



201 North Washington Square • Suite 910
Lansing, Michigan 48933
Telephone 517 / 482-6237 • Fax 517 / 482-6937 • www.varnumlaw.com

Timothy J. Lundgren

tjlundgren@varnumlaw.com

April 23, 2018

Ms. Kavita Kale
Executive Secretary
Michigan Public Service Commission
7109 W. Saginaw Highway
P.O. Box 30221
Lansing, MI 48909

Re: MPSC Case No. U-18352

Dear Ms. Kale:

Attached for electronic filing in the above-referenced matter, please find the Direct Testimony and Exhibits of Caitlin Marquis on behalf of the Michigan Energy Innovation Business Council, the Institute for Energy Innovation, and Advanced Energy Economy. Thank you for your assistance in this matter.

Sincerely yours,

VARNUM

Timothy J. Lundgren

TJL/kc
Enclosures
c. All parties of record.

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter, on the Commission's own motion,)	
regarding the regulatory reviews, revisions,)	Case No. U-18352
determination and/or approvals necessary for)	
DTE Electric Company to comply)	
with Section 61 of 2016 PA 342)	
_____)	

DIRECT TESTIMONY OF CAITLIN MARQUIS
ON BEHALF OF
MICHIGAN ENERGY INNOVATION BUSINESS COUNCIL, INSTITUTE FOR
ENERGY INNOVATION, AND ADVANCED ENERGY ECONOMY

DIRECT TESTIMONY OF CAITLIN MARQUIS

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1 **Q. Please state your name and business address.**

2 A. My name is Caitlin Marquis, and my business address is 133 Federal Street, 12th Floor,
3 Boston, MA 02110.

4

5 **Q. What is your position?**

6 A. I am Manager of Federal and State Policy at Advanced Energy Economy.

7

8 **Q. On whose behalf are you testifying in this proceeding?**

9 A. I am testifying on behalf of the Michigan Energy Innovation Business Council
10 ("Michigan EIBC"), the Institute for Energy Innovation ("IEI"), and Advanced Energy
11 Economy ("AEE").

12

13 **Q. Please summarize your education and professional backgrounds.**

14 A. I have worked for AEE for three and a half years. I facilitate AEE's "Advanced Energy
15 Buyers Group," a business-led coalition of large energy users who have come together to
16 engage on energy policy issues that will help them achieve their ambitious clean energy
17 targets. I also lead AEE's parallel "Access to Advanced Energy" initiative, which brings
18 together both corporate purchasers and renewable energy suppliers to develop and
19 advocate for solutions to meet customers' renewable energy needs.¹ In this capacity, I
20 have worked extensively with both corporate purchasers and renewable energy
21 developers on the topic of renewable energy procurement solutions. Prior to my

¹ Learn more about both initiatives at AEE, *Corporate Access to Advanced Energy*, <https://www.aee.net/initiatives/corporate-access-to-advanced-energy.html>.

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1 employment with AEE, I worked at Altenex LLC (now part of Edison Energy), an energy
2 management network that assists leading companies with their renewable energy
3 procurement decisions. I hold a B.A. from Harvard University and a Master of Science in
4 Environmental Change and Management from the University of Oxford.

5
6 **Q. Have you testified as an expert witness in prior proceedings?**

7 A. Yes, I have testified before the State Corporation Commission in Virginia in Case No.
8 PUR-2017-00060, and also have testimony before the Michigan Public Service
9 Commission in Case No. U-18351.

10
11 **Q. Are you sponsoring any exhibits?**

12 A. Yes, I am sponsoring three exhibits:

- 13 • Exhibit EIB-1 (CM-1) - DTE response to ELPC-1.8
- 14 • Exhibit EIB-2 (CM-2) - DTE response to Michigan EIBC, AEE, and IEI question
15 1.4, attachment 4, "MIGreenPower FAQs: Commercial & Industrial Customers".
- 16 • Exhibit EIB-3 (CM-3) - DTE response to Michigan EIBC, AEE, IEI question 1.5i.

17
18 **Q. What is the purpose of your testimony?**

19 A. The purpose of my testimony is to assess the suitability of DTE Energy's (hereafter
20 "DTE") proposed MIGreenPower program as a solution to meet customers' needs under
21 Section 61 of Public Act 342 of 2016 (hereafter "Section 61").² My role at AEE is

² DTE Application and Affidavit of Terri L. Schroeder filed on October 18, 2017 in Case No. U-18352 [hereafter "Application"].

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1 focused on expanding opportunities for large customers to procure renewable energy and
2 other advanced energy resources to serve their energy needs, and I evaluated DTE's
3 application for approval of MIGreenPower with these goals in mind. Ultimately, my
4 testimony concludes that MIGreenPower, as proposed, will not meet customers' needs
5 and preferences. My testimony points out the positive aspects of the program, as well as
6 several problematic aspects that result in my conclusion that the program will fall short of
7 meeting customer's needs, especially those of larger commercial and industrial customers
8 with ambitious renewable energy or sustainability targets. Where I identify shortcomings,
9 I also suggest opportunities to better address customers' varying renewable energy needs
10 and preferences, including suggestions for improvements to the MIGreenPower program
11 as well as recommendations regarding additional options or programs for customers
12 under Section 61.

13
14 **Q. Do the assessments and recommendations in your testimony regarding customer**
15 **needs and preferences represent the views of a range of corporate purchasers?**

16 A. The needs and preferences of corporate purchasers and renewable energy developers vary
17 across sectors and between companies, and my testimony attempts to reflect this range of
18 needs and preferences. However, my testimony should not be interpreted as representing
19 the views of any individual company within AEE's or Michigan EIBC's membership.

20
21 **Q. Please describe your overall assessment of DTE's MIGreenPower program.**

22 A. DTE's MIGreenPower program offers customers an option to purchase a portion of their
23 electricity from renewable energy projects. This subscription-style program offers

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1 customers local renewable energy with flexibility around term and amount, but as
2 designed, it is costly and lacks transparency and flexibility around resource cost and
3 selection, does not offer long-term contract options, and is overall unlikely to meet the
4 needs of many large commercial and industrial customers. My testimony suggests
5 improvements to the MIGreenPower program and provides recommendations for
6 additional renewable energy offerings under Section 61, which I understand to be under
7 development by DTE.³ I recommend that the Commission require these additional
8 programs be filed for approval under this docket to comply with the Section 61
9 requirements by offering viable options to all customers.

10
11 **Q. Please provide an outline of your testimony in this case.**

12 A. My testimony is structured as follows:

- 13 I. Customer renewable energy demand and preferences;
- 14 II. Evaluation of DTE's MIGreenPower program;
- 15 III. Recommendations for additional programs as a part of DTE's
16 Section 61 application;
- 17 IV. Conclusion.

18
19
20
21
22

³ See DTE Direct Testimony filed on March 29, 2018 in Case No. U-18232.

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1 **I. CUSTOMER RENEWABLE ENERGY DEMAND AND PREFERENCES.**

2

3 **Q. Please discuss trends in customer demand for renewable energy across the country.**

4 A. Customers across the country have made their commitment to purchase renewable energy
5 very clear, with a growing number of companies setting renewable energy and energy-
6 related sustainability targets. 71 of the Fortune 100 companies are now committed to
7 reducing their energy-related impacts, including all three Fortune 100 companies
8 headquartered in Michigan. Over 43% of the Fortune 500 have similar commitments, and
9 nearly 60% (10 out of 17) of Michigan-headquartered Fortune 500 companies have set
10 some form of renewable energy or energy-related sustainability target.⁴

11 Companies are not only making commitments on paper but are following through with
12 them in reality. Since 2013, U.S. corporations have purchased over 11 gigawatts of
13 renewable energy from offsite projects.⁵

14

15 **Q. Have companies coalesced around any common goals or principles regarding their**
16 **renewable energy needs?**

17 A. Yes. In 2014, a group of companies came together to develop the Renewable Energy
18 Buyers' Principles.⁶ As of February 2018, a total of 73 companies representing 67 million
19 MWh of electricity use have agreed to these principles, which are:

⁴ Advanced Energy Economy, 2016 Corporate Advanced Energy Commitments (Dec. 2016), available at <http://info.aee.net/growth-in-corporate-advanced-energy-demand-market-benefits-report>.

⁵ Business Renewables Center, BRC Deal Tracker, available at <http://businessrenewables.org/corporate-transactions/>, accessed April 20, 2018.

⁶ Corporate renewable energy buyers' principles, "About Us," <http://buyersprinciples.org/about-us/>, accessed April 16, 2018.

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- 1 1. Greater choice in procurement options;
- 2 2. More access to cost competitive options;
- 3 3. Longer- and variable-term contracts;
- 4 4. Access to new projects that reduce emissions beyond business as
- 5 usual;
- 6 5. Increased access to third-party financing vehicles as well as
- 7 standardized and simplified processes, contracts, and financing for
- 8 renewable energy projects; and
- 9 6. Opportunities to work with utilities and regulators to expand choices
- 10 for buying renewable energy.⁷

11

12 These principles are intended to apply in both traditionally regulated and restructured

13 markets, and to represent the needs of a range of customers of different sizes and across

14 different industries and market sectors.

15

16 **Q. In addition to general principles, are there any common needs and preferences**

17 **among corporate purchasers that specifically pertain to utility renewable energy**

18 **offerings?**

19 A. Yes. AEE worked with member companies, including both energy users and renewable

20 energy suppliers, to develop a set of principles or best practices for renewable energy

21 tariffs, summarized in a policy brief published by AEE in 2017.⁸ That brief finds that, to

⁷ Corporate Renewable Energy Buyers' Principles, "The Principles," <http://buyersprinciples.org/principles/>.

⁸ AEE, *Making Corporate Renewable Energy Purchasing Work for All Utility Customers*, available at <http://info.aee.net/making-corporate-renewable-energy-purchasing-work-for-all-utility-customers>.

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1 be effective, a renewable energy tariff should:

- 2 • Avoid impacts on nonparticipating customers;
- 3 • Include program pricing that reflects actual market pricing and program costs;
- 4 • Allow for competitive project selection;
- 5 • Enable development of new renewable energy, beyond business-as-usual;
- 6 • Allow a range of customers to participate; and
- 7 • Include varied or flexible offerings to meet the needs of different customers.

8 These elements are derived from customer and developer experience under existing
9 renewable energy tariffs and provide a set of benchmarks against which to assess DTE's
10 proposed MIGreenPower program.

11
12 **Q. Are these needs and preferences reflected in Docket U-18349 regarding utility**
13 **Section 61 filings, and consistent with the Commission's July 2017 order in that**
14 **docket?**

15 A. Yes, the points above are all reflected in comments submitted in Docket U-18349 and
16 also in the Commission's July 2017 order providing guidelines for utility Section 61
17 filings.⁹ In particular, the Commission's Order included the following requirements and
18 recommendations, which are all consistent with the principles outlined above:

- 19 • Emphasis on innovation and experimentation;
- 20 • Endorsement of a competitive bidding processes for resource selection;
- 21 • Rejection of programs that rely on a set price premium, in favor of cost-of-

⁹ Michigan Public Service Commission Order, filed July 2017 in Case No. U-18349, U-18350, U-18351, U-18352, U-18353, U-18354, U-18355, U-18356, U-18357 [hereafter "Commission Order" or "Commission July Order"].

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- 1 service offerings;
- 2 • Concern with high administrative and marketing costs;
- 3 • Acknowledgement that program caps are unnecessary at this stage;
- 4 • Encouragement of load aggregation for customers with multiple metered
- 5 locations; and
- 6 • Interest in exploring direct negotiation between customers and suppliers.

7 Programs that successfully deliver on these recommendations are likely to be successful

8 in meeting the needs of a range of customers.

9

10 **II. EVALUATION OF DTE'S MIGREENPOWER PROGRAM**

11

12 **Q. Please summarize what you view as the key positive aspects of the MIGreenPower**

13 **program, as well as its primary shortcomings.**

14 A. Based on my experience working with large energy customers and suppliers across a

15 number of different states, and consistent with the principles outlined above, I see two

16 elements of the MIGreenPower program that align well with the needs of large

17 customers, and that are likely to meet the needs of smaller customers as well:

- 18 1. Access to bundled renewable energy certificates (RECs) and
- 19 energy from specific, local projects; and
- 20 2. Customer flexibility with respect to contract term and renewable
- 21 energy quantity.

22 However, I am concerned by a few key problems and limitations with the program as

23 proposed that will make it unattractive to many residential and small business customers,

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1 and untenable for many large commercial and industrial customers. Specifically, the
2 program suffers from:

- 3
- 4 1. A lack of competitive process for resource solicitation and
5 selection to meet customer needs under the program, and program
6 pricing that is not transparent and does not appear to match market
7 pricing;
 - 8 2. High administrative fees;
 - 9 3. No opportunities for customers to lock in long-term commitments
10 (with the potential for cost savings over time);
 - 11 4. A low initial program cap that is likely to deter large customers
12 from considering participation; and
 - 13 5. Failure to incorporate flexibility to meet the needs of a range of
14 customers.

15 More generally, I also recommend a clear process for regular evaluation of DTE's Section
16 61 offerings to ensure that customer needs are being met. My testimony will address each
17 of these points in turn.

18

19 **Q. Please describe the positive aspects of the program in more detail.**

20 A. The MIGreenPower program is structured to provide customers with bundled RECs and
21 energy from specific, local projects, and allows customers flexibility with respect to
22 contract term and renewable energy quantity.

23

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1 Access to bundled RECs and energy is an increasingly important consideration for
2 customers. The Buyers Principles summarized above specify that the signatories, "are
3 increasingly interested in access to bundled energy and REC products." This is because
4 "[u]nbundled RECs do not deliver the same value and impact as directly procured
5 renewable energy from a specific project or facility."¹⁰

6
7 The program also provides customers with flexibility to sign up for renewable energy in
8 5% increments and allows customers significant flexibility to change their participation
9 level. Specifically, according to DTE, a customer participating in MIGreenPower has the
10 option to "change his subscription amount or discontinue taking service under the
11 Program at any time," with a \$50 termination fee applied only if the customer exists
12 within 12 months of enrollment.¹¹ This flexibility is attractive for certain customers who
13 are unable to make a long-term commitment—although, as I will explain, customers
14 would also benefit from the *option* to commit to the program for a longer term.

15
16 **Q. Turning to the downsides of the program that you identified, please describe your**
17 **concerns regarding project selection.**

18 A. The generation supply to meet renewable energy demand under the MIGreenPower
19 program is all DTE-owned, and it is unclear what steps the utility took, if any, to assess
20 alternative options that might have resulted in lower costs. Under the MIGreenPower
21 program, renewable energy will be supplied "from DTEE owned solar and wind facilities

¹⁰ See *Supra* n. 7.

¹¹ Application, Affidavit of Terri L. Schroeder at 7.

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1 approved in the Company's Renewable Energy Plan ("REP") by the Commission's Order
2 in Case No. U-17793," namely the Pinnebog Wind Park and the Turill and Demille Solar
3 Parks.¹² DTE provides no information about how these projects were selected, whether
4 competitive bids from third-parties were considered, and how the price of the chosen
5 projects compares to alternative third-party owned alternatives. Customers therefore have
6 no assurances that they are being provided with cost-competitive renewable energy
7 options.

8
9 Indeed, the price of renewable energy under the MIGreenPower program is much higher
10 than available market pricing for renewable generation, which has fallen rapidly in recent
11 years. Prices tracked by the Lawrence Berkeley National Laboratory show that average
12 levelized power purchase agreements (PPAs) for solar photovoltaics (PV) dropped more
13 than 75% since 2009 to reach approximately \$35/MWh for contracts signed in 2016, and
14 PPAs for wind dropped 73% since 2009 to reach \$19/MWh for contracts signed in
15 2016.¹³ DTE proposes a renewable energy cost of \$70/MWh, which is more than 70%
16 higher than wind contracts signed in 2016. Customers lack transparency into why this
17 pricing is so much higher than market costs.

18
19 **Q. Is a competitive project solicitation and selection process important to meet**
20 **customers' needs?**

¹² Ibid., at 3.

¹³ Lawrence Berkeley National Laboratory, *Utility-Scale Solar 2016: An Empirical Analysis of Project Cost, Performance, and Pricing Trends in the United States*, available at https://emp.lbl.gov/sites/default/files/utility-scale_solar_2016_slides.pdf, at 25; U.S. Department of Energy, *2016 Wind Technologies Market Report*, available at https://emp.lbl.gov/sites/default/files/2016_wind_technologies_market_report_final_optimized.pdf.

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1 A. Yes. A competitive solicitation and project selection process is an effective means to
2 provide customers access to least-cost, best-fit resource options to meet their needs.
3 Whether the least-cost renewable option comes at a net savings or a net premium, a
4 competitive solicitation process will assure customers that they are paying fair, market-
5 based prices. In fact, both the Buyers Principles and AEE's Essential Elements
6 underscore the importance of competitively-sourced projects. The Buyers Principles
7 signatories agree that they want "more access to cost competitive options," while AEE's
8 Essential Elements lists "competitive project selection" as one of the six most important
9 criteria for utility programs, noting that "a competitive project solicitation process with
10 participation open to both utilities and third-party suppliers will bring costs down for
11 consumers." The Commission's July 2017 Order similarly recommends a competitive
12 bidding process to meet customer needs under Section 61.¹⁴ DTE's MIGreenPower
13 program falls short of this clear requirement.

14

15 **Q. Can you point to other voluntary utility renewable energy programs across the**
16 **country that meet customer needs through a competitive solicitation process?**

17 A. Yes, the following programs either allow the customer to lead the project selection
18 process or rely on a utility-driven competitive solicitation:

- 19 • Dominion's Schedule Market Based Rate (MBR) and proposed Schedule
20 Renewable Generation (RG) in Virginia;
- 21 • NV Energy's Green Energy Rider in Nevada;
- 22 • Rocky Mountain Power's Schedule 34 in Utah;

¹⁴ Commission Order at 13.

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- 1 • Public Service of New Mexico's Green Energy Rider in New Mexico; and
2 • Puget Sound Energy's Green Direct in Washington.¹⁵

3 These examples represent a range of different program types, from subscription-style
4 programs similar to MIGreenPower (e.g., PSE's Green Direct) to sleeved-PPA programs
5 (e.g., PNM's Green Energy Rider) to market-based rate programs (e.g., Dominion's
6 Schedule MBR).

7
8 **Q. Please explain DTE's proposed administrative fee.**

9 A. DTE proposes a \$0.002/kWh administrative fee for this program, based on a total
10 Program IT/marketing/administrative budget of \$3 million, divided by the total expected
11 kilowatt hours over the entire term of the program to calculate a per kWh fee. DTE
12 explains that this \$3 million budget is front-loaded during the three-year enrollment
13 period, and further breaks down the annual budget into administrative fees ranging from a
14 "low" estimate of \$460,000 to a "high" estimate of \$680,000 per year for the first three
15 years, and marketing costs ranging from a "low" of \$190,000 to a "high" estimate of
16 \$320,000 per year for the first three years, for total estimated marketing and
17 administrative costs of between \$650,000 and \$1,000,000 per year for the first three
18 years. The total \$3 million administrative and marketing cost is based on DTE's "high"
19 estimate of its annual costs during the enrollment period.¹⁶

¹⁵ See World Resources Institute, Letha Tawney, Priya Barua, and Celina Bonugli, *Emerging Green Tariffs in U.S. Regulated Electricity Markets* (February 2018), available at <http://www.wri.org/publication/emerging-green-tariffs-us-regulated-electricity-markets>.

¹⁶ DTE response to Environmental Law and Policy Center question 1.8 (ELPC-1.8), included as Exhibit EIB-1 (CM-1).

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1 **Q. Do you find this administrative fee to be reasonable?**

2 A. I am concerned that the administrative fee proposed by DTE is inconsistent with
3 customers' desire for cost-competitive and cost-based renewable energy options, and that
4 it violates the Commission's July 2017 order.

5
6 First, DTE provides very little detail or justification for its cost estimates. For example,
7 DTE does not explain why it has selected the "high" estimate for administrative and
8 marketing costs, a choice that results in total program administrative and marketing costs
9 that are more than \$1 million higher than costs under the "low" estimate. Similarly, DTE
10 has not explained how it arrived at annual totals when some costs (e.g., website
11 development, marketing material design, outreach team uniforms) appear to be one-time,
12 upfront costs, while others (website maintenance, call center outreach, marketing
13 materials printing) would occur across the three years. Without additional information, it
14 is impossible to assess whether DTE's administrative and marketing fees are an accurate
15 reflection of its costs.

16
17 Second, it is unclear whether DTE has taken steps to minimize its marketing and
18 administrative costs for the MIGreenPower program. In particular, I note that many
19 customers (and particularly large commercial and industrial customers) are proactively
20 seeking out opportunities to source renewable energy. For companies that have set
21 ambitious renewable energy or greenhouse gas targets, very little education or marketing
22 will be needed beyond informing companies about the new offering through existing
23 channels of customer engagement. This function appears to be included in the

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1 "administrative" costs (i.e., personnel/field outreach, call center outreach, and
2 personnel/program management), although these administrative functions could likely be
3 accomplished simply by arming existing customer representatives already tasked with
4 customer account management with information about the new renewable energy
5 offering. It is unclear whether DTE took into consideration the growing sophistication
6 and interest of customers when estimating the total administrative and marketing costs for
7 the program.

8
9 By contrast, Consumers Energy in its Section 61 filing finds that an administrative and
10 marketing costs for its Large Customer Renewable Energy Program (LC-REP) will be
11 minimal, specifically stating that marketing and administrative costs "are not anticipated
12 to represent a significant amount of cost for the LC-REP Program." The LC-REP Option
13 A program has not suffered from lack of customer interest or awareness, as evident from
14 the fact that the program is already fully, or at least substantially, subscribed.¹⁷

15
16 **Q. You note that customers lack options to lock in long-term commitments with the**
17 **potential for cost savings over time. Please explain.**

18 **A.** Customers participating in the MIGreenPower program have the flexibility to change
19 subscription amount or terminate participation in the program at any time, with a \$50
20 termination fee applied only if the customer exits within 12 months of enrollment.
21 However, although customers must sign up within the initial three-year window,
22 customers have no option to lock in their participation in the program and have no

¹⁷ See Consumers Direct Testimony of Teri L. VanSumeren filed on October 18, 2017 in Case No. U-18351, at 11.

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1 guarantee that they will be able to continue participating in the program over any set
2 period of time. In particular, Exhibit A-1 to Ms. Schroeder's testimony states that the
3 "Company may suspend or terminate this Rider and its obligations hereunder in the event
4 of a change of law or regulation that, in Company's sole judgment, materially affects the
5 cost of providing service under this Rider or reduces or limits the revenue collected
6 pursuant to this Rider."¹⁸

7
8 **Q. Please explain why the lack of long-term options is an issue with the program as**
9 **proposed.**

10 A. While some customers will find value in the flexibility afforded by the option to *not* enter
11 into a long-term commitment, as noted above, other customers conversely place
12 significant value on long-term opportunities, and in particular the cost benefits and cost
13 certainty that such commitments can deliver. The option for variable or flexible contracts
14 and the desire for longer-term options is captured in the Buyers Principles, which lists
15 "longer and variable-term contracts" as one of the six key principles, specifying that
16 "Many companies would like to have options for entering into contracts over various time
17 periods."¹⁹

18
19 DTE's marketing materials for MIGreenPower recognize the potential benefits of locked-
20 in prices, stating that the program "allows customers to lock in a portion of their power

¹⁸ Application, Affidavit of Terri L. Schroeder, Exhibit A-1.

¹⁹ See *supra* n. 7.

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1 supply rate for 25 years."²⁰ The option to lock in prices over a longer term could enable
2 customers to make up some of the upfront premium if fuel and purchase power costs
3 increase and cause the subscription credit to increase. However, as noted above, the
4 customer's participation is not contractually fixed; the marketing claim of a fixed power
5 supply rate is not guaranteed, and would not stand up during a prospective participant's
6 consideration of the program.

7
8 **Q. You note that the low initial program cap is likely to deter large customers from**
9 **even considering participation. Please explain.**

10 A. The MIGreenPower program is limited to 150,000 MWh annually, equivalent to the
11 annual output from approximately 57 MW of renewable energy.²¹ With the average PPA
12 signed by *individual* corporate off-takers over each of the past three years from 2014 to
13 2016 exceeding 90 MW, a total program cap for *all* customers below 60 MW is very
14 restrictive.²² DTE explains in its application that the program size is driven by the
15 selected resources; however, some large customers, knowing that the program is
16 insufficient to meet their needs, will be deterred by the small program size. I will discuss
17 potential solutions to align customer needs and program size in the next section of my
18 testimony.

²⁰ DTE response to Michigan EIBC, AEE, and IEI question 1.4, attachment 4, "MIGreenPower FAQs: Commercial & Industrial Customers," included as Exhibit EIB-2 (CM-2).

²¹ Assuming an average capacity factor of 30%.

²² The average size of a PPA signed by a single corporate offtaker was 169 MW in 2014, 98 MW in 2015, and 97 MW in 2016. See Business Renewables Center, *State of the Market* (Nov. 2016), available at http://www.businessrenewables.org/downloads/brc_nov_2016/State-of-the-market.pdf.

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1 The Commission urged utilities against setting program caps in its July 2017 order
2 stating, "the Commission finds that, for now, there is no need to set any limit on the
3 amount of renewable energy to be obtained under the Act 61 programs and tariffs."²³
4

5 **Q. You note that the program lacks flexibility to meet the needs of a range of**
6 **customers. Please explain the importance of flexibility.**

7 A. AEE's Essential Elements guide lists "varied or flexible offerings to meet the needs of
8 different customers" as one of the six key design elements for voluntary utility renewable
9 energy programs. The guide explains, "There is no one-size-fits all offering that will meet
10 the needs and preferences of all corporate purchasers," and suggests "providing a range of
11 offerings and allowing for flexibility and special contracts within programs" to ensure
12 that customers' needs are met.
13

14 **Q. Please explain how customers' needs and preferences differ.**

15 A. Customers—especially large commercial and industrial customers—often have very
16 specific needs and preferences. In my experience, these needs and preferences vary by
17 company, and may include:

- 18 • Price, with some customers valuing price certainty even when it comes at an
19 initial premium;
- 20 • Resource type, i.e., wind, solar, hydropower, etc., with some customers favoring
21 certain technologies while others are resource agnostic;
- 22 • Project-specific characteristics, e.g., developer track record or congestion risk;

²³ Commission Order at 8.

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- 1 • Risk and upfront capital expenditure, with some customers preferring to avoid
2 capital expenditures and others willing to expend their own capital to bring down
3 overall costs;
- 4 • Term, with some customers preferring shorter contracts while others have appetite
5 or tolerance for longer contracts;
- 6 • Contribution to corporate energy or sustainability goals, with some customers
7 seeking to meet all their energy needs with renewable or carbon-free sources and
8 some seeking less than 100%;
- 9 • Additionality, i.e., whether a project is new and goes beyond "business as usual;"
- 10 • Proximity to the customer's load center(s); and
- 11 • Project size, with some customers preferring to join with other customers to
12 achieve economies of scale while others have sufficient load to pursue their own
13 projects.

14

15 **Q. Please explain why you believe MIGreenPower will fall short of providing this**
16 **flexibility.**

17 A. As a month-by-month program served by a 50-50 mix of a pre-selected wind project and
18 a pre-selected solar project, the MIGreenPower program cannot accommodate the range
19 of different customer needs. While some customers will likely be satisfied with a utility-
20 provided mix (assuming that other shortcomings noted previously are resolved), many
21 larger customers will want more tailored renewable energy offerings.

22

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1 **Q. Are you suggesting that the utility must provide individual deals for every**
2 **customer?**

3 A. No. While individual deals may be most appropriate in some specific cases, there are also
4 programmatic options that are more responsive to individual customer needs. For
5 example, programs such as PNM's Green Energy Rider and Dominion's proposed
6 Schedule RG allow customers to sleeve a PPA through their utility, and programs such as
7 Dominion's Schedule Market-Based Rate (MBR) and Consumers Energy's Large
8 Customer Renewable Energy Program (LC-REP) Option B allow customers to have a
9 project delivered into the same wholesale market, with their retail rate for energy
10 reflecting that same wholesale price. With these programs, the specific project to meet
11 the needs of an individual customer or group of customers is unknown at the time of the
12 program approval (and selected either by the customer or by the utility through a
13 competitive bidding process), but the billing structure and certain terms of participation
14 are standardized.

15
16 The Commission in its July 2017 order expressed support for such an approach under
17 Section 61, stating, "Recognizing that the preferences and objectives of many commercial
18 and industrial customers are perhaps more easily satisfied with an approach that allows
19 independent contracting between customers and third-party renewable energy providers,
20 the Commission encourages utilities to work in cooperation with these customers to
21 source and contract for renewable energy that meets individual corporate sustainability
22 goals at a competitive price."²⁴

²⁴ Commission Order at 12.

CAITLIN MARQUIS
DIRECT TESTIMONY

1 **Q. You also recommend a regular process for evaluation of Section 61 offerings. Please**
2 **explain.**

3 A. If a program or suite of programs is *not* meeting customer needs, it is important to
4 uncover its failings and take corrective measures as soon as possible to ensure that
5 customers have access to renewable energy as required under Section 61. Accordingly, I
6 recommend annual reports to the Commission that include enrollment figures for the
7 prior year. I also recommend that the Commission include an opportunity during this
8 annual review for both participating and prospective customers to provide feedback on
9 Section 61 offerings.

10

11 **III. SUGGESTIONS TO IMPROVE DTE'S SECTION 61 APPLICATION**

12

13 **Q. Do you have any specific suggestions to improve the MIGreenPower program?**

14 A. Yes, I recommend that DTE reduce the administrative and marketing costs and fees
15 associated with the program, and provide customers with the *option*, but not a
16 requirement, to lock in prices through long-term contract. Such options should include a
17 range of different contract lengths, including term lengths between 10 and 15 years, to
18 meet the needs of customers who wish to sign long-term contracts but cannot commit to a
19 20 year contract.²⁵

20

²⁵ For example, Walmart has publicly stated, “for corporate governance reasons, we don’t sign contracts over 15 years... we can’t look at a program that’s 20 years because we couldn’t sign it.” See Joel Makower, “How Google and Walmart work with utilities to procure clean power,” Greentech Media (April 9, 2018), <https://www.greenbiz.com/article/how-google-and-walmart-work-utilities-procure-clean-power>.

CAITLIN MARQUIS
DIRECT TESTIMONY

1 I also recommend inclusion of a clear process for program expansion that would be
2 initiated prior to the program being fully subscribed to ensure that customers continue to
3 have access to renewable energy options under the program. Such expansion should rely
4 on a competitive selection process for renewable energy resources to serve customers
5 through MIGreenPower, including opportunities for third-party participation.

6
7 Because the program is likely to remain undersubscribed due to the concerns I have laid
8 out, the Commission should require development of the second tranche of the
9 MIGreenPower without waiting for the existing resources to become fully subscribed.
10 Moving forward, future tranches would be initiated when the program is close to being
11 fully subscribed, or, alternatively, DTE could hold a regular (e.g., annual or biennial)
12 customer enrollment process for large customers, and secure resources in response to
13 committed customer demand.

14
15 **Q. Do you recommend that DTE propose any additional options or new programs for**
16 **compliance under Section 61?**

17 A. Yes. As I have already noted, I expect that the MIGreenPower program will be untenable
18 for many large customers, and even the recommendations provided above are unlikely to
19 address the needs of many customers. Accordingly, I recommend introduction of an
20 alternative offering under Section 61. I am encouraged that DTE is already considering
21 an additional offering for large customers that it has initially targeted at 300 MW.²⁶

²⁶ DTE response to Michigan EIBC, AEE, IEI question 1.5, included as Exhibit EIB-3 (CM-3).

CAITLIN MARQUIS
DIRECT TESTIMONY

1 I believe that the language of the statute allows the Commission to require additional
2 offerings as a condition for approval of DTE's Section 61 application given the statutory
3 requirement that "An electric provider *shall offer to its customers* the opportunity to
4 participate in a voluntary green pricing program under which the customer may specify,
5 *from the options made available* by the electric provider, the amount of electricity
6 attributable to the customer that will be renewable energy." MCL 460.1061. This
7 language makes clear that Section 61 is intended to apply to all customers, and
8 anticipates that utilities may need to provide multiple offerings. It would be unreasonable
9 to assume that the statutory language would be satisfied by merely making a program
10 available, with no regard to whether the program meets customers' needs. Indeed, the
11 responsibility for assessing programs is clearly given to the Commission by the statute,
12 which states, "If the electric provider's rates are regulated by the commission, the
13 program, including the rates paid for renewable energy, must be approved by the
14 commission." *Id.* To ensure that all customers have access to renewable energy options as
15 required under Section 61, that can reasonably be expected to meet their needs, the
16 Commission should require that DTE file an additional offering prior to its approval of
17 the Company's Section 61 application.

18
19 **Q. How do you recommend that DTE design an additional offering?**

20 A. First and foremost, I recommend that DTE work collaboratively with its customers to
21 design an offering that will meet their needs. Such an offering should follow the
22 principles laid out above (i.e., the Renewable Energy Buyers Principles, AEE's *Essential*
23 *Elements*, and the Commission's July 2017 order in this case).

CAITLIN MARQUIS
DIRECT TESTIMONY

1 Additionally, with respect to specific characteristics that a new Section 61 program
2 should include, I recommend:

- 3 • Inclusion of a sleeved PPA option and/or a market-based rate option for
4 customers' underlying bills;
- 5 • Flexible term options ranging from 10 to 20 years, including options that are 15
6 years or less;
- 7 • Competitive project solicitation and selection (including options for customers to
8 directly source projects and negotiate contracts); and
- 9 • Cost-based fees and market-based credits for renewable energy and capacity.

10
11 DTE should also look to examples in other states when designing an offering; programs
12 that have successfully met customer needs (i.e., have multiple large subscribers and/or
13 resulted in significant renewable energy purchases) include:

- 14 • Consumers Energy's Large Customer Renewable Energy Program, Option A in
15 Michigan;
- 16 • Dominion's Schedule Market Based Rate (MBR) in Virginia;
- 17 • NV Energy's Green Energy Rider in Nevada;
- 18 • Rocky Mountain Power's Schedule 34 in Utah;
- 19 • Omaha Public Power District's Schedule No. 261 M; and
- 20 • Public Service of New Mexico's Green Energy Rider in New Mexico.²⁷

²⁷ See *supra* n. 15.

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DIRECT TESTIMONY

1 These programs have not only been approved, but also utilized by customers to bring new
2 projects online. While the programs differ in design (with some offering a sleeved PPA,
3 and others structured as a market-based rate), they all offer access to cost-competitive
4 renewable energy and include options for customers to select the resource or resources
5 that best meet their individual needs.

6
7 **IV. CONCLUSION**

8
9 **Q. Please summarize your recommendations in this case.**

10 **A.** I recommend that the Commission not approve DTE's Section 61 application until and
11 unless DTE makes improvements to the MIGreenPower program *and* introduces an
12 additional customer offering or offerings. Specifically, regarding the MIGreenPower
13 program, the Commission should require that DTE:

- 14 1. Reduce the administrative and marketing costs and fees associated with the
15 program;
- 16 2. Provide customers with the *option* to lock in prices through long-term contract
17 while preserving flexibility for customers to participate month-to-month;
- 18 3. Include a clear process for program expansion that relies on a competitive
19 selection process for renewable energy resources, including opportunities for
20 third-party participation.

21 I also recommend that DTE introduce an additional program or programs to meet the
22 needs of large customers. Such a program should:

CAITLIN MARQUIS
DIRECT TESTIMONY

- 1 1. Be developed in collaboration with DTE customers interested in renewable
2 energy;
- 3 2. Be consistent with the Renewable Energy Buyers Principles, AEE's *Essential*
4 *Elements*, and the Commission's July 2017 Order regarding Section 61
5 programs;
- 6 3. Look to other successful renewable energy tariffs as examples; and
- 7 4. Contain specific provisions to meet customer needs, including:
- 8 ○ Inclusion of a sleeved PPS option and/or a market-based rate option for
9 the customer's underlying bill;
- 10 ○ Flexible term options ranging from 10 to 20 years;
- 11 ○ Competitive project solicitation and selection (including options for
12 customers to directly source projects and negotiate contracts); and
- 13 ○ Cost-based fees and market-based credits for renewable energy and
14 capacity.

15 For all Section 61 programs, I recommend an annual review process that includes
16 information about enrollment and also provides both participating and nonparticipating
17 customers an opportunity to provide input. Without the recommended changes to
18 MIGreenPower and the inclusion of an additional program, DTE's Section 61 application
19 will not provide customers with realistic, cost-competitive renewable energy offerings,
20 and should not be approved by the Commission.

21

22 **Q. Does this conclude your testimony?**

23 **A. Yes.**

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter, on the Commission's own motion,)
regarding the regulatory reviews, revisions,)
determination and/or approvals necessary for)
DTE Electric Company to comply)
with Section 61 of 2016 PA 342)
_____)

Case No. U-18352

EXHIBITS OF CAITLIN MARQUIS
ON BEHALF OF
MICHIGAN ENERGY INNOVATION BUSINESS COUNCIL, INSTITUTE FOR
ENERGY INNOVATION, AND ADVANCED ENERGY ECONOMY

MPSC Case No.: U-18352
Respondent: T. L. Schroeder
Requestor: ELPC-1
Question No.: ELPC-1.8
Page: 1 of 1

Question: Please provide a detailed breakdown of costs for marketing and administration of the MIGreenPower Program.

Answer: Below is a table highlighting the range of expenses by category for years when the program is enrolling customers:

Admin	Low	High
Website development and maintenance	\$60,000	\$180,000
Personnel/Field Outreach	\$150,000	\$200,000
Call Center Outreach	\$100,000	\$100,000
Personnel/Program Management	\$150,000	\$200,000

Marketing	Low	High
Event trinkets/outreach team uniforms	\$10,000	\$20,000
Marketing materials - design and printing	\$80,000	\$150,000
Outreach events sponsorships	\$100,000	\$150,000

Total Marketing and Admin	\$650,000	\$1,000,000
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MPSC Case No.: U-18352
Respondent: T. L. Schroeder
Requestor: MEIBC IEI AEE
Question No.: MEIBC IEI AEEDE-1.4
Page: 1 of 1

Question: Has the Company directed its account representatives to discuss voluntary renewable energy interests with its commercial and industrial customers? If so, what information is being provided to customers? If so, what intelligence about customer interest is reported to the Company?

Answer: The Company has shared information and marketing materials for MIGreenPower with the major account representatives. See attachments MiEIBC IEI AEEDE – 1.4(1) through (4) for the materials shared with this group. Based on initial conversations with the account representatives, at least six follow up meetings have occurred.

DTE has received consistent feedback similar to the Buyers' Principles, as outlined on <http://buyersprinciples.org/principles/>. Customers are interested in working with utilities to procure renewable energy and secure long-term contracts. Customers are looking for additionality and no premium.



MI GreenPower™ FAQs:

COMMERCIAL & INDUSTRIAL CUSTOMERS



Through this program, we are offering our customers an opportunity to reduce their environmental impact and reach corporate sustainability goals.

WHAT IS MI GREEN POWER?

MI Green Power is a voluntary program that allows residential and commercial electric customers the opportunity to support local wind and solar projects while reducing their carbon footprint.

HOW DOES THE PROGRAM WORK?

Customers sign up to match all or a portion of their electricity usage with Michigan-made wind and solar energy. This match can be as little as 5% of their monthly kilowatt-hour (kWh) use, all the way up to 100%.

This program is above and beyond the renewable energy that currently makes up 10% of our generation mix.

WHY IS THIS PROGRAM VALUABLE TO MY CUSTOMERS?

Large organizations have a lot of options when it comes to going green – on-site generation, Renewable Energy Certificates (RECs), Power Purchase Agreements (PPAs), carbon offsets, etc.

This program offers customers a way to reach corporate sustainability goals without going outside of their utility. A renewable energy option that doesn't require a fixed-term contract or a significant upfront payment will be of interest to large organizations.

WHAT DOES PARTICIPATION INVOLVE?

There is no upfront payment required to enroll in this program. Customers are billed month-to-month and can cancel free of charge after one year of participation. A \$50 cancellation fee will be assessed for all customers who leave the program within their first year of participation.

HOW MUCH DOES IT COST?

The current net participation cost is an additional 3.1 cents per subscribed kWh above a customer's existing retail rate. The cost is expected to decline over time and will be updated each time DTE updates its rate schedules.

WHAT IS THE COST BASED ON?

The net cost is based on two additional line items that will appear on customers' bills: a subscription charge and a subscription credit. The subscription charge of 7.2 cents per subscribed kWh is based on the costs to construct and operate the wind and solar facilities and will remain constant over the life of the program. The subscription credit is based on the energy and capacity generated by the renewable energy facilities, and is currently 4.1 cents per subscribed kWh. These two items are visible on their monthly bills, and currently net out to an additional 3.1 cents per kWh.

ARE WE INSTALLING WIND AND/OR SOLAR ON OUR CUSTOMERS' FACILITIES?

No. Participation in this program does not require any changes to a customer's facilities. The program's projects are completed and located throughout our service territory.

WILL CUSTOMERS SAVE MONEY THROUGH THIS PROGRAM?

MI Green Power is designed as a premium program, and is not intended to save a customer money. However, in the longer term, the program may serve as a hedge against rising fuel prices and allows customers to lock in a portion of their power supply rate for 25 years.

CAN CUSTOMERS MAKE ENVIRONMENTAL CLAIMS?

Yes! Participants in MI Green Power may claim that they are using local wind and solar energy to power their operations. The MI Green Power Team encourages that all claims are made in accordance with the Green-e Energy Code of Conduct.

MPSC Case No.: U-18352
Respondent: T. L. Schroeder
Requestor: MEIBC IEI AEE
Question No.: MEIBC IEI AEEDE-1.5i
Page: 1 of 1

Question: Attached is a spreadsheet titled EIBC VGP Committed Purchaser Lists. This spreadsheet contains two tabs, one titled “Committed Companies” and one titled “Public Institutions”. These tabs list, respectively, large corporations and Michigan public institutions known by EIBC to have made public commitments either to renewable energy purchasing or greenhouse gas emissions reductions that entail renewable energy purchasing for their own use.

- i. How much aggregate annual voluntary renewable energy sales to the listed companies is included in the Company’s most recent forecast of future voluntary renewable energy purchases from the Company?

Answer: DTE has not forecasted renewable energy sales for specific companies. See MEIBC IEI AEEDE – 1.2 for the Company’s MIGreenPower forecast. Additionally, DTE is currently examining interest in a custom program for large customers. An initial pilot program could accept up to 300 MW of capacity. Furthermore, DTE could offer additional programs if there was more interest.

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter, on the Commission's own motion,)
regarding the regulatory reviews, revisions,)
determination and/or approvals necessary for)
DTE Electric Company to comply)
with Section 61 of 2016 PA 342)
_____)

Case No. U-18352

PROOF OF SERVICE

STATE OF MICHIGAN)
) ss.
COUNTY OF INGHAM)

Kimberly Champagne, the undersigned, being first duly sworn, deposes and says that she is a Legal Secretary at Varnum LLP and that on the 23rd day of April, 2018, she served a copy of the Direct Testimony and Exhibits of Caitlin Marquis on behalf of the Michigan Energy Innovation Business Council, the Institute for Energy Innovation, and Advanced Energy Economy upon those individuals listed on the attached Service List via email at their last known addresses.

Kimberly Champagne

SERVICE LIST
MPSC CASE NO. U-18352

Administrative Law Judge

Honorable Martin D. Snider
7109 W. Saginaw Highway
Lansing, MI 48917
sniderm@michigan.gov

Counsel for DTE Electric Company

Andrea Hayden
DTE Electric Company
One Detroit Plaza, 688 WCB
Detroit, MI 48826
andrea.hayden@dteenergy.com
mpscfilings@dteenergy.com

**Counsel for Michigan Public
Service Commission**

Amit T. Singh
Steven D. Hughey
7109 W. Saginaw Hwy., 3rd Floor
Lansing, MI 48919
singha9@michigan.gov
hugheys@michigan.gov

**Counsel for Environmental Law & Policy
Center**

Margrethe K. Kearney
Environmental Law & Policy Center
1514 Wealthy St. SE, Suite 256
Grand Rapids, MI 49506
mkearney@elpc.org

Rachel Granneman
Environmental Law & Policy Center
35 E. Wacker Drive, Suite 1600
Chicago, IL 60601
rgranneman@elpc.org

**Counsel for Michigan Environmental
Council**

Christopher M. Bzdok
Lydia Barbash-Riley
Olson, Bzdok & Howard
420 E. Front St.
Traverse City, MI 49686
chris@envlaw.com
lydia@envlaw.com
karla@envlaw.com
kimberly@envlaw.com
marcia@envlaw.com