



ENVIRONMENTAL LAW & POLICY CENTER

Protecting the Midwest's Environment and Natural Heritage

February 2, 2018

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

RE: MPSC Case No. U-18419

Dear Ms. Kale:

The following is attached for paperless electronic filing:

Rebuttal Testimony of R. Thomas Beach on behalf of the Environmental Law & Policy Center, the Ecology Center, the Solar Energy Industries Association, the Union of Concerned Scientists, and Vote Solar

Exhibit ELP-64 (RTB-6)

Proof of Service

Sincerely,

Margrethe Kearney
Environmental Law & Policy Center
mkearney@elpc.org

cc: Service List, Case No. U-18419

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**STATE OF MICHIGAN
MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter of the Application of DTE)	
ELECTRIC COMPANY for approval of)	
Certificates of Necessity pursuant to MCL)	Case No. U-18419
460.6s, as amended, in connection with the)	
addition of a natural gas combined cycle)	
generating facility to its generation fleet and)	
for related accounting and ratemaking)	
authorizations.)	

REBUTTAL TESTIMONY OF

R. THOMAS BEACH

ON BEHALF OF

**ENVIRONMENTAL LAW AND POLICY CENTER, THE ECOLOGY CENTER,
THE SOLAR ENERGY INDUSTRIES ASSOCIATION, VOTE SOLAR, AND
THE UNION OF CONCERNED SCIENTISTS**

February 2, 2018

EXECUTIVE SUMMARY

Q: Mr. Beach, what is the purpose of this rebuttal testimony?

A: On behalf of the Environmental Law & Policy Center, the Ecology Center, the Solar Energy Industries Association, the Union of Concerned Scientists, and Vote Solar (collectively, “the Clean Energy Groups”), this rebuttal responds to the direct testimony of Mr. Nicholas L. Phillips on behalf of the Association of Businesses Advocating Tariff Equity (ABATE). ABATE recommends that the Commission should deny DTE Energy’s (DTE) request for a Certificate of Necessity (CON) to build an 1,100 MW gas-fired combined cycle power plant, on the grounds that DTE has not adequately analyzed whether it should continue to operate three aging coal-fired power plants that DTE is planning to retire and replace with the new gas plant.

Q: How do you disagree with ABATE’s position?

A: Although I agree that the Commission should reject DTE’s CON, the Commission should not do so on the grounds that ABATE suggests. DTE has presented a reasonable case that the continued operation of the coal plants is less cost-effective than replacing them with gas plants. The utility’s conclusion on coal retirements is robust even if the current federal administration suspends or revises certain environmental regulations. Further, the federal tax legislation that was recently enacted will have modest impacts, will impact all

1 utility resource options, and is unlikely to decisively change the comparison among
2 DTE's resource choices.

3
4 Moreover, my opening testimony showed that a portfolio of renewable generation and
5 efficiency resources will be even less expensive than DTE's proposed gas plant. This
6 renewable / efficiency portfolio sets an even lower cost benchmark that reinforces a
7 conclusion that DTE's coal plants should be retired.

8
9 Finally, this rebuttal highlights that DTE's customers – including many of ABATE's own
10 members – are not demanding that DTE continue to serve them with aging coal-fired
11 power plants or with new gas generation. Instead, DTE's customers are increasingly
12 seeking to be served with clean, affordable, renewable generation. Given this increased
13 demand for renewable energy, granting a CON for DTE's proposed project runs the real
14 risk of creating stranded assets, as DTE finds itself having built capacity and energy that
15 its customers – including many ABATE members – do not want to purchase or that they
16 displace through their own purchases of cleaner renewable generation or investments in
17 energy efficiency.

18
19 **Q: What is your conclusion?**

20 **A:** Contrary to the suggestion of ABATE's testimony, I conclude that, in the long run,
21 ratepayers will pay lower costs for electricity and will receive the clean energy that they

1 are demanding, if DTE procures the cost-effective renewable and efficiency portfolio that
2 I have proposed. If the gas plant is built, or if DTE continues to operate its aging coal
3 units, ratepayers will bear higher costs and will receive fewer employment or
4 environmental benefits. DTE should confirm this conclusion by testing the market for
5 the portfolio of renewable and efficiency resources that I have recommended.

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EXHIBIT

ELP-64 (RTB-6) Michigan Energy Innovation Business Council and Advanced Energy
 Economy letter dated October 4, 2017 re Green Pricing Programs

1 **I. INTRODUCTION**

2 **Q1: Please state for the record your name, position, and business address.**

3 A1: My name is R. Thomas Beach. I am principal consultant of the consulting firm
4 Crossborder Energy. My business address is 2560 Ninth Street, Suite 213A, Berkeley,
5 California 94710.

6
7 **Q2: Have you previously submitted direct testimony in this docket?**

8 A2: Yes. On January 12, 2018, I submitted direct testimony on behalf of the Ecology Center,
9 Environmental Law & Policy Center, Solar Energy Industries Association, Union of
10 Concerned Scientists, and Vote Solar (collectively, the “Clean Energy Groups”). My
11 experience and qualifications are described in **Attachment RTB-1** to that testimony. My
12 direct testimony explains the significant interest of the Clean Energy Groups in the issues
13 presented by DTE’s request for a Certificate of Necessity (CON) to build a nominal
14 1,100 MW gas-fired combined cycle generating facility, and recommends that DTE’s
15 request for a CON should be denied.

16
17 **II. RESPONSE TO ABATE**

18 **Q3: What is the purpose of your rebuttal testimony?**

19 A3: I respond to the direct testimony of Mr. Nicholas L. Phillips on behalf of the Association
20 of Businesses Advocating Tariff Equity (ABATE). ABATE also supports the denial of

1 DTE's CON for its proposed gas plant; however, ABATE recommends that the grounds
2 for the denial should be the utility's failure to justify that the new gas plant is more cost-
3 effective than the continued operation of three of DTE's aging coal plants. Generally, it
4 is the planned retirements of older coal-fired units at the River Rouge (Unit 2), St. Clair
5 (Units 1-4, 6, and 7), and Trenton Channel (Unit 9) power plants over the next five years
6 that creates much of the capacity need that DTE proposes to fill with its gas plant.

7 ABATE recommends that the Commission deny DTE's request for a CON and direct the
8 Company to revise its Coal Retirement analysis to incorporate "the significant changes in
9 federal environmental and tax policy" that, ABATE believes, will determine whether the
10 coal retirements proposed by DTE are in the public interest.¹

11
12 **Q4: What are the specific changes in federal regulatory and tax policies that, ABATE**
13 **argues, require a new analysis of DTE's coal retirements and the utility's need for**
14 **new capacity in the 2022-2023 time frame?**

15 A4: There are three. The first is the enactment in December 2017 of the Tax Cuts and Jobs
16 Act of 2017 ("TCJA"), which makes changes to the federal tax structure, including a
17 significant reduction (from 35% to 21%) in the corporate tax rate. These tax law changes
18 would largely take effect in 2018. The second change is the court stay of the
19 Environmental Protection Agency's (EPA) Clean Power Plan (CPP) and the current
20 Administration's stated intent to review and possibly to revise the CPP. The third change

¹ ABATE Testimony (Phillips), at p. 3.

1 is the current EPA's announced intent to review and potentially revise the Steam Electric
2 Effluent Limitation Guidelines (ELG), including the associated compliance dates.

3
4 **Q5: Do you have any general observations on these changes, and how they should affect**
5 **the Commission's decision-making in this case?**

6 A5: Yes. Resource planning cases such as this CON docket require making long-term
7 forecasts about the future, including technology performance, resource costs, market
8 prices, and regulations. These elements of long-term forecasts are always changing, and
9 always are subject to uncertainty. In this proceeding the Commission will need to make a
10 decision recognizing this uncertainty, using the best available information. New
11 developments should not delay a decision unless it is clear that they represent a
12 fundamental change in the key drivers of the outcome. In my opinion, none of the TCJA
13 changes cited by ABATE by themselves rise to the level of requiring a revision to DTE's
14 Coal Retirement analysis. I understand that other parties to this case have presented
15 testimony challenging that analysis and indicating that the case to close the coal plants is
16 even stronger than what DTE presents. *See, e.g.,* Rebuttal Testimony of R. Fagan at 1.
17 To the extent that these critiques indicate deficiencies in the Coal Retirement analysis,
18 these are yet another flaw in DTE's IRP. As I discuss below, the tax law changes will
19 impact all resource options that are being compared in this case. In addition, the possible
20 revisions to the CPP and ELG regulations were known when DTE filed for a CON and
21 have been well-considered in this record.

A. The Corporate Tax Reductions Will Impact All Resource Options.

Q6: ABATE cites a number of states, including Michigan, in which regulators have asked utilities to track or to consider the impacts on ratepayers of the TCJA, including the impacts on existing dockets.² Do these actions suggest that the Commission needs either to deny the CON or allow all parties to supplement the record with analysis of the impacts of the TCJA, as ABATE recommends?³

A6: For the reasons stated in my direct testimony, I agree that the Commission should deny the CON. However, I do not recommend allowing all parties to supplement the record. It is not surprising that many state regulators are taking actions to review the rate impacts of the lower corporate tax rate resulting from the TCJA, because in rate cases the impact of a lower federal tax rate clearly will be to reduce the utility's revenue requirement.⁴ However, the impact of the tax law changes on resource planning analyses, such as those in this CON proceeding, will be less significant, more difficult to discern, and will require the passage of time to emerge fully. In this case, the question is whether the utility should upgrade the pollution controls on aging coal plants, build a new gas plant, or pursue a portfolio of renewable and efficiency resources. The costs of all of these competing resource options will be impacted by the tax law changes, because all of these options include capital additions by the utility or other corporations that will benefit from

² ABATE Testimony, at pp.15-19.

³ *Ibid.*, at p. 17, lines 11-17.

⁴ For example, this appears to include the Indiana rate proceedings referenced in ABATE's testimony at p. 18 and Exhibits AB-4 and AB-5.

1 the reduction in the federal corporate tax rate.⁵ Generally, the change in the federal
2 corporate tax rate will have a modest impact on costs; in general, it will reduce them. For
3 example, the annual revenue requirement for a \$100 investment by DTE will be reduced
4 by about \$1.60 as a result of the lower corporate tax rate, all else remaining the same.⁶
5 Further, the competitive generation market may see changes in capital structure and the
6 cost of capital as a result of the tax law changes that may moderate the impacts of the
7 change in the corporate tax rate alone; these factors will only become apparent over time
8 as the new law is implemented and the market adjusts to it. Given these small impacts,
9 the fact that all resource options will be impacted, and the time that will be required to
10 see the full impact of the new law on the generation market, the Commission should not
11 ask all parties to supplement the record. To the extent there is uncertainty about the
12 effect of the tax law on the alternative scenarios presented, the better course of action
13 would be for DTE to proceed with a Request for Proposals to determine the actual market
14 costs of the resources. This will reveal most directly the impacts of the TCJA on the
15 relative costs of the resources available to DTE.

⁵ For example, one might conclude that utility-owned resources whose costs are all capital, with zero fuel cost – i.e. wind and solar resources – will see the largest benefit from the corporate tax rate reduction, but this is complicated if the renewables are owned by third parties which are subject to different tax rules and structures than utilities.

⁶ Based on a reduction from 10.72% to 9.15% in DTE's pre-tax marginal weighted average cost of capital as a result of a 14% reduction in the federal tax rate. See Mr. Chreston's workpaper KJC-54.

B. The ELG and CPP Changes Do Not Alter the Coal Retirement Dates.

Q7: ABATE also argues that the EPA’s reconsideration of the ELG regulations and the stay of the Clean Power Plan should cause DTE to reconsider the retirement of the three coal units. Please respond.

A7: First, the ELG and CPP changes are not new developments, and were known and addressed by DTE in its testimony.⁷ Mr. Phillips argues that “DTE has not performed the full economic analysis to determine whether the continued stay of ELG alone would change the outcome of the analysis for any of the plants.” However, in the data response to which Mr. Phillips cites, DTE shows clearly that removing the ELG capital costs does not change the results of the retirement analysis; Mr. Phillips has not explained why this is not a “full economic analysis.”⁸ Moreover, it is not clear that the ELG regulations will be stayed indefinitely; to date the EPA has only postponed certain ELG compliance dates by two years, from 2018-2023 to 2020-2023. DTE remains under an obligation to comply with these regulations within a time frame that continues to justify both DTE’s planned retirement dates for the three plants and its stated need for capacity in 2022-2023.

⁷ See DTE Testimony of K.J. Chreston, at p. KJC-23 and B.J. Marietta, at p. BJM-6 and BJM-14.

⁸ See ABATE Testimony, at p. 14 and Exhibit AB-3. The analysis discussed in Exh. AB-3 can be seen by comparing the net present value (NPV) of the retirement scenarios in Mr. Chreston’s Figure 2 to the ELG capital costs in his Figure 1, on page KJC-25.

1 **Q8: Does the current Administration’s decision to review the CPP constitute a new**
2 **circumstance that should change DTE’s Coal Retirement analysis?**

3 A8: No. DTE conducted its analysis knowing that the Administration would be reviewing the
4 CPP, and its Coal Retirement analysis is already conservative in its assumptions for
5 future carbon regulations. DTE does not include a carbon price in its base case, and ran a
6 single sensitivity case with an assumed carbon price.⁹ The utility’s announced
7 commitment to reduce its carbon emissions by 80% by 2050 obviously calls for a long-
8 term perspective on future carbon regulations that extends well beyond the tenure of the
9 current Administration. Moreover, the utility is responding to a business climate in
10 which its customers are seeking a cleaner energy supply, as DTE makes clear in its 2017

11 *Integrated Resource Plan (2017 IRP):*

12 A plan for reducing DTEE’s CO2 emissions makes business sense, ensures
13 safe, reliable, affordable, and cleaner energy for its customers and allows the
14 Company to implement a long-term generation transformation strategy in
15 which more than half of the energy produced is generated from zero-emitting
16 resources. Customers are asking for cleaner and affordable energy, and DTEE
17 will deliver on that.¹⁰

18 As discussed below, customers are seeking affordable, zero-emission renewable
19 generation, not just the marginal improvement in emissions that results from
20 substituting natural gas for coal.

⁹ DTE Testimony (Chreston) at pp. KJC-25 to KJC-26 and Figure 3.

¹⁰ DTE Exhibit A-4, (DTE 2017 IRP), at p. 31.

C. Vote Solar’s Least-cost R / E Portfolio Should be the Benchmark.

Q9: Does the portfolio of renewables and efficiency that you proposed in your direct testimony provide the Commission with further assurance that it is reasonable to retire the coal plants according to the schedule that DTE proposed, contrary to ABATE’s position?

A9: Yes. In its Coal Retirement analysis, DTE assumed that the least-cost replacement for the retired coal plants would be gas-fired combined-cycle units.¹¹ My direct testimony shows that a portfolio of wind, solar, and demand-side resources will be significantly less expensive and less risky than such gas plants, including the gas plant for which DTE has requested a CON. This lower-cost portfolio of resources should be the benchmark against which the continued operation of the coal units is judged. The Commission also should consider that the renewables and efficiency portfolio will provide more jobs and cleaner air than the gas plant or the coal plants, and will enhance the reliability and resiliency of the State’s electric grid. This lower cost benchmark should provide the Commission with further confidence that DTE’s coal plant retirement schedule is reasonable. Finally, I note that ABATE itself recommends that “the Commission should seriously consider that alternative [DTE’s long-term carbon reduction goal], provided “its proposal aligns with its obligation to provide reliable electric

¹¹ DTE Testimony (Chreston) at pp. KJC-24.

1 service at lowest reasonable cost.”¹² The portfolio of renewable and efficiency
2 resources that my testimony proposes meets ABATE’s standard for “serious
3 consideration” by this Commission: it replaces the coal plants, provides the same
4 capacity as DTE’s proposed gas plant, and significantly reduces DTE’s carbon
5 emissions, at the lowest cost to DTE’s ratepayers.
6

7 **III. ABATE MEMBERS, AND BUSINESSES IN GENERAL, WILL BENEFIT**
8 **FROM THE R / E PORTFOLIO.**

9 **Q11: ABATE’s testimony suggests that DTE should continue to operate its coal plants in**
10 **preference to either DTE’s gas plant or the clean energy portfolio you have**
11 **recommended. Yet you note above DTE’s statement in its IRP that its customers**
12 **are asking for “cleaner and affordable energy.” Have DTE’s customers**
13 **demonstrated an increasing demand for the purchase of renewable energy?**

14 A11: Yes. The Michigan Energy Innovation Business Council (MiEIBC) and Advanced
15 Energy Economy (AEE) have estimated that there is a combined customer demand of
16 “more than 2.6 million annual MWh of renewable energy in Michigan.”¹³ This
17 represents about 50% of the annual output of DTE’s proposed gas plant. This demand
18 would be in addition to any renewable energy DTE uses to meet its RPS obligations. As
19 MiEIBC witness Ms. Hannah Hunt testified, DTE has failed to plan for increased demand

¹² ABATE Testimony, at p. 15.

¹³ See Exhibit ELP-64, MiEIBC’s and AEE’s letter to the Commission about the magnitude of customer interest in well-designed green pricing programs under Section 61 of Public Act 342 of 2016 (Act 342).

1 for renewable energy capacity through its voluntary green pricing program.¹⁴ DTE's
2 existing green pricing program has attracted just 5,000 annual MWh of non-residential
3 load.¹⁵

4
5 **Q12: Are ABATE's own members among the businesses that have ambitious goals to use**
6 **renewable energy to power their facilities or that participate actively in the market**
7 **for clean energy?**

8 A12: Yes. ABATE members¹⁶ with renewable energy goals include:

- 9 • **General Motors**, which has committed to 100% renewable energy by 2050.¹⁷ This is
10 a more ambitious goal than DTE's carbon reduction target. GM is one of 65 large
11 corporations that has subscribed to the Renewable Energy Buyers' Principles that
12 include seeking greater choice in procurement options, including more access to cost-
13 competitive, new renewable generation under long-term contracts.¹⁸
- 14 • **Cargill** uses renewables for more than 14% of its energy portfolio, and is working
15 actively to increase its use of renewables to 18% by 2020.¹⁹
- 16 • **Dow Chemical** recently increased its 2025 clean energy target to 750 MW, after
17 reaching the initial 400 MW target in less than one year.²⁰

¹⁴ MiIEBC Testimony (Hunt) at p. 18.

¹⁵ See DTE Electric Company Quarterly Report for MiGreenPower, filed July 31, 2017 in Case No. U-18076, cited in the MiEIBC / AEE letter in Exhibit ELP-64.

¹⁶ See <http://abate-energy.org/our-members/>.

¹⁷ See <http://www.gm.com/mol/m-2016-sep-0914-renewable-energy.html>.

¹⁸ See <http://www.wri.org/blog/2017/05/6-graphics-show-how-us-utilities-are-turning-corporate-demand-renewables-growth> and <http://buyersprinciples.org/principles/>.

¹⁹ See <https://www.cargill.com/story/renewable-energy-good-for-business-and-the-planet>.

- 1 • **Eaton** recognizes the switch to renewable energy as a priority worldwide²¹ and
2 manufactures electrical equipment used as balance-of-system components in solar,
3 wind, and storage installations.²²
- 4 • **Graphic Packaging** powers several of its mills almost entirely with renewable
5 energy, has reduced its use of non-renewable energy by 29% since 2008, and has a
6 goal of a further 10% reduction in non-renewable energy use by 2025.²³
- 7 • **Pfizer** endeavors to achieve a 20% greenhouse gas emissions reduction by 2020, and
8 uses solar and wind to meet a share of the power needs at a number of its facilities.²⁴
- 9 • **Praxair** sourced more than 500,000 MWh of its electricity supply (2%) directly from
10 renewable sources in 2016.²⁵ The company also estimates that over 7 million MWh
11 (31%) of the grid electricity that it used in 2016 was from renewable sources.²⁶
12 DTE's current mix of electricity sources does not contribute to increasing this
13 percentage.

²⁰ See <https://www.dow.com/en-us/news/press-releases/dow-increases-clean-energy-targets-aligned-to-2025-sustainability-goals>.

²¹ See <http://www.eatoncorp.com.au/Oceania/Electrical/MarketSolutions/RenewableEnergy/index.htm>.

²² See <http://www.eaton.com/Eaton/ProductsServices/Electrical/Markets/AlternativeEnergy/index.htm>.

²³ See <http://www.graphicpkg.com/NA/EN/Sustainability/Pages/Vision.aspx?x=39>.

²⁴ See https://www.pfizer.com/responsibility/protecting_environment/energy_efficiency.

²⁵ See <http://www.praxair.com/our-company/sustainable-development/targets-and-performance>.

²⁶ See <http://www.praxair.com/-/media/documents/reports-papers-case-studies-and-presentations/our-company/sustainability/praxair-2016-gri-annex.pdf?la=en>, at pp. 19-20.

1 **Q13: In your review of the corporate sustainability goals of the above ABATE members,**
2 **did you encounter any corporate goals to increase the use of electric generation**
3 **from fossil fuels such as coal or natural gas?**

4 A13: No, I did not. The sustainability goals of these members of ABATE focus on increasing
5 the purchase of renewable energy and reducing the carbon emissions from their
6 operations.

7
8 **Q14: Is this corporate demand for more renewable energy part of a significant national**
9 **trend?**

10 A14: Yes. The recent explosive growth of corporate demand for renewable energy has been
11 well documented. For example, large corporate customers accounted for an
12 unprecedented 10% of annual solar capacity additions in the U.S. in 2016, totaling more
13 than 1.0 GWdc.²⁷ **Figure 1** below shows the major corporate purchases of renewable
14 energy over the last six years, using data collected for the Business Renewables Center
15 by the Rocky Mountain Institute.

16
17 A recent report determined that Michigan is one of the ten states with the most
18 manufacturing facilities that have 100% renewable energy targets, and that “enabling
19 access to renewable energy sources is a critical factor for a state’s attractiveness to these

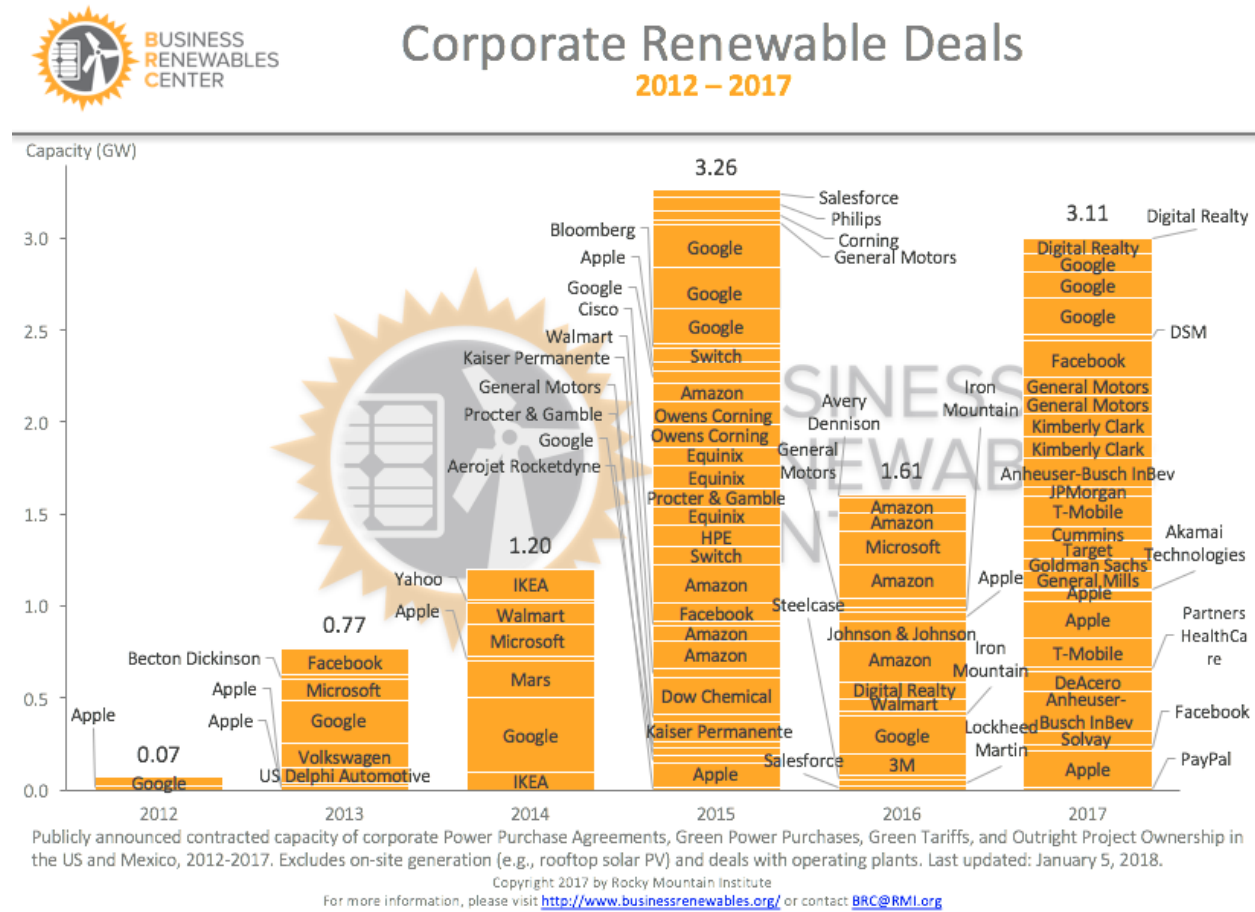
²⁷ See SEIA, *Solar Market Insight Report 2016 Year In Review*, available at <https://www.seia.org/research-resources/solar-market-insight-report-2016-year-review>.

1 manufacturers and other large buyers of renewable energy.”²⁸ At the same time,
2 Michigan recently was ranked 29th out of the 50 states in a clean energy procurement
3 index developed by the Retail Industry Leaders Association (RILA) and the Information
4 Technology Industry Council (ITI). In this ranking, Michigan trailed other Midwestern
5 states including Iowa (1), Illinois (2), Ohio (8), and Indiana (28).²⁹

²⁸ David Gardiner and Associates, *The Growing Demand for Renewable Energy Among Major U.S. and Global Manufacturers* (February 2018), at p. 11.

²⁹ See RILA and ITI, *Corporate Clean Energy Procurement Index: State Leadership & Rankings* (January 2017), at p. 8, available at <https://www.rila.org/sustainability/RetailEnergyManagementProgram/Documents/RILAITICEIndex.pdf>.

Figure 1



Q15: How would DTE’s active procurement of a portfolio of renewable and efficiency resources assist its customers, including ABATE members, to reach their renewable energy goals?

A15: Such a procurement program could include an active green pricing or green tariff element that could provide customers with direct access to 100% renewable generation from a growing DTE portfolio of renewable resources. This also could be an important element in a broader business development strategy to convince new customers to locate, or

1 existing customers to expand, in DTE's service territory. As noted in my direct
2 testimony, the R / E portfolio would also significantly increase the share of clean, zero-
3 emitting resources in DTE's resource mix, which would make it easier for corporate
4 customers with sustainability goals to continue to buy generation from DTE. Last, but
5 not least, a strategy to pursue renewables and efficiency is also the least-cost and least-
6 risk approach to meeting DTE's long-term capacity needs and keeping electricity
7 affordable in southeast Michigan.

8
9 **IV. CONCLUSION**

10 **Q16: ABATE's testimony suggests that the continued operation of DTE's coal plants may**
11 **be the utility's least-cost strategy, given possible changes in environmental**
12 **regulations and DTE's tax expenses. Would DTE's procurement of more renewable**
13 **energy force its commercial and industrial customers, such as ABATE members, to**
14 **pay higher costs?**

15 A16: No. As my scenario shows, a renewable portfolio is less expensive than DTE's Proposed
16 Project and less expensive than the continued operation of its aging fleet of coal plants.
17 In addition, fixed-price renewable energy avoids the risks of volatile natural gas prices,
18 risks that I have quantified as potentially increasing by almost 50% the cost of DTE's
19 proposed gas plant. Given the increased demand for renewable energy in addition to the
20 amount required by the Renewable Portfolio Standard, there is a real risk that the
21 Proposed Project will create a stranded asset, as the Company finds itself having built

1 capacity and energy that its customers – including ABATE members – do not want to
2 purchase or that they displace through their own purchases of cleaner renewable
3 generation or investments in energy efficiency. I conclude that foregoing cost-effective
4 renewable and efficiency investments now in favor of the proposed gas plant, or the
5 continued operation of the coal units, will force DTE ratepayers to pay higher costs for
6 electricity. DTE should confirm this conclusion by testing the market for the portfolio of
7 renewable and efficiency resources that I have proposed.

8
9 **Q17: Does this complete your rebuttal testimony?**

10 **A17:** Yes, it does.

**STATE OF MICHIGAN
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ELECTRIC COMPANY for approval of)	
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EXHIBIT OF

R. THOMAS BEACH

ON BEHALF OF

**ENVIRONMENTAL LAW AND POLICY CENTER, THE ECOLOGY CENTER,
THE SOLAR ENERGY INDUSTRIES ASSOCIATION, VOTE SOLAR, AND
THE UNION OF CONCERNED SCIENTISTS**

February 2, 2018



October 4, 2017

Michigan Public Service Commission
Commissioner Sally Talberg, Chairman
7109 W. Saginaw Highway
Lansing, MI 48917

To Chairman Talberg and Commissioners Eubanks and Saari:

In advance of the October 18, 2017 filing deadline in Case No. U-18349 *et seq.* for utilities to submit “voluntary green pricing programs” in accordance with Section 61 of Public Act 342 of 2016 (Act 342), the Michigan Energy Innovation Business Council (Michigan EIBC) and Advanced Energy Economy (AEE) write to convey the magnitude of customer interest in well-designed programs under this section.

Michigan EIBC, an organization of more than 100 advanced energy companies doing business in Michigan, works to grow Michigan’s advanced energy economy by fostering opportunities for innovation and business growth and offering a unified voice in creating a business-friendly environment for the advanced energy industry in Michigan. AEE is a national association of advanced energy business leaders who are making the global energy system more secure, clean, and affordable. AEE is active at the federal level and in 27 states across the country, working with a coalition of 16 state partner organizations, including Michigan EIBC.

Our organizations have been working closely with both suppliers and purchasers of advanced energy, and we submitted joint comments and reply comments in response to the questions posed by the Commission regarding Section 61 programs. Those comments outlined some key elements for successful design, evaluation, and implementation of utility voluntary green pricing programs. Key provisions of those comments included a focus on program pricing that reflects actual market pricing rather than a locked-in premium, administrative costs and other fees that are kept to a minimum and passed on to participants in a transparent way, availability of new renewable energy options that go beyond business-as-usual, third-party participation in competitive project selection, and inclusive eligibility requirements, among other elements.

We were pleased to see many of these same criteria in the Commission’s July 17 Order in this proceeding, including an emphasis on innovation and experimentation, a rejection of programs that rely on a set price premium and an emphasis on cost-of-service offerings, a concern with high administrative and marketing costs, an acknowledgement that program caps are unnecessary at this stage, an encouragement of load aggregation for customers with multiple metered locations, an endorsement of a competitive bidding processes for resource selection, and an interest in exploring direct negotiation between customers and suppliers.



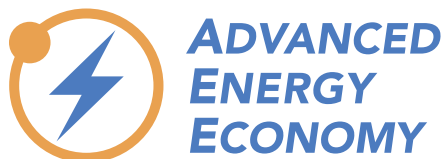
We are concerned, however, by the Commission's statement that, "certain factors, such as customer interest and enrollment, cannot be fairly evaluated as part of the initial program filings in October." While customer enrollment will depend on how well utility programs match customer preferences, customer interest can and should be assessed upfront.

Assessing customer interest upfront is particularly important because the Commission has stated, "it is incumbent on the providers to assess their customers' preferences and objectives and design programs accordingly." In addition, the Commission has also suggested that failure to adequately project customer demand and construct attractive programs may trigger the Commission asking for comments from potential customers or directing a contested hearing "in cases involving a program that draws significant criticism, does not comply with Section 61, or that may be unsuccessful due to anticipated low subscription rates." Having a benchmark for potential participation in programs that successfully meet customer needs will enable a more meaningful assessment of program success during the Commission's evaluation of initial program offerings and for regularly scheduled program reviews.

There is significant evidence that substantial corporate interest exists for well-designed, competitively priced voluntary renewable energy purchasing options in Michigan. For example, a number of firms with a large presence in Michigan – including Amazon, the Dow Chemical Company, Ford Motor Company, General Motors, Steelcase, Whirlpool, among others – have ambitious renewable energy commitments and/ or have signed renewable energy purchase agreements to power their operations in other states. To take just one recent example, General Motors announced just two weeks ago that it would power all of its Ohio and Illinois manufacturing facilities with renewable energy, and that once the 200 MW of wind generation it was contracting for came online in 2019, fully 20% of the automaker's global energy consumption would be met with renewable energy – significant progress towards its public goal of meeting 100% of its energy needs with renewable energy by 2050.

To assist the Commission in quantifying this potential demand, we have compiled an initial assessment of the magnitude of large customer interest in green pricing programs. Based on a limited screen of companies with stated renewable energy goals, we found corporate demand of more than 2.6 million annual MWh of renewable energy in Michigan, with an additional 725,000+ annual MWh of demand for programs that would allow market-based rates that reflect actual real-time wholesale market energy prices. As this data is derived from a limited number of potential participants, these numbers likely represent a relatively small percentage of total potential demand.

Despite this existing demand, the current voluntary renewable energy procurement options offered by Michigan utilities do not match customer objectives. For example, according to the most recent filing from DTE Energy, the voluntary pilot program approved last year in Case No. U-18076 has enrolled just two non-residential customers, and non-residential customer participation represents less than 5% of the 100,000 MWh available for subscription, despite



the fact that this program was specifically focused on commercial and industrial customers. See DTE Electric Company Quarterly Report for MiGreenPower, filed July 31, 2017 in Case No. U-18076. Such a result is sadly not a surprise given the objections raised by potential corporate purchasers in that proceeding – concerns reflected in the Commission’s October 2016 approval of the pilot program. A recent report from David Gardiner & Associates underscores the disconnect between current utility renewable energy procurement options in Michigan, noting that despite the concentration of manufacturing firms located in Michigan that are interested in purchasing renewable energy, Michigan ranks in the bottom half of states for Retail Industry Leaders Association *Corporate Clean Energy Procurement Index*, published in January 2017.¹

Given the scale of potential demand, the fact that many Michigan-based firms are actively signing renewable energy contracts to power their facilities in other states, and the inadequacy of the voluntary renewable energy purchasing options offered to date by Michigan utilities, AEE and Michigan EIBC encourage the Commission to consider both customer demand and clearly articulated customer needs when evaluating programs offered by utilities to comply with the provisions of 2016 PA 342. We hope that these comments and the quantification of demand for well-designed, competitively priced programs assists Michigan utilities in developing proposals that meet customer demands, and look forward to participating in the assessment and implementation of utility filings to comply with Section 61.

Sincerely,

A handwritten signature in black ink, appearing to read "Liesl Eichler Clark".

Liesl Eichler Clark
President
Michigan Energy Innovation Business Council

A handwritten signature in black ink, appearing to read "Caitlin Marquis".

Caitlin Marquis
Manager – State and Federal Policy
Advanced Energy Economy

cc: MPSC Service List for U-18349 *et seq.*

¹ <https://www.dgardiner.com/dga-publishes-white-paper-growing-demand-renewable-energy-among-major-u-s-global-manufacturers/> and <https://www.itic.org/dotAsset/f9040bd1-7681-455a-9a64-5a518c16551d.pdf>.

**STATE OF MICHIGAN
MICHIGAN PUBLIC SERVICE COMMISSION**

In the matter of the Application of DTE)	
ELECTRIC COMPANY for approval of)	
Certificates of Necessity pursuant to MCL)	Case No. U-18419
460.6s, as amended, in connection with the)	
addition of a natural gas combined cycle)	
generating facility to its generation fleet and)	
for related accounting and ratemaking)	
authorizations.)	

PROOF OF SERVICE

I hereby certify that true copies of the foregoing *Rebuttal Testimony of R. Thomas Beach* and *Exhibit ELP-64* were served by electronic mail upon the following Parties of Record, this 2nd of February, 2018.

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