Order issued January 23, 2025, DTE Electric's General Rate Case  
(3) Long-term debt rate provided by DTE Treasury Department

|    | (a)  | (b)             | (c)                              | (d)                            |
|----|--|-----------------|----------------------------------|--------------------------------|
|    | <b>Description</b>                           | <b>Source</b>   | <b>Equity Conversion Percent</b> | <b>Debt Conversion Percent</b> |
| 4  | Base   |                 | 100.00%                          | 100.00%                        |
| 5  | Michigan Corporate Income Tax Rate           |                 | 5.88%                            |                                |
| 6  | Municipal Tax Rate                           |                 | 0.33%                            |                                |
| 7  | Federal Income Tax (FIT) Base                | L4 - L5 - L6    | 93.79%                           | 100.00%                        |
| 8  | FIT Rate                                     |                 | 21.00%                           | 0.00%                          |
| 9  | FIT Obligation                               | Line 7 * Line 8 | 19.70%                           | 0.00%                          |
| 10 | Net Income                                   | L7 - L9         | 74.09%                           | 100.00%                        |
| 11 | Revenue Conversion Factor                    | L4/L10          | 1.3496                           | 1.0000                         |
| 12 | Composite Federal, State, and Local Tax Rate | L4 - L10        | 25.90%                           |                                |

Michigan Public Service Commission  
DTE Gas Company  
2026 - 2029 Energy Waste Reduction Plan  
Pre-Tax Rate of Return and Revenue Conversion Factors - Gas

Case No: U-21681  
Exhibit: A-32  
Witness: E. Smith  
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|          | (a)           | (b)            | (c)         | (d)            | (e)               | (f)                    |
|----------|---------------|----------------|-------------|----------------|-------------------|------------------------|
| Line No. | Description   | Ratio (1)      | Cost (2)(3) | Rate of Return | Conversion Factor | Pre Tax Rate of Return |
| 1        | Debt          | 50.00%         | 5.60%       | 2.80%          | 1.0000            | 2.80%                  |
| 2        | Common Equity | 50.00%         | 9.80%       | 4.90%          | 1.3547            | 6.64%                  |
| 3        | Total         | <u>100.00%</u> |             | <u>7.70%</u>   |                   | <u>9.44%</u>           |

(1) Authorized Capital Structure per U-21291 Final Order issued November 7, 2024, DTE Gas's General Rate Case  
(2) Cost of Equity authorized per U-21291 Final Order issued November 7, 2024, DTE Gas's General Rate Case  
(3) Long-term debt rate provided by DTE Treasury Department

|    | (a)  | (b)             | (c)                       | (d)                     |
|----|--|-----------------|---------------------------|-------------------------|
|    | Description                                  | Source          | Equity Conversion Percent | Debt Conversion Percent |
| 4  | Base   |                 | 100.00%                   | 100.00%                 |
| 5  | Michigan Corporate Income Tax Rate           |                 | 6.00%                     |                         |
| 6  | Municipal Tax Rate                           |                 | 0.56%                     |                         |
| 7  | Federal Income Tax (FIT) Base                | L4 - L5 - L6    | 93.44%                    | 100.00%                 |
| 8  | FIT Rate                                     |                 | 21.00%                    | 0.00%                   |
| 9  | FIT Obligation                               | Line 7 * Line 8 | 19.62%                    | 0.00%                   |
| 10 | Net Income                                   | L7 - L9         | <u>73.82%</u>             | <u>100.00%</u>          |
| 11 | Revenue Conversion Factor                    | L4/L10          | <u>1.3547</u>             | <u>1.0000</u>           |
| 12 | Composite Federal, State, and Local Tax Rate | L4 - L10        | <u>26.20%</u>             |                         |

Michigan Public Service Commission  
DTE Gas Company  
2026 - 2029 Energy Waste Reduction Plan  
Calculation of Energy Waste Reduction Surcharges - Gas

Case No: U-21681  
Exhibit : A-33  
Witness: E. Smith  
Page: 1 of 1

| Line No.  | (a)<br>Customer Class                                  | (b) <u>Nominal Value</u>      |                        | (c) <u>Present Value</u>       |                               | (d) <u>Levelized Surcharge</u>  |                             | (e) <u>Levelized Surcharge per Mcf (4)</u> | (f) <u>Levelized Surcharge per Ccf</u> | (g) <u>Currently Effective Base EWR Surcharge per Ccf (5)</u> | (h) <u>Change Col. g less Col. h</u> | (i) <u>Percent Change Col. i/Col. h</u> |
|---|--|-------------------------------|------------------------|--------------------------------|-------------------------------|---------------------------------|-----------------------------|--|--|---|--------------------------------------|---|
|   |  | Total Revenue Requirement (1) | Total Determinants (2) | NPV of Revenue Requirement (3) | NPV of Total Determinants (3) | Levelized Surcharge per Mcf (4) | Levelized Surcharge per Ccf |  |  |   |                                      |   |
| 1   | Residential  | \$ 111,017,006                | 439,381                | \$ 101,119,728                 | 398,786                       | \$ 0.2536                       | \$ 0.02536                  | \$ 0.02340                                 | \$ 0.00196                             | 8%  |                                      |   |
| 2   | C&I  | 97,429,958                    | 179,099                | 72,829,716                     | 162,622                       | \$ 0.4478                       | \$ 0.04478                  | \$ 0.04670                                 | \$ (0.00191)                           | -4%   |                                      |   |
| 3   | EUT  | N/A                           | 590,735                | 15,468,267                     | 536,122                       | \$ 0.0289                       | \$ 0.00289                  | \$ 0.00301                                 | \$ (0.00012)                           | -4%   |                                      |   |
| 4   | Total  | <u>\$ 208,446,963</u>         | <u>1,209,216</u>       | <u>\$ 189,417,711</u>          | <u>1,097,530</u>              |                                 |                             |  |  |   |                                      |   |
| 5   | C&I/EUT Exploratory Program (EEP) percentage (7)       |                               |                        |                                |                               |                                 | 41.09%                      |  |  |   |                                      |   |
| 6   | C&I/EUT Exploratory Program Rate (EEP) Line 3 * Line 5 |                               |                        |                                |                               |                                 | \$ 0.0119                   | \$ 0.00119                                 | \$ 0.00111                             | \$ 0.00007  | 7%                                   |   |
| <b><u>Billing Determinants (MMcf) (8)</u></b>           |  |                               |                        |                                |                               |                                 |                             |  |  |   |                                      |   |
|   |  |                               | <u>2026</u>            | <u>2027</u>                    | <u>2028</u>                   | <u>2029</u>                     | <u>Total</u>                |  |  |   |                                      |   |
| 7   | Residential  |                               | 110,283                | 109,902                        | 110,089                       | 109,107                         | 439,381                     |  |  |   |                                      |   |
| 8   | C&I  |                               | 45,112                 | 45,771                         | 44,445                        | 43,771                          | 179,099                     |  |  |   |                                      |   |
| 9   | EUT  |                               | 148,134                | 147,772                        | 147,414                       | 147,414                         | 590,735                     |  |  |   |                                      |   |
| <b><u>Levelized Revenue Requirement (\$000) (9)</u></b> |  |                               |                        |                                |                               |                                 |                             |  |  |   |                                      |   |
|   |  |                               | <u>2026</u>            | <u>2027</u>                    | <u>2028</u>                   | <u>2029</u>                     | <u>Total</u>                |  |  |   |                                      |   |
| 10  | Residential  | \$                            | 27,964                 | \$ 27,868                      | \$ 27,915                     | \$ 27,666                       | \$ 111,413                  |  |  |   |                                      |   |
| 11  | C&I  |                               | 20,203                 | 20,498                         | 19,904                        | 19,603                          | 80,209                      |  |  |   |                                      |   |
| 12  | EUT  |                               | 4,274                  | 4,264                          | 4,253                         | 4,253                           | 17,044                      |  |  |   |                                      |   |
| 13  | Total Nominal Revenue                                  | \$                            | 52,442                 | \$ 52,630                      | \$ 52,073                     | \$ 51,522                       | \$ 208,666                  |  |  |   |                                      |   |
| 14  | NPV of Line 13 (3)                                     | \$                            | 50,425                 | \$ 48,659                      | \$ 46,292                     | \$ 44,041                       | \$ 189,418                  |  |  |   |                                      |   |

Source:

- (1) Exhibit A-27
- (2) Lines 7 - 9, Col. (g)
- (3) Utilized a discount rate of 4.00% for 2026 to 2029, which is DTE Gas's estimated short-term borrowing rate and was supplied by the DTE Treasury Department. See Workpapers ES-G3 and ES-G4
- (4) Column (d) / Column (e)
- (5) Currently Effective Base EWR surcharge as approved in Case No. U-21322
- (6) NPV revenues to be collected from EUT so rate change is equalized between C&I and EUT
- (7) EEP percentage per Line 5 of Exhibit A-34
- (8) Exhibit A-20 Page 1
- (9) Billing Determinants on lines 7-9 multiplied by the levelized rates on column (f) Lines 1-3

Michigan Public Service Commission  
DTE Gas Company  
2026 - 2029 Energy Waste Reduction Plan  
Calculation of Income-Qualified Percentage For the C&I/EUT Exploratory Program - Gas

Case No: U-21681  
Exhibit: A-34  
Witness: E.Smith  
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| Line No. | (a)<br>Description                                | (b)<br>Source            | (c)<br>2026   | (d)<br>2027   | (d)<br>2028   | (d)<br>2029   | (e)<br>Total  |
|----------|---|--------------------------|---------------|---------------|---------------|---------------|---------------|
| 1        | Expenses:   |                          |               |               |               |               |               |
| 2        | Income-Qualified Program Costs                    | Exh A-6, Page 1, Line 15 | \$ 10,241,686 | \$ 10,241,022 | \$ 10,251,016 | \$ 10,259,353 | \$ 40,993,076 |
| 3        | Revenue Requirement - Program Costs               | Line 2                   | \$ 10,241,686 | \$ 10,241,022 | \$ 10,251,016 | \$ 10,259,353 | \$ 40,993,076 |
| 4        | Total Revenue Requirement (All Costs)             | Exh A-27, Page 2, Line 7 | \$ 25,100,770 | \$ 24,810,788 | \$ 24,997,057 | \$ 24,863,337 | \$ 99,771,951 |
| 5        | Percentage Attributable to Income-Qualified (EEP) | Line 3/Line 4            |               |               |               |               | 41.09%        |

| Line No. | (a)<br>Customer Class                       | (b)<br>Consumption Level | (c)<br>Proposed Base 2026-2029 Surcharge | EWR Rate Comparison       |   |   | Total EWR rate Jan 2026 compared to 2025 | PI detail  |                      |                     |
|----------|---|--------------------------|--|---------------------------|---|---|--|--|----------------------|---------------------|
|          |   |                          |  | Current EWR Base* U-21322 | % change from current base EWR higher / (lower) | Total Surcharge as of Jan 1, 2025 (U-21322 Base and U-21558 PI)** |  | Total Proposed Jan 1, 2026 with (U-21861 Base and U-21672 PI)*** | U-21672 Incentive*** | U-21558 Incentive** |
| 1        | <b>Residential</b>                          | All kwh                  | \$0.003689/kWh                           | \$0.001750/kWh            | 111%  | \$0.002699/kWh  | \$0.004420/kWh                           | 64%  | \$0.000731/kWh       | \$0.000949/kWh      |
| 2        |   |                          |  |                           |   |   |  |  |                      |                     |
| 3        | <b>Commercial Secondary:</b>                |                          |  |                           |   |   |  |  |                      |                     |
| 4        |   | 0-850 kWh/month          | \$3.83/meter/month                       | \$4.85/meter/month        | -21%  | \$5.53/meter/month  | \$4.73/meter/month                       | -14%   | \$0.90/meter/month   | \$0.68/meter/month  |
| 5        |   | 851-1,650 kWh/month      | \$23.26/meter/month                      | \$29.39/meter/month       | -21%  | \$33.51/meter/month   | \$28.72/meter/month                      | -14%   | \$5.46/meter/month   | \$4.12/meter/month  |
| 6        |   | Above 1,650 kWh/month    | \$97.87/meter/month                      | \$123.64/meter/month      | -21%  | \$140.98/meter/month  | \$120.84/meter/month                     | -14%   | \$22.97/meter/month  | \$17.34/meter/month |
| 7        |   |                          |  |                           |   |   |  |  |                      |                     |
| 8        | Customers with Self-Directing Plans         |                          |  |                           |   |   |  |  |                      |                     |
| 9        |   | 0-850 kWh/month          | \$0.94/meter/month                       | \$1.04/meter/month        | -10%  | \$1.04/meter/month  | \$0.94/meter/month                       | -10%   | \$0.00/meter/month   | \$0.00/meter/month  |
| 10       |   | 851-1,650 kWh/month      | \$6.08/meter/month                       | \$6.70/meter/month        | -9%   | \$6.70/meter/month  | \$6.08/meter/month                       | -9%  | \$0.00/meter/month   | \$0.00/meter/month  |
| 11       |   | Above 1,650 kWh/month    | \$25.59/meter/month                      | \$28.20/meter/month       | -9%   | \$28.20/meter/month   | \$25.59/meter/month                      | -9%  | \$0.00/meter/month   | \$0.00/meter/month  |
| 12       |   |                          |  |                           |   |   |  |  |                      |                     |
| 13       | <b>Commercial &amp; Industrial Primary:</b> |                          |  |                           |   |   |  |  |                      |                     |
| 14       |   | 0-11,500 kWh/month       | \$145.32/meter/month                     | \$106.12/meter/month      | 37%   | \$115.50/meter/month  | \$167.30/meter/month                     | 45%  | \$21.98/meter/month  | \$9.38/meter/month  |
| 15       |   | Above 11,500 kWh/month   | \$1,567.47/meter/month                   | \$1,129.40/meter/month    | 39%   | \$1,229.24/meter/month  | \$1,804.52/meter/month                   | 47%  | \$237.05/meter/month | \$99.84/meter/month |
| 16       |   |                          |  |                           |   |   |  |  |                      |                     |
| 17       | Customers with Self-Directing Plans         |                          |  |                           |   |   |  |  |                      |                     |
| 18       |   | 0-11,500 kWh/month       | \$31.56/meter/month                      | \$14.38/meter/month       | 119%  | \$14.38/meter/month   | \$31.56/meter/month                      | 119%   | \$0.00/meter/month   | \$0.00/meter/month  |
| 19       |   | Above 11,500 kWh/month   | \$383.84/meter/month                     | \$174.87/meter/month      | 120%  | \$174.87/meter/month  | \$383.84/meter/month                     | 120%   | \$0.00/meter/month   | \$0.00/meter/month  |

\*excludes incentive portion of surcharge  
\*\* billing Jan-Dec 2025  
\*\*\*proposed billing Jan-Dec 2026

**Michigan Public Service Commission**  
**DTE Electric Company**  
**2026 - 2029 Energy Waste Reduction Plan**  
**Summary of Proposed EWR Revenues - Electric**

Case No.: U-21681  
Exhibit: A-36  
Witness: E. Smith  
Page: 1 of 1

|   | (a)                               | (b)                   | (c)                   | (d)                   | (e)                   | (f)                   |
|---|-----------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Line No.  | Description                       | 2026                  | 2027                  | 2028                  | 2029                  | Total                 |
| <b>Total Annual Revenue for all Program Offerings</b> |                                   |                       |                       |                       |                       |                       |
| 1   | Residential                       | \$ 56,651,877         | \$ 56,860,975         | \$ 57,303,572         | \$ 57,571,385         | \$ 228,387,809        |
| 2   | Commercial & Industrial Secondary |                       |                       |                       |                       |                       |
| 3   | 0-850 kWh/month                   | 4,962,027             | 4,973,389             | 4,982,328             | 4,989,273             | 19,907,016            |
| 4   | 851-1650 kWh/month                | 8,304,680             | 8,322,901             | 8,337,082             | 8,347,938             | 33,312,602            |
| 5   | > 1651 kWh/month                  | 89,703,516            | 89,835,555            | 89,925,102            | 89,979,679            | 359,443,852           |
| 6   | Commercial & Industrial Primary   |                       |                       |                       |                       |                       |
| 7   | 0-11,500 kWh/month                | 48,836                | 48,836                | 48,836                | 48,836                | 195,345               |
| 8   | > 11,500 kWh/month                | 66,100,702            | 66,100,702            | 66,100,702            | 66,100,702            | 264,402,809           |
| 9   | Total                             | <u>\$ 225,771,639</u> | <u>\$ 226,142,359</u> | <u>\$ 226,697,622</u> | <u>\$ 227,037,814</u> | <u>\$ 905,649,433</u> |
| 10  |                                   |                       |                       |                       |                       |                       |
| 11  |                                   |                       |                       |                       |                       |                       |
| <b>Program Offerings other than Income-Qualified</b>  |                                   |                       |                       |                       |                       |                       |
| 12  |                                   |                       |                       |                       |                       |                       |
| 13  |                                   | 2026                  | 2027                  | 2028                  | 2029                  | Total                 |
| 14  |                                   |                       |                       |                       |                       |                       |
| 15  | Residential                       | \$ 39,845,804         | \$ 39,992,872         | \$ 40,304,170         | \$ 40,492,535         | \$ 160,635,381        |
| 16  | Commercial & Industrial Secondary |                       |                       |                       |                       |                       |
| 17  | 0-850 kWh/month                   | 3,739,298             | 3,747,860             | 3,754,596             | 3,759,830             | 15,001,583            |
| 18  | 851-1650 kWh/month                | 6,134,664             | 6,148,124             | 6,158,599             | 6,166,618             | 24,608,005            |
| 19  | > 1651 kWh/month                  | 66,242,645            | 66,340,166            | 66,406,303            | 66,446,612            | 265,435,727           |
| 20  | Commercial & Industrial Primary   |                       |                       |                       |                       | -                     |
| 21  | 0-11,500 kWh/month                | 38,229                | 38,229                | 38,229                | 38,229                | 152,916               |
| 22  | > 11,500 kWh/month                | 49,580,171            | 49,580,171            | 49,580,171            | 49,580,171            | 198,320,685           |
| 23  | Total                             | <u>\$ 165,580,811</u> | <u>\$ 165,847,421</u> | <u>\$ 166,242,068</u> | <u>\$ 166,483,996</u> | <u>\$ 664,154,296</u> |
| 24  |                                   |                       |                       |                       |                       |                       |
| 25  |                                   |                       |                       |                       |                       |                       |
| <b>Income-Qualified Program Offerings</b>             |                                   |                       |                       |                       |                       |                       |
| 26  |                                   |                       |                       |                       |                       |                       |
| 27  |                                   | 2026                  | 2027                  | 2028                  | 2029                  | Total                 |
| 28  |                                   |                       |                       |                       |                       |                       |
| 29  | Residential                       | \$ 16,806,073         | \$ 16,868,103         | \$ 16,999,402         | \$ 17,078,850         | \$ 67,752,428         |
| 30  | Commercial & Industrial Secondary |                       |                       |                       |                       |                       |
| 31  | 0-850 kWh/month                   | 1,222,729             | 1,225,529             | 1,227,732             | 1,229,443             | 4,905,434             |
| 32  | 851-1650 kWh/month                | 2,170,016             | 2,174,778             | 2,178,483             | 2,181,320             | 8,704,597             |
| 33  | > 1651 kWh/month                  | 23,460,871            | 23,495,389            | 23,518,799            | 23,533,066            | 94,008,125            |
| 34  | Commercial & Industrial Primary   |                       |                       |                       |                       |                       |
| 35  | 0-11,500 kWh/month                | 10,607                | 10,607                | 10,607                | 10,607                | 42,429                |
| 36  | > 11,500 kWh/month                | 16,520,531            | 16,520,531            | 16,520,531            | 16,520,531            | 66,082,125            |
| 37  | Total                             | <u>\$ 60,190,828</u>  | <u>\$ 60,294,937</u>  | <u>\$ 60,455,554</u>  | <u>\$ 60,553,818</u>  | <u>\$ 241,495,137</u> |

Michigan Public Service Commission  
DTE Electric Company  
2026 - 2029 Energy Waste Reduction Plan  
Calculation of EWR Surcharges - Electric - Residential

Case No.: U-21681  
Exhibit: A-37  
Witness: E. Smith  
Page: 1 of 1

| Line No. | (a) Description                               | (b) 2026             | (c) 2027             | (d) 2028             | (e) 2029             | (f) NPV 2026-2029 (4) |
|----------|---|----------------------|----------------------|----------------------|----------------------|-----------------------|
|          | <b>Revenue Requirement:</b>                   |                      |                      |                      |                      |                       |
| 1        | Program Offerings other than Income-Qualified | \$ 22,751,261        | \$ 42,857,190        | \$ 47,494,638        | \$ 49,145,438        | \$ 145,732,380        |
| 2        | Income-Qualified Program Offerings (1)        | 16,866,347           | 16,912,892           | 16,965,557           | 16,997,805           | 61,466,674            |
| 3        | Total Revenue Requirement (2)                 | <u>\$ 39,617,608</u> | <u>\$ 59,770,082</u> | <u>\$ 64,460,195</u> | <u>\$ 66,143,243</u> | <u>\$ 207,199,055</u> |
| 4        |   |                      |                      |                      |                      |                       |
| 5        | <b>Billing determinants (GWh): (3)</b>        |                      |                      |                      |                      |                       |
| 6        | Program Offerings other than Income-Qualified | 15,358               | 15,415               | 15,535               | 15,608               | 56,172                |
| 7        | Income-Qualified Program Offerings            | 15,358               | 15,415               | 15,535               | 15,608               | 56,172                |
| 8        |   |                      |                      |                      |                      |                       |
| 9        | <b>Applicable Surcharge (\$/kWh)</b>          |                      |                      |                      |                      |                       |
| 10       | Program Offerings Other than Income-Qualified | 0.002594             | 0.002594             | 0.002594             | 0.002594             | 0.002594              |
| 11       | Income-Qualified Program Offerings            | 0.001094             | 0.001094             | 0.001094             | 0.001094             | 0.001094              |
| 12       |   |                      |                      |                      |                      |                       |
| 13       | <b>Annual Revenue:</b>                        |                      |                      |                      |                      |                       |
| 14       | Program Offerings Other than Income-Qualified | \$ 39,845,804        | \$ 39,992,872        | \$ 40,304,170        | \$ 40,492,535        | \$ 145,732,380        |
| 15       | Income-Qualified Program Offerings            | 16,806,073           | 16,868,103           | 16,999,402           | 17,078,850           | 61,466,674            |
| 16       | Total Annual Revenue                          | <u>\$ 56,651,877</u> | <u>\$ 56,860,975</u> | <u>\$ 57,303,572</u> | <u>\$ 57,571,385</u> | <u>\$ 207,199,055</u> |
|          |   | 1                    | 2                    | 3                    | 4                    |                       |
|          |   | 14,768               | 14,252               | 13,811               | 13,342               | 56,172                |

Source:

- (1) Income-Qualified Revenue Requirement from Exhibit A-5, line 5
- (2) Total Revenue Requirement from Exhibit A-26, page 1, line 12
- (3) Annual billing determinants (GWh)
- (4) Utilized a discount rate of 4.00% for 2026 to 2029 as provided by DTE Treasury Department.

Michigan Public Service Commission  
DTE Electric Company  
2026 - 2029 Energy Waste Reduction Plan  
Calculation of EWR Surcharges - Electric - C&I Secondary

Case No.: U-21681  
Exhibit: A-38  
Witness: E. Smith  
Page: 1 of 1

| Line No.   | (a)<br>Description                            | (b)<br>2026           | (c)<br>2027           | (d)<br>2028           | (e)<br>2029           | (f)<br>NPV 2026-2029 (4) |
|--|---|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------|
| <b>Revenue Requirement:</b>                      |   |                       |                       |                       |                       |                          |
| 1  | Program Offerings other than Income-Qualified | \$ 90,498,054         | \$ 70,121,745         | \$ 71,023,378         | \$ 72,317,192         | \$ 276,805,418           |
| 2  | Income-Qualified Program Offerings (1)        | <u>26,796,444</u>     | <u>26,870,392</u>     | <u>26,954,064</u>     | <u>27,005,298</u>     | <u>97,655,305</u>        |
| 3  | Total Revenue Requirement (2)                 | <u>\$ 117,294,498</u> | <u>\$ 96,992,137</u>  | <u>\$ 97,977,442</u>  | <u>\$ 99,322,490</u>  | <u>\$ 374,460,724</u>    |
| 4  |   |                       |                       |                       |                       |                          |
| <b>Billing determinants (Meter counts) : (3)</b> |   |                       |                       |                       |                       |                          |
| 6  | Program Offerings other than Income-Qualified |                       |                       |                       |                       |                          |
| 7  | 0-850 kWh/month                               | 1,295,846             | 1,298,813             | 1,301,148             | 1,302,962             |                          |
| 8  | 851-1650 kWh/month                            | 356,981               | 357,764               | 358,373               | 358,840               |                          |
| 9  | > 1651 kWh/month                              | 916,422               | 917,771               | 918,686               | 919,244               |                          |
| 10   | Income-Qualified Program Offerings            |                       |                       |                       |                       |                          |
| 11   | 0-850 kWh/month                               | 1,295,846             | 1,298,813             | 1,301,148             | 1,302,962             |                          |
| 12   | 851-1650 kWh/month                            | 356,981               | 357,764               | 358,373               | 358,840               |                          |
| 13   | > 1651 kWh/month                              | 916,962               | 918,311               | 919,226               | 919,784               |                          |
| 14   |   |                       |                       |                       |                       |                          |
| <b>Applicable surcharge:</b>                     |   |                       |                       |                       |                       |                          |
| 16   | Program Offerings other than Income-Qualified |                       |                       |                       |                       |                          |
| 17   | 0-850 kWh/month                               | 2.89                  | 2.89                  | 2.89                  | 2.89                  | <u>2.89</u>              |
| 18   | 851-1650 kWh/month                            | 17.18                 | 17.18                 | 17.18                 | 17.18                 | <u>17.18</u>             |
| 19   | > 1651 kWh/month                              | 72.28                 | 72.28                 | 72.28                 | 72.28                 | <u>72.28</u>             |
| 20   | Income-Qualified Program Offerings            |                       |                       |                       |                       |                          |
| 21   | 0-850 kWh/month                               | 0.94                  | 0.94                  | 0.94                  | 0.94                  | <u>0.94</u>              |
| 22   | 851-1650 kWh/month                            | 6.08                  | 6.08                  | 6.08                  | 6.08                  | <u>6.08</u>              |
| 23   | > 1651 kWh/month                              | 25.59                 | 25.59                 | 25.59                 | 25.59                 | <u>25.59</u>             |
| 24   |   |                       |                       |                       |                       |                          |
| <b>Annual Revenue:</b>                           |   |                       |                       |                       |                       |                          |
| 26   | Program Offerings Other than Income-Qualified |                       |                       |                       |                       |                          |
| 27   | 0-850 kWh/month                               | \$ 3,739,298          | \$ 3,747,860          | \$ 3,754,596          | \$ 3,759,830          | \$ 13,612,326            |
| 28   | 851-1650 kWh/month                            | 6,134,664             | 6,148,124             | 6,158,599             | 6,166,618             | 22,329,224               |
| 29   | > 1651 kWh/month                              | <u>66,242,645</u>     | <u>66,340,166</u>     | <u>66,406,303</u>     | <u>66,446,612</u>     | <u>240,863,868</u>       |
| 30   | Total   | <u>\$ 76,116,607</u>  | <u>\$ 76,236,149</u>  | <u>\$ 76,319,498</u>  | <u>\$ 76,373,060</u>  | <u>\$ 276,805,418</u>    |
| 31   |   |                       |                       |                       |                       |                          |
| 32   | Income-Qualified Program Offerings            |                       |                       |                       |                       |                          |
| 33   | 0-850 kWh/month                               | \$ 1,222,729          | \$ 1,225,529          | \$ 1,227,732          | \$ 1,229,443          | \$ 4,451,154             |
| 34   | 851-1650 kWh/month                            | 2,170,016             | 2,174,778             | 2,178,483             | 2,181,320             | 7,898,523                |
| 35   | > 1651 kWh/month                              | <u>23,460,871</u>     | <u>23,495,389</u>     | <u>23,518,799</u>     | <u>23,533,066</u>     | <u>85,305,628</u>        |
| 36   | Total   | <u>\$ 26,853,617</u>  | <u>\$ 26,895,696</u>  | <u>\$ 26,925,014</u>  | <u>\$ 26,943,829</u>  | <u>\$ 97,655,305</u>     |
| 37   |   |                       |                       |                       |                       |                          |
| 38   | Total Annual Revenue                          | <u>\$ 102,970,223</u> | <u>\$ 103,131,845</u> | <u>\$ 103,244,512</u> | <u>\$ 103,316,890</u> | <u>\$ 374,460,724</u>    |

Source:

- (1) Income-Qualified Revenue Requirement from Exhibit A-5, Page 1, line 25.
- (2) Total Revenue Requirement from Exhibit A-26, Page 2 line 12.
- (3) Annual meter counts
- (4) Utilized a discount rate of 4.00% for 2026 to 2029 as provided by DTE Treasury Department.

**Michigan Public Service Commission**  
**DTE Electric Company**  
**2026 - 2029 Energy Waste Reduction Plan**  
**Calculation of EWR Surcharges - Electric - C&I Primary**

Case No.: U-21681  
 Exhibit: A-39  
 Witness: E. Smith  
 Page: 1 of 1

| Line No. | (a)<br>Description                               | (b)<br>2026          | (c)<br>2027          | (d)<br>2028          | (e)<br>2029          | (f)<br>NPV 2026-2029 (4) |
|----------|--|----------------------|----------------------|----------------------|----------------------|--------------------------|
|          | <b>Revenue Requirement:</b>                      |                      |                      |                      |                      |                          |
| 1        | Program Offerings other than Income-Qualified    | \$ 66,133,294        | \$ 43,048,652        | \$ 43,604,617        | \$ 44,401,566        | \$ 180,109,594           |
| 2        | Income-Qualified Program Offerings (1)           | 16,465,623           | 16,511,062           | 16,562,476           | 16,593,958           | 60,006,300               |
| 3        | Total Revenue Requirement (2)                    | <u>\$ 82,598,917</u> | <u>\$ 59,559,713</u> | <u>\$ 60,167,093</u> | <u>\$ 60,995,523</u> | <u>\$ 240,115,894</u>    |
| 4        |  |                      |                      |                      |                      |                          |
| 5        | <b>Billing determinants (Meter counts) : (3)</b> |                      |                      |                      |                      |                          |
| 6        | Program Offerings other than Income-Qualified    |                      |                      |                      |                      |                          |
| 7        | 0-11,500 kWh/month                               | 336                  | 336                  | 336                  | 336                  |                          |
| 8        | > 11,500 kWh/month                               | 41,888               | 41,888               | 41,888               | 41,888               |                          |
| 9        | Income-Qualified Program Offerings               |                      |                      |                      |                      |                          |
| 10       | 0-11,500 kWh/month                               | 336                  | 336                  | 336                  | 336                  |                          |
| 11       | > 11,500 kWh/month                               | 43,040               | 43,040               | 43,040               | 43,040               |                          |
| 12       |  |                      |                      |                      |                      |                          |
| 13       | <b>Applicable surcharge:</b>                     |                      |                      |                      |                      |                          |
| 14       | Program Offerings other than Income-Qualified    |                      |                      |                      |                      |                          |
| 15       | 0-11,500 kWh/month                               | 113.76               | 113.76               | 113.76               | 113.76               | 113.76                   |
| 16       | > 11,500 kWh/month                               | 1183.63              | 1183.63              | 1183.63              | 1183.63              | 1,183.63                 |
| 17       | Income-Qualified Program Offerings               |                      |                      |                      |                      |                          |
| 18       | 0-11,500 kWh/month                               | 31.56                | 31.56                | 31.56                | 31.56                | 31.56                    |
| 19       | > 11,500 kWh/month                               | 383.84               | 383.84               | 383.84               | 383.84               | 383.84                   |
| 20       |  |                      |                      |                      |                      |                          |
| 21       | <b>Annual Revenue:</b>                           |                      |                      |                      |                      |                          |
| 22       | Program Offerings Other than Income-Qualified    |                      |                      |                      |                      |                          |
| 23       | 0-11,500 kWh/month                               | \$ 38,229            | \$ 38,229            | \$ 38,229            | \$ 38,229            | \$ 138,767               |
| 24       | > 11,500 kWh/month                               | 49,580,171           | 49,580,171           | 49,580,171           | 49,580,171           | 179,970,827              |
| 25       | Total  | <u>\$ 49,618,400</u> | <u>\$ 49,618,400</u> | <u>\$ 49,618,400</u> | <u>\$ 49,618,400</u> | <u>\$ 180,109,594</u>    |
| 26       | Income-Qualified Program Offerings               |                      |                      |                      |                      |                          |
| 27       | 0-11,500 kWh/month                               | 10,607               | 10,607               | 10,607               | 10,607               | \$ 38,503                |
| 28       | > 11,500 kWh/month                               | 16,520,531           | 16,520,531           | 16,520,531           | 16,520,531           | 59,967,797               |
| 29       | Total  | <u>\$ 16,531,138</u> | <u>\$ 16,531,138</u> | <u>\$ 16,531,138</u> | <u>\$ 16,531,138</u> | <u>\$ 60,006,300</u>     |
| 30       | Total Annual Revenue                             | <u>\$ 66,149,539</u> | <u>\$ 66,149,539</u> | <u>\$ 66,149,539</u> | <u>\$ 66,149,539</u> | <u>\$ 240,115,894</u>    |

Source:

- (1) Income-Qualified Revenue Requirement from Exhibit A-5, Page 1, line 15.
- (2) Total Revenue Requirement from Exhibit A-26, Page 3 line 12.
- (3) Annual meter counts
- (4) Utilized a discount rate of 4.00% for 2026 to 2029 as provided by DTE Treasury Department.

(Continued from Sheet No. C-67.00)

**C9 SURCHARGES AND CREDITS APPLICABLE TO DELIVERY SERVICE (Contd.)**

**C9.6 Energy Waste Reduction Surcharge (EWRS)**

On June 2, 2009, in Case No. U-15806, the MPSC authorized the implementation of an Energy Optimization Surcharge (EOS) for electric customers in accordance with the Clean, Renewable, and Energy Efficiency Act, PA295 of 2008. In compliance with PA 342 of 2016, the surcharge has been renamed as the Energy Waste Reduction (EWR) Surcharge. The EWR will be used to fund energy efficiency programs for DTE Electric customers. The EWR rates approved by the MPSC on \_\_\_\_\_, \_\_\_\_\_ in **Case No. U-21681** will be effective beginning with bills rendered in **January 2026**. The total EWRS for all residential customers is **\$0.004420** per kWh. The EWRS for all metered Commercial, Industrial, and Governmental customers is a per meter, per month charge which is based on the total monthly energy consumption by rate as shown in the table below.

| <u>Voltage</u> | <u>Monthly Consumption</u> | <u>Customers Without Self Directed Plans Energy Waste Reduction Surcharge</u> | <u>Customers With Self Directed Plans Energy Waste Reduction Surcharge</u> |
|----------------|----------------------------|---|--|
| Secondary      | 0 – 850 kWh                | <b>\$4.73/meter/month</b>   | <b>\$0.94/meter/month</b>  |
| Secondary      | 851 – 1,650 kWh            | <b>\$28.72/meter/month</b>  | <b>\$6.08/meter/month</b>  |
| Secondary      | Above 1,650 kWh            | <b>\$120.84/meter/month</b>   | <b>\$25.59/meter/month</b>   |
| Primary        | 0 – 11,500 kWh             | <b>\$167.30/meter/month</b>   | <b>\$31.56/meter/month</b>   |
| Primary        | Above 11,500 kWh           | <b>\$1,804.52/meter/month</b>   | <b>\$383.84/meter/month</b>  |

**C9.7.6 HOLD FOR FUTURE USE**

This exhibit reflects: 1) the 2024 performance incentive proposed by the Company in the 2024 EWR Rec filing, Case No. U-21672, and 2) the base EWR surcharges proposed by the Company in the 2026-2029 EWR Plan filing, Case No. U-21681. Upon a final Commission Order in the instant case, the tariff filed with the Commission will reflect the approved base surcharges plus the applicable performance incentives.

(Continued on Sheet No. C-69.00)

Issued \_\_\_\_\_, 202\_\_  
M. A. Bruzzano  
Senior Vice President  
Regulatory Affairs  
Detroit, Michigan

Effective for bills rendered on  
and after January 1, 2026  
  
Issued under authority of the  
Michigan Public Service Commission  
dated \_\_\_\_\_,  
in Case No. U-21681

(Continued from Sheet No. C-69.00)

**C9 SURCHARGES AND CREDITS APPLICABLE TO DELIVERY SERVICE: (Contd.)**

**SURCHARGES AND CREDITS APPLICABLE TO DELIVERY SERVICE: (Contd.)**

**C9.8 Summary of Surcharges and Credits:** Summary of surcharges and credits, pursuant to sub-rules C9.1, C9.2, C9.6, C9.7.9, and C.9.7.14. Cents per kilowatthour or percent of base bill, unless otherwise noted.

|                               | <u>NS</u><br>¢/kWh | <u>EWRS</u><br>¢/kWh | <u>Base</u><br><u>Securitization</u><br>¢/kWh | <u>IRM</u><br>¢/kWh | <u>Total</u><br><u>Delivery</u><br><u>Surcharges</u><br>¢/kWh | <u>LIEAF Factor</u><br><u>S/Billing Meter</u> |
|-------------------------------|--------------------|----------------------|---|---------------------|---|---|
| <b>Residential</b>            |                    |                      |   |                     |   |   |
| D1 Non Transmitting Meter     | 0.0911             | 0.4420               | 0.0799  | 0.0941              | 0.7071  | \$0.87  |
| D1.1 Int. Space Conditioning  | 0.0911             | 0.4420               | 0.1629  | 0.0941              | 0.7901  | N/A   |
| D1.2 Enhanced TOU             | 0.0911             | 0.4420               | 0.1626  | 0.0941              | 0.7898  | \$0.87  |
| D1.6 Special Low Income Pilot | 0.0911             | 0.4420               | 0.0799  | 0.0941              | 0.7071  | \$0.87  |
| D1.7 Geothermal Time-of-Day   | 0.0911             | 0.4420               | 0.1533  | 0.0941              | 0.7805  | N/A   |
| D1.8 Dynamic Peak Pricing     | 0.0911             | 0.4420               | 0.1720  | 0.0941              | 0.7992  | \$0.87  |
| D1.9 Electric Vehicle         | 0.0911             | 0.4420               | 0.1653  | 0.0941              | 0.7925  | N/A   |
| D1.11 Standard TOU            | 0.0911             | 0.4420               | 0.1749  | 0.0941              | 0.8021  | \$0.87  |
| D1.13 Overnight Savers        | 0.0911             | 0.4420               | 0.1749  | 0.0941              | 0.8021  | \$0.87  |
| D2 Space Heating              | 0.0911             | 0.4420               | 0.1687  | 0.0941              | 0.7959  | \$0.87  |
| D5 Wtr Htg                    | 0.0911             | 0.4420               | 0.1677  | 0.0941              | 0.7948  | N/A   |
| D9 Outdoor Lighting           | 0.0911             | 0.4420               | 0.1801  | 0.5352              | 1.2484  | N/A   |
| <b>Commercial</b>             |                    |                      |   |                     |   |   |
| D1.1 Int. Space Conditioning  | 0.0911             | See C9.6             | 0.1285  | 0.0595              |   | \$0.87  |
| D1.7 Geothermal Time -of- day | 0.0911             | See C9.6             | 0.1071  | 0.0595              |   | \$0.87  |
| D1.8 Dynamic Peak Pricing     | 0.0911             | See C9.6             | 0.1155  | 0.0595              |   | \$0.87  |
| D1.9 Electric Vehicle         | 0.0911             | See C9.6             | 0.1866  | 0.0595              |   | \$0.87  |
| D3 General Service            | 0.0911             | See C9.6             | 0.1145  | 0.0595              |   | \$0.87  |
| D3.1 Unmetered                | 0.0911             | See C9.6             | 0.1079  | 0.0595              |   | N/A   |
| D3.2 Educ. Inst.              | 0.0911             | See C9.6             | 0.1060  | 0.0595              |   | \$0.87  |
| D3.3 Interruptible            | 0.0911             | See C9.6             | 0.1053  | 0.0595              |   | \$0.87  |
| D3.5 Charging                 | 0.0911             | See C9.6             | 0.1145  | 0.0595              |   | \$0.87  |
| D3.11 TOU General Service     | 0.0911             | See C9.6             | 0.1145  | 0.0595              |   | \$0.87  |
| D4 Large General Service      | 0.0911             | See C9.6             | 0.1188  | See C9.7.11         |   | \$0.87  |
| D5 Wtr Htg                    | 0.0911             | See C9.6             | 0.1184  | 0.0595              |   | \$0.87  |
| D9 Outdoor Lighting           | 0.0911             | See C9.6             | 0.1801  | 0.2988              |   | N/A   |
| R3 Standby Secondary          | 0.0911             | See C9.6             | 0.0225  | 0.0595              |   | \$0.87  |
| R7 Greenhouse Lighting        | 0.0911             | See C9.6             | 0.1053  | 0.0595              |   | \$0.87  |
| R8 Space Conditioning         | 0.0911             | See C9.6             | 0.1122  | 0.0595              |   | \$0.87  |
| <b>Industrial</b>             |                    |                      |   |                     |   |   |
| D6.2 Educ. Inst.              | 0.0911             | See C9.6             | 0.0130  | See C9.7.11         |   | \$0.87  |
| D8 Interruptible Primary      | 0.0911             | See C9.6             | 0.0095  | See C9.7.11         |   | \$0.87  |
| D10 Schools                   | 0.0911             | See C9.6             | 0.0198  | See C9.7.11         |   | \$0.87  |
| D11 Primary Supply            | 0.0911             | See C9.6             | 0.0083  | See C9.7.11         |   | \$0.87  |
| D12 Large Low Peak            | 0.0911             | See C9.6             | 0.0083  | See C9.7.11         |   | \$0.87  |
| D13 XL                        | N/A                | See C9.6             | 0.0019  | See C9.7.11         |   | \$0.87  |
| D14 TOU Primary Supply        | 0.0911             | See C9.6             | 0.0083  | See C9.7.11         |   | \$0.87  |
| R1.1 Metal Melting            | 0.0911             | See C9.6             | 0.0065  | See C9.7.11         |   | \$0.87  |
| R1.2 Electric Process Heating | 0.0911             | See C9.6             | 0.0177  | See C9.7.11         |   | \$0.87  |
| R3 Standby Primary            | 0.0911             | See C9.6             | 0.0225  | See C9.7.11         |   | \$0.87  |
| R10 Interruptible Supply      | 0.0911             | See C9.6             | 0.0032  | See C9.7.11         |   | \$0.87  |

(Continued on Sheet No. C-71.00)

Issued \_\_\_\_\_, 202\_\_  
M. A. Bruzzano  
Senior Vice President  
Regulatory Affairs  
  
Detroit, Michigan

Effective for bills rendered on  
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dated \_\_\_\_\_,  
in Case No. U-21681

(Continued from Sheet No. C-70.00)

**C9 SURCHARGES AND CREDITS APPLICABLE TO DELIVERY SERVICE: (Contd.)**

**C9.8 Summary of Surcharges and Credits (Contd.):**

|                                   | <u>NS</u><br>¢/kWh | <u>EWRS</u><br>¢/kWh | <u>Base</u><br><u>Securitization</u><br>¢/kWh | <u>IRM</u><br>¢/kWh | <u>Total Delivery</u><br><u>Surcharges</u><br>¢/kWh | <u>LIEAF Factor</u><br><u>\$/Billing</u><br><u>Meter</u> |
|-----------------------------------|--------------------|----------------------|---|---------------------|---|--|
| <b>Governmental</b>               |                    |                      |   |                     |   |  |
| E1 Streetlighting Option I        | 0.0911             | See C9.6             | 0.2307  | 0.5140              |   | N/A  |
| E1 Streetlighting Option II & III | 0.0911             | See C9.6             | 0.2307  | 0.5140              |   | N/A  |
| E1.1 Energy Only                  | 0.0911             | See C9.6             | 0.1085  | 0.0595              |   | \$0.87   |
| E2 Traffic Lights                 | 0.0911             | See C9.6             | 0.0531  | 0.0275              |   | N/A  |
| <b>Electric Choice</b>            |                    |                      |   |                     |   |  |
| EC2 Residential                   | 0.0911             | See C9.6             | Note 1  | 0.0941              |   | \$0.87   |
| EC2 Commercial                    | 0.0911             | See C9.6             | Note 1  | See C9.7.11         |   | \$0.87   |
| EC2 Primary                       | 0.0911             | See C9.6             | Note 1  | See C9.7.11         |   | \$0.87   |

NOTE 1: Electric choice tariffs will be billed surcharges and credits applicable to delivery service for the corresponding full service tariff, unless otherwise noted.

(Continued on Sheet No. C-72.00)

Issued \_\_\_\_\_, 202\_  
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Regulatory Affairs  
Detroit, Michigan

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**D2. SURCHARGES AND INFRASTRUCTURE RECOVERY MECHANISM**

**D2.1 Surcharges**

| Rate<br>Schedule<br>No.                       | <i>U-21681</i><br><i>Energy Waste<br/>Reduction<br/>Surcharge<br/>\$/Ccf</i> | <i>U-21291</i><br><i>IRM<br/>Surcharge<br/>\$/Customer</i> |
|---|--|--|
| A Residential                                 | <b>\$ 0.03108</b>  | \$ 0.66  |
| 2A Multifamily Dwelling Class I               | <b>\$ 0.05220</b>  | \$ 4.11  |
| 2A Multifamily Dwelling Class II              | <b>\$0.05220</b>   | \$ 4.11  |
| GS-1 Non-Residential General Service          | <b>\$0.05220</b>   | \$ 3.06  |
| GS-2 Large Volume                             |  | \$ 3.06  |
| <100,000 Mcf                                  | <b>\$0.05220</b>   |  |
| >100,000 Mcf                                  | <b>\$ 0.00401</b>  |  |
| S School                                      | <b>\$0.05220</b>   | \$ 46.03   |
| ST Small Volume Transportation                | <b>\$0.00401</b>   | \$ 151.07  |
| LT Large Volume Transportation                | <b>\$0.00401</b>   | \$ 733.48  |
| XLT Extra Large Volume Transportation         | <b>\$0.00401</b>   | \$ 4,258.38  |
| XXLT Double Extra Large Volume Transportation | <b>\$0.00401</b>   | \$ 2,379.09  |
| C&I/EUT Exploratory Program                   | <b>\$ 0.00231</b>  |  |

In addition to the above surcharges/ (credits), Rate Schedules A, 2A, GS-1, GS-2, and S are subject to Rule C7, Gas Cost Recovery, and may be subject to Rule C8, Customer Attachment Program.

The Energy Waste Reduction Surcharge is implemented on a **bill cycle** basis and is effective for a twelve-month period commencing with the **first** billing cycle of January **2026** and ending **with the final cycle of** December **2026**.

The IRM is effective beginning with the first cycle of the January 2025 billing month and will change on a bill cycle basis thereafter each January based on the tables on Sheet No. D-2.01.

This exhibit reflects: 1) the 2024 performance incentive proposed by the Company in the 2024 EWR Rec filing, Case No. U-21672, and 2) the base EWR surcharges proposed by the Company in the 2026-2029 EWR Plan filing, Case No. U-21681. Upon a final Commission Order in the instant case, the tariff filed with the Commission will reflect the approved base surcharges plus the applicable performance incentives.

Issued: \_\_\_\_\_, \_\_\_\_  
M. A. Bruzzano  
Senior Vice President  
Regulatory Affairs  
  
Detroit, Michigan

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**STATE OF MICHIGAN**  
**BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter, on the Commission's own )  
motion, regarding the regulatory reviews, )  
revisions, determinations, and/or approvals )  
necessary for **DTE ELECTRIC** )  
**COMPANY and DTE GAS COMPANY** )  
to fully comply with Public )  
Act 295 of 2008, as amended by Public )  
Act 342 of 2016 )

Case No. U-21681

**PROOF OF SERVICE**

STATE OF MICHIGAN     )  
  ) ss.  
COUNTY OF WAYNE     )

ESTELLA R. BRANSON states that on June 27, 2025, she served a copy of DTE Electric Company's and DTE Gas Company's Application for Approval of its Energy Waste Reduction Plan, and Direct Testimony and Exhibits of Witnesses, Reema A. Biel, George H. Chapel, Jose N. Goncalves, Jason R. Kupser, Rebecca M. Malfroid, Thac K. Nguyen, Frank Sirwaitis, Eddie Smith, and Kevin A. Stewart in the above captioned matter, via electronic mail, upon the persons listed on the attached service list.

\_\_\_\_\_  
ESTELLA R. BRANSON

**MPSC Case No. U-21681**  
**SERVICE LIST**

**MICHIGAN PUBLIC SERVICE**  
**COMMISSION STAFF**

Steven D. Hughey

Assistant Attorney General

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Lansing, MI 48917

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