



THE UNIVERSITY OF CHICAGO
THE LAW SCHOOL
Abrams Environmental
Law Clinic

July 26, 2024

Via E-Filing

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

RE: MPSC Case No. U-21534

Dear Ms. Felice:

Please find enclosed the Direct Testimony of Jackson Koepfel on Behalf of Soulardarity and We Want Green, Too and Accompanying Exhibits DAO-1 to DAO-8 (Part 1 of 2), along with proof of service for electronic filing in the above-referenced matter. Please do not hesitate to contact me with any questions or comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark N. Templeton".

Mark N. Templeton, *pro hac vice*
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xc: Parties to Case No. U-21534

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of **DTE**)
ELECTRIC COMPANY for authority to) Case No. U-21534
increase its rates, amend its rate schedules)
and rules governing the distribution and) ALJ Sally L. Wallace
supply of electric energy, and for)
miscellaneous accounting authority.)

DIRECT TESTIMONY OF JACKSON KOEPEL

ON BEHALF OF

**DETROIT AREA ADVOCACY ORGANIZATIONS
(SOULARDARITY AND WE WANT GREEN, TOO)**

July 26, 2024

1 **I. INTRODUCTION AND SUMMARY**

2 **Q: Please state your name, occupation, and business address.**

3 **A:** My name is Jackson Koeppel. I am an independent consultant, primarily focused on
4 working on energy regulatory issues for Soulardarity and We Want Green, Too. My
5 business address is 189 Monterey St, Highland Park, MI 48203.

6

7 **Q: On whose behalf are you submitting this direct testimony?**

8 **A:** I am testifying on behalf of Soulardarity and We Want Green, Too collectively the Detroit
9 Area Advocacy Organizations (DAAO).

10

11 **Q: Please describe your work experience.**

12 **A:** I moved to Highland Park, Michigan in 2012 and co-founded Soulardarity, an
13 organization rooted in the Highland Park community, to organize for community-owned
14 solar streetlights and energy democracy. I served as the organization's primary staff and
15 founding Executive Director. Shimekia Nichols succeeded me as Executive Director of
16 Soulardarity in 2021. I have contributed to work locally, regionally, and nationally to
17 democratize and decarbonize our energy economy as an independent consultant. My
18 work has included developing original research, regulatory interventions, coordination of
19 state and regional networks, and development of implementation programs for energy
20 transition.

21

1 **Q: For what purpose was Soulardarity created?**

2 **A:** In 2011, DTE Energy repossessed more than 1,000 streetlights from Highland Park,
3 Michigan, a predominantly low-income and people-of-color city, after its municipal
4 government defaulted on its electric utility payments. A coalition of Highland Park
5 residents formed Soulardarity in 2012 to help alleviate this crisis by installing
6 community-owned, solar-powered streetlights in the city. Soulardarity’s mission has
7 subsequently broadened to include energy education and advocacy for community solar
8 and greater equity in Michigan’s energy generation and delivery systems. Through
9 activism and advocacy, Soulardarity emphasizes the particular needs, experiences, and
10 perspectives of low-income communities and communities of color.

11
12 **Q: What is Soulardarity’s focus?**

13 **A:** Soulardarity’s focus is improving access to affordable, clean energy for low-income
14 communities and communities of color, including women, children, the elderly, people
15 with disabilities, and others who live in poverty. As such, Soulardarity promotes solar
16 street lighting, solar bulk purchasing, energy education, job training, and expanding
17 access to clean energy. These efforts aim to improve the economic condition of low-
18 income communities, especially low-income communities of color, in southeast
19 Michigan. Soulardarity has developed partnerships with other Michigan stakeholders
20 interested in energy justice and affordability, including experienced solar installers, solar
21 developers, environmental justice advocates, and public health experts. Soulardarity also
22 advocates for equitable utility rates and services, including but not limited to investments
23 in reliability, safety, and energy waste reduction, on behalf of low-income communities

1 and communities of color. Finally, Soulardarity pushes for reducing the burdens of fossil-
2 fuel energy generation on low-income communities and communities of color and for just
3 transitions from the fossil-fuel energy economy to the clean energy economy.

4
5 **Q: For what purpose was We Want Green, Too created?**

6 **A:** We Want Green, Too was created to develop programs to assist veterans with post-
7 traumatic stress disorder in in transforming their lives and communities as sustainability
8 leaders.

9
10 **Q: What is We Want Green, Too's focus?**

11 **A:** Early on, We Want Green, Too focused on giving veterans opportunities to work with
12 their hands on building projects. This effort began with an experimental, energy efficient
13 renovation for a home in Jackson, Michigan with four veterans. It continued with the
14 rebuilding of a blighted 2200 square foot home on Detroit's east side, incorporating
15 energy-efficient retrofits. These projects illustrate how to build homes that reduce utility
16 costs and increase health by creating spaces with healthy, clean indoor air. We Want
17 Green, Too's current projects include deconstructing three blighted buildings to create a
18 multi-family energy efficient housing unit, as well as launching solar and energy
19 efficiency job-training programs. Other programming includes get-out-the-vote outreach,
20 youth mentorship, crisis response, and direct employment and mental-health support for
21 veterans. We Want Green, Too has also formed collaborative partnerships with local
22 organizations such as The Villages Community Development Corporation, churches, and
23 other nonprofits to continue to understand community needs. We Want Green, Too is

1 also a member and partner of Michigan Environmental Justice Coalition (MEJC), which
2 engages in on-the-ground work to that promote energy justice and energy efficient
3 housing and fights against disinvestment, unemployment, and threats to community
4 health in Detroit's East Side.

5
6 **Q: Have Soulardarity and We Want Green Too previously intervened in or commented**
7 **on an MPSC matter?**

8 **A:** Yes, Soulardarity intervened in DTE's 2018 rate case, MPSC matter U-20162, and DTE's
9 2019 rate case, MPSC matter U-20561, and DTE's 2022 rate case, MPSC matter U-20836.
10 In these rate cases, Soulardarity advocated, through testimony and briefing, for a more
11 equitable rate design through the provision of increased resources in underserved
12 communities and for policies that promote access to distributed generation programs for
13 low-income and people-of-color ratepayers. Beyond the rate cases, Soulardarity intervened
14 in MPSC matter U-18232 and advocated, through testimony and briefing, for the inclusion
15 of community solar projects in DTE's Renewable Energy Plan (REP) and for the
16 accommodation of low-income, people-of-color ratepayers in DTE's energy decision-
17 making. Soulardarity filed a comment in MPSC matter U-18418 regarding the proposed
18 Integrated Resource Planning (IRP) process and advocated that the process include more
19 robust engagement with stakeholders from low-income, people-of-color communities.
20 Soulardarity also commented during the MPSC Staff's development of the Distributed
21 Generation Tariff in MPSC matter U-18383 and advocated for changes that would increase
22 transparency and access to solar energy for low-income communities and communities of
23 color. Soulardarity joined a Response to Prior Comments in MPSC matter U-18076

1 concerning DTE's application for Commission approval of a previous amended REP.
2 Soulardarity has also intervened and raised similar concerns in DTE's 2019 IRP
3 proceeding, MPSC matter U-20471 and DTE's 2023 IRP proceeding, MPSC matter U-
4 21193; DTE's Energy Waste Reduction (EWR) proceeding, MPSC matter U-20373;
5 DTE's Voluntary Green Pricing (VGP) proceedings, MPSC matters U-20713 U-20851,
6 and U-21172; DTE's Prepay proceeding, MPSC matter U-21087; and DTE Gas's Rate
7 Case, MPSC matter U-21291.

8 We Want Green, Too intervened in DTE's 2022 Rate Case, MPSC matter U-20836;
9 DTE's 2023 IRP, MPSC matter U-21193; and DTE's 2023 VGP filing, MPSC matter U-
10 21172; and DTE Gas's Rate Case, MPSC matter U-21291. We Want Green, Too has
11 worked collectively with Soulardarity to raise the issues described above.

12
13 **Q: What is the purpose of your testimony?**

14 **A:** The purpose of my testimony is twofold: (1) to provide a critical analysis of DTE
15 Electric's rate case proposal through the lens of a just and equitable energy transition, and
16 (2) to make specific recommendations on revenue requirement and programmatic
17 changes that would increase equity in affordability, infrastructure quality, health, and
18 technology access.

19
20 **Q: How is your testimony structured?**

21 **A:** My testimony is organized into the following sections:

- 22 I. Introduction and Summary;
23 II. Principles of Analysis;

1 III. DTE Electric's Rate Case Proposal is Unjust, Unreasonable, and Insufficient to
2 Achieve a Just and Equitable Energy Transition;

3 IV. Conclusion and Summary of Recommendations
4

5 **Q: Are you sponsoring any exhibits?**

6 **A:** Yes, I am sponsoring the following exhibits:

7 DAO-1. DTE Energy, [2023 Form 10-K](#) (2024).

8 DAO-2. Dan Lowrey, *Electric beats gas in exceeding authorized equity returns over*
9 *past 15 years*, S&P GLOBAL (May 23, 2023),

10 <https://www.spglobal.com/marketintelligence/en/news->

11 [insights/research/electric-beats-gas-in-exceeding-authorized-equity-returns-](https://www.spglobal.com/marketintelligence/en/news-insights/research/electric-beats-gas-in-exceeding-authorized-equity-returns-)

12 [over-past-15-years](https://www.spglobal.com/marketintelligence/en/news-insights/research/electric-beats-gas-in-exceeding-authorized-equity-returns-over-past-15-years).

13 DAO-3. Brian Allnutt, *The battle against Michigan power outages yields little*
14 *accountability*, PLANET DETRIOT (Mar. 1, 2024),

15 <https://planetdetroit.org/2024/03/dte-power-outages/>.

16 DAO-4. Fisher, Sheehan, & Colton, Michigan Energy Affordability Gap (2022)

17 DAO-5. DTE Electric Company's First Partial Response to DAADO-3.1.

18 DAO-6. DTE Electric Company's Response to DAADO-1.35, 1.36, 1.37.

19 DAO-7. DTE Electric Company's First Partial Response to Detroit Area Advocacy
20 Organizations' Third Discovery Request, DAAODE-3.2a, 3.2b, 3.2.c, 3.2.d,
21 and 3.3.

- 1 DAO-8. BEN STACEY & TONEY REAMES, URB. ENERGY JUST. LAB, SOCIAL EQUITY IN
2 STATE ENERGY POLICY: INDICATORS FOR MICHIGAN’S ENERGY EFFICIENCY
3 PROGRAMS (2017).
- 4 DAO-9. Amy Lange & Jack Nissen, Affordability Connectivity Programs at Risk in
5 Detroit and Abroad without Congressional Help, *FOX 2 DETROIT* (Apr. 3,
6 2024), [https://www.fox2detroit.com/news/affordability-connectivity-](https://www.fox2detroit.com/news/affordability-connectivity-program-at-risk-in-detroit-and-abroad-without-congressional-approval)
7 [program-at-risk-in-detroit-and-abroad-without-congressional-approval](https://www.fox2detroit.com/news/affordability-connectivity-program-at-risk-in-detroit-and-abroad-without-congressional-approval).
- 8 DAO-10. WE THE PEOPLE MICHIGAN, GENTRIFICATION, POPULATION CHANGE, AND
9 ELECTRIC GRID INVESTMENT (July 2023) (available at
10 [https://wethepeoplemi.org/wp-content/uploads/2023/08/DTE-Gentrification-](https://wethepeoplemi.org/wp-content/uploads/2023/08/DTE-Gentrification-Brief.pdf)
11 [Brief.pdf](https://wethepeoplemi.org/wp-content/uploads/2023/08/DTE-Gentrification-Brief.pdf)).
- 12 DAO-11. Edison Electric Institute, About, accessed July 26, 2024,
13 <https://www.eei.org/about-eei/About>
- 14 DAO-12. Edison Electric Institute, U.S. Investor-Owned Electric Companies, accessed July
15 26, 2024, <https://www.eei.org/about-eei/us-investor-owned-electric-companies>
- 16 DAO-13. Edison Electric Institute, Member List, [https://www.eei.org/-](https://www.eei.org/-/media/Project/EEI/Documents/About/memberlist_print.pdf?la=en&hash=D5E71B7A813022B20243C1FFAD5C4170D91FFA4B)
17 [/media/Project/EEI/Documents/About/memberlist_print.pdf?la=en&hash=D5E71B](https://www.eei.org/-/media/Project/EEI/Documents/About/memberlist_print.pdf?la=en&hash=D5E71B7A813022B20243C1FFAD5C4170D91FFA4B)
18 [7A813022B20243C1FFAD5C4170D91FFA4B](https://www.eei.org/-/media/Project/EEI/Documents/About/memberlist_print.pdf?la=en&hash=D5E71B7A813022B20243C1FFAD5C4170D91FFA4B)
- 19 DAO-14. COMMENT FROM THE EDISON ELECTRIC INSTITUTE ON THE ENVIRONMENTAL
20 PROTECTION AGENCY’S PROPOSED RULE NEW SOURCE PERFORMANCE
21 STANDARDS FOR GREENHOUSE GAS EMISSIONS FROM NEW, MODIFIED, AND
22 RECONSTRUCTED FOSSIL FUEL-FIRED ELECTRIC GENERATION UNITS;
23 EMISSIONS GUIDELINES FOR GREENHOUSE GAS EMISSIONS FROM EXISTING
24 FOSSIL-FUEL FIRED ELECTRIC GENERATION UNITS; AND REPEAL OF THE

- 1 AFFORDABLE CLEAN ENERGY RULE, Docket No. EPA-HQ-OAR-2023-0072,
2 (August 8, 2023) [https://www.eei.org/-](https://www.eei.org/-/media/497F22CE3B0D45619E5ABA593778C641.pdf)
3 [/media/497F22CE3B0D45619E5ABA593778C641.pdf](https://www.eei.org/-/media/497F22CE3B0D45619E5ABA593778C641.pdf).
- 4 DAO-15. Edison Electric Institute, Energy Grid, accessed July 26, 2024,
5 <https://www.eei.org/issues-and-policy/energy-grid>
- 6 DAO-16. Edison Electric Institute, Electric Transportation, accessed July 26, 2024,
7 <https://www.eei.org/issues-and-policy/electric-transportation>
- 8 DAO-17. Edison Electric Institute, Clean Energy, accessed July 26, 2024,
9 <https://www.eei.org/issues-and-policy/clean-energy>
- 10 DAO-18. Edison Electric Institute, 2024 Lobbying, Advocacy, and Other
11 Expenditures (February 2024).
- 12 DAO-19. Walker Orenstein, Utility regulators hosted annual conference in
13 Minneapolis with money, STAR TRIBUNE (Jun. 18, 2024),
14 <https://www.startribune.com/walker-orenstein/11331478/>.
- 15 DAO-20. Energy and Policy Institute, Utilities' Anti-Solar Campaign and Misinformation
16 Debunked, accessed July 26, 2024, [https://energyandpolicy.org/utilities-anti-solar-](https://energyandpolicy.org/utilities-anti-solar-campaign-and-misinformation-debunked/)
17 [campaign-and-misinformation-debunked/](https://energyandpolicy.org/utilities-anti-solar-campaign-and-misinformation-debunked/)
- 18 DAO-21. William Pentland, Disruptive Deceptions: How Electric Utilities Stifled Rooftop
19 Solar, Forbes (Dec. 4, 2015),
20 [https://www.forbes.com/sites/williampentland/2015/12/04/disruptive-deceptions-](https://www.forbes.com/sites/williampentland/2015/12/04/disruptive-deceptions-how-electric-utilities-stifled-rooftop-solar/)
21 [how-electric-utilities-stifled-rooftop-solar/](https://www.forbes.com/sites/williampentland/2015/12/04/disruptive-deceptions-how-electric-utilities-stifled-rooftop-solar/)
- 22 DAO-22. Kim Riley, EEI takes targeted strike at EPA's power plant emissions rule, Daily
23 Energy Insider (May 22, 2024), [https://dailyenergyinsider.com/featured/43843-eei-](https://dailyenergyinsider.com/featured/43843-eei-takes-targeted-strike-at-epas-power-plant-emissions-rule/)
24 [takes-targeted-strike-at-epas-power-plant-emissions-rule/](https://dailyenergyinsider.com/featured/43843-eei-takes-targeted-strike-at-epas-power-plant-emissions-rule/)

1 DAO-23. Emily L Williams et al., The American electric utility industry's role in
2 promoting climate denial, doubt, and delay, 17 Environmental Research
3 Letters 1 (2022)

4 DAO-24. Matt Kasper, Coal and utility interests ask for, receive, bailouts to help failing
5 power plants, Energy and Policy Institute (Oct. 2, 2017),
6 <https://energyandpolicy.org/bailouts-for-coal-and-nuclear-plants/>.

7 DAO-25. *In re Xcel Energy Inc.*, Minnesota Public Utilities Commission Docket Nos.
8 G002/GR-23-413, Bhosale Rebuttal Testimony (May 29, 2024)

9 DAO-26. *In re Xcel Energy Inc.*, Minnesota Public Utilities Commission Docket Nos.
10 G002/GR-23-413, Settlement Agreement (June 26, 2024)

11 DAO-27. DAAODE-3.13b and DAAODE-3.14ai

12 DAO-28. DAAODE-3.15ai

14 II. Principles of Analysis

15 **Q: What are the guiding principles of your analysis of DTE Electric's rate case**
16 **proposal?**

17 **A:** My analysis is guided by: (1) the application of a Social Interest Principle rather than a
18 Profit Maximization Principle, and (2) the goal of a just and equitable energy transition. I
19 will define and explain these principles in this section of testimony.

21 A. Social Interest Principle vs. Profit Maximization Principle

22 **Q: How does DTE Electric describe their business purpose?**

23 **A:** DTE Electric Witness Crozier states that "DTE Electric strives to provide safe, reliable,
24 and affordable electric service to its customers....[and] seeks to deliver reasonable and

1 appropriate compensatory returns to DTE Energy shareholders while maintaining the
2 Company's financial health.”¹

3
4 **Q: How would you describe DTE Electric's business purpose?**

5 **A:** Consistent with my assessment of DTE Gas in Case U-21291, I would describe DTE
6 Electric's true business purpose as maximizing long-term profitability for DTE Energy
7 shareholders.

8 As a subsidiary of DTE Energy, a publicly-traded, investor-owned corporation,
9 DTE Electric is ultimately beholden to its parent company's fiduciary duty to maximize
10 returns for shareholders. While DTE Electric may pursue safe, reliable, clean, and cost-
11 effective service to some degree, it will only do so to the extent that regulation and public
12 pressure would otherwise limit its ability to prioritize profits.

13 DTE Energy's own public filings confirm this profit-driven purpose. In its most
14 recent annual 10-K filing with the Securities and Exchange Commission, DTE Energy
15 states: “DTE Energy's strategy is to achieve long-term earnings growth with a strong
16 balance sheet and an attractive dividend.”²

17 So, while DTE Electric's testimony may mention customer service, the company's
18 real-world behavior and legal obligations reveal that shareholder profits take precedence.
19 As long as DTE Electric remains an investor-owned utility, regulators and the public
20 must scrutinize its proposals and actions through this lens of profit maximization.

21

¹ Crozier Direct Testimony at 20, lines 7–10.

² Ex. DAO–1, DTE Energy, [2023 Form 10-K](#) (2024), at 28.

1 **Q: What evidence supports your claim that DTE Electric’s business objective is**
2 **maximization of long-term profit for shareholders?**

3 **A:** There are several pieces of evidence that support my assessment of DTE Electric's true
4 business objective. First, DTE Electric's parent company, DTE Energy, is an investor-
5 owned corporation. Investor-owned utilities have a fiduciary duty to maximize returns for
6 their shareholders. This is a well-established principle of corporate law, as articulated in
7 cases like *Dodge v. Ford Motor Co.* (204 Mich. 459, 507; 1919).

8 Second, DTE Energy's own public statements emphasize profitability and
9 shareholder returns as the company's top priorities. In its 2023 Form 10-K filing, DTE
10 Energy states: “DTE Energy's strategy is to achieve long-term earnings growth with a
11 strong balance sheet and an attractive dividend.”³ This focus on earnings, financial
12 strength, and dividends reveals the company's true objectives.

13 Finally, DTE Electric's behavior in past rate cases and regulatory proceedings
14 consistently prioritizes shareholder interests over customer needs. For example, in Case
15 U-20836, DTE Electric sought a return on equity of 10.25%,⁴ significantly higher than
16 the national average for electric utilities,⁵ while simultaneously requesting a substantial
17 rate increase.⁶

18 Taken together, this evidence paints a clear picture: DTE Electric is ultimately
19 beholden to DTE Energy's investor-driven business model that puts profits first. While
20 the company's testimony may mention customer service, its ownership structure,

³ *Id.*

⁴ *In Re DTE Electric*, Direct Testimony of Jackson Koeppel, MPSC Case No. U-20836, at 84, line 21.

⁵ Ex. DAO-2, Dan Lowrey, *Electric beats gas in exceeding authorized equity returns over past 15 years*, S&P GLOBAL (May 23, 2023), <https://www.spglobal.com/marketintelligence/en/news-insights/research/electric-beats-gas-in-exceeding-authorized-equity-returns-over-past-15-years>.

⁶ Koeppel Direct Testimony, Case No. U-20836, at 84, lines 19–23.

1 executive incentives, and actual behavior reveal that shareholder returns are the true
2 priority. Regulators must keep this fundamental profit motive in mind when evaluating
3 any of DTE Electric's claims or proposals.

4
5 **Q: Please describe the Profit Maximization Principle and Social Interest Principle as**
6 **you will use them in your testimony.**

7 **A:** The Profit Maximization Principle (PMP) refers to the guiding objective behind all
8 elements of DTE Electric's filing: the maximization of long-term profits for DTE Energy
9 shareholders. This principle stems from DTE Electric's obligations as an investor-owned
10 utility to deliver returns for its parent company's investors above all else. In this case,
11 consistent with the PMP, DTE Electric proposes a plan to maximize profitable capital
12 investment in the gas system without regard for the long-term, systemic impacts of doing
13 so on its customer base, and especially on low-to-moderate income (LMI) and Black,
14 Indigenous, and People Of Color (BIPOC) communities.

15 In contrast, the Social Interest Principle (SIP) represents an alternative guiding
16 objective: maximizing collective social welfare by thoroughly evaluating the full
17 lifecycle costs and benefits of energy decisions and equitably distributing those costs and
18 benefits. The SIP prioritizes metrics like public health, environmental sustainability,
19 energy affordability, and community resilience over narrow measures of shareholder
20 returns. Applying the SIP would require DTE Electric to justify its proposals based on
21 their holistic, long-term impact on ratepayers and society, not just their effect on the
22 company's bottom line.

1 In practice, the conflict between the PMP and SIP is stark. DTE Electric's
2 proposed residential rate increase in this case exemplifies the PMP in action. The
3 company is seeking to raise costs for essential electric service, disproportionately
4 burdening low-income households, in order to bolster returns for shareholders—despite
5 the fact that electricity is already unaffordable for many ratepayers and service to support
6 those ratepayers is already deficient.⁷ An SIP-driven approach, on the other hand, would
7 prioritize reducing energy burdens and ensuring affordable access to basic service, even
8 if it meant accepting lower near-term profits.

9
10 **Q: How does your assessment of an accurate description of DTE Electric's business**
11 **purpose inform your testimony?**

12 **A:** My assessment that DTE Electric's true business purpose is to maximize profits for
13 shareholders fundamentally shapes my perspective on the company's proposals in this
14 rate case and beyond.

15 Recognizing that DTE Electric is ultimately driven by the Profit Maximization
16 Principle means that I do not accept the company's claims of prioritizing customer
17 welfare or the public interest at face value. Instead, I presume that each element of DTE
18 Electric's testimony is oriented towards the goal of profit maximization first and social
19 welfare to the extent that it is seen as supportive of profit maximization.

20 This lens of profit maximization also informs my evaluation of DTE Electric's
21 past behavior and the credibility of its commitments to issues like affordability,
22 reliability, and environmental responsibility. I consider how the company's actions and

⁷ Kinkhabwala Direct Testimony at 6, lines 1–8; Jacob Direct Testimony at 7, lines 1–12.

1 investments have consistently prioritized its bottom line over the needs of its most
2 vulnerable customers, and I view its pledges of future improvements with skepticism
3 unless backed by clear, enforceable metrics and accountability measures.

4 Ultimately, my understanding of DTE Electric's profit-driven business model
5 leads me to conclude that it is the Commission's responsibility to ensure that the utility
6 serves the broader social interest. Throughout my testimony, I strive to provide analysis
7 and recommendations that will help the Commission fulfill this critical role of aligning
8 DTE Electric's behavior with the principles of affordability, reliability, sustainability, and
9 equity, even and especially when doing so conflicts with the company's narrow financial
10 objectives.

11
12 **Q: How does DTE Electric attempt to connect the Company's "financial health" to**
13 **with benefits to "customers and the region?"**

14 **A:** DTE Electric Witness Crozier argues that the company's strong financial health benefits
15 customers and the broader service territory. Witness Crozier asserts that continued
16 implementation of infrastructure maintenance and investment programs enabled by
17 robust finances leads to benefits like job creation, economic development, and property
18 tax payments.⁸ DTE Electric separately argues that by improving its financial health—
19 which in this case appears to deal substantially with its rate of profit—customers in fact
20 save money by the avoidance of higher financing costs.⁹

⁸ Crozier Direct Testimony at 22, lines 6–7.

⁹ *Id.* at 21, lines 6–7.

1 **Q: Does DTE adequately support its claim that the company’s financial health is**
2 **important to customers?**

3 **A:** No. DTE Electric's claim that its financial health is necessary to benefit customers is
4 flawed and contradictory.

5 The core of the company's argument is that strong financial performance allows it
6 to make investments that improve service quality and reliability for customers.¹⁰
7 However, DTE Electric is simultaneously arguing that it must raise rates - thereby
8 reducing affordability for all customers—in order to maintain this financial health.

9 In essence, DTE Electric is saying that in order to avoid rates becoming even
10 more unaffordable in the future and allowing service to become more deficient in the
11 future, it must make rates more unaffordable now in order to secure higher profits for
12 shareholders. This tenuous and circular logic amounts to arguing that the company must
13 burn down the village in order to save it.

14 Moreover, as I will discuss later in my testimony, DTE Electric has failed to
15 provide a convincing plan for improving affordability and reliability – let alone doing so
16 equitably - even with the requested rate increase. The company's lack of clear
17 commitments or strategies for delivering measurable benefits to customers further
18 undercuts its claim that strong financial health is necessary or sufficient for promoting
19 public welfare.

20 Instead of accepting DTE Electric's vague assertions about the importance of its
21 “financial health,” the Commission should demand concrete evidence that the company is

¹⁰ Crozier Direct Testimony at 21, lines 13–23.

1 using its financial resources to address the real-world needs and challenges facing its
2 customers - especially those struggling with unaffordable bills and unreliable service.

3
4 **Q: Does DTE adequately explain how its business activities generate additional benefits**
5 **to “customers and the region?”**

6 **A:** No. As with its arguments about financial health, DTE Electric's claims about the broader
7 economic benefits of its business activities are incomplete and unpersuasive.

8 Witness Crozier provides a high-level overview of the ways in which DTE
9 Electric's operations create jobs, spur economic development, and generate tax revenue.¹¹
10 However, DTE offers no quantitative analysis or specific evidence demonstrating the
11 scale or unique nature of these benefits.

12 Crucially, Witness Crozier does not show that the alleged economic benefits of
13 DTE Electric's activities are significantly greater than what could be achieved through
14 alternative utility structures, such as municipalization or cooperatives. Witness Crozier
15 simply asserts that the provision of utility services generates economic activity, without
16 addressing why DTE’s role as the provider of that service is essential to that activity.

17 Witness Crozier also does not provide evidence demonstrating that these benefits
18 are directly tied to DTE Electric's profitability or rate of return. Witness Crozier also fails
19 to demonstrate that DTE Electric is uniquely capable of delivering these benefits
20 compared to alternative utility models, such as a public or cooperative utility, or by 3rd
21 party or community-based energy service providers.

¹¹ Crozier Direct Testimony at 22, lines 9–21.

1 This lack of comparative analysis is a critical flaw in DTE Electric's argument.
2 The mere fact that the company's operations have some economic impact on its service
3 territory does not serve any evidentiary purpose in justifying the importance of its
4 profitability.

6 **B. Just & Equitable Energy Transition**

7 **Q: Please summarize the Just and Equitable Energy Transition framework utilized by**
8 **DAAO in this case.**

9 **A:** The Just and Equitable Energy Transition framework employed by the DAAO in this
10 case focuses on three central pillars:

11 **(1) Affordability:** This refers to the cost of energy service in relation to household
12 income. A just and equitable transition requires that all households can access the energy
13 they need to maintain health, safety, and comfort without sacrificing other essential
14 needs.

15 **(2) Infrastructure Quality:** This encompasses the reliability, safety, and technological
16 readiness of the energy system. A just and equitable transition demands that all
17 communities have access to modern, resilient infrastructure that provides consistent,
18 high-quality service. Indicators include measures of outage frequency and duration,
19 safety incidents, and the deployment of advanced technologies like distributed energy
20 resources and grid automation.

21 **(3) Technology Access:** This refers to the ability of households and communities to
22 participate in and benefit from emerging clean energy technologies and programs. A just
23 and equitable transition ensures that all ratepayers, especially those in historically

1 underserved areas, can access options like energy efficiency, distributed solar, battery
2 storage, and electric vehicle infrastructure. Metrics include the penetration of these
3 technologies in low-income and marginalized communities, as well as the availability of
4 targeted incentives and financing mechanisms.

5 This framework recognizes that these three pillars are interconnected and
6 interdependent. Efforts to improve one dimension of energy equity must not come at the
7 expense of the others. For example, investments in advanced infrastructure should not be
8 funded through regressive rate designs that exacerbate affordability challenges. Similarly,
9 programs to expand clean energy access must be paired with bill protections and other
10 measures to ensure that participating households are not left worse off.

11 Critically, the Just and Equitable Energy Transition framework is grounded in the
12 lived experiences and priorities of frontline communities - those that have been most
13 impacted by fossil fuel pollution, disinvestment, and energy insecurity. The framework
14 highlights the need for robust community engagement, participatory planning processes,
15 and accountability measures to ensure that these communities are not just passive
16 recipients of energy policies, but active agents in shaping a more equitable and
17 sustainable future.

18 By applying this holistic, community-centered framework to DTE Electric's rate
19 case and other regulatory proceedings, DAAO aims to center considerations of justice,
20 equity, and inclusion in the clean energy transition and push back against proposals that
21 prioritize utility profits over the public interest.

22

1 **III. DTE Electric’s Rate Case Proposal is Unjust, Unreasonable, and Insufficient to**
2 **Achieve a Just and Equitable Energy Transition**

3 **Q: Please summarize the deficiencies in DTE Electric’s proposal in this case.**

4 **A:** I will focus on the following deficiencies in DTE Electric’s rate proposal:

- 5 ● DTE Electric’s proposed residential rate increase is unjust, lacks an affordability analysis,
6 and will exacerbate the existing affordability crisis faced by many low-income and
7 marginalized communities in DTE Electric's service territory;
- 8 ● DTE Electric's proposed minimization of fiscal accountability for outages removes its
9 incentive to improve and burdens ratepayers for its poor performance;
- 10 ● DTE Electric’s IT Capital requests, particularly regarding Collections Self-Service, are
11 imprudent, driven by perverse incentives, and unlikely to achieve improvements in
12 customer experience;
- 13 ● DTE Electric's deficient study of the impact of Time-of-Use (TOU) rates fails assess
14 impacts on low-income and other vulnerable customer groups;
- 15 ● DTE Electric’s equity analysis of its infrastructure spending and reliability performance
16 is flawed and contradicts its rationale supporting the City of Detroit Infrastructure
17 (CODI) expenditures;
- 18 ● DTE Electric’s request to recover discretionary corporate memberships and other
19 industry association dues are not adequately justified in terms of benefits to ratepayers
20 and, in some cases, are demonstrably contrary to ratepayer interests.

21

1 **A. DTE Electric’s proposed residential rate increase is unjust, lacks an affordability**
2 **analysis, and will exacerbate the existing affordability crisis faced by many low-**
3 **income and marginalized communities in DTE Electric's service territory**

4 **Q. How much does DTE Electric’s proposed rate hike impact residential ratepayers?**

5 **A.** DTE Electric is proposing a \$456.4 million rate increase, with residential customers
6 seeing a 9.6% increase in their rates under the proposed plan.¹² This would amount to an
7 additional \$11.25 per month for a typical residential customer.¹³ This increase, on top of
8 the consistent increases the Commission has approved in the past few rate cases, would
9 continue to exacerbate the unaffordability of DTE’s rates and harm already overburdened
10 LMI and BIPOC communities.

11
12 **Q. How does the Commission define affordability?**

13 **A.** The Michigan Public Service Commission has defined energy affordability as “the extent
14 to which a household has the resources to meet their home energy needs for heating,
15 cooling and other uses in a healthy, sustainable, and energy efficient manner without
16 compromising a household's ability to meet other basic needs.”¹⁴

17 This definition recognizes that affordability is not just about the absolute cost of
18 energy, but about the ability of households to pay for necessary energy services while
19 still meeting other essential needs like food, housing, healthcare, and transportation. It

¹² MPSC Case No. U-21534, Rate Case Summary, (Mar. 25, 2024), available at <https://mi-psc.my.site.com/s/filing/a008y000004RHVEAA4/u215340002>, at 4.

¹³ See Crozier Direct Testimony at 17, lines 4–7 (stating that the rate request would result in an increase in the average customer bill of 37 cents a day). Thirty-seven cents times 365 days is \$135.05 per year, divided by 12 is \$11.25 per month.

¹⁴ *In re Response to COVID-19*, MPSC Case No. U-20757, Order (Dec. 21, 2023) [hereinafter U-20757 Order], available at: <https://mi-psc.my.site.com/sfc/servlet.shepherd/version/download/0688y00000BD37gAAD>, at 36.

1 also emphasizes the importance of energy efficiency and sustainability in promoting
2 long-term affordability and reducing environmental impacts.

3
4 **Q. What is energy burden and how does it relate to affordability?**

5 **A.** Energy burden is defined as the percentage of household income spent on energy.¹⁵
6 Energy burden is a key metric for assessing energy affordability as it directly measures
7 the impact of energy costs on household budgets and the ability to meet other basic
8 needs.

9 As discussed in greater depth by DAAO Witness Justin Schott, energy burdens in
10 Michigan are particularly high for low-income households. As of 2022, households at or
11 below 50% of the federal poverty level faced an average energy burden of over 30%,
12 while those between 50% and 100% of the poverty level had an average burden of 20%.¹⁶
13 These figures highlight the urgent need for policies and programs that prioritize energy
14 affordability for the most vulnerable customers.

15
16 **Q. Does DTE Electric use the word “affordability” throughout their testimony in an
17 internally consistent manner, or a manner consistent with the Commission’s
18 definition?**

19 **A.** No, DTE Electric's testimony frequently uses the term “affordability” in ways that are
20 inconsistent with or unrelated to the Commission's definition. DTE states that it “does not
21 have a standard definition of affordability,” but “uses the term “affordable” or
22 “affordability” to reflect keeping customer bills as low as possible” while recovering its

¹⁵ Direct Testimony of Witness Justin Schott at 11, line 17.

¹⁶ See Ex. DAO-4, Fisher, Sheehan, & Colton, Michigan Energy Affordability Gap (2022), at 1–2.

1 costs.¹⁷ This response manages to be both exceedingly vague and exceedingly troubling,
2 in that it implies DTE Electric is fundamentally unconcerned with a customer’s ability to
3 afford energy. Instead, DTE Electric's testimony tends to use “affordability” as a generic
4 term to describe the overall cost of service, without any meaningful consideration of the
5 ability of different customer groups to pay for necessary energy services while meeting
6 other basic needs. This narrow and uncontextualized view of affordability fails to capture
7 the real-world impacts of rising energy costs on household budgets and quality of life,
8 particularly for low-income and marginalized communities, and fails to meet the standard
9 of the Commission’s definition.

10
11 **Q. Has DTE Electric presented a sufficient analysis of affordability in this case?**

12 **A.** No. DTE Electric acknowledges that it did not conduct any specific analysis of customer
13 affordability impacts or energy burdens in developing its rate case proposal. The
14 company also did not assess how the proposed rate increase would affect the existing
15 affordability gap for low-income customers or propose any new programs or investments
16 specifically aimed at reducing energy burdens.¹⁸

17
18 **Q. How does DTE Electric attempt to characterize the affordability problem?**

19 **A.** DTE Electric's characterization of the affordability problem tends to downplay its
20 severity and urgency, demonstrate a lack of real planning to address the crisis, and to
21 prioritize the company's own financial interests over the needs of its most vulnerable
22 customers. DTE Electric further utilizes reference to affordability to justify its proposed

¹⁷ Ex. DAO–5, DTE Electric Company's First Partial Response to DAADO-3.1.

¹⁸ Ex. DAO–6, DTE Electric Company's Response to DAADO-1.35, 1.36, 1.37.

1 investments but is unable to produce a coherent definition or measurable goals. This
2 approach is inconsistent with the principles of a just and equitable energy transition.

3 Witness Crozier emphasizes that DTE Electric’s proposed rate increase is
4 necessary to support continued investments in reliability, safety, and clean energy
5 infrastructure, which she argues will benefit all customers in the long run.¹⁹ While some
6 of these investments may be important, as discussed above, this framing fails to
7 acknowledge the trade-offs and distributional impacts of raising rates on customers who
8 are already struggling to pay their bills.

9 Company Witness Hatsios acknowledges that DTE Electric has seen an increase
10 in service disconnections and arrearages in recent years.²⁰ However, he does not provide
11 any specific analysis of how these affordability challenges are distributed across different
12 customer groups or propose any targeted solutions beyond existing assistance programs
13 and payment plans. Additionally, Company Witness Sharma refers to “affordability
14 targets,”²¹ but was unable to produce any such targets in response to discovery.²²

15
16 **Q. What should the Commission do to work toward improving affordability?**

17 **A.** The Commission should require that DTE Electric adopt and uniformly use the
18 Commission’s definition of affordability, set energy-burden based goals to improve the
19 company’s unaffordable rates, and refrain from using the term in the incoherent manner

¹⁹ Crozier Direct Testimony at 15–16.

²⁰ Revised Direct Testimony of Witness Hatsios at 23, lines 6– 9 (stating that shutoff notices increased from 1.9 million in 2022 to 2.1 million in 2023, and that there was a 28% increase in low-income customers reaching final arrears status in 2023).

²¹ Revised Direct Testimony of Witness Sharma at 31, lines 14–16.

²² Ex. DAO–7, DTE Electric Company’s First Partial Response to Detroit Area Advocacy Organizations’ Third Discovery Request, DAAODE-3.2a, 3.2b, 3.2.c, 3.2.d, and 3.3.

1 that has been the company's practice. Additionally, the Commission should require DTE
2 Electric to conduct a comprehensive affordability assessment as part of its next rate case
3 filing, using the Commission's affordability definition and metrics to evaluate the impact
4 of proposed rates and investments on energy burdens and other key indicators. This
5 assessment should include a detailed analysis of affordability gaps and disparities across
6 different customer groups and geographic areas, as well as specific proposals for how to
7 mitigate these impacts and support more equitable outcomes.

8
9 **Q. Do you have any further recommendations to the Commission regarding the**
10 **provision of affordability?**

11 **A.** Yes. I believe the Commission should consider the immediate implementation of
12 affordability-based rates through an operating expense in DTE Electric's revenue
13 requirement.

14
15 **Q: Describe your proposal for affordability-based rates.**

16 **A:** The affordability gap for electricity bills in DTE Electric territory is about \$380 million.
17 After accounting for existing affordability programs, an additional \$304 million is
18 required to close the affordability gap. Witness Makhikani estimates that per DTE
19 Electric's sales projection, a rate increase of 0.743 cents per kilowatt hour of energy sold
20 would close this gap.²³ I recommend this amount be included in the revenue requirement,
21 added equally to all bills, and utilized to cover the affordability gap for all customers.

22

²³ Makhikani Direct Testimony at 28, lines 4-8.

1 **Q: How do you envision such a program being implemented?**

2 **A:** If a DTE Electric customer falls behind in their bills, they would be contacted by DTE
3 Electric. DTE Electric would verify their income, compare it to their last twelve months
4 of bills, and identify if their cost of electricity exceeded 6% of their annual income. If so,
5 DTE Electric would immediately credit to their account the amount accrued in excess of
6 that number. DTE Electric would then calculate the percentage of that customer's bills
7 which were in excess of the affordability threshold and begin applying a monthly
8 affordability credit at that percentage rate moving forward.

9 In the initial program year, DTE Electric would be granted an operating revenue
10 increase matched to the affordability estimates presented in Witness Kinkhabwala. Every
11 year thereafter, DTE Electric would file a reconciliation report with the total amount of
12 affordability credit offered with a request for recovery. Recovery would be contingent
13 upon DTE Electric demonstrating its best efforts to support customers to access existing
14 assistance programs and implementation of the cost-reducing measures identified in
15 Witness Kinkhabwala's testimony.

16

17 **Q: How does this proposal align with your position to avert a residential rate hike?**

18 **A:** While I believe reductions in the company's shareholder profits would be appropriate, the
19 limitation of further harms does not address the existing affordability crisis. In order to do
20 so, a more comprehensive affordability program is needed. I understand that the proposal
21 above would result in a rate increase in the most literal sense. However, the increase
22 would serve primarily to socialize the cost of unaffordable power and would
23 immediately—and durably—end the affordability crisis.

1 **Q: Why are you proposing this issue be solved within the rate structure rather than**
2 **through additional public spending?**

3 **A:** First, addressing the affordability crisis in the rate structure directly changes how DTE
4 Electric does business and engages with customers. The excessive, cruel, and costly
5 collections practices which DAAO has fought against for years and have been further
6 elucidated by Witness Jacob would all but disappear. Second, this proposal would not
7 require legislative action; resolving the affordability crisis through rate structure would
8 offer a complete affordability solution within the context of regulatory intervention.
9 Finally, the process of financial reconciliation of recovery requests by DTE Electric
10 presents a unique opportunity to tie affordability and equitable energy transition together
11 through thoughtful performance metrics.

12

13 **B. DTE Electric's proposed minimization of fiscal accountability for outages removes**
14 **its incentive to improve and burdens ratepayers for its poor performance**

15 **Q. What does DTE Electric request regarding outage credits?**

16 **A.** In this rate case, DTE Electric is proposing several changes to its existing outage credit
17 mechanism that would reduce the company's financial liability for service interruptions
18 and shift more of the costs and risks of outages onto ratepayers. Specifically, DTE
19 Electric is proposing to modify the criteria for determining which outage credits are
20 eligible for recovery by the company by denoting certain types of outages that the

1 company deems to be “outside of DTE Electric’s control,” such as those caused by the
2 transmission operation, public interference, animal interference, and weather.²⁴

3
4 **Q. How does DTE justify its request to limit its financial accountability for outages?**

5 **A.** Witness Crozier cites the Commission’s order in Case No. U-20836. In that case, the
6 Commission approved the ALJ’s recommendation to adopt MPSC Staff’s proposals to
7 allow DTE to recover the cost of outage credits for outages with certain causes that were
8 outside DTE’s control, such as outages caused by customer negligence or the
9 transmission system operator.²⁵ Witness Crozier then proposes that the outages for which
10 DTE can recover the costs of outage credits be broadened beyond what the Commission
11 stated in that case to include a number of additional scenarios including outages caused
12 by animal interference and outages caused by weather.²⁶

13
14 **Q. What is your view of DTE Electric’s request to minimize their financial
15 accountability for outages?**

16 **A.** I am strongly opposed to DTE Electric's proposed changes to its outage credit
17 mechanism, as I believe they would undermine the fundamental purpose of outage credits
18 as a tool for holding utilities accountable for providing reliable service to their customers.

19 Outage credits are intended to serve several important functions in the regulatory
20 compact between utilities and their customers. First and foremost, they are a way of
21 compensating customers for the inconvenience, disruption, and economic losses they

²⁴ Crozier Direct Testimony at 31–33.

²⁵ *Id.* at 31–32 (citing MPSC Case No. U-20836, Order, (Nov. 18, 2022) at 366.

²⁶ Crozier Direct Testimony at 32–33.

1 suffer when their power goes out, particularly for extended periods of time. However,
2 outage credits also serve to incentivize utility behavior that benefits ratepayers by
3 improving reliability. By providing a financial incentive for utilities to minimize the
4 frequency and duration of outages, outage credits help to ensure that companies like DTE
5 Electric are making the necessary investments and operational improvements to maintain
6 a high level of service reliability.

7 DTE Electric's proposed changes to its outage credit mechanism would
8 undermine the company's incentive to improve its reliability. By allowing the company
9 to recover the cost of outage credits for certain types of outages, the Commission would
10 allow the company to externalize the cost of those outages. This would be particularly
11 harmful if extended to causes such as weather and animal interference where investments
12 made by the company could significantly reduce both the frequency and duration of the
13 outages. If DTE chooses not to make these investments, the company, not customers,
14 should internalize that cost.

15
16 **Q. What is your recommendation to the Commission?**

17 **A.** I recommend that the Commission reject DTE's proposal for deferred accounting
18 treatment of outage credits, reject their proposed system to partially recover its already
19 limited outage credits in the specific instances it identifies such as weather and animal
20 interference. I further recommend that the Commission reconsider the establishment of
21 hourly, progressive, automatic credits as DAAO has previously argued for before the
22 Commission.²⁷

²⁷ See MPSC Case No. U-21297, Revised Direct Testimony of Jackson Koeppl (July 5, 2023) at 79.

1 **C. DTE Electric’s IT Capital requests, particularly regarding Collections Self-Service,**
2 **are imprudent, driven by perverse incentives, and unlikely to achieve improvements**
3 **in customer experience**

4 **Q. What does DTE Electric request in terms of IT Capital expenses?**

5 **A.** In this rate case, DTE Electric is requesting approval for a significant increase in its
6 capital expenditures for information technology (IT) systems and infrastructure.
7 Specifically, the company is seeking to justify \$181.1 million in IT capital
8 expenditures.²⁸

9
10 **Q. Do you have any concerns with DTE’s Digital Self Service programs?**

11 **A.** Yes. There are several reasons to believe that DTE Electric's proposed IT capital
12 investments in digital self-service tools for customer collections may be subject to
13 diminishing returns and may not generate the full scale of benefits that the company
14 claims.

15 Witness Hatsios's own testimony suggests that DTE Electric may be reaching a
16 saturation point in terms of the adoption and utilization of its self-service options by
17 customers. For example, he notes that the company has seen a significant increase in the
18 percentage of customer interactions and transactions that are completed through digital
19 channels in recent years, from 53% in 2020 to almost 70% in 2023.²⁹ While this trend
20 may be positive from a cost and efficiency perspective for DTE Electric, it also raises
21 questions about how much additional room for growth and improvement there may be in

²⁸ Hatsios Revised Direct Testimony at 2–3. \$181.1 represents the sum of the expenditures in the historical test year ending in Dec. 31, 2022 the 24-month bridge period ending in Dec. 31, 2024, and the proposed expenditures in the projected test year ending Dec. 31, 2025. *Id.*

²⁹ *Id.* at 18 tbl.2.

1 this area, particularly given the ongoing economic and technological barriers that some
2 customers may face in accessing and using digital tools. It appears that in certain
3 categories, such as the categories of Outages and Payment, DTE Electric is already
4 nearing their long term targets.³⁰ And although Collections DERs are increasing, actual
5 call volumes are not diminishing.³¹

6 It is worth noting that DTE Electric's proposed IT capital investments in digital
7 Collections self-service for customer collections are not necessarily aligned with the
8 broader goals and priorities of the Commission and other stakeholders in terms of
9 advancing energy affordability, equity, and sustainability in Michigan. While improving
10 the efficiency and convenience of the collections process may generate some cost savings
11 and revenue benefits for DTE Electric, it does not address the root causes of customer
12 non-payment and energy insecurity, such as high rates, inadequate assistance programs,
13 and systemic economic and social inequities.

14 In fact, as discussed further below, there is a risk that DTE Electric's focus on
15 digital self-service and automation in its collections processes could actually exacerbate
16 these challenges by making it easier for the company to pursue disconnections and other
17 punitive measures against struggling customers, without providing meaningful support or
18 solutions for their underlying affordability needs. This points to the need for a more
19 comprehensive and equity-focused approach to customer service and collections that
20 prioritizes bill assistance, energy efficiency, and other programs that can help to reduce

³⁰ *Id.*

³¹ *Id.* at 23, lines 3–5 (noting that call volumes are “not materially different” from levels seen four or five years ago).

1 energy burdens and improve access to affordable, reliable, and clean energy for all
2 customers.

3
4 **Q. What specific requests does DTE Electric make regarding IT Capital for Collections**
5 **Digital Self-Service?**

6 **A.** One of the specific IT capital investments that DTE Electric is seeking to recover in this
7 rate case is \$10.7 million for a new “Collections Digital Self-Service” platform, which
8 the company claims will enhance its ability to collect on past-due customer accounts and
9 reduce its overall bad debt expense.³² According to Witness Hatsios, the Collections
10 Digital Self-Service platform will include a range of new features and capabilities, such
11 as a web portal that allows customers to request restoration of service and payment holds,
12 and allows customers to view the status of holds, energy assistance funding, and pending
13 income status verifications.³³

14
15 **Q. How does DTE Electric’s explanation of the benefits of investment in Collections**
16 **self-service capital imply a perverse incentive?**

17 **A.** DTE Electric's justification for its proposed \$10.7 million IT capital investment in the
18 Collections Digital Self-Service platform reveals a troubling misalignment of incentives
19 that prioritizes the company's own financial interests over the needs and well-being of its
20 customers.

21 Witness Hatsios acknowledges that many of DTE Electric's customers are facing
22 significant affordability challenges, including high energy burdens and economic

³² *Id.* at 21–22.

³³ *Id.* at 22, lines 6–12.

1 insecurity.³⁴ However, rather than proposing meaningful solutions or investments to
2 address these challenges and reduce the need for collections activities in the first place,
3 DTE Electric is instead seeking to use ratepayer funds to make its collections process
4 more automated, efficient, and aggressive.

5 This reveals a perverse incentive structure in which DTE Electric is essentially
6 being rewarded for its own failure to ensure that its services are affordable and accessible
7 to all customers. By investing in digital self-service tools and other technologies that
8 make it easier and cheaper for the company to pursue collections and disconnections,
9 DTE Electric is effectively shifting the costs and risks of its own unaffordable rates onto
10 its most vulnerable customers, while generating additional profits for its shareholders
11 through increased capital spending.

12 This is particularly concerning given the ongoing affordability crisis facing many
13 low-income and marginalized communities in Michigan, and the disproportionate
14 impacts of energy insecurity and utility shut-offs on these groups as discussed by DAAO
15 Witnesses Schott, Jacob, Kinkhabwala, and Makhijani. By focusing on collections
16 efficiency rather than affordability and assistance, DTE Electric is not only failing to
17 meet its basic obligations as a regulated utility, but is actively exacerbating the economic
18 and social inequities that are at the root of the problem.

³⁴ *See id.* at 23, lines 5–9 (stating that, between 2022 and 2023, there was an “11% increase in the number of active low-income customers versus 2022, a 28% increase in the number of low-income customers who reached final arrears status, a 15% reduction in available Energy Assistance (EA) funding, and an increase in shutoff notices from 1.9 million to 2.1 million”).

1 **Q. Do you see any value in these investments in digital self-service?**

2 **A.** Yes. In general, I think that improving these systems is beneficial to customers. However,
3 I think that it is unlikely to generate the sort of call volume reduction DTE claims.
4 Further, to whatever extent it does reduce call volume, I expect that difficulty navigating
5 affordability issues for customers would increase. These investments should thus not be
6 paired with the expectation that other more personal methods of customer support during
7 outages and affordability crisis would be reduced; rather, digital self-service should be
8 considered to be complementary to call support. Any digital self-service capital
9 investment should also be paired with performance metrics aimed at reducing the
10 indicators of customers experiencing affordability crises, such as disconnections or
11 shutoff notices.

12
13 **Q. What do you recommend to the Commission?**

14 **A.** I recommend that the Commission reject DTE Electric's request to recover the \$10.7
15 million in costs associated with the Collections Digital Self-Service platform at
16 minimum, as well as any other proposed IT investments that are primarily focused on
17 collections automation and efficiency rather than customer assistance and affordability.
18 Furthermore, I recommend that the Commission require DTE Electric to provide a more
19 detailed and comprehensive cost-benefit analysis of its IT investments, including specific
20 metrics and targets for reducing energy burdens, preventing disconnections, and
21 improving customer satisfaction and affordability, particularly for low-income and
22 vulnerable households. I also support all of the recommendations in Witness Jacob's
23 testimony.

1 **D. DTE Electric's deficient study of the impact of Time-of-Use (TOU) rates fails assess**
2 **impacts on low-income and other vulnerable customer groups**

3 **Q. What action does DTE Electric request regarding conversion to TOU rates in this**
4 **case?**

5 **A.** In this case, DTE Electric is proposing several changes to its residential rate offerings
6 that would expand the availability and adoption of Time of Use (TOU) rates, while
7 phasing out some of its existing flat-rate options. Specifically, the company is requesting
8 to (1) change the Low Income Assistance (LIA) policy that currently requires customers
9 to switch from their existing rate schedule to D1.6, to all residential base rates³⁵ (2)
10 transition the remaining customers on the closed D1.6 rate, a product available to
11 qualifying low-income customers and supplies them with a \$40 monthly credit, to the
12 D1.11 rate, which is a TOU rate with peak and off-peak pricing periods,³⁶ and (3) Retire
13 the D1.6 rate entirely once all customers have been migrated to other rate options.³⁷

14 According to DTE Electric Witness Willis, these changes are intended to provide
15 “optionality” to LIA-recipient customers.³⁸ Willis argues that TOU rates can benefit both
16 customers and the grid by incentivizing energy use during off-peak periods when
17 electricity is less expensive to generate and deliver, and by reducing demand during peak
18 periods when the system is under the most stress.³⁹

³⁵ Willis Revised Direct Testimony at 22, lines 1–4.

³⁶ *Id.* at 18, lines 6–7, 15–17; *id.* at 22, lines 6–11.

³⁷ *Id.* at 22, lines 12–15.

³⁸ *Id.* at 22–23.

³⁹ *Id.* at 23–24.

1 **Q. What did DAAO argue for regarding DTE Electric’s proposed retirement of the**
2 **D1.6 rate class in MPSC Case No. U-21297?**

3 **A.** In the last rate case (case no. U-21297), DAAO argued that the Commission should reject
4 the company’s request to retire the D1.6 rate schedule, and move customers currently
5 paying D1.6 rates to the D1.11 rate, until after the company had completed a study of the
6 impacts of such a shift.⁴⁰ Specifically, DAAO requested that the Commission require the
7 company to conduct a study with the following parameters:

- 8 1. “Compare the rate of customer disconnections (1) for all customers switched to TOU
9 rates before and after they were switched, (2) for all LMI customers who were
10 switched to TOU rates before and after they were switched, and (3) for all customers
11 on the D1.6 rate before and after DTE implemented the TOU rate for its other
12 customers.
- 13 2. Survey customers to identify measures likely to contribute to being unable to shift
14 energy use off of peak times (e.g., family size, having a disability, having children
15 and elders, having all working parents).
- 16 3. Run three different regressions analyzing the impact both before and after the
17 implementation of the U-20836 order, including the switch to TOU rates. For this
18 analysis, DTE should identify a representative sample of ratepayers, including
19 customers both at the same income level included in the D1.6 rate class and at income
20 levels representing every band of income in the DTE service territory. The sample of
21 LMI ratepayers should include customers on the D1.6 rate class and those who were
22 already shifted to TOU. For the regressions run for the D1.6 rate class customers, the

⁴⁰ See *In re DTE Electric Co.*, MPSC Case No. U-21297, DAAO Replies to Exceptions (Nov. 8, 2023) [hereinafter U-21297 DAAO Replies to Exceptions] at 7–10.

1 categories should include the D1.6 rate class customers, only customers who went
2 through the TOU switch, and those two groups combined to generate appropriate
3 comparisons.”⁴¹

4 **Q. What did the Commission order regarding the retirement of the D1.6 rate class and**
5 **conversion to time of use rates in U-21297?**

6 **A.** In its order in Case No. U-21297, the Commission agreed with DAAO’s concerns about
7 the company's proposal to retire the D1.6 rate and transition all low-income customers to
8 the D1.11 TOU rate.⁴² Specifically, the Commission agreed that DTE Electric had not
9 provided any detailed studies or modeling to demonstrate how different types of low-
10 income customers with different usage patterns and household characteristics would be
11 impacted by the transition to TOU rates, or to identify any potential unintended
12 consequences or disparate impacts that could result from this change.⁴³

13 To address these concerns, the Commission directed DTE Electric to conduct a
14 study of the potential impacts of TOU rates on low-income customers before proposing
15 to retire the D1.6 rate or transition these customers to other rate options:

16 The Commission remains supportive of TOU rates; however, the Commission
17 agrees with the DAAOs and finds it appropriate for DTE Electric to conduct an
18 impact study comporting to the DAAOs’ recommended report outline before
19 retiring Rate Schedule D1.6 and transitioning customers to Rate Schedule D1.11.

20 The Commission thus finds that Rate Schedule D1.6 should continue at this time,

⁴¹ *Id.* at 8–9.

⁴² *In re DTE Electric Co.*, MPSC Case No. U-21297, Order (Dec. 1, 2023) [hereinafter U-21297 Order] at 312–13.

⁴³ U-21297 Order at 309–10.

1 with this issue to be revisited in the company's next rate case and with results
2 from the company's study to help inform the appropriate path forward.⁴⁴

3
4 **Q. Has DTE Electric completed a TOU study which meets the terms of the order?**

5 **A.** No, based on the information provided in DTE Electric's testimony and exhibits in this
6 case, the company has not completed a TOU study that meets any of the terms and
7 requirements of the Commission's order in Case U-21297.

8 Witness Willis states that DTE Electric has conducted a bill "impact study" to
9 review the average change in monthly bills for current D1.6 who transitioned to the
10 D1.11 TOU rate, based on data customers who switched from the D1.6 rate following the
11 Commission's order in the U-20836 rate case.⁴⁵ According to DTE Electric witness
12 Willis, the company's theoretical bill impact analysis found that "the average impact is
13 near zero" from transitioning from the current D1.6 to the D1.11 TOU rate, with most
14 customers seeing a decrease of their bill of 0.17%.⁴⁶ The study additionally found that
15 customers "with higher average usage tend to benefit on D1.11 and customers with lower
16 average usage tend to benefit on the inverted block rate."⁴⁷ Witness Willis concludes that
17 "there is no structurally adverse impact" to the transition from D1.6 to D1.11 rates.⁴⁸

18 However, this analysis falls short of the Commission's order in several key
19 respects.

⁴⁴ U-21297 Order at 312–13.

⁴⁵ Willis Revised Direct Testimony at 23, lines 4–13.

⁴⁶ *Id.* at 23, lines 17–19.

⁴⁷ *Id.* at 24, lines 6–7.

⁴⁸ *Id.* at 23, lines 18–19.

1 First, DTE's analysis does not provide any information on the rate of shut-offs for
2 customers that switched from the D1.6 rate to the D1.11 rate. Without providing an
3 analysis of the rates of shut-offs for customers switched from the D1.6 rate, and
4 comparing them to relevant control groups, DTE cannot establish that the switch would
5 not significantly harm its LMI customers.

6 Second, Witness Willis provides no information from any company survey of
7 customers to identify measures likely to contribute to being unable to shift energy use off
8 of peak times, such as family size or disability status. Without such a survey, it is
9 impossible to know whether vulnerable households with these characteristics are
10 suffering under the switch to TOU rates. Regardless of whether customers on average
11 tend to have a significant increase in cost on TOU rates, knowing whether the transition
12 is likely to shift costs primarily to a particular group of vulnerable customers, such as
13 those with disabilities, young children, or with multiple parents who have to work, is
14 important before the Commission orders the retirement of the D1.6 rate. DTE's failure to
15 provide a study with an analysis of this information means that the Commission still does
16 not have the necessary data to approve the retirement of the D1.6 rate.

17 Finally, the analysis described by Witness Willis does not include a regression
18 analysis to identify any statistically significant differences in the impacts of TOU rates on
19 different groups of customers.

20 Overall, while DTE Electric has made some effort to analyze the potential
21 impacts of transitioning low-income customers to TOU rates, this analysis falls well short
22 of the analysis that the Commission ordered in Case No. U-21297. Without a more
23 thorough and inclusive analysis of the potential risks and benefits of TOU rates for low-

1 income customers, it is premature and inappropriate for DTE Electric to propose retiring
2 the D1.6 rate or transitioning customers to other rate options at this time.

3
4 **Q. Are you opposed to time of use in principle?**

5 **A.** No. In fact, I believe that well-designed TOU rates, if paired with targeted energy
6 efficiency, demand response, and distributed energy resource (DER) programs, could
7 potentially provide significant benefits for low-income customers and communities, by
8 reducing energy burdens, improving affordability and resilience, and providing
9 opportunities for local economic development and empowerment.

10 Additionally, the analysis presented by DTE Witness Willis points to the potential
11 for TOU rates to serve as part of the solution to underconsumption – the pattern of low-
12 income households severely limiting energy use even when it compromises home health
13 and safety due to affordability challenges. The insight that higher-use customers tended
14 to benefit on the switch to D1.11, while presenting an additional affordability burden to
15 low-use households in the most immediate sense,⁴⁹ also highlights the potential for TOU
16 rates to encourage usage rates that better match household needs. Witness Willis’
17 analysis is completely inadequate to truly understand this potential, but it opens up
18 interesting questions for further exploration.

19 Low-income households face a range of structural and socioeconomic barriers
20 that make it more difficult for them to respond to TOU price signals or to take advantage
21 of potential bill savings opportunities. These include limited flexibility in household
22 energy use patterns due to work obligations, childcare needs, or medical conditions,

⁴⁹ *Id.* at 23–24.

1 lower access to energy efficiency,⁵⁰ the lack of affordable internet access⁵¹ required for
2 smart devices and demand response, and language or digital literacy barriers that make it
3 harder to understand and navigate peak pricing.

4 Given these challenges, I believe that any consideration of TOU rates for low-
5 income customers must be based on a thorough and equity-focused analysis of the
6 potential impacts and risks for different subgroups of customers, and must include robust
7 consumer protections, education and outreach programs, and other measures to ensure
8 that vulnerable households are not unduly burdened or left behind.

9
10 **Q. What do you recommend the Commission do in the instant case?**

11 **A.** Based on the concerns and considerations outlined in my previous responses, I
12 recommend that the Commission (1) reject DTE Electric's request to retire the D1.6 flat
13 rate for low-income customers and to transition all customers to the D1.11 TOU rate at
14 this time, and (2) require DTE Electric to conduct a more comprehensive and
15 collaborative study of the potential impacts and opportunities of TOU rates for low-
16 income customers, in line with the Commission's order in Case No. U-21297.

17

⁵⁰ Ex. DAO–8 BEN STACEY & TONEY REAMES, URB. ENERGY JUST. LAB, SOCIAL EQUITY IN STATE ENERGY POLICY: INDICATORS FOR MICHIGAN’S ENERGY EFFICIENCY PROGRAMS (2017), at 2.

⁵¹ See *Generally* Ex. DAO–9, Amy Lange & Jack Nissen, Affordability Connectivity Programs at Risk in Detroit and Abroad without Congressional Help, *FOX 2 DETROIT* (Apr. 3, 2024), <https://www.fox2detroit.com/news/affordability-connectivity-program-at-risk-in-detroit-and-abroad-without-congressional-approval>.

1 **F. DTE Electric’s equity analysis of its infrastructure spending and reliability**
2 **performance is flawed and contradicts its rationale supporting the City of Detroit**
3 **Infrastructure (CODI) expenditures**

4 **Q. How does DTE Electric describe the equity impact of its infrastructure plans?**

5 **A.** In his direct testimony, DTE Electric Witness Kryscynski describes the company's efforts
6 to integrate equity considerations into its distribution system planning and infrastructure
7 investment processes. Specifically, Witness Kryscynski states that DTE Electric has
8 begun using the Michigan Environmental Justice Screen (MI EJScreen) tool, developed
9 by the Michigan Department of Environment, Great Lakes, and Energy (EGLE), to
10 analyze the socioeconomic and demographic characteristics of the communities served by
11 its distribution system, and to identify areas with high concentrations of low-income,
12 minority, and other vulnerable populations.⁵² DTE relies on defining communities at the
13 80th percentile and above of MIEJ Screen score as “vulnerable” and running comparisons
14 between those communities and overall system averages on various measures of system
15 performance.⁵³

16
17 **Q. What are the problems with DTE Electric’s equity analysis?**

18 **A.** There are several problems and limitations with DTE Electric's approach to integrating
19 equity considerations into its distribution system planning and infrastructure investment
20 processes, as described by witness Kryscynski in his direct testimony.

21 While the MIEJ Screen tool is a useful starting point for identifying areas with
22 high concentrations of low-income and vulnerable populations, it does not provide a

⁵² Revised Direct Testimony of Witness Kryscynski at 78–79.

⁵³ *Id.* at 79.

1 sufficiently granular or differentiated picture of the specific needs, challenges, and
2 opportunities facing individual neighborhoods, households, or customer subgroups within
3 each tract.

4 For example, a census tract with an overall MI EJSscreen about the 80th percentile
5 may still contain significant variation and heterogeneity in terms of income levels,
6 housing quality, energy burdens, and other relevant factors that affect customers' energy
7 needs and vulnerabilities. Lumping all customers in this tract together under a single
8 equity category may obscure important differences and disparities that require more
9 targeted and customized interventions. As previously discussed by DAAO in case no. U-
10 21297, DTE Energy's investment patterns in Detroit have prioritized census tracts which
11 are becoming whiter and wealthier, while neighborhoods that are not experiencing the
12 same demographic change are being left behind.⁵⁴ Conversely, census tracts which do not
13 register above the 80th percentile likely include many households with low incomes, poor
14 housing quality, high energy burdens, and cumulatively impacting social vulnerabilities.
15 DTE has chosen to studiously ignore this reality.

16 In DTE's current mode of equity analysis, these differences continue to be
17 flattened by a binary assessment of vulnerable vs. not vulnerable tracts. As an example,
18 in Witness Deol's defense of the City of Detroit Infrastructure (CODI) program
19 investments, he states:

20 Some of the notable new load projects in the last decade are Little Caesars Arena,
21 David Whitney Building, Q Line Light Rail System, Wayne State School of Business and

⁵⁴ See Ex. DAO-10, WE THE PEOPLE MICHIGAN, GENTRIFICATION, POPULATION CHANGE, AND ELECTRIC GRID INVESTMENT (July 2023) (available at <https://wethepeoplemi.org/wp-content/uploads/2023/08/DTE-Gentrification-Brief.pdf>).

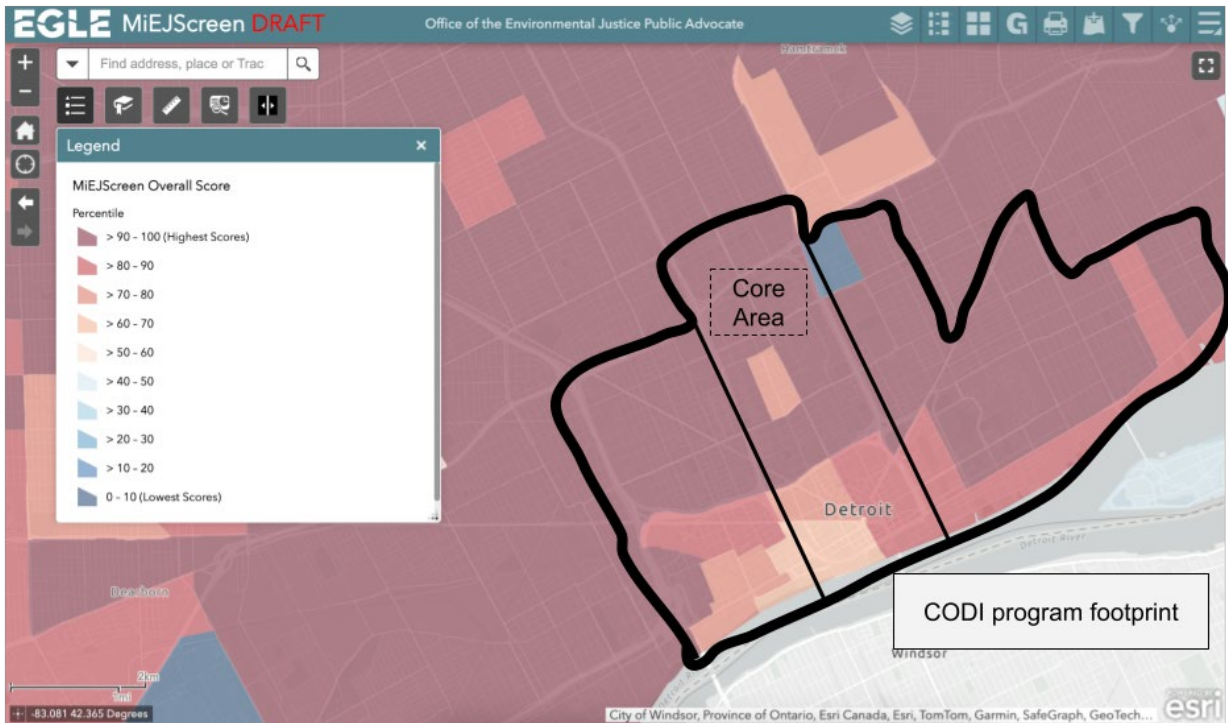
1 Hillberry Theater Expansion, Book Tower, David Stott Building, Detroit Pistons
2 Performance Center, and the Huntington Bank Tower. These along with dozens of other
3 completed new build/renovations in the New Center, Midtown, and Central Business
4 District areas of Detroit have created significant load growth and economic momentum in
5 the CODI area, which will continue with the pipeline of future projects.⁵⁵

6 Clearly, at least from this list of investments, Witness Deol is not primarily
7 concerned with improving service to vulnerable populations. Yet investments in the
8 CODI areas nonetheless likely count towards Krysycnski’s binary bucketing of
9 “vulnerable” census tracts, even if DTE directly acknowledges that these investments are
10 primarily intended to serve new load and new residents.⁵⁶

⁵⁵ Deol Direct Testimony at 26–27.

⁵⁶ See Figure 1 showing EJ census tracts within the CODI area.

1 *Figure 1: MiEJScreen Grab, Economic Development and Load Growth Map*⁵⁷



2
3 Witness Krysynski presents a table in his testimony which shows higher numbers
4 of residential customers in clusters of census tracts at higher EJ score percentiles,⁵⁸ likely
5 indicating higher population density. In the preceding tables Krysynski presents, the EJ
6 score census tracts at the 35th-40th percentiles and below, which have the lowest
7 numbers of residential customers, also demonstrate the most consistent
8 underperformance.⁵⁹ This indicates a strong potential that population density is a
9 significant factor in reliability performance.

10

⁵⁷ This figure was pulled from the MIEJ Screen Website (available at <https://www.michigan.gov/egle/maps-data/miejscreen>). I outlined the CODI program footprint.

⁵⁸ Krysynski Direct Testimony at 92, Table 14.

⁵⁹ *Id.* at 88-92, Tables 10, 11, 12, 13.

1 **Q: Does DTE Electric present a consistent position on equity in service quality?**

2 **A:** No. There are notable discrepancies between the equity analysis presented by Witness
3 Kryscynski and Witness Deol’s defense of the City of Detroit Infrastructure (CODI)
4 program.

5
6 **Q: Please describe the conflict between witness Kryscynski and Deol’s positions.**

7 **A:** Witness Deol argues that the CODI program is essential because customers are
8 experiencing much worse reliability in the target areas of the program due to load growth
9 and aging infrastructure.⁶⁰ But to the contrary, the maps presented by Witness Kryscynski
10 show those a substantial portion of those target areas as being in the first and second
11 quartiles of reliability performance in 2023. This especially true of the “Core Area”,
12 which is almost entirely within the first quartile of performance.⁶¹ DTE Electric is
13 describing two different realities: one in which the CODI areas are in need of investment
14 due to reliability problems, and one in which the CODI areas are part of the higher-
15 performing EJ communities which demonstrate its equitable service. Witnesses Deol and
16 Kryscynski use these different realities for the same end: justifying DTE’s preferred
17 capital spending plan without the integration of equity analysis into its actual
18 development.

19

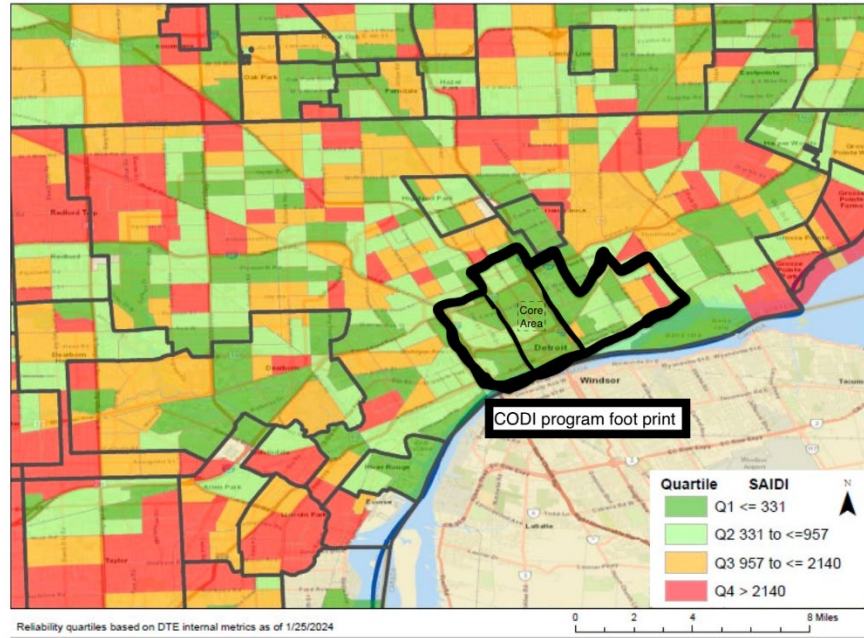
⁶⁰ Deol Direct Testimony at 26.

⁶¹ Kryscynski Direct at 83, 85, Figures 13 and 15.

1

Figure 2: CODI Program Outline from SAUDI Census Tract⁶²

Figure 15 2023 All Weather SAIDI by Census Tract for DTE Electric (Metro Detroit Area)

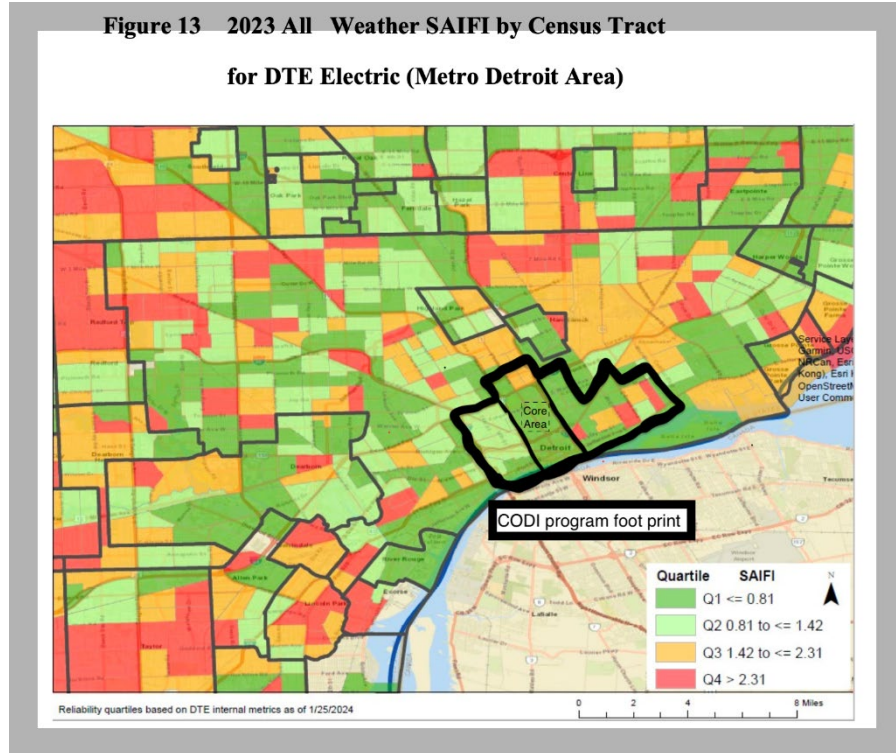


2

⁶² This figure was pulled from Witness Kryscynski's Testimony at 85, over which I traced the CODI program footprint.

1

Figure 3: CODI Program Outline from SAIFI Census Tract⁶³



2

3 **Q. What do you recommend the Commission do in the instant case?**

4 **A.** The Commission should reject or substantially reduce DTE’s proposed capital spending
 5 on the CODI program, particularly in the Core Area which demonstrates higher-than-
 6 average reliability. The Commission should require DTE to analyze changes in
 7 demographics over time when assessing the equity impacts of its proposed long-term
 8 investments. Finally, the Commission should require the use of regression analysis to
 9 have a complete understanding of equity outcomes along lines of race and class.

⁶³ This figure was pulled from Witness Kryscynski’s Testimony at 83, over which I traced the CODI program footprint.

1 **G. Corporate memberships are not supported and are contrary to ratepayer interest**

2 **Q. What does DTE Electric request in terms of corporate memberships?**

3 **A.** Through testimony⁶⁴ and an exhibit,⁶⁵ DTE requests recovery of \$16.88 million in total
4 corporate membership dues, including \$4.44 million in discretionary corporate
5 membership dues, for various industry trade groups and associations, including the
6 Edison Electric Institute (EEI) and the Electric Power Research Institute (EPRI), among
7 others.⁶⁶

8
9 **Q. What information has the Commission required DTE Electric to provide about its**
10 **corporate membership dues in past rate cases?**

11 **A.** In its order in DTE Electric’s general rate case, Case No. U-20836, the Commission
12 ordered DTE Electric to “file in its future rate cases an exhibit containing an itemized list
13 of projected costs associated with membership fees and justification for why these costs
14 are in customers’ interest.”⁶⁷

15 However, in the next rate case, Case No. U-21297, DTE again failed to provide
16 the Commission with sufficient information. While the Company did provide some
17 information about its corporate memberships in an exhibit, DAAO argued that DTE
18 needed to provide at least “(1) the specific achievements that each organization has
19 accomplished that are in ratepayer interests, (2) specific information about each
20 organization’s governance structure, including whether and how its leadership is directly

⁶⁴ Crozier Direct Testimony at 34–38; Davis Direct Testimony at 57–60; Guillaumin Revised Direct Testimony at 130–31.

⁶⁵ Exhibit A-27, Q1.

⁶⁶ The summation of all the requests listed in the column titled “Membership Costs” equals \$16,888,624. Adding up only the discretionary memberships results in a total of \$4,438,238.

⁶⁷ MPSC Case No. U-20836, Order (Nov. 18, 2022) at 308.

1 accountable to ratepayers, and (3) information about how each organization’s interests
2 and priorities have evolved over time.”⁶⁸ In its order in that case, the Commission
3 required the following: “DTE Electric shall provide in its next general rate case a detailed
4 description of how these organizations *specifically* impact/benefit customers as outlined
5 by the DAAOs, which will convey DTE Electric’s roles and responsibilities in advancing
6 ratepayer interests through its participation in each organization.”⁶⁹

7
8 **Q. Has DTE Electric complied with the Commission’s order in case U-21297?**

9 **A.** No. While DTE Electric has provided a breakdown of its total membership dues, it has
10 not provided a detailed description of the research, advocacy, or other programs and
11 services provided by every organization and the costs associated with each of those
12 activities. At best, for most organizations, it provides only vague and high-level
13 generalities about the benefits to DTE.

14 First, the information that DTE provides in Exhibit A-27, Q1⁷⁰ is insufficient to
15 meet the Commission’s requirement for a “detailed description of how the organizations
16 *specifically* impact/benefit customers...” With respect to the “Customer Benefits,” for
17 some of the memberships, DTE simply includes a link to the organization’s website.⁷¹

18 While these organizations may make claims on their websites about the organization’s
19 offerings, these websites are primarily geared towards companies and explain the benefits
20 of membership to the company. In the context of seeking rate recovery, DTE has an
21 obligation to describe the specific benefits that its memberships provide *to customers*

⁶⁸ U-21297 Order at 219–20.

⁶⁹ *Id.* at 221 (emphasis in original).

⁷⁰ See Exhibit A-27, Schedule Q1 (including a column labeled “Customer Benefits.”)

⁷¹ See, e.g., *id.* at line 2 (CEWD), 3 (Conference Board), 8 (HCI).

1 which the public information on the organizations’ websites falls short of doing. Even if
2 the website provides some information, it is DTE’s responsibility to explain the benefits
3 to customers, not the responsibility of the Commission and intervenors to hunt for the
4 information and make the argument on DTE’s behalf. Other stated “Customer Benefits”
5 include provision of information and reports to the Company,⁷² but the Company does
6 not always make clear how that information benefits customers.

7 Second, I am concerned that DTE Electric’s approach to calculating and reporting
8 its corporate membership expenses is not sufficiently transparent or consistent with the
9 Commission’s previous orders and guidance on this issue. DTE Electric did not provide
10 more detailed and itemized information; it did not include a breakdown of the specific
11 activities and benefits provided by each organization and clear explanations of the
12 methodology used to allocate costs between recoverable and non-recoverable categories
13 for each organization so that the Commission, intervenors, and ratepayers can understand
14 how each of these entities’ activities is appropriate and benefits ratepayers. DTE Electric
15 removes lobbying percentages per the proportions that the organizations themselves
16 report, which falls short of the detailed information necessary to fulfill the Commission’s
17 directive. Neither Exhibit A-27, Schedule Q1 nor any of the witness testimonies provide
18 this level of detail about the costs associated with specific activities so that the
19 Commission, intervenors, and ratepayers can scrutinize them.

20 Third, I am concerned that some of DTE Electric’s requested corporate
21 membership expenses may be used for activities that are neither directly related to the
22 provision of utility service nor beneficial to ratepayers and may even be contrary to the

⁷² See, e.g., *Id.* at line 1 (ASE), 6 (Gartner).

1 public interest. In particular, I am concerned about DTE Electric's membership in the
2 Edison Electric Institute (EEI), which is the largest trade association for investor-owned
3 electric utilities in the United States and which over time has advocated for policies and
4 positions that prioritize the financial interests of its member companies over the needs
5 and interests of consumers and the public. As I will discuss in more detail below, EEI has
6 taken a number of controversial and problematic positions on key energy policy issues,
7 such as opposing the growth of distributed solar energy, supporting the rollback of
8 federal clean air and climate regulations, and lobbying against state and local efforts to
9 promote energy efficiency, renewable energy, and other clean energy solutions.

10 Fourth, the Company failed to provide any information relating to the governance
11 structure of any of the organizations to which it pays membership dues. It does not
12 elaborate on whether or how any of these organizations are accountable to ratepayers.

13 Overall, given these concerns and the lack of sufficient justification and
14 transparency in DTE Electric's filing, I believe that the Commission should disallow
15 recovery of a significant portion, if not all, of the company's requested corporate
16 membership expenses in this case.

17
18 **Q. Are there any particular organizations to which DTE pays membership dues with**
19 **which you take particular issue?**

20 **A.** Yes. I will focus my testimony on DTE Electric's request to recover approximately \$1.4
21 million in membership dues for the Edison Electric Institute (EEI).

22

1 **Q. Why are you choosing to focus on the EEI membership?**

2 **A.** I am choosing to focus on DTE Electric’s membership in EEI for several reasons.

3 First, EEI is the largest and most influential trade association for investor-owned
4 electric utilities in the United States, with a significant budget and staff dedicated to
5 shaping energy policy and regulation at the federal, state, and local levels. As such, EEI’s
6 activities and positions have a major impact on the direction and outcomes of the energy
7 sector and on the costs and benefits borne by ratepayers and the public.

8 Second, EEI has a history of advocating for policies and positions that prioritize
9 the financial interests of its member companies over the needs and interests of consumers
10 and the public, often in ways that are contrary to the goals of affordability, sustainability,
11 and equity that are critical to a just and inclusive clean energy transition.

12

13 **Q. Does your focus on the Edison Electric Institute membership indicate support for**
14 **the other requested corporate memberships?**

15 **A.** No, my focus on DTE Electric’s membership in EEI does not indicate support for the
16 company's other requested corporate membership expenses in this case.

17 Without more information and documentation to support the reasonableness and
18 prudence of these expenses and their direct relevance to the provision of utility service
19 and the interests of ratepayers, I believe that the Commission should view all of DTE
20 Electric’s requested corporate membership expenses with skepticism and scrutiny.

21 However, given the limited time and resources available for this testimony and
22 the particular significance and impact of EEI’s activities and positions on energy policy
23 and regulation, I have chosen to focus my analysis and recommendations on the

1 Company's EEI membership as an illustrative example of the broader concerns and
2 issues raised by utility trade association expenses in general.

3 By providing a detailed examination of EEI's track record and policy agenda, and
4 the potential impacts on ratepayers and the public interest, I hope to demonstrate the need
5 for greater transparency, accountability, and oversight of this particular expense and these
6 kinds of corporate membership expenses more generally and to encourage the
7 Commission to take a more proactive and critical approach to reviewing and approving
8 utility corporate membership requests in the future.

9
10 **Q. What is the Edison Electric Institute?**

11 **A.** The Edison Electric Institute (EEI) was founded in 1933 as a trade association for
12 investor-owned electric utilities in the United States, with the mission of promoting the
13 interests and perspectives of its member companies on a range of policy, regulatory, and
14 technical issues affecting the electric power industry.⁷³

15 Today, EEI represents all or almost all of the investor-owned electric utilities in
16 the United States, which collectively serve nearly 250 million electricity customers.⁷⁴
17 EEI's member companies include some of the largest and most powerful utilities in the
18 country, such as Duke Energy, Southern Company, and Exelon Corporation, as well as
19 many smaller and regional utilities.⁷⁵

⁷³ See Ex. DAO-11, Edison Electric Institute, About, accessed July 26, 2024, <https://www.eei.org/about-eei/About>.

⁷⁴ See Ex. DAO-12, Edison Electric Institute, U.S. Investor-Owned Electric Companies, accessed July 26, 2024, <https://www.eei.org/about-eei/us-investor-owned-electric-companies>

⁷⁵ See Ex. DAO-13, Edison Electric Institute, Member List, https://www.eei.org/-/media/Project/EEI/Documents/About/memberlist_print.pdf?la=en&hash=D5E71B7A813022B20243C1FFAD5C4170D91FFA4B.

1 **Q. What activities does EEI undertake to shape energy regulation and policy?**

2 **A.** EEI's activities and positions cover a wide range of issues affecting the electric utility
3 industry, including but not limited to:

- 4 - Federal and state energy policies and regulations, such as the Clean Air Act, the
5 Clean Power Plan, and renewable portfolio standards;⁷⁶
- 6 - Grid modernization and resilience, including issues related to smart grid technologies,
7 cybersecurity, and disaster response and recovery;⁷⁷
- 8 - “Knowledge building regarding FERC Order 2222 (addressing Distributed Energy
9 Resource participation in electricity markets) and its implications for utility system
10 preparation and operation;”⁷⁸
- 11 - Electrification and transportation, including issues related to electric vehicles,
12 charging infrastructure, and utility involvement in transportation electrification;⁷⁹
- 13 - Renewable energy and clean technology, including issues related to solar, wind,
14 storage, and other emerging technologies.⁸⁰

15 EEI pursues these issues through a variety of activities and channels, including:

⁷⁶ Ex. DAO-14, COMMENT FROM THE EDISON ELECTRIC INSTITUTE ON THE ENVIRONMENTAL PROTECTION AGENCY’S PROPOSED RULE NEW SOURCE PERFORMANCE STANDARDS FOR GREENHOUSE GAS EMISSIONS FROM NEW, MODIFIED, AND RECONSTRUCTED FOSSIL FUEL-FIRED ELECTRIC GENERATION UNITS; EMISSIONS GUIDELINES FOR GREENHOUSE GAS EMISSIONS FROM EXISTING FOSSIL-FUEL FIRED ELECTRIC GENERATION UNITS; AND REPEAL OF THE AFFORDABLE CLEAN ENERGY RULE, Docket No. EPA-HQ-OAR-2023-0072, (August 8, 2023) <https://www.eei.org/-/media/497F22CE3B0D45619E5ABA593778C641.pdf>.

⁷⁷ See Ex. DAO-15, Edison Electric Institute, Energy Grid, accessed July 26, 2024, <https://www.eei.org/issues-and-policy/energy-grid>.

⁷⁸ Crozier Direct Testimony at 38.

⁷⁹ See Ex. DAO-16, Edison Electric Institute, Electric Transportation, accessed July 26, 2024, <https://www.eei.org/issues-and-policy/electric-transportation>.

⁸⁰ See Ex. DAO-17, Edison Electric Institute, Clean Energy, accessed July 26, 2024, <https://www.eei.org/issues-and-policy/clean-energy>.

- 1 - Policy research and analysis, including the development of white papers, reports, and
2 other technical documents on key energy issues and trends;
- 3 - Advocacy and lobbying, including direct engagement with policymakers and
4 regulators at the federal, state, and local levels, as well as participation in regulatory
5 proceedings and legal challenges;⁸¹
- 6 - Sponsorship of conferences and events of utility regulators, such as the 2024 Mid-
7 America Regulatory Conference.⁸²
- 8 - Public outreach and education, including the development of marketing and
9 communications materials, social media campaigns, and other efforts to shape public
10 opinion and discourse on energy issues;
- 11 - Member services and support, including the provision of technical assistance, best
12 practice sharing, and other resources to help member companies navigate the
13 changing energy landscape and advance their business interests.⁸³
- 14

15 **Q. What major positions has EEI taken that are contrary to ratepayer interest?**

16 **A.** The Edison Electric Institute (EEI) has taken a number of positions and engaged in
17 various activities over the years that could be seen as contrary to the interests of
18 ratepayers and the broader public interest. Some notable examples include:

⁸¹ Ex. DAO-18, Edison Electric Institute, 2024 Lobbying, Advocacy, and Other Expenditures (February 2024)

⁸² Ex. DAO-19, Walker Orenstein, Utility regulators hosted annual conference in Minneapolis with money, STAR TRIBUNE (Jun. 18, 2024), <https://www.startribune.com/walker-orenstein/11331478/>.

⁸³ See Crozier Direct Testimony at 37-38.

- 1 1. Opposition to distributed solar energy and net metering: EEI has been an advocate
2 for protecting the utility industry from the financial impacts of clean energy.⁸⁴ The
3 keystone of this efforts has been the creation and socialization of the now-infamous
4 “Disruptive Challenges” report, which stoked fears of the “utility death spiral” across
5 the industry and among regulators.⁸⁵
- 6 2. Advocacy against clean air and climate regulations: EEI has been a vocal critic of
7 federal and state policies to reduce air pollution and greenhouse gas emissions from
8 the electric power sector, such as their recent litigation against the EPA’s
9 implementation of the Clean Air Act.⁸⁶ EEI was found to be among one of the major
10 fronts of climate denialism in the utility industry.⁸⁷
- 11 3. Efforts to limit competition and customer choice: EEI has been a key resource for
12 investor-owned utilities fighting municipalization campaigns, commissioning the
13 “New Public Power Takeovers: Strategic Resources for Defeating Municipalization”
14 handbook⁸⁸ and associated resources, which have guided investor-owned utilities in
15 fighting municipalization proposals emerging from ratepayer dissatisfaction across
16 the country.

⁸⁴ See Ex. DAO-20, Energy and Policy Institute, Utilities’ Anti-Solar Campaign and Misinformation Debunked, accessed July 26, 2024, <https://energyandpolicy.org/utilities-anti-solar-campaign-and-misinformation-debunked/>.

⁸⁵ See Ex. DAO-21, William Pentland, Disruptive Deceptions: How Electric Utilities Stifled Rooftop Solar, *Forbes* (Dec. 4, 2015), <https://www.forbes.com/sites/williampentland/2015/12/04/disruptive-deceptions-how-electric-utilities-stifled-rooftop-solar/>.

⁸⁶ See Ex. DAO-22, Kim Riley, EEI takes targeted strike at EPA’s power plant emissions rule, *Daily Energy Insider* (May 22, 2024), <https://dailyenergyinsider.com/featured/43843-eei-takes-targeted-strike-at-epas-power-plant-emissions-rule/>.

⁸⁷ See Ex. DAO-23. Emily L Williams et al., The American electric utility industry's role in promoting climate denial, doubt, and delay, *17 Environmental Research Letters* 1 (2022)

⁸⁸ See Ex. DAO-18.

1 4. Support for bailouts of uneconomic coal and nuclear plants: In recent years, EEI has
2 supported efforts to provide financial support and cost recovery for struggling coal
3 and nuclear power plants that are facing economic challenges due to competition
4 from cheaper natural gas and renewable energy. EEI has argued that these plants are
5 needed for reliability and resilience, but critics have argued that the bailouts are
6 costly, unnecessary, and contrary to market principles and clean energy goals.⁸⁹

7 These are just a few examples of the ways in which EEI's advocacy and activities
8 have been seen as contrary to the interests of ratepayers and the public by various
9 stakeholders and observers. While EEI argues that its positions are necessary to protect
10 utility customers and ensure reliable and affordable electricity service, critics argue that
11 they prioritize the financial interests of utility shareholders over the needs and
12 preferences of ratepayers and society as a whole.

13 These positions and activities are funded in part by utility ratepayers through the
14 dues and other fees that utilities pay to EEI, which are then passed on to customers
15 through rates. This has raised concerns about the transparency, accountability, and
16 prudence of these expenses, and has led to calls for greater scrutiny and oversight of
17 EEI's activities and costs in utility ratemaking and regulation.

18 The Commission should remember that the critical question in judging these
19 activities is not only whether the positions themselves are valid, but also whether they
20 have been undertaken in the interest of ratepayers or utility shareholders. The
21 Commission does not need to take a position on distributed generation, municipalization,

⁸⁹ See Ex. DAO-24, Matt Kasper, Coal and utility interests ask for, receive, bailouts to help failing power plants, Energy and Policy Institute (Oct. 2, 2017), <https://energyandpolicy.org/bailouts-for-coal-and-nuclear-plants/>.

1 or fossil fuel facility bailouts to identify that EEI’s positions on these matters have been
2 fundamentally concerned with financial outcomes for their member companies.

3
4 **Q. Why should the Commission be concerned about and scrutinize further DTE’s**
5 **request for reimbursement of EEI dues despite the removal of formal lobbying**
6 **expenses?**

7 **A.** There are several reasons why the Michigan Public Service Commission (MPSC) should
8 be concerned about DTE Electric's EEI membership dues, even if the company has
9 excluded a portion of these dues associated with lobbying or political activities.

10 First, the distinction between lobbying and non-lobbying activities is often blurry
11 and subjective and may not fully capture the scope and influence of EEI's advocacy and
12 outreach efforts. EEI engages in a wide range of activities that could be seen as indirect
13 or grassroots lobbying, such as public education campaigns, policy research and analysis,
14 and stakeholder engagement and mobilization, which may not be formally reported as
15 lobbying expenses but still have the effect of shaping public opinion and policy outcomes
16 in ways that benefit utility interests.

17 The best expression of this concern is found in the rebuttal testimony of Xcel
18 Energy in its most recent gas rate case. Responding to testimony from Dr. Karlee
19 Weinmann of the Energy and Policy Institute, who argued for a more expansive
20 understanding of lobbying, Xcel stated that “there is no practical way for the Company to
21 review each activity and make a determination as to whether it constitutes lobbying.”⁹⁰
22 Xcel finds itself accidentally hitting the nail on the head: Institutions like the American

⁹⁰ Ex. DAO-25, *In re Xcel Energy Inc.*, Minnesota Public Utilities Commission Docket Nos. G002/GR-23-413, Bhosale Rebuttal Testimony (May 29, 2024) at 9.

1 Gas Association (which was the subject of that testimony) and EEI conduct a broad array
2 of activities that are clearly intended to shape regulatory and legislative action while
3 steering clear of the IRS definition of lobbying. The vast scope makes it difficult for the
4 companies themselves, let alone their regulators or legislators, to understand and be able
5 to explain what is actually going on. It is notable that in a settlement agreement filed on
6 June 26th, 2024, Xcel agreed to remove all its membership dues from recovery.⁹¹

7 The Commission should also be concerned about its own conflicts of interest. The
8 Edison Electric Institute is a regular sponsor of regulatory events, including the 2024
9 Mid-America Regulatory Conference. MARC does not allow entities directly regulated
10 by the attending officials, such as DTE Energy to sponsor the conference, but it does
11 allow industry associations to do so. In response to a discovery request, DTE stated that it
12 has no information about how their dues are allocated to EEI's different activities, has no
13 part in decision-making about sponsorships, and has no way to verify that its membership
14 dues do not fund sponsorships for events and conferences which the Commission
15 attends.⁹² Thus, the Commission and its staff are presumably attending conferences
16 which are, within a single degree of separation, funded by the utilities they regulate with
17 money recovered from ratepayers at the Commission's approval.

⁹¹ Ex. DAO-26, *In re Xcel Energy Inc.*, Minnesota Public Utilities Commission Docket Nos. G002/GR-23-413, Settlement Agreement (June 26, 2024) at 11-12.

⁹² Ex. DAO-27, DAAODE-3.13b and DAAODE-3.14ai.

1 **Q. Does DTE Electric convincingly demonstrate that the membership in EEI is**
2 **advancing ratepayer interests?**

3 **A.** No, based on my review of DTE Electric's testimony and exhibits in this case, the
4 company does not convincingly demonstrate that its membership in EEI is advancing the
5 interests of ratepayers or providing clear and tangible benefits to customers.

6 As discussed in my previous responses, EEI has a long history of advocating for
7 policies and positions that prioritize the financial interests of its member utilities over the
8 needs and preferences of ratepayers and the broader public interest, such as opposing
9 renewable energy and energy efficiency programs, fighting against air quality and climate
10 regulations, and supporting bailouts of uneconomic fossil fuel plants.

11 While DTE Electric claims that its EEI membership provides benefits to
12 ratepayers such as access to research and information on industry trends, best practices,
13 and regulatory issues,⁹³ the Company does not provide any specific examples or
14 quantitative evidence of how these benefits have actually translated into improved service
15 quality, reliability, affordability, or other tangible outcomes for customers. DTE Electric
16 states that the value of the Company's membership to ratepayers are "embedded in each
17 business unit's historical and projected data in an implicit, rather than explicit manner"⁹⁴
18 and merely references Exhibit A-27, Schedule Q1—the deficiencies of which I have
19 already addressed—in answer to the discovery requesting a clear description of ratepayer
20 benefits.

21 While certain elements of the value DTE claims arises from their EEI
22 membership, such as mutual assistance coordination, are plausibly beneficial to

⁹³ Crozier Direct Testimony at 36–37.

⁹⁴ See Ex. DAO-28, DAAODE-3.15ai.

1 ratepayers, without any means to discern the proportion of membership dues that go to
2 those elements, the Commission has no manner in which to assess an appropriate portion
3 of dues to approve or reject.

4 Overall, while DTE Electric claims that its EEI membership is providing value to
5 ratepayers, the evidence suggests that a significant portion of these dues are going
6 towards activities that are primarily aimed at advancing utility industry interests, rather
7 than delivering tangible benefits to customers.

8 As such, I do not believe that DTE Electric has met its burden of demonstrating
9 that its EEI membership is a reasonable, prudent, or necessary expense for ratepayers to
10 bear, or that it is consistent with the public interest and the goals of a fair and equitable
11 regulatory process.

12 The MPSC should carefully scrutinize these costs and require DTE Electric to
13 provide more specific and quantitative evidence of the direct ratepayer benefits of its EEI
14 membership, if any, and to justify why these benefits outweigh the potential harms and
15 risks to customers and the broader public interest.

16
17 **Q. What should the Commission do in the instant case?**

18 **A.** Based on the concerns and issues raised in my testimony regarding DTE Electric's EEI
19 membership and other corporate political spending, I recommend that the Michigan
20 Public Service Commission (MPSC) take the following actions in this rate case:

- 21 1. Disallow DTE Electric's entire \$1.4 million request for recovery of EEI membership
22 dues from ratepayers on the grounds that these costs are not reasonable, prudent, or

1 necessary for the provision of safe and reliable utility service and are not consistent
2 with the public interest and the goals of a fair and equitable regulatory process.

- 3 2. Examine closely the Company's justification for its other membership requests and
4 reject those that have similar failings as pointed out above for EEI, e.g., lack of detail
5 about what specific activities are funded at what levels with DTE's contributions and
6 lack any specific examples or quantitative evidence of how these benefits have
7 actually translated into improved service quality, reliability, affordability, or other
8 tangible outcomes for customers.
- 9 3. Make explicit in its order that failure to meet the requirements to demonstrate explicit
10 ratepayer benefit identified in case 21297 for any discretionary corporate membership
11 will result in the rejection of cost recovery.

12
13 **Q: Please summarize your recommendations for the Commission in this case.**

14 **A:** Based on my analysis of the deficiencies in DTE Electric's rate case proposal, I
15 recommend that the Commission take the following actions:

16 • **Affordability**

- 17 ○ Require that DTE Electric adopt and uniformly and accurately use the
18 Commission's approved definition of affordability;
- 19 ○ Order that DTE Electric set goals to reduce energy burden and report on their
20 achievement;
- 21 ○ Require DTE Electric to present a comprehensive assessment of the affordability
22 impact of its proposed rates and investments in future rate case filings. This
23 assessment should include a detailed analysis of affordability gaps and disparities

1 across different customer groups and geographic areas, as well as specific
2 proposals for how to mitigate these impacts and support more equitable outcomes.

- 3 ○ Order DTE Electric to propose in its next rate case a universal affordability
4 program by adding to its revenue requirement an operating expense equal to the
5 projection of the annual affordability gap while shall be utilized to reduce arrears
6 and bills such that no DTE Electric customer is being charged in excess of 3% of
7 annual income according to the program parameters outlined in my testimony.

- 8 • **Outage Credits**

- 9 ○ Reject DTE Electric’s proposal for deferred accounting treatment of outage
10 credits;
- 11 ○ Reject DTE Electric’s proposed system for limiting their fiscal liability for the
12 cost of outage credits;
- 13 ○ Reconsider the establishment of hourly, automatic, progressive outage credits for
14 all customers.

- 15 • **IT Capital**

- 16 ○ Reject DTE Electric’s recovery of \$10.7 million of IT Capital Investment in the
17 Collections Digital Self-Service Platform, as well as any other proposed IT
18 investments that are primarily focused on collections automation and efficiency
19 rather than customer assistance and affordability;
- 20 ○ Require DTE Electric to provide a more detailed and comprehensive cost-benefit
21 analysis of its IT investments, including specific metrics and targets for reducing
22 energy burdens, preventing disconnections, and improving customer satisfaction
23 and affordability, particularly for low-income and vulnerable households.

- 1 • **TOU Rates**
- 2 ○ Find that DTE Electric’s TOU study does not meet the standards of the
- 3 Commission’s order in Case No. U-21297;
- 4 ○ Reject DTE Electric's request to retire the D1.6 flat rate for low-income customers
- 5 and to transition all customers to the D1.11 TOU rate at this time;
- 6 ○ Require DTE Electric to conduct a more comprehensive and collaborative study
- 7 of the potential impacts and opportunities of TOU rates for low-income
- 8 customers, in line with the Commission's order in Case No. U-21297.

- 9 • **Infrastructure Equity**
- 10 ○ Reject or substantially reduce DTE’s proposed capital spending on the CODI
- 11 program, particularly in the Core Area which demonstrates higher-than-average
- 12 reliability;
- 13 ○ Require DTE to analyze changes in demographics over time when assessing the
- 14 equity impacts of its proposed long-term investments;
- 15 ○ Require DTE Electric to use regression analysis to have a complete understanding
- 16 of equity outcomes along lines of race and class.

- 17 • **Corporate Memberships**
- 18 ○ Reject DTE Electric's entire \$1.4 million request for recovery of EEI membership
- 19 dues from ratepayers;
- 20 ○ Make explicit in its order that failure to meet the requirements to demonstrate
- 21 explicit ratepayer benefit as identified in Case No. U-21297 for any discretionary
- 22 corporate membership will result in the rejection of cost-recovery.

1 **Q:** Does this conclude your Direct Testimony?

2 **A:** Yes.

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

DTE Energy Yes No **DTE Electric** Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

DTE Energy	Large accelerated filer	Accelerated filer	Non-accelerated filer	Smaller reporting company	Emerging growth company
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DTE Electric	Large accelerated filer	Accelerated filer	Non-accelerated filer	Smaller reporting company	Emerging growth company
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

DTE Energy Yes No **DTE Electric** Yes No

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflects the correction of an error to previously issued financial statements.

DTE Energy **DTE Electric**

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive based compensation received by any of the registrants' executive officers during the relevant recovery period pursuant to 240.10D-1(b).

DTE Energy **DTE Electric**

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

DTE Energy Yes No **DTE Electric** Yes No

On June 30, 2022, the aggregate market value of DTE Energy's voting and non voting common equity held by non-affiliates was approximately \$24.4 billion (based on the New York Stock Exchange closing price on such date).

Number of shares of Common Stock outstanding at January 31, 2023:

Registrant	Description	Shares
DTE Energy	Common Stock, without par value	205,688,574
DTE Electric	Common Stock, \$10 par value, indirectly-owned by DTE Energy	138,632,324

DOCUMENTS INCORPORATED BY REFERENCE

Certain information in DTE Energy's definitive Proxy Statement for its 2023 Annual Meeting of Common Shareholders to be held May 4, 2023, which will be filed with the Securities and Exchange Commission pursuant to Regulation 14A, not later than 120 days after the end of the Registrants' fiscal year covered by this report on Form 10-K, is incorporated herein by reference to Part III (Items 10, 11, 12, 13, and 14) of this Form 10-K.

This combined Form 10-K is filed separately by two registrants: DTE Energy and DTE Electric. Information contained herein relating to any individual registrant is filed by such registrant solely on its own behalf. DTE Electric makes no representation as to information relating exclusively to DTE Energy.

DTE Electric, an indirect wholly-owned subsidiary of DTE Energy, meets the conditions set forth in General Instructions I(1)(a) and (b) of Form 10-K and is therefore filing this form with the reduced disclosure format specified in General Instruction I(2) of Form 10-K.

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DEFINITIONS

ACE	Affordable Clean Energy
AFUDC	Allowance for Funds Used During Construction
AMT	Alternative Minimum Tax
ASU	Accounting Standards Update issued by the FASB
CAD	Canadian Dollar (C\$)
CARB	California Air Resources Board that administers California's Low Carbon Fuel Standard
Carbon emissions	Emissions of carbon containing compounds, including carbon dioxide and methane, that are identified as greenhouse gases
CARES Act	Coronavirus Aid, Relief, and Economic Security Act enacted in March 2020 to assist individuals and employers with the impacts of the COVID-19 pandemic, including certain tax relief provisions
CCR	Coal Combustion Residuals
CFTC	U.S. Commodity Futures Trading Commission
COVID-19	Coronavirus disease of 2019
DOE	U.S. Department of Energy
DTE Electric	DTE Electric Company (an indirect wholly-owned subsidiary of DTE Energy) and subsidiary companies
DTE Energy	DTE Energy Company, directly or indirectly the parent of DTE Electric, DTE Gas, and numerous non-utility subsidiaries
DTE Gas	DTE Gas Company (an indirect wholly-owned subsidiary of DTE Energy) and subsidiary companies
DTE Securitization	DTE Electric Securitization Funding I, LLC, a special purpose entity wholly-owned by DTE Electric. The entity was created to issue securitization bonds for certain qualified costs authorized by the MPSC and to recover debt service costs from DTE Electric customers
DTE Sustainable Generation	DTE Sustainable Generation Holdings, LLC (an indirect wholly-owned subsidiary of DTE Energy) and subsidiary companies
DT Midstream	DT Midstream, Inc., formerly DTE Energy's natural gas pipeline, storage, and gathering non-utility business comprising the Gas Storage and Pipelines segment and certain DTE Energy holding company activity in the Corporate and Other segment, which separated from DTE Energy and became an independent public company on July 1, 2021
EGLE	Michigan Department of Environment, Great Lakes, and Energy, formerly known as Michigan Department of Environmental Quality
EGU	Electric Generating Unit
ELG	Effluent Limitations Guidelines
EPA	U.S. Environmental Protection Agency
Equity units	DTE Energy's 2019 equity units issued in November 2019, which were used to finance the Gas Storage and Pipelines acquisition on December 4, 2019
ERCOT	Electric Reliability Council of Texas, the independent power market operator responsible for substantially all of the Texas power market.
EWR	Energy Waste Reduction program, which includes a mechanism authorized by the MPSC allowing DTE Electric and DTE Gas to recover through rates certain costs relating to energy waste reduction
FASB	Financial Accounting Standards Board
FERC	Federal Energy Regulatory Commission
FGD	Flue Gas Desulfurization
FOV	Finding of Violation

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DEFINITIONS

FTRs	Financial Transmission Rights are financial instruments that entitle the holder to receive payments related to costs incurred for congestion on the transmission grid
GCR	A Gas Cost Recovery mechanism authorized by the MPSC that allows DTE Gas to recover through rates its natural gas costs
GHGs	Greenhouse gases
Green Bonds	A financing option to fund projects that have a positive environmental impact based upon a specified set of criteria. The proceeds are required to be used for eligible green expenditures
IRS	Internal Revenue Service
ISO	Independent System Operator
LLC	DTE Energy Corporate Services, LLC, a subsidiary of DTE Energy
MGP	Manufactured Gas Plant
MISO	Midcontinent Independent System Operator, Inc.
MPSC	Michigan Public Service Commission
MTM	Mark-to-market
NAV	Net Asset Value
NEIL	Nuclear Electric Insurance Limited
Net zero	Goal for DTE Energy's utility operations and gas suppliers at DTE Gas that any carbon emissions put into the atmosphere will be balanced by those taken out of the atmosphere. Achieving this goal will include collective efforts to reduce carbon emissions and actions to offset any remaining emissions. Progress towards net zero goals is estimated and methodologies and calculations may vary from those of other utility businesses with similar targets
Non-utility	An entity that is not a public utility. Its conditions of service, prices of goods and services, and other operating related matters are not directly regulated by the MPSC
NO _x	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NRC	U.S. Nuclear Regulatory Commission
PLD	City of Detroit's Public Lighting Department
Production tax credits	Tax credits as authorized under Section 45 of the Internal Revenue Code that are designed to stimulate investment in and development of renewable energy and alternate fuel sources. The amount of a production tax credit can vary each year as determined by the Internal Revenue Service
PSCR	A Power Supply Cost Recovery mechanism authorized by the MPSC that allows DTE Electric to recover through rates its fuel, fuel-related, and purchased power costs
REC	Renewable Energy Credit
REF	Reduced Emissions Fuel
Registrants	DTE Energy and DTE Electric
Retail access	Michigan legislation provided customers the option of access to alternative suppliers for electricity and natural gas
RPS	Renewable Portfolio Standard program, which includes a mechanism authorized by the MPSC allowing DTE Electric to recover through rates its renewable energy costs
RSN	Remarketable Senior Note
RTO	Regional Transmission Organization
SEC	Securities and Exchange Commission

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DEFINITIONS

SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
SOFR	Secured Overnight Financing Rate
TCJA	Tax Cuts and Jobs Act of 2017, which reduced the corporate Federal income tax rate from 35% to 21%
Topic 606	FASB issued ASU No. 2014-09, Revenue from Contracts with Customers, as amended
Topic 842	FASB issued ASU No. 2016-02, Leases, as amended
TRIA	Terrorism Risk Insurance Program Reauthorization Act of 2015
TRM	A Transitional Reconciliation Mechanism authorized by the MPSC that allows DTE Electric to recover through rates the deferred net incremental revenue requirement associated with the transition of PLD customers to DTE Electric's distribution system
USD	United States Dollar (\$)
VEBA	Voluntary Employees Beneficiary Association
VIE	Variable Interest Entity

Units of Measurement

Bcf	Billion cubic feet of natural gas
BTU	British thermal unit, heat value (energy content) of fuel
kWh	Kilowatthour of electricity
MDth/d	Million dekatherms per day
MMBtu	One million BTU
MW	Megawatt of electricity
MWh	Megawatt-hour of electricity

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FILING FORMAT

This combined Form 10-K is separately filed by DTE Energy and DTE Electric. Information in this combined Form 10-K relating to each individual Registrant is filed by such Registrant on its own behalf. DTE Electric makes no representation regarding information relating to any other companies affiliated with DTE Energy other than its own subsidiaries. Neither DTE Energy, nor any of DTE Energy's other subsidiaries (other than DTE Electric), has any obligation in respect of DTE Electric's debt securities, and holders of such debt securities should not consider the financial resources or results of operations of DTE Energy nor any of DTE Energy's other subsidiaries (other than DTE Electric and its own subsidiaries (in relevant circumstances)) in making a decision with respect to DTE Electric's debt securities. Similarly, none of DTE Electric nor any other subsidiary of DTE Energy has any obligation with respect to debt securities of DTE Energy. This combined Form 10-K should be read in its entirety. No one section of this combined Form 10-K deals with all aspects of the subject matter of this combined Form 10-K.

FORWARD-LOOKING STATEMENTS

Certain information presented herein includes "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 with respect to the financial condition, results of operations, and businesses of the Registrants. Words such as "anticipate," "believe," "expect," "may," "could," "projected," "aspiration," "plans," and "goals" signify forward-looking statements. Forward-looking statements are not guarantees of future results and conditions, but rather are subject to numerous assumptions, risks, and uncertainties that may cause actual future results to be materially different from those contemplated, projected, estimated, or budgeted. Many factors may impact forward-looking statements of the Registrants including, but not limited to, the following:

- impact of regulation by the EPA, EGLE, the FERC, the MPSC, the NRC, and for DTE Energy, the CFTC and CARB, as well as other applicable governmental proceedings and regulations, including any associated impact on rate structures;
- the amount and timing of cost recovery allowed as a result of regulatory proceedings, related appeals, or new legislation, including legislative amendments and retail access programs;
- economic conditions and population changes in the Registrants' geographic area resulting in changes in demand, customer conservation, and thefts of electricity and, for DTE Energy, natural gas;
- the operational failure of electric or gas distribution systems or infrastructure;
- impact of volatility in prices in the international steel markets and in prices of environmental attributes generated from renewable natural gas investments on the operations of DTE Vantage;
- the risk of a major safety incident;
- environmental issues, laws, regulations, and the increasing costs of remediation and compliance, including actual and potential new federal and state requirements;
- the cost of protecting assets and customer data against, or damage due to, cyber incidents and terrorism;
- health, safety, financial, environmental, and regulatory risks associated with ownership and operation of nuclear facilities;
- volatility in commodity markets, deviations in weather, and related risks impacting the results of DTE Energy's energy trading operations;
- changes in the cost and availability of coal and other raw materials, purchased power, and natural gas;
- advances in technology that produce power, store power, or reduce power consumption;
- changes in the financial condition of significant customers and strategic partners;
- the potential for losses on investments, including nuclear decommissioning and benefit plan assets and the related increases in future expense and contributions;

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- access to capital markets and the results of other financing efforts which can be affected by credit agency ratings;
- instability in capital markets which could impact availability of short and long-term financing;
- impacts of inflation and the timing and extent of changes in interest rates;
- the level of borrowings;
- the potential for increased costs or delays in completion of significant capital projects;
- changes in, and application of, federal, state, and local tax laws and their interpretations, including the Internal Revenue Code, regulations, rulings, court proceedings, and audits;
- the effects of weather and other natural phenomena, including climate change, on operations and sales to customers, and purchases from suppliers;
- unplanned outages at our generation plants;
- employee relations and the impact of collective bargaining agreements;
- the availability, cost, coverage, and terms of insurance and stability of insurance providers;
- cost reduction efforts and the maximization of plant and distribution system performance;
- the effects of competition;
- changes in and application of accounting standards and financial reporting regulations;
- changes in federal or state laws and their interpretation with respect to regulation, energy policy, and other business issues;
- successful execution of new business development and future growth plans;
- contract disputes, binding arbitration, litigation, and related appeals;
- the ability of the electric and gas utilities to achieve net zero emissions goals; and
- the risks discussed in the Registrants' public filings with the Securities and Exchange Commission.

New factors emerge from time to time. The Registrants cannot predict what factors may arise or how such factors may cause results to differ materially from those contained in any forward-looking statement. Any forward-looking statements speak only as of the date on which such statements are made. The Registrants undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events.

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Part I

Items 1. and 2. Business and Properties

General

In 1995, DTE Energy incorporated in the State of Michigan. DTE Energy's utility operations consist primarily of DTE Electric and DTE Gas. DTE Energy also has two other segments that are engaged in a variety of energy-related businesses.

DTE Electric is a Michigan corporation organized in 1903 and is an indirect wholly-owned subsidiary of DTE Energy. DTE Electric is a public utility engaged in the generation, purchase, distribution, and sale of electricity to approximately 2.3 million customers in southeastern Michigan.

DTE Gas is a Michigan corporation organized in 1898 and is an indirect wholly-owned subsidiary of DTE Energy. DTE Gas is a public utility engaged in the purchase, storage, transportation, distribution, and sale of natural gas to approximately 1.3 million customers throughout Michigan and the sale of storage and transportation capacity.

DTE Energy's other businesses include 1) DTE Vantage which is primarily involved in renewable natural gas projects and providing custom energy solutions to industrial, commercial, and institutional customers, and 2) energy marketing and trading operations.

DTE Electric and DTE Gas are regulated by the MPSC. Certain activities of DTE Electric and DTE Gas, as well as various other aspects of businesses under DTE Energy, are regulated by the FERC. In addition, the Registrants are regulated by other federal and state regulatory agencies including the NRC, the EPA, EGLE, and for DTE Energy, the CFTC and CARB.

The Registrants' annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements, and all amendments to such reports are available free of charge through the Investor Relations SEC Filings page of DTE Energy's website: www.dteenergy.com, as soon as reasonably practicable after they are filed with or furnished to the SEC.

The DTE Energy Code of Ethics and Standards of Behavior, Board of Directors' Mission and Guidelines, Board Committee Charters, and Categorical Standards for Director Independence are also posted on the DTE Energy website. The information on DTE Energy's website is not part of this report or any other report that DTE Energy files with, or furnishes to, the SEC.

Additionally, the public may read and copy any materials the Registrants file electronically with the SEC at www.sec.gov.

Corporate Structure

DTE Energy sets strategic goals, allocates resources, and evaluates performance based on the following structure. For financial information by segment for the last three years, see Note 22 to the Consolidated Financial Statements, "Segment and Related Information."

Electric

- The Electric segment consists principally of DTE Electric, which is engaged in the generation, purchase, distribution, and sale of electricity to approximately 2.3 million residential, commercial, and industrial customers in southeastern Michigan.

Gas

- The Gas segment consists principally of DTE Gas, which is engaged in the purchase, storage, transportation, distribution, and sale of natural gas to approximately 1.3 million residential, commercial, and industrial customers throughout Michigan and the sale of storage and transportation capacity.

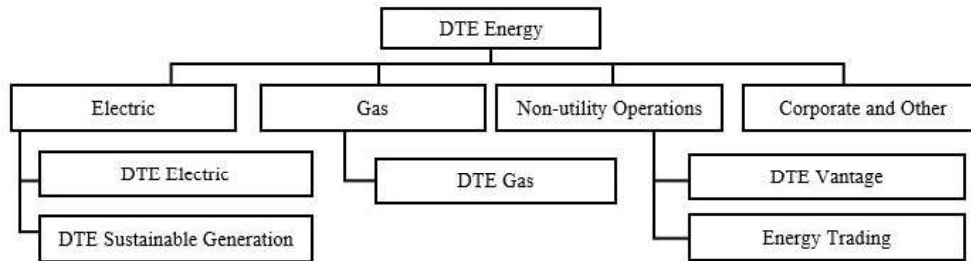
Non-utility Operations

- DTE Vantage is comprised primarily of renewable energy projects that sell electricity and pipeline-quality gas and projects that deliver custom energy solutions to industrial, commercial, and institutional customers.
- Energy Trading consists of energy marketing and trading operations.

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Corporate and Other

- Corporate and Other includes various holding company activities, holds certain non-utility debt, and holds certain investments, including funds supporting regional development and economic growth.



Refer to Management’s Discussion and Analysis in Item 7 of this Report for an in-depth analysis of each segment’s financial results. A description of each business unit follows.

ELECTRIC

Description

DTE Energy's Electric segment consists principally of DTE Electric, an electric utility engaged in the generation, purchase, distribution, and sale of electricity to approximately 2.3 million customers in southeastern Michigan. DTE Electric is regulated by numerous federal and state governmental agencies, including, but not limited to, the MPSC, the FERC, the NRC, the EPA, and EGLE. Electricity is generated from fossil-fuel plants, a hydroelectric pumped storage plant, a nuclear plant, wind and solar assets, and is supplemented with purchased power. The electricity is sold, or distributed through the retail access program, to three major classes of customers: residential, commercial, and industrial, throughout southeastern Michigan.

Weather, economic factors, competition, energy waste reduction initiatives, and electricity prices affect sales levels to customers. DTE Electric's peak load and highest total system sales generally occur during the third quarter of the year, driven by air conditioning and other cooling-related demands. DTE Electric's operations are not dependent upon a limited number of customers, and the loss of any one or a few customers would not have a material adverse effect on the results of DTE Electric.

The Electric segment also includes non-utility operations relating to renewable energy projects at DTE Sustainable Generation, which were acquired to support DTE Energy's renewable energy goals.

For a summary of Electric segment operating revenues by service, see Note 5 to the Consolidated Financial Statements, "Revenue."

Fuel Supply and Purchased Power

DTE Electric's power is generated from a variety of fuels and is supplemented with purchased power. DTE Electric expects to have an adequate supply of fuel and purchased power to meet its obligation to serve customers. DTE Electric's generating capability is dependent upon the availability of coal and natural gas.

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Coal is purchased from various sources in different geographic areas under agreements that vary in both pricing and terms. DTE Electric expects to obtain the majority of its coal requirements through long-term contracts, with the balance to be obtained through short-term agreements and spot purchases. DTE Electric has long-term and short-term contracts for the purchase of approximately 10 million tons of low-sulfur western coal and approximately 1 million tons of Appalachian coal to be delivered from 2023 to 2024. All of these contracts have pricing schedules. DTE Electric has 96% of its expected coal requirements under contract for 2023. DTE Electric leases a fleet of rail cars and has the expected western and eastern coal rail requirements under multi-year contracts. DTE Electric's 2023 rail transportation is covered under long-term agreements. DTE Electric expects to cover all of its 2023 vessel transportation requirements for delivery of purchased coal to electric generating facilities through existing agreements. DTE Electric's natural gas supply requirements are expected to be met through a combination of short and long-term agreements, agreements with local distribution companies, and spot market purchases. Natural gas purchase requirements for 2023 are expected to be approximately 64 Bcf. DTE Electric has contracts for firm gas transportation and storage capacity to ensure reliable and flexible gas supply to its power plants. Given the geographic diversity of supply, DTE Electric believes it can meet its expected generation requirements.

DTE Electric participates in the energy market through MISO. DTE Electric offers its generation in the market on a day-ahead and real-time basis and bids for power in the market to serve its load. DTE Electric is a net purchaser of power that supplements its generation capability to meet customer demand during peak cycles or during major plant outages.

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Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following combined discussion is separately filed by DTE Energy and DTE Electric. However, DTE Electric does not make any representations as to information related solely to DTE Energy or the subsidiaries of DTE Energy other than itself.

EXECUTIVE OVERVIEW

DTE Energy is a diversified energy company with 2022 Operating Revenues of approximately \$19.2 billion and Total Assets of approximately \$42.7 billion. DTE Energy is the parent company of DTE Electric and DTE Gas, regulated electric and natural gas utilities engaged primarily in the business of providing electricity and natural gas sales, distribution, and storage services throughout Michigan. DTE Energy also operates two energy-related non-utility segments with operations throughout the United States.

On July 1, 2021, DTE Energy completed the separation of DT Midstream, its former natural gas pipeline, storage, and gathering non-utility business. Financial results of DT Midstream are presented as discontinued operations in the Consolidated Financial Statements. Refer to Note 4 to the Consolidated Financial Statements, "Discontinued Operations," for additional information.

Management's Discussion and Analysis of Financial Condition and Results of Operations below reflect DTE Energy's continuing operations, unless noted otherwise. The following table summarizes DTE Energy's financial results:

	Years Ended December 31,					
	2022		2021		2020	
	(In millions, except per share amounts)					
Net Income Attributable to DTE Energy Company — Continuing operations	\$	1,083	\$	796	\$	1,054
Diluted Earnings per Common Share — Continuing operations	\$	5.52	\$	4.10	\$	5.45

The increase in 2022 Net Income Attributable to DTE Energy Company was primarily due to higher earnings in the Electric, Gas, and Corporate and Other segments, partially offset by lower earnings in the DTE Vantage and Energy Trading segments. The decrease in 2021 Net Income Attributable to DTE Energy Company was primarily due to lower earnings in the Corporate and Other segment, driven primarily by losses on the extinguishment of debt incurred in 2021. The decrease was also due to lower earnings in the Energy Trading segment, partially offset by higher earnings in the Electric, Gas, and DTE Vantage segments.

STRATEGY

DTE Energy's strategy is to achieve long-term earnings per share growth with a strong balance sheet and attractive dividend.

DTE Energy's utilities are investing capital to support a modern, reliable grid and cleaner, affordable energy through investments in base infrastructure and new generation. Increasing intensity of wind storms and other weather events, coupled with increasing electric vehicle adoption, will drive a continued need for substantial grid investment over the long-term.

DTE Energy plans to reduce the carbon emissions of its electric utility operations by 32% by 2023, 65% in 2028, 85% in 2035, and 90% by 2040 from 2005 carbon emissions levels. These represent accelerated goals compared to the electric utility's prior targets to reduce carbon emissions by 50% by 2028 and 80% by 2040. DTE Energy plans to end its use of coal-fired power plants in 2035 and is committed to a net zero carbon emissions goal by 2050 for its electric and gas utility operations.

To achieve the targeted carbon reduction goals at the electric utility, DTE Energy will continue its transition away from coal-powered energy sources and is replacing or offsetting the generation from these facilities with renewable energy, natural gas, battery storage, and energy waste reduction initiatives. Refer to the "Capital Investments" section below for further discussion regarding DTE Energy's retirement of its aging coal-fired plants and transition to renewable energy and other sources. Over the long-term, DTE Energy is also monitoring the advancement of emerging technologies such as long-duration storage, modular nuclear reactors, hydrogen, and carbon capture and sequestration, and how these technologies may support clean, reliable generation and customer affordability.

RESEARCH — 25 May, 2023

Electric beats gas in exceeding authorized equity returns over past 15 years



Author [Dan Lowrey](#)

Theme [Energy](#)

The average annual earned return on equity for the Financial Focus energy coverage universe of utility operating companies has trailed the average authorized equity return for more years than not over the past 15 years, but much more so for gas utilities than electric utilities.

Electric utilities' average annual earned return on equity (ROE) climbed steadily from 2015 to 2018 and exceeded the average authorized ROE from 2016 to 2021. The average earned ROE, however, declined in 2022, falling below the average authorized ROE as utility disconnection moratoriums expired and states of emergency were lifted in the wake of the COVID-19 pandemic.

In contrast, the average annual earned ROE from a sample of US investor-owned gas utility operating companies never exceeded its authorized ROE over the 15-year time frame. The closest the group came to meeting its average authorized ROE was in 2013 and 2014 when the average earned ROE fell short by 54 and 58 basis points, respectively.

The Take

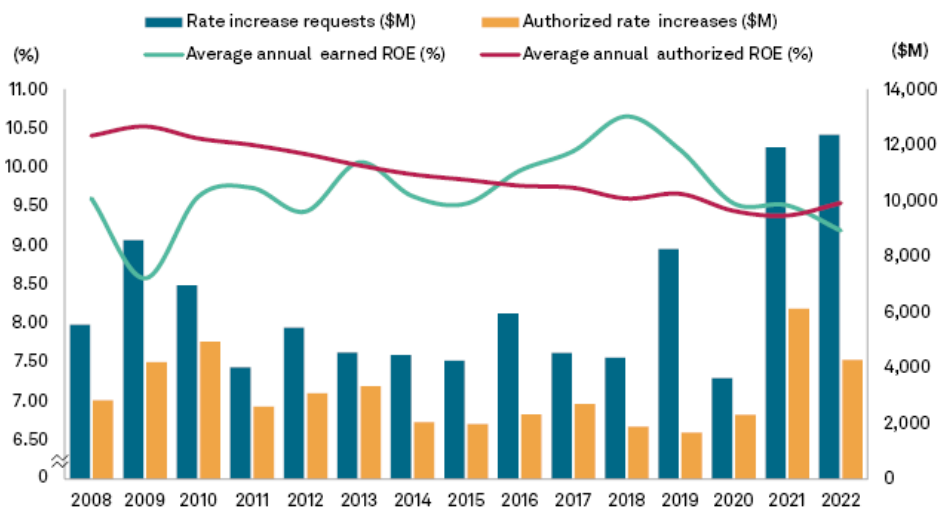
► Energy utility-earned ROEs, on average, have been pressured over the past three years reflecting the difficult operating environment for utilities during a period of tremendous volatility brought about by the COVID-19 pandemic. But when the data is broken down by service type, electric utilities have fared far better.

- After a number of years of overearning authorized ROEs, electric utilities on average slipped below that threshold in 2022. A hotter-than-normal summer and a record number of rate cases that address growing capital spending plans by utilities, however, could pave the way for a return to higher earned returns.
- Gas utilities underearned authorized ROEs on average for the entire 2008–22 time frame, though some in our sample of gas utilities showed consistent overperformance.
- While there is new evidence of rising authorized ROEs in data collected by Regulatory Research Associates, history cautions about the stickiness of authorized returns. Commissions may be less inclined to boost approved returns in an environment of high inflation and interest rates.

Following the outbreak of the COVID-19 pandemic in 2019, states began to institute service disconnection moratoriums for customers unable to pay their utility bills as businesses shuttered or curtailed operations. In turn, earned ROEs for US investor-owned electric and gas utility operating subsidiaries fell. The decline since 2019 has been much more pronounced among electric utilities.

Disconnection moratoriums have largely expired, and states of emergency imposed by state governors and the federal government have also been lifted. In the past two years, utilities have filed some of the largest rate cases ever witnessed by RRA, and underearning has been frequently cited as a factor by utilities in testimony. Rate requests by utilities totaled a combined \$16.78 billion in 2022, up about 13% from a record-setting 2021, as tracked by RRA. Coinciding with record-breaking capital investment plans by utilities, this should bode well for utilities and could point toward a rebound in earned ROEs.

Earned versus authorized ROE by electric utility operating subsidiary



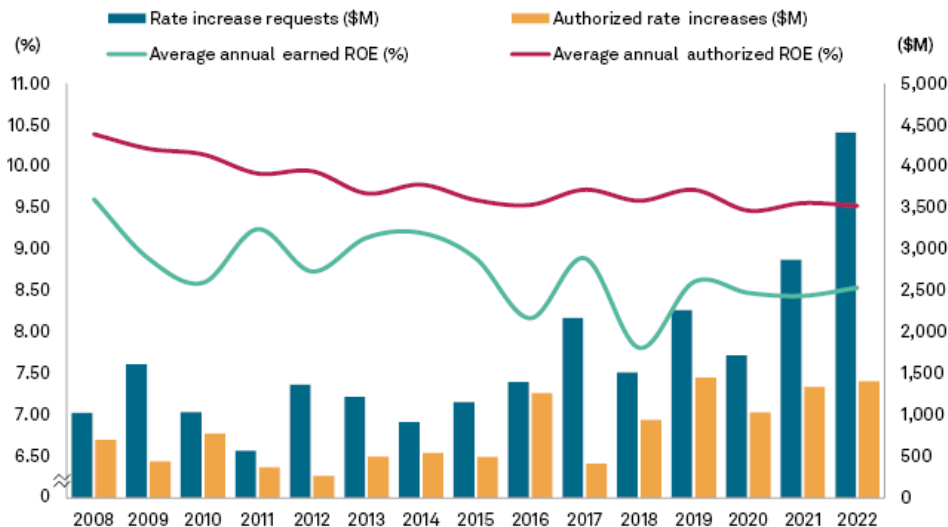
Data as of May 10, 2023.
 Includes a sample of US investor-owned utility operating subsidiaries tracked by Regulatory Research Associates.
 Source: Regulatory Research Associates, a group within S&P Global Commodity Insights.
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Utilities have noted several capital market factors that could increase their cost of equity, including changes in monetary policy, exceptionally high inflation, increasing interest rates and volatile market conditions. Inflation and rising interest rates, in particular, pose challenges to the recovery of capital investment and authorized ROEs.

Examining the period from 2008 to 2022, the variability in average earned ROE has only been slightly higher for electric utilities compared to gas utilities. The largest variance between average earned ROE and average authorized ROE occurred in 2009, the height of the global financial crisis. The average electric earned ROE fell short of the average authorized ROE by 195 basis points. At that time, the economy was in the depths of a sharp recession, and the US GDP declined 2.5%.

By comparison, the biggest variance for gas utilities occurred in 2018 when the average earned ROE was 178 basis points below the average authorized ROE.

Earned versus authorized ROE by gas utility operating subsidiary



Data as of May 10, 2023.
 Includes a sample of US investor-owned utility operating subsidiaries tracked by Regulatory Research Associates.
 Source: Regulatory Research Associates, a group within S&P Global Commodity Insights.
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Earned ROEs peaked for electric utilities in 2018 at 105 basis points above authorized ROEs on average but dropped in 2022 to 36 basis points below authorized ROEs.

Interestingly, in 2022, both gas and electric utilities experienced favorable weather. The US experienced a higher-than-average number of cooling degree days during the summer and a higher-than-average number of heating degree days during the waning months of the year.

Regulator-approved authorized ROEs have drifted steadily lower through the review period for both gas and electric utilities. Most recently, however, RRA has seen an increase in authorized ROEs. The average ROE authorized for electric utilities was 9.71% for rate cases decided in the first quarter of 2023, up from the 9.54% average observed in full year 2022. The average ROE authorized for gas utilities was 9.75% for cases decided in the first quarter of 2023, up from the 9.53% average observed in full year 2022.

For a chronological listing of the major energy rate case decisions issued during 2023, as well as historical summary data going back to 1990, see Regulatory Research Associates' latest "Rate Case Decisions Quarterly Update."

In RRA's view, macroeconomic factors could reduce customer and regulatory tolerance for rate increases, which could maintain downward pressure on authorized ROEs. If history is any guide, the contraction in spreads between US Treasury Bills and average authorized

returns may continue, causing authorized ROEs to remain relatively flat, or perhaps even fall in some instances, as interest rates continue to rise. For more information, refer to "Macro challenges give utility regulators a chance to differentiate themselves."

An important issue to note is whether the authorized equity return accurately represents the utility's cost of equity capital. Unlike the cost of debt, which can be observed, the cost of equity cannot be directly observed/measured as it is an investor expectation, and expectations, as a psychological concept, do not always lend themselves well to measurement. Regulators utilize various models to estimate the required ROE. Because it is not directly observable, the required ROE cannot be conclusively demonstrated that the authorized ROE, as estimated by regulators, is the company's actual cost of equity capital, which may be higher or lower.

Comments on methodology

The earned ROE data used in this analysis was primarily taken from the latest pull of data reflected in Financial Focus Utility Subsidiary Quality Measures Databooks, while the authorized ROE data is derived from RRA's "Major Rate Case Decisions" reports. Both are available in the Research Library.

The earned ROE data represents the simple average of the returns for the electric and gas utility operating companies in the Financial Focus coverage universe, and the authorized ROE is the simple average of the equity returns adopted by regulators in the specified 12-month period. As noted, RRA uses the average annual authorized ROE as a proxy for the average required equity return in each annual period.

RRA emphasizes that this analysis is an overall industry study and not one of individual companies. For some companies, determining the authorized ROE is difficult, if not impossible, since rate cases can be resolved through black box settlements that do not specify an authorized ROE. In addition, some utilities operate in multiple regulatory jurisdictions, and the authorized ROE can differ across jurisdictions. Also, for multijurisdictional companies, ROE determinations in various jurisdictions may have occurred in different years.

Regulatory Research Associates is a group within S&P Global Commodity Insights. Brian Collins contributed to this article.

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The battle against Michigan power outages yields little accountability

A year after a severe ice storm left 700,000 Michigan residents without power, calls for improved reliability and accountability continue.

BY BRIAN ALLNUTT • [ACCOUNTABILITY](#) • MARCH 1, 2024



Ice on power lines is one reason for power outages. Credit: roibu

- **Advocates criticize utilities for inadequate reliability improvements**

and accountability measures.

- **Utilities say they are working to enhance reliability through tree trimming and infrastructure upgrades.**
- **Political spending by utilities is seen as a barrier to enhancing grid reliability.**

An ice storm last February left Nick Selewski without power for five days while recovering from hip surgery, making repairing his backup generator difficult.

Selewski, a DTE Energy customer in Redford Township, was one of the 700,000 Michiganders who lost power during the storm.

A year later, Selewski doesn't think reliability has improved in Redford, where he said the power "seems to go off a lot." He lost power again in January for over four hours during another winter storm.

"My opinion is they [DTE] have to update their system," said Selewski, adding that better tree trimming could help reduce the outages that have plagued his neighborhood for years.

Utilities say they're working to address reliability by increasing tree trimming and upgrading infrastructure. But advocates say new laws and policies are needed to hold utilities accountable and protect ratepayers and, despite calls for accountability from lawmakers following the ice storm, little has happened.

And some lawmakers and advocates say that the millions of dollars utilities spend to influence the political process make it difficult to advance legislation to protect ratepayers. Several who spoke with Planet Detroit said Michigan's recently passed [clean energy legislation](#) was notable for including few consumer protections like outage credits or penalties for utilities that fail to meet reliability standards.

A recent [report](#) highlighted Michigan's long-term reliability problems, finding it was the [second worst state](#) for [power outages](#) between 2000 and 2021. Another [report](#) found that

Michigan was the fourth worst state for restoration time following an outage in 2021, with DTE taking the longest to restore power among Michigan's investor-owned utilities.

In 2022, DTE and Consumers Energy [showed modest improvement](#) in reliability compared to 2021, but the average customer was without power for roughly 10 hours and 8 hours, respectively. This was well above the [national average](#) of five and a half hours.

What's standing in the way of accountability for Michigan power outages?

Michigan Attorney General Dana Nessel criticized Consumers' most recent long-term distribution plan, which details investments in the grid, in Feb. 16 [comments](#) made to the Michigan Public Service Commission.

"Consumers Energy failed to articulate the degree of customer burden for their spending, does not focus enough on reliability improvements, and includes no accountability measures should they fail in their commitments," she said.

At a Feb. 22 [meeting](#) for the "Taking Back Our Power" coalition, which supports legislation to rein in utilities' political spending, House Majority Floor Leader Abraham Aiyash (D-Hamtramck) suggested that efforts to improve reliability and add consumer protections to the renewable energy package have been undermined by utilities, which have [spent heavily](#) against candidates opposed to their interests.

Aiyash said that utilities were "the elephant in the room" during negotiations over the bill package and that legislators worked with the understanding that utilities "have to at least be neutral on the passage of bills in order to move them across the finish line."

State regulators consider incentives while advocates push for power outage credits

In the past year, one of the more significant gestures toward accountability has been a [proposal](#) from the MPSC to create financial incentives and disincentives for utilities based on reliability, potentially collecting \$10 from ratepayers to create a fund for the program.

However, the proposal prompted [further outrage](#). Cities, ratepayer advocates, and business groups have criticized it, arguing it would reward utilities for service that would still not meet Michigan's reliability standards.

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Power outages in Michigan: Little accountability in ongoing battle

Amy Bandyk, executive director of the Citizens Utility Board of Michigan, said basic utility functions like reliability shouldn't be eligible for incentives, only penalties.

In a previous statement, CUB and other groups said such benefits were "misaligned with customer interests." They would come on top of the utilities' 9.9% return on equity, higher than most electric utilities.

The groups also argued that larger penalties were needed to reflect the true cost of outages and motivate utilities to improve reliability. They said the funds from these penalties should go to the most impacted ratepayers.

"It was a little upsetting to hear that we're even entering into a conversation about incentives when the idea of compensation for impacted ratepayers is constantly being knocked down and not even being considered for discussion," Rafael Mojica, program director for the energy justice nonprofit Soulardarity, said at a Feb. 12 meeting of the MPSC Financial Incentives/Disincentives Work Group.

In a statement to Planet Detroit, DTE said that the MPSC's proposal would more likely result in penalties for Michigan utilities than rewards.

The MPSC made modest changes to outage credits last year, increasing them from \$25 to \$35 for each day customers are without power and making them automatic. But it takes four days for the credits to kick in during "catastrophic" conditions, when more than 10% of customers are without power, with outages applied after shorter periods under other conditions.

Roshan Krishnan, a Michigan Environmental Justice Coalition policy associate, called the rules governing these credits "byzantine."

"The duration limits are such that you have to be an extreme outlier in order to receive the credits," he said.

The group has pushed for higher credits like those included in bills introduced in 2022, which would have created a \$5 hourly credit that increased with the duration of the outage, prohibited utilities from recovering the cost of credits, and created a \$100 credit for customers experiencing four outages in a year and \$200 for more than four. Those bills did not progress and have not been reintroduced.

CUB previously pushed for a [\\$2 per hour](#) outage credit, which Bandyk said would align with the losses customers experience. However, those forced to replace food in their freezers or pay for hotels may be paying much more. The MPSC [said](#) CUB's request was "not reasonable."

Some legislation to protect ratepayers was introduced last year, including [HB 5221](#), to limit utility charges for restoring service to \$25, and [HB 5216](#), to create incentives and penalties for utilities based on safety, reliability and environmental impact.

The bill also included language about moving the state away from frequent rate hike requests.

DTE signaled in early February that it would ask for [another rate increase](#) this spring, just months after securing a [\\$368 million](#) rate increase that added \$6.51 to the average bill.

Bandyk said [HB 5216](#) could limit the "revolving door rate increases" that "enrich utilities while continually squeezing customers."

Rep calls political spending a 'conflict of interest'

Rep. Dylan Wegela (D-Garden City) said utility spending on politics is at the heart of Michigan's ongoing reliability problems, calling the present system "a major conflict of interest."

"The regulators of the utilities are being influenced by the companies pretty severely," he said.

According to the most recent data from the watchdog group Energy and Policy Institute, 120 of 148 Michigan state lawmakers took money from political action committees affiliated with DTE, Consumers, or both in 2023. These PACs sent a total of \$329,750 to Democrats and \$235,2000 to Republicans.

These donations [often arrived](#) as lawmakers were demanding accountability. For example, Rep. Helena Scott (D-Detroit) received \$3,000 from DTE's PAC while leading a statewide listening tour for the newly created [Michigan House Energy Reliability, Resilience, and Accountability Task Force](#). Other lawmakers received far more, like House Speaker Joe Tate

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Power outages in Michigan: Little accountability in ongoing battle

(D-Detroit), who took in \$32,500. Neither Scott nor Tate responded to a request for comment.

DTE has also donated to dark money nonprofits involved in political causes, including a [\\$100,000 donation](#) in 2020 to a group opposed to Michigan COVID restrictions.

Wegela introduced two bills last week, [HB 5520](#) and [HB 5521](#), to ban dark money contributions to PACs and political campaigns and block any political nonprofit or PAC tied to an electric or natural gas company from doing so.

“It is cheaper for them to spend money on influencing us in Lansing than it is for them to actually update the grid,” Wegela said at the Feb. 22 Taking Back Our Power meeting. “They only have to spend a few million dollars to get a return on that investment...in the billions.”

DTE defended its political spending in a statement to Planet Detroit.

“We owe it to our customers and employees to support candidates for public office that help us meet our purpose of providing safe, reliable, affordable and clean energy for the 3 million plus residents and businesses we serve every day,” the company said.

DTE also said it would invest \$9 billion over the next five years in its [“four-point plan,”](#) which includes tree-trimming, rebuilding older portions of the grid, updating infrastructure and installing smart grid technology.

‘It’s not a coincidence that DTE spends a lot of money on Michigan politics’

On a Feb. 8 earnings call, DTE Chairman and CEO Jerry Norcia [said](#) circuits that received upgrades in the first half of 2023, experienced 33% fewer outages in the second half of the year compared to the second half of 2022.

Consumers Energy spokesperson Brian Wheeler said shareholders, not customers, paid for the company’s political spending.

He added that the company was working on its [“Reliability Roadmap,”](#) which includes tree-trimming, upgrading grid infrastructure, installing smart technology, and burying some sections of power lines. He said that in 2023, 9 in 10 customers who lost power had it restored in 24 hours.

Bandyk challenged Wheeler. “The revenue all comes from customers,” she said, adding that the company’s return on investment is excessive from CUB’s point of view.

Karlee Weinmann, research and communications manager for the watchdog group Energy and Policy Institute, questioned if there was the political will to advance legislation to protect ratepayers.

“It’s not a coincidence that DTE spends a lot of money on Michigan politics,” she said, “and then we end up with policy outcomes that are criticized as overly deferential to utilities.”



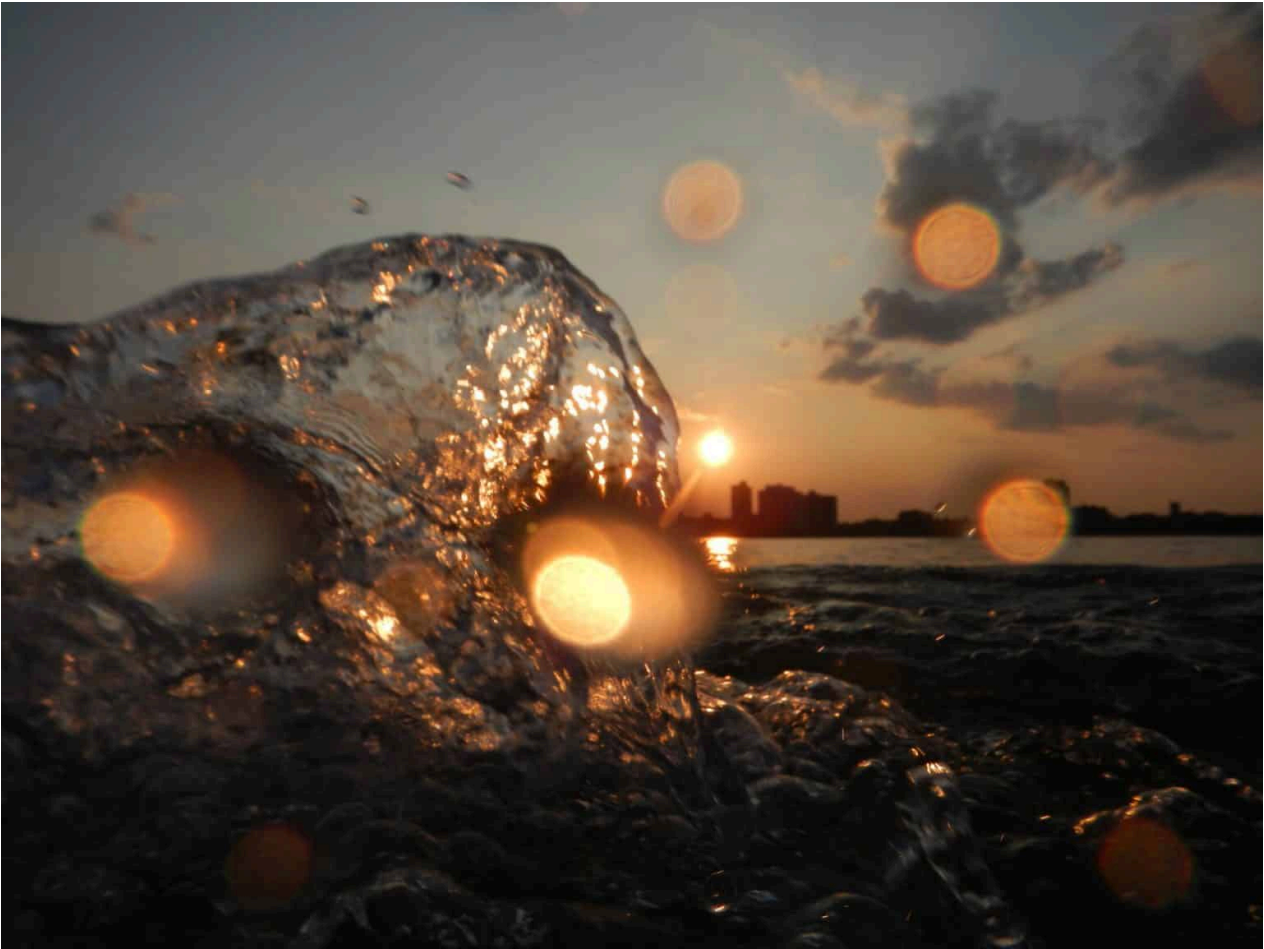
Author



BRIAN ALLNUTT

Brian Allnutt is a senior reporter for Planet Detroit. He covers the climate crisis, utilities, air quality, environmental justice and politics. His work has appeared in The Guardian, Bloomberg CityLab, Bridge Michigan and The Detroit News. Prior to joining Planet Detroit in 2019, he ran a farm and garden store in Southwest Detroit for six years. [More by Brian Allnutt](#)

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BY BRIAN ALLNUTT • [ACCOUNTABILITY](#) • JULY 25, 2024

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BY NINA IGNACZAK • [GUIDES](#) • JUNE 26, 2024

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BY NINA IGNACZAK • [NEWS](#) • JUNE 26, 2024

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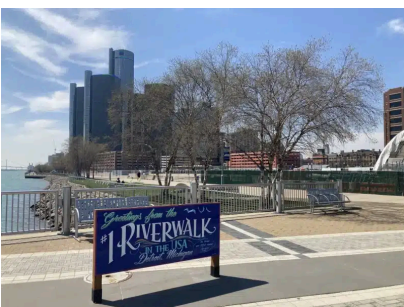
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PFAS detected in Metro Detroit's water supplies



Would \$10 million in fines push for DTE reliability?



What we're reading: William Smith charged in Detroit Riverfront Conservancy embezzlement, Michigan beaches closed for E. coli

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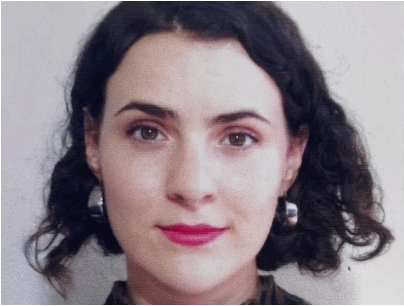
Stories of 2 Black vegans (and a spouse) navigating a meat-free lifestyle in Detroit

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THE HOME ENERGY AFFORDABILITY GAP 2022

(2ND SERIES) PUBLISHED APRIL 2023

Finding #1

Poverty Level	Home Energy Burden	
Below 50%	38%	Home energy is a crippling financial burden for low-income Michigan households. Michigan households with incomes of below 50% of the Federal Poverty Level pay 38% of their annual income simply for their home energy bills.
50 – 100%	20%	
100 – 125%	14%	
125 – 150%	11%	Home energy unaffordability, however, is not only the province of the very poor. Bills for households with incomes between 150% and 185% of Poverty take up 9% of income. Michigan households with incomes between 185% and 200% of the Federal Poverty Level have energy bills equal to 8% of income.
150 – 185%	9%	
185% - 200%	8%	

Finding #2

Poverty Level	Number of Households		
	Last Year	This Year	
Below 50%	251,274	239,539	The number of households facing unaffordable home energy burdens is staggering. According to the most recent five-year American Community Survey, nearly 240,000 Michigan households live with income at or below 50% of the Federal Poverty Level and face a home energy burden of 38%. And nearly 289,000 <i>additional</i> Michigan households live with incomes between 50% and 100% of the Federal Poverty Level and face a home energy burden of 20%. In 2022 the total number of Michigan households below 200% of the Federal Poverty Level fell slightly from the prior year.
50 – 100%	314,293	288,881	
100 – 125%	169,162	156,800	
125 – 150%	165,848	159,534	
150 – 185%	246,454	237,763	
185% - 200%	103,027	107,124	
Total < 200%	1,250,058	1,189,641	

Finding #3

<p>Home Energy Affordability Gap: 2011 (base year)</p>	<p>\$1,793,445,416</p>	<p>The Home Energy Affordability Gap Index (2nd Series) indicates the extent to which the Home Energy Affordability Gap has increased between the base year and the current year. In Michigan, this Index was 116.6 for 2022.</p>
<p>Home Energy Affordability Gap: 2022 (current year)</p>	<p>\$2,091,058,457</p>	<p>The Home Energy Affordability Gap Index (2nd Series) uses the year 2011 as its base year. The Index for 2011 is set equal to 100. A current year Index of more than 100 thus indicates that the Home Energy Affordability Gap for has increased since 2011. A current year Index of less than 100 indicates that the Home Energy Affordability Gap has decreased since 2011.</p>
<p>Home Energy Affordability Gap Index (2011 = 100)</p>	<p>116.6</p>	

Finding #4

	Last Year	This Year	
Gross LIHEAP Allocation (\$000's)	\$146,417	\$146,525	<p>Existing sources of energy assistance do not adequately address the Home Energy Affordability Gap in Michigan. LIHEAP is the federal fuel assistance program designed to help pay low-income heating and cooling bills. The gross LIHEAP allocation to Michigan was \$146.5 million in 2022 and the number of average annual low-income heating and cooling bills “covered” by LIHEAP was 112,625.</p> <p>In comparison, the gross LIHEAP allocation to Michigan in 2021 reached \$146.4 million and covered 143,406 average annual bills.</p>
Number of Households <150% FPL	900,577	844,754	
Heating/Cooling Bills “Covered” by LIHEAP	143,406	112,625	

Finding #5

Primary Heating Fuel	Penetration by Tenure		
	Owner	Renter	
Electricity	6%	22%	<p>The Home Energy Affordability Gap in Michigan is not solely a function of household incomes and fuel prices. It is also affected by the extent to which low-income households use each fuel. All other things equal, the Affordability Gap will be greater in areas where more households use more expensive fuels.</p> <p>In 2022, the primary heating fuel for Michigan homeowners was Natural Gas (78% of homeowners). The primary heating fuel for Michigan renters was also Natural Gas (70% of renters).</p> <p>Changes in the prices of home energy fuels over time are presented in Finding #6 below.</p>
Natural gas	78%	70%	
Fuel Oil	1%	0%	
Propane	10%	4%	
All other	5%	4%	
Total	100%	100%	

Finding #6

Fuel	2020 Price	2021 Price	2022 Price	
Natural gas heating (ccf)	\$0.761	\$0.762	\$0.992	<p>In Michigan, natural gas prices rose 30.2% during the 2021/2022 winter heating season. Fuel oil prices rose substantially 43.6% and propane prices rose 33.9%.</p>
Electric heating (kWh)	\$0.167	\$0.166	\$0.180	
Propane heating (gallon)	\$1.810	\$1.994	\$2.669	
Fuel Oil heating (gallon)	\$2.510	\$2.523	\$3.622	<p>Heating season electric prices rose modestly 8.4% in the same period and cooling season electric prices rose 9.2%.</p>
Electric cooling (kWh)	\$0.174	\$0.173	\$0.189	

Home Energy Affordability Gap Dashboard -- Michigan 2022 versus 2021

<p>AVERAGE DOLLAR AMOUNT BY WHICH ACTUAL HOME ENERGY BILLS EXCEEDED AFFORDABLE HOME ENERGY BILLS FOR HOUSEHOLDS BELOW 200% OF POVERTY LEVEL.</p> <p>2021: \$1,405 per household</p> <p>2022: \$1,758 PER HOUSEHOLD</p>	<p>AVERAGE TOTAL HOME ENERGY BURDEN FOR HOUSEHOLDS BELOW 50% OF POVERTY LEVEL.</p> <p>2021: 34% of household income</p> <p>2022: 38% OF HOUSEHOLD INCOME</p>
<p>PERCENT OF INDIVIDUALS BELOW 100% OF POVERTY LEVEL.</p> <p>2021: 14% of all individuals</p> <p>2022: 13% OF ALL INDIVIDUALS</p>	<p>NUMBER OF AVERAGE LOW-INCOME HEATING/COOLING BILLS COVERED BY FEDERAL HOME ENERGY ASSISTANCE.</p> <p>2021: 143,406 bills covered</p> <p>2022: 112,625 BILLS COVERED</p>
<p>PRIMARY HEATING FUEL (2022):</p> <p>HOMEOWNERS - NATURAL GAS *** TENANTS - NATURAL GAS</p>	

NOTES AND EXPLANATIONS

The 2012 Home Energy Affordability Gap, published in May 2013, introduced the 2nd Series of the annual Affordability Gap analysis. The 2012 Home Energy Affordability Gap going forward cannot be directly compared to the Affordability Gap (1st Series) for 2011 and earlier years. While remaining fundamentally the same, several improvements have been introduced in both data and methodology in the Affordability Gap (2nd Series).

The most fundamental change in the Home Energy Affordability Gap (2nd Series) is the move to a use of the American Community Survey (ACS) (5-year data) as the source of foundational demographic data. The Affordability Gap (1st Series) relied on the 2000 Census as its source of demographic data. The ACS (5-year data) offers several advantages compared to the Decennial Census. While year-to-year changes are smoothed out through use of 5-year averages, the ACS nonetheless is updated on an annual basis. As a result, numerous demographic inputs into the Affordability Gap (2nd Series) will reflect year-to-year changes on a county-by-county basis, including:

- The distribution of heating fuels by tenure;
- The average household size by tenure;
- The number of rooms per housing unit by tenure;
- The distribution of owner/renter status;
- The distribution of household size;
- The distribution of households by ratio of income to Poverty Level;

Data on housing unit size (both heated square feet and cooled square feet) is no longer calculated based on the number of rooms. Instead, Energy Information Administration/Department of Energy (EIA/DOE) data on square feet of heated and cooled living space per household member is used beginning with the Home Energy Affordability Gap (2nd Series). A distinction is now made between heated living space and cooled living space, rather than using total living space.

The change resulting in perhaps the greatest dollar difference in the aggregate and average Affordability Gap for each state is a change in the treatment of income for households with income at or below 50% of the Federal Poverty Level. In recent years, it has become more evident that income for households with income below 50% of Poverty Level is not normally distributed. Rather than using the mid-point of the Poverty range (i.e., 25% of Poverty Level) to determine income for these households, income is set somewhat higher (40% of Poverty). By setting income higher, both the average and aggregate Affordability Gap results not only for that Poverty range, but also for the state as a whole, will be lower. The Affordability Gap results for other Poverty ranges remain unaffected by this change.

Another change affecting both the aggregate and average Affordability Gap is a change in the definition of “low-income.” The Home Energy Affordability Gap (2nd Series) has increased the definition of “low-income” to 200% of the Federal Poverty Level (up from 185% of Poverty). While this change may increase the aggregate Affordability Gap, it is likely to decrease the average Affordability Gap. Since more households are added to the analysis, the aggregate is likely to increase, but since the contribution of each additional household is less than the contributions of households with lower incomes, the overall average will most likely decrease.

Most of the Home Energy Affordability Gap calculation remains the same. All references to “states” include the District of Columbia as a “state.” Low-income home energy bills are calculated in a two-step process: First, low-income energy consumption is calculated for the following end-uses: (1) space heating; (2) space cooling; (3) domestic hot water; and (4) electric appliances (including lighting and refrigeration). All space cooling and appliance consumption is assumed to involve only electricity. Second, usage is multiplied by a price per unit of energy by fuel type and end use by time of year. The price of electricity, for example, used for space cooling (cooling months), space heating (heating months), and appliances (total year) differs to account for the time of year in which the consumption is incurred.

Each state’s Home Energy Affordability Gap is calculated on a county-by-county basis. Once total energy bills are determined for each county, each county is weighted by the percentage of persons at or below 200% of the Federal Poverty Level to the total statewide population at or below 200% of the Federal Poverty Level to derive a statewide result. Bills are calculated by end-use and summed before county weighting.

LIHEAP comparisons use gross allotments from annual baseline LIHEAP appropriations as reported by the federal LIHEAP office. They do not reflect supplemental appropriations or the release of LIHEAP “emergency” funds. The number of average heating/cooling bills covered by each state’s LIHEAP allocation is determined by dividing the total base LIHEAP allocation for each state by the average heating/cooling bill in that state, the calculation of which is explained below. No dollars are set aside for administration; nor are Tribal set-asides considered.

State financial resources and utility-specific rate discounts are not considered in the calculation of the Affordability Gap. Rather, such funding should be considered available to fill the Affordability Gap. While the effect in any given state may perhaps seem to be the same, experience shows there to be an insufficiently authoritative source of state-by-state data, comprehensively updated on an annual basis, to be used as an input into the annual Affordability Gap calculation.

Energy bills are a function of the following primary factors:

- Tenure of household (owner/renter)
- Housing unit size (by tenure)
- Heating Degree Days (HDDs) and Cooling Degree Days (CDDs)
- Housing size (by tenure)
- Heating fuel mix (by tenure)
- Energy use intensities (by fuel and end use)

Bills are estimated using the U.S. Department of Energy’s “energy intensities” published in the DOE’s Residential Energy Consumption Survey (RECS). The energy intensities used for each state are those published for the Census Division in which the state is located. Heating Degree Days (HDDs) and Cooling Degree Days (CDDs) are obtained from the National Weather Service’s Climate Prediction Center on a county-by-county basis for the entire country.

End-use consumption by fuel is multiplied by fuel-specific price data to derive annual bills. State price data for each end-use is obtained from the Energy Information Administration’s (EIA) fuel-specific price reports (e.g., Natural Gas

Monthly, Electric Power Monthly). State-specific data on fuel oil and kerosene is not available for all states. For those states in which these bulk fuels have insufficient penetration for state-specific prices to be published, prices from the Petroleum Administration for Defense Districts (PADD) of which the state is a part are used.

The Home Energy Affordability Gap Index (2nd Series) uses 2011 as its base year. The base year (2011) Index has been set equal to 100. A current year Index of more than 100 thus indicates that the Home Energy Affordability Gap has increased since 2011. A current year Index of less than 100 indicates that the Affordability Gap has decreased since 2011. The Affordability Gap Index was, in other words, re-set in 2011. The Affordability Gap Index (2nd Series) for 2012 and beyond cannot be compared to the Affordability Gap Index (1st Series) for 2011 and before.

The Home Energy Affordability Gap is a function of many variables, annual changes in which are now tracked for nearly all of them. For example, all other things equal: increases in income would result in decreases in the Affordability Gap; increases in relative penetrations of high-cost fuels would result in an increase in the Gap; increases in amount of heated or cooled square feet of living space would result in an increase in the Gap. Not all variables will result in a change in the Affordability Gap in the same direction. The annual Affordability Gap Index allows the reader to determine the net cumulative impact of these variables, but not the impact of individual variables.

Since the Affordability Gap is calculated assuming normal Heating Degree Days (HDDs) and Cooling Degree Days (CDDs), annual changes in weather do not have an impact on the Affordability Gap or on the Affordability Gap Index.

Price data for the various fuels underlying the calculation of the Home Energy Affordability Gap (2nd Series) was used from the following time periods:

<i>Heating prices</i>	
Natural gas	February 2022
Fuel oil ***	Week of 02/7/2022
Liquefied petroleum gas (LPG) ***	Week of 02/7/2022
Electricity	February 2022
Cooling prices	
August 2022	
<i>Non-heating prices</i>	
Natural gas	May 2022
Fuel oil ***	Week of 10/03/2022
Liquefied petroleum gas (LPG) ***	Week of 10/03/2022
Electricity	May 2022

***Monthly bulk fuel prices are no longer published. Weekly bulk fuel prices are published during the heating months (October through March). The prices used are taken from the weeks most reflective of the end-uses to which they are to be applied. Prices from the middle of February best reflect heating season prices. Bulk fuel prices from October best reflect non-heating season prices.

MPSC Case No: U-21534

Requester: DAAO

Question No.: DAAODE-3.1

Respondent: N. Foley

Page: 1 of 1

Question: Does DTE Electric Company ("DTE Electric") have a standard definition of "affordability" that is consistently applied by all witnesses in this case? If so, please state that definition as used in preparing testimony. If not, please explain why there is no uniform definition across witnesses.

Answer: The Company does not have a standard definition of affordability since a customer's assessment of what's "affordable" could be different for each of the Company's roughly 2.2 million customers. Instead, the Company uses the term "affordable" or "affordability" to reflect keeping customer bills as low as possible while still recovering the costs that are needed to deliver safe, reliable energy and to continue the journey toward a more reliable grid and cleaner sources of generation.

Attachment: *None*

MPSC Case No: U-21534

Requester: DAAO

Question No.: DAAODE-1.35

Respondent: A. Willis

Page: 1 of 1

Question: 35. Has DTE conducted any affordability analysis that considers the resources of its customers, or its customers' ability to pay the rates charged by the Company? If yes, please provide a copy of that analysis.

Answer: No, to my knowledge the Company has not

Attachment: *None*

MPSC Case No: U-21534

Requester: DAAO

Question No.: DAAODE-1.36

Respondent: A. Willis

Page: 1 of 1

Question: 36. When DTE develops its rate requests, what analyses, if any, does it conduct in order to identify the affordability gap (i.e., the amount of money consumers pay for electricity over 3% of their income)?

Answer: To my knowledge, DTE conducts no such analysis.

Attachment: *None*

MPSC Case No: U-21534

Requester: DAAO

Question No.: DAAODE-1.37

Respondent: A. Willis

Page: 1 of 1

Question: 37. Has DTE conducted any analysis to determine how its requested rate in this case would impact the affordability gap? If yes, please provide any analyses completed by the Company.

Answer: To my knowledge, DTE has conducted no such analysis.

Attachment: *None*

MPSC Case No: U-21534

Requester: DAAO

Question No.: DAAODE-3.2a

Respondent: P. Sharma

Page: 1 of 1

Question: Witness Sharma testifies at page 31, lines 14-16: "In order to optimize operating cost and meet customer affordability targets the Company must invest in streamlining all business processes." Please identify with specificity each "customer affordability target" referenced in this statement. For each such target, please provide the following:

a. The precise metrics, calculations, and/or formulas used to quantify the target;

To the extent the customer affordability targets vary by customer segment, please provide the definition of the customer segments, the number of customers in each segment, and the information requested above in 2.a., 2.b., 2.c. and 2.d. for each segment.

Answer: The requested information is unavailable in a quantified format. Organizational Management Optimization reduces operational drag by improving system replication between SAP on-premise and SuccessFactors cloud. The IT solution does not directly impact customer affordability targets however it will reduce manual effort by 100%, improve transaction accuracy and speed, hence increasing efficiency gains by 30%. By resolving manual efforts due to system replication between SAP and SuccessFactors, additional system automation and self-service capabilities can be implemented, improving employee engagement, efficiency, and response times by 10%.

Attachment: *None*

MPSC Case No: U-21534

Requester: DAAO

Question No.: DAAODE-3.2b

Respondent: P. Sharma

Page: 1 of 1

Question: Witness Sharma testifies at page 31, lines 14-16: "In order to optimize operating cost and meet customer affordability targets the Company must invest in streamlining all business processes." Please identify with specificity each "customer affordability target" referenced in this statement. For each such target, please provide the following:

b. The numerical value of the target in the test year and the four prior years; To the extent the customer affordability targets vary by customer segment, please provide the definition of the customer segments, the number of customers in each segment, and the information requested above in 2.a., 2.b., 2.c. and 2.d. for each segment.

Answer: Please see response to DAAODE-3.2a

Attachment: *None*

MPSC Case No: U-21534

Requester: DAAO

Question No.: DAAODE-3.2c

Respondent: P. Sharma

Page: 1 of 1

Question: Witness Sharma testifies at page 31, lines 14-16: "In order to optimize operating cost and meet customer affordability targets the Company must invest in streamlining all business processes." Please identify with specificity each "customer affordability target" referenced in this statement. For each such target, please provide the following:

c. Actual performance in relation to the target in the test year and the four prior years;

To the extent the customer affordability targets vary by customer segment, please provide the definition of the customer segments, the number of customers in each segment, and the information requested above in 2.a., 2.b., 2.c. and 2.d. for each segment.

Answer: Please see response to DAAODE-3.2a

Attachment: *None*

MPSC Case No: U-21534

Requester: DAAO

Question No.: DAAODE-3.2d

Respondent: P. Sharma

Page: 1 of 1

Question: Witness Sharma testifies at page 31, lines 14-16: "In order to optimize operating cost and meet customer affordability targets the Company must invest in streamlining all business processes." Please identify with specificity each "customer affordability target" referenced in this statement. For each such target, please provide the following:

d. Documents sufficient to show how the target was developed and approved.

To the extent the customer affordability targets vary by customer segment, please provide the definition of the customer segments, the number of customers in each segment, and the information requested above in 2.a., 2.b., 2.c. and 2.d. for each segment.

Answer: Please see response to DAAODE-3.2a

Attachment: None

MPSC Case No: U-21534

Requester: DAAO

Question No.: DAAODE-3.3

Respondent: P. Sharma

Page: 1 of 1

Question: Please produce all documents or communications in the possession or control of DTE Electric that describe, quantify, or otherwise refer to the "customer affordability targets" identified by Witness Sharma on page 31 of his direct testimony, including but not limited to any documents reflecting how DTE Electric calculates and tracks performance in relation to said targets.

Answer: No documents or communications from this IT business case will tie directly to customer affordability targets. Please see response to DAAODE-3.2a.

Attachment: None

SOCIAL EQUITY IN STATE ENERGY POLICY: INDICATORS FOR MICHIGAN'S ENERGY EFFICIENCY PROGRAMS

SUMMARY

State policies providing residential energy efficiency programs have emerged over the past decade with the goal of producing widespread economic and environmental benefits. While these policies have largely achieved and surpassed legislated objectives, the degree to which program benefits are distributed amongst population subgroups, particularly low-income residents, remains unclear. On average in the United States, low-income households are less energy efficient contributing towards 1 in 3 of these homes struggle to afford energy, and 1 in 5 facing decisions between energy use and other necessities such as food or medicine. Energy efficiency programs however, may offer a critical avenue in alleviating energy poverty. This study focuses on measuring the social equity achieved through Michigan's "Energy Waste Reduction" programs for the state's two major investor-owned utilities (IOUs). The study establishes a novel, quantitatively sensitive measure, called the Energy Efficiency Equitable baseline (E3b). This measure is used to identify disparities that occur in policy decision-making and outcomes. Particularly, the study quantifies disparities in program investments and household energy savings on a per capita basis between low and high-income residential groups. E3b reveals trends in policy outcomes from a social perspective, illustrating high variability in social equity between energy type and providers. Broad patterns showed that gas program investments approached equitable levels, however, electric Low-Income program investments fall well below the E3b. Household energy savings also demonstrated substantial disparities, where per capita ratios reached up to 22:1 when comparing high to low-income program benefits. As states aim to transition towards clean and affordable energy, social equity must be quantitatively evaluated to prevent discriminatory impact on vulnerable populations.



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KEY FINDINGS

- 35% of Michigan residents qualify for Low-Income Energy Waste Reduction (EWR) programs; this ranges widely (30-40%), depending upon utility territory.
- One key policy consideration for MI low-income consumers: In approving utility EWR Plans, the Michigan Public Service Commission, must consider, “the extent to which the plan provides programs that are *available, affordable, and useful* to all customers.” -P.A. 342
- There is a \$73.4 million gap in utility investment levels between equitable (E3B) and actual low-income program investments. This gap is only \$1.0 million *gas* LI programs (2010-2016).
- On average, utilities invested 3 times less on Low-Income (electric) programs per capita, and near equitable levels for Low-Income gas programs .
- Low-income consumers overall recieved 10 times less home energy savings (electric) and 3.4 times less home energy savings (gas) when compared to high-income consumers. The greatest difference found, by utility, was 22 times higher.

I. BACKGROUND

ENERGY POVERTY

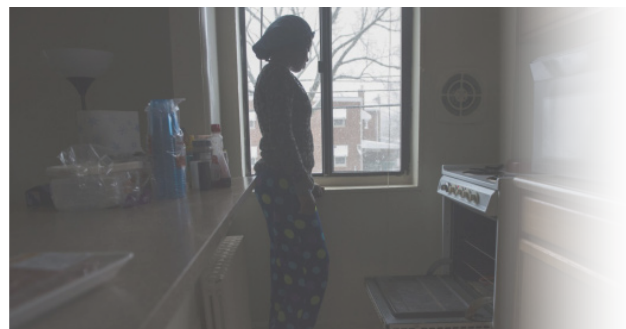
The relationship between residents and energy use varies between sociodemographic groups and the homes in which they live. This study focuses on income, as distinguished by state policy, however, the social perspective applied in this study can also be applied to groups by race, age, ability, and tenure.

Low-income consumers, defined as households earning below 200% of the federal poverty level (FPL), oftentimes occupy older homes which are energy inefficient. This contributes to a high energy-use-intensity (EUI), a proxy for energy waste, when compared to higher-income households. Nearly one-third of US homes struggle to afford adequate energy, and one in five homes trade-off energy use with other necessities such as food or medicine.¹ When a household’s energy burden, or the percentage of income allocated towards energy bills, surpasses 10%, the home is considered to suffer energy poverty.² Above 6%, the burden is considered unaffordable. In Michigan studies show that in 2016, 999,442

households experienced an energy burden greater than 10% while earning less than 150% of the FPL.³ For low-income households, the average home energy affordability gap (HEAG) is \$1,250 per year, totalling \$1.7 billion in 2016 for Michigan.⁴ Energy poverty has been shown to lead to negative mental and physical health impacts, recurring debt, and homelessness.⁵ In severe cases, as described in the NAACP report, Lights Out in the Cold (2017), the struggle to afford heating bills in Michigan winters, has resulted in hypothermia and death.⁶ Similarly, populations unable to afford cooling their homes, are vulnerable to the health impacts of urban heat islands.⁷

POLICY & SOCIAL PROBLEMS OF ENERGY

State and federal policies to address the social concerns surrounding energy affordability include energy shut-off protections, bill-payment assistance programs, home weatherization and energy efficiency programs.⁸ Major federal policies include Low Income Home Energy Assistance Program (LIHEAP), and the Weatherization Assistance Program (WAP). While many states such as Michigan have legislated bill-payment assistance programs, policy targeting the reduction of energy waste at the household level presents an alternative approach that empowers households facing energy poverty and reduces the home energy affordability gap. For many low-income energy advocates, these state energy efficiency programs offer hope for a sustainable path towards eliminating energy poverty. Yet, while reports claim widespread social and economic benefits, concerns have been raised in regards to utility investment levels in programs targeting low-income residents and the impact on achieving an equitable energy future.



Source: Amanda Voisard, Washington Post (2016)

Urban Energy Justice Lab
University of Michigan

MI ENERGY EFFICIENCY POLICY: GOALS & ACCOMPLISHMENTS

The social, economic and environmental benefits of energy efficiency have driven policy changes in efficiency standards in residential building, appliance and vehicles over the past several decades. These policies have led to substantial social benefits including reductions in atmospheric emissions, consumer economic gains, and national security through reduced dependency on foreign energy. However, to understand the relative impact of energy efficiency policies from a social perspective, the distribution of costs and benefits between population subgroups must be clearly understood to avoid unintended social consequences.

Energy efficiency legislation was first signed into Michigan law in 2008 as the Clean, Renewable and Efficient Energy Act, and amended in 2016 as the Clean and Renewable Energy and Energy Waste Reduction Act. This establishes standards for utility companies to achieve energy savings equivalent to 0.75% and 1% of retail sale volumes from the previous year for natural gas and electricity respectively. Regulatory agency reports show that the energy savings resultant of this policy (Subpart C. Energy Waste Reduction), has saved billions of dollars in energy costs to commercial, industrial, and residential consumers through these state regulated, utility managed, energy efficiency programs. As in many other state energy efficiency policies, energy providers are required to achieve these annual energy savings targets through EWR Plans, which outline the utility's portfolio composed of various Residential and Commercial & Industrial (C&I) programs.

Policy Goals:

“Help customers reduce energy waste” &
“To reduce the future costs of provider service to customers” -P.A. 342

Utility companies accomplish this through their range of programs targeting various consumer markets and employing a variety of energy savings interventions. For residential energy consumers, these programs are tailored towards two socioeconomic groups: low-income and non-low-income (higher-income).

In 2016, the Michigan Licensing and Regulatory Affairs (LARA) reported that EWR programs across

the state resulted in consumer electricity savings of 1.1 million MWh and natural gas savings of 4.58 million Mcf. Utility companies spent \$262 million of rate-payer funds on these programs, and captured a life cycle savings of \$1.1 billion for consumers, demonstrating an aggregate return of \$4.35 for every \$1 invested across the state as a whole.

To incentivize energy savings beyond legislated standards, utilities exceeding these goals are granted financial incentives up to the lesser amount of:

Utility Financial Incentives:

20% of the annual EWR program expenditures OR
30% of the net-present-value of life-cycle cost reductions -P.A. 342

PROGRAM REVENUE & SPENDING

To fund these programs, energy providers, whose rates are regulated by the state, are allowed to recover program costs from two distinct customer classes: Residential (including low-income residents), and Commercial and Industrial (C&I). Base revenue, is generated through an on-bill surcharge to consumers. The residential consumer class is charged volumetrically, dependent upon energy use (kWh, ccf), while C&I consumers are charged on a per-meter basis. The allocation of base revenue funds are restricted on a customer class basis. In other words, funds generated in the residential class were not allocated towards C&I programs. Both customer classes contribute to low-income programs. Similarly, utilities recover performance-based financial incentives through an on-bill surcharge.

POLICY: LOW-INCOME CONSUMER OUTCOMES

The Residential customer class in Michigan is composed of 9.7 million residents, 3.4 million (35%) of which qualify as low-income, face gaps in unaffordability and are likely to experience energy poverty. While not officially recognized within state legislation, regulatory agencies, energy providers, and low-income advocacy groups frequently cite the benefits of energy efficiency policy in reducing the impacts of energy poverty. However, the broad impact on energy poverty remains unclear.

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MI EWR Act requires that utility companies offer programs for low-income residents, calling for “an established spending level” on Low-Income programs. While this study was unable to identify a standardized spending level, this requirement appears to be met through the EWR plan filing process, which requires Michigan Public Service Commission (MPSC) approval. EWR stipulates that in order to approve an EWR plan:

Michigan Public Service Commission

must consider: “The extent to which the energy waste reduction plan provides programs that are *available, affordable, and useful* to all customers” (PA 342)

Metrics for *availability, affordability and usefulness* were unable to be identified in this study, and are addressed in the Policy Recommendation section. Once approved, Low-Income program investment levels are subject to change. Commission Order U-15806 allows energy providers to reallocate up to 30% of any program’s designated funds elsewhere.

Because residential programs employ tailored approaches for incentivizing participation, funding low-income specific programs is crucial to reach these households. While Low-Income programs are often free, non-low-income programs provide subsidized rates for incentives to participate. Commonly, identical or similar programs are offered separately as Low-Income or “Residential” (referred to henceforth as “High-Income” programs).

Policy also requires that collectively, program spending must prove to be cost-effective. However, this excludes Low-Income programs. The cost-benefit is measured as the Utility-Resource-Cost-Test (URCT), however, this cost-benefit metric does not account for the non-energy impacts (NEI’s), and reduced demand for bill payment assistance that result from Low-Income programs.

In this study, the social disparities in distribution (between Low and High-Income programs) of rate-payer revenue (utility investments) and program benefits (household energy savings) are quantified. The results show wide variation in equity achieved by energy type (electric/gas) and provider (Utility A/Utility B), raising social and economic concerns for policy efficacy for providing household energy savings benefits to one-third of the state’s population. This study demonstrates the necessity for developing metrics for EWR plan approval on the basis of

accessibility, affordability and usefulness, and suggests the need for a Low Income oriented cost-benefit analysis tool.

From an energy justice perspective, energy efficiency policies have the significant potential to reduce energy poverty and the home energy affordability gap, but is shown here, that these policies are susceptible to furthering social inequities. As energy efficiency forms an integral role in planning for state energy demands, it is essential that policy makers, regulatory agencies and utility companies examine the impact from a social perspective in order to reach a more just energy future.

II. STUDY SCOPE & METHODS

This study establishes a metric tool, the Equitable Energy Efficiency baseline (E3b), to quantify the gap between equitable and actual levels in utility program investments and household energy savings. Trends from Michigan’s two main investor-owned utility (IOU) providers, referred to as Utility A and Utility B, are compared spanning the policy implementation period from 2010-2016.

Data on utility investments and energy savings were extracted from annual regulatory reports detailing electric and gas EWR programs for each utility. 2009 data was excluded as a partial (first) year with incompatible data reports for the purposes of this study. Slight variation between utility reporting required minor data revisions, specifically the removal of Utility B pilot program data which did not differentiate Residential and C&I pilot programs comparably to Utility A).

Each utility territory, or coverage area, is unique in terms of population characteristics (figures 1 and 2). To assess equitable distribution program spending and energy savings between utility providers, these variables were normalized by the proportion of low-income residents in each utility territory. Spatial data describing energy provider coverage area at the subtownship level was provided by the Michigan Agency for Energy and paired with US Census Bureau 5-year ACS data (2015) to accurately differentiate variation in low-income

population levels. Populations in subtownships which had multiple, or overlapping energy providers, were attributed to both utility populations as consumer choices were indiscernible in these areas. Actual data for utilities' customer population socioeconomic composition were unavailable. To quantify disparities in utility investments in Low-Income programs, the E3b was established for each utility by energy type (Utility A electric, Utility A gas, Utility B electric, Utility B gas). This was done for each provider, by multiplying the annual sum of residential program investments (Low and High-Income) with the proportion of low-income residents in the respective territory. Investment deficit/surplus was calculated as the difference between actual spending and the E3b.

To compare disparities in per capita investments and energy savings by energy provider, utility reported data were compared to the territory population. Given the imprecision in determining actual utility customer populations, these values should be used for relative comparison only.

The focus of this study is limited to quantifying disparities in investments and energy savings between programs targeting low- and high-income residents. While it is plausible that "Residential (non-low-income programs) may spill-over to low-income consumers, this study distinguishes these programs with the assumption that this impact is minimal. Further studies are necessary to better assess the accessibility and impact of non-low-income residential programs on low-income customers. As previously noted, several non-low-income residential programs, have similar or identical counterparts offered as Low Income programs. Hence this study distinguishes the two as High Income and Low Income programs based upon their targeted markets.

III.RESULTS

VARIATION IN LOW-INCOME POPULATION BY UTILITY TERRITORY

There are 3,390,700 Michigan residents who qualify for Low-Income EWR programs, however, they are not evenly distributed across geographic space (eg. utility coverage area). Spatial variation in income levels are illustrated in Figures 1 and 2 for electric provider territories. Depending on the service and provider, the percentage of low-income

Table 1. Percent population low-income by utility territory. (Source: Michigan Agency for Energy, US Census ACS 5-year 2015)

Population	State of Michigan	Utility A Electric	Utility B Electric	Utility A Gas	Utility B Gas
Total Population	9,677,170	4,348,955	4,675,213	4,785,515	3,577,48
Low-Income Population	3,390,700 (35.04%)	1,584,048 (36.42%)	1,549,477 (33.14%)	1,435,612 (30.00%)	1,428,0 (39.92%)
Minority Population	2,076,696 (20.98%)	651,989 (14.5%)	1,361,406 (28.73%)	825,571 (17.13%)	1,087,96 (29.71%)

consumers ranges between 30.0-39.9% and 14.5-29.7% for minority populations (table 1).

Low-income populations for electric coverage area varies between 36.4% (Utility A) and 33.1% (Utility B) and racial composition varies by minority populations composing 14.5% (Utility A) and 28.7% (Utility B). Utility B territory encompasses 1.4 million non-white Michigan residents, including the largest black population in the state located in Detroit.

Population socioeconomic characteristics vary more greatly for gas service providers. Utility A Gas territory includes 4.8 million residents of which, 30.0% qualify for Low-Income programs, while Utility B gas, with 3.6 million residents, encompasses 39.9% low-income. Utility B gas also has 12.6% higher proportion of minority residents.

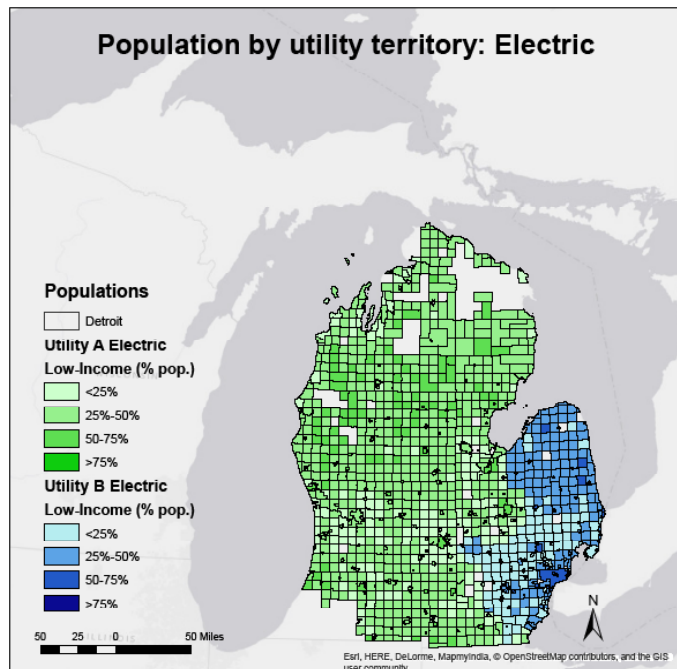


Figure 1. Low-income population distribution for Utility A and Utility B territories. (Source: US Census, Michigan Agency for Energy)

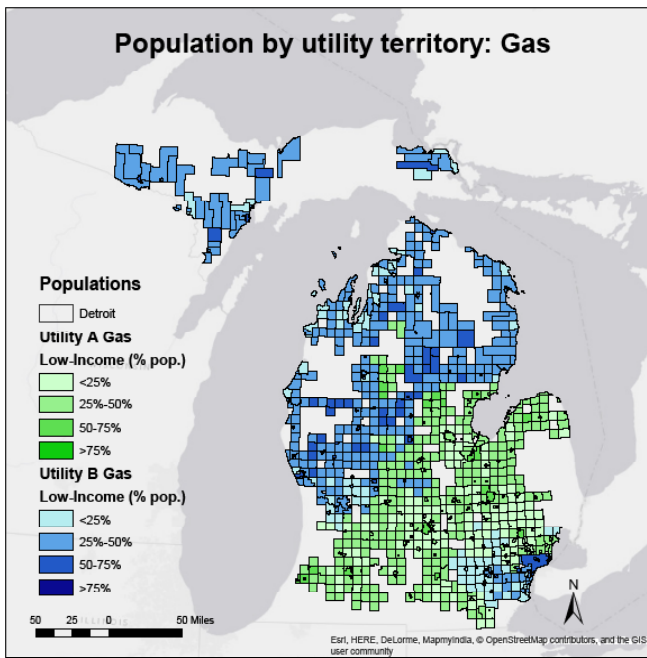


Figure 2. Low-income population distribution for Utility A and Utility B Gas territories. (Source: US Census, Michigan Agency for Energy)

DISPARITIES IN EQUITABLE UTILITY INVESTMENTS AND CONSUMER BENEFITS

Summatively, Utility A and Utility B spent \$596 million on EWR Residential programs between 2010-2016. For electric programs, Utility A invested \$160 million total, (\$18.7 million Low-Income). Utility B invested \$237 million total (\$40 million Low-Income). For gas programs, Utility A invested \$187 million, (\$62 million Low-Income) and Utility B \$112 million total (\$38 million Low-Income). Comparing the actual investment levels in Low-Income programs to the territory tailored E3b, a deficit for Low-Income program investments of \$74.3 million (electric) and \$1.0 million (gas) was identified (Table 2). Figure 7 demonstrates that there is a high degree of variability in proximity to E3b investments by energy type and provider. On average, gas programs were funded closer to E3b (1% below) than electric programs (56% below).

INVESTMENTS IN ENERGY EFFICIENCY ELECTRIC PROGRAMS

Investment trends for both the Utility A and Utility B electric programs demonstrate a substantial deficit between actual and E3b levels from 2010-2016. Yearly, deficits ranged from \$1.5 million to \$7.4 million (Utility A) or 40%-82% under the E3b, and for Utility B: \$3.5 to \$6.9 million, or 39%-61% under the E3b (figures 3-7). Recently (2016), the equitable investment deficit for electric programs totalled \$13.6 million for Utility A (\$6.7 million or 64% under E3b) and Utility B (\$6.9 million or 51% under E3b). The total spending deficit for electric Low-Income programs from 2010-2016 was \$73.4 million, approximately 55.5% under the equitable baseline (table 2).

INVESTMENTS IN ENERGY EFFICIENCY

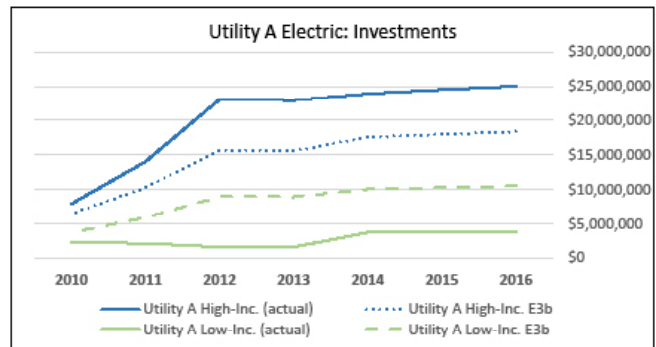


Figure 3. Actual vs. Equitable (E3b) spending for Utility A electric EWR programs between 2010-2016. Source: EWR Annual Reconciliation Reports (Utility A, 2010-2016), US Census Bureau 5-year ACS 2015, Michigan Agency for Energy.

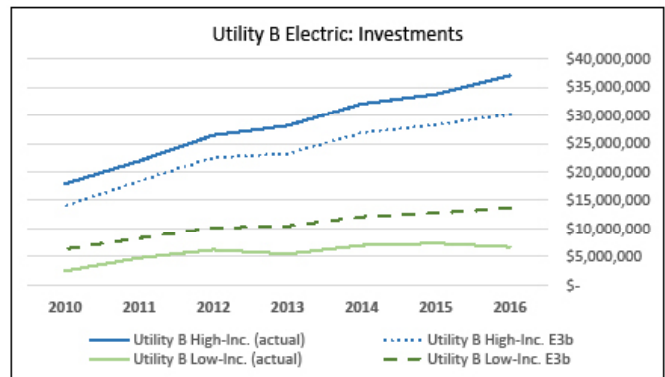


Figure 4. Actual vs. Equitable (E3b) spending for Utility B electric EWR programs between 2010-2016. Source: EWR Annual Reconciliation Reports (Utility B, 2010-2016), US Census Bureau 5-year ACS 2015, Michigan Agency for Energy.

GAS PROGRAMS

Investment trends for gas programs show a much different pattern than electric programs, with actual investment levels near or surpassing the E3b. The cumulative spending deficit for EWR gas Low-Income programs from 2010-2016 is \$1.0 million, reflecting an under investment of only 1%. This was composed of Utility A surpassing the E3b by \$5.9 million and Utility B investing \$6.9 million under the baseline, relatively 10.5% over and 15.4% under respectively (Table 2). Low-Income program spending ranged yearly, from \$1.7 million under to \$4.7 million over the E3b. In 2016, Low-Income investments by Utility A gas was \$0.4 million, or 5% above, and \$1.2 million or 18% below for Utility B (Figure 5-7).

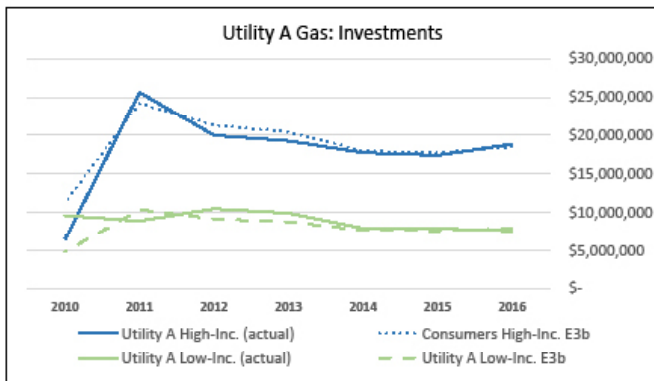


Figure 7. Actual vs. Equitable (E3b) spending for Utility A gas EWR programs between 2010-2016. *Source:* EWR Annual Reconciliation Reports (Utility A Energy, 2010-2016), US Census Bureau 5-year ACS 2015, Michigan Agency for Energy.

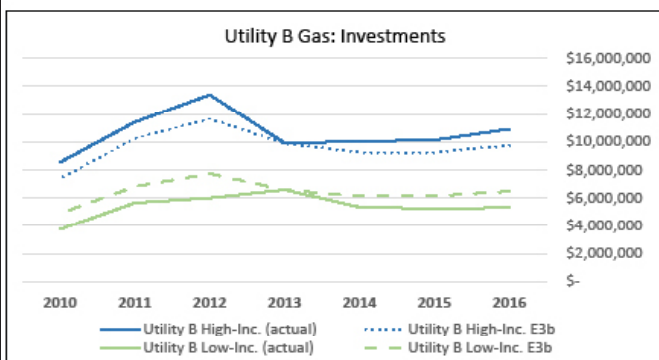


Figure 6. Actual vs. Equitable (E3b) spending for Utility B gas EWR programs between 2010-2016. *Source:* EWR Annual Reconciliation Reports (Utility B Energy, 2010-2016), US Census Bureau 5-year ACS 2015, Michigan Agency for Energy.

Table 2. Summary of EWR program investments, Actual vs. Equitable (E3b), 2010-2016.

Low-Income Program	Actual Investment	Equitable Investment	Investment Deficit	Proportion Deficit
Utility-A Electric	\$18,670,697	\$58,268,333	-\$39,597,636	-68.0%
Utility-B Electric	\$40,070,000	\$73,828,290	-\$33,758,290	-45.7%
Total Electric	\$58,740,697	\$132,096,623	-\$73,355,926	-55.5%
Utility-A Gas	\$62,151,372	\$56,223,498	+\$5,927,874	+10.5%
Utility-B Gas	\$37,811,000	\$44,711,541	-\$6,900,541	-15.4%
Total Gas	\$99,962,372	\$100,935,039	-\$972,667	-1.0%
Total	\$158,703,069	\$233,031,662	-\$74,328,593	-31.9%

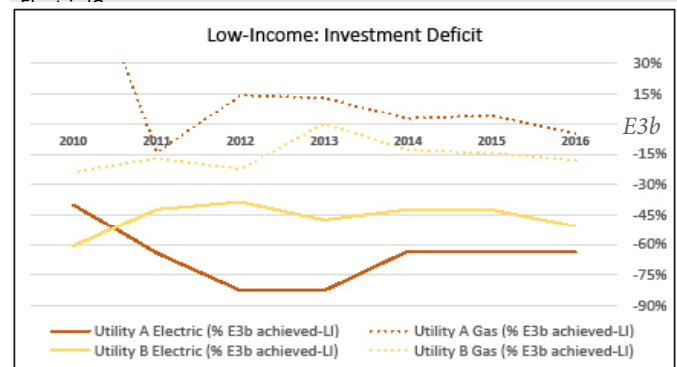


Figure 7. Summary comparison of EWR program investments (Actual vs. Equitable) between 2010-2016. *Source:* EWR Annual Reconciliation Reports (Utility A & Utility B, 2010-2016), US Census Bureau 5-year ACS 2015, Michigan Agency for Energy

MPSC APPROVED PLAN VS. ACTUAL

The difference between MPSC approved EWR Plan investment and actual investments varied between energy type and provider. In electric programs, the greatest yearly decreases were found in Utility B Low-Income programs, where reductions in three of seven years ranged from 25-31% (figures 8 & 9). No other program exceeded a 10% increase or decrease any year. Utility A electric Low and High-Income programs showed an average spending change of less than 1%. Utility B electric programs showed an average increase of 1% in High-Income and an average decrease of 14% in Low-Income programs. Variance in gas program spending included increases in Low-Income programs for Utility A (2010) and Utility B (2013), with a decrease in High-Income programs Utility B (2013). Average variance for Low-Income gas programs was 2% (Utility A and

Utility B), while High-Income programs increased by 1% and decreased by 4% respectively.

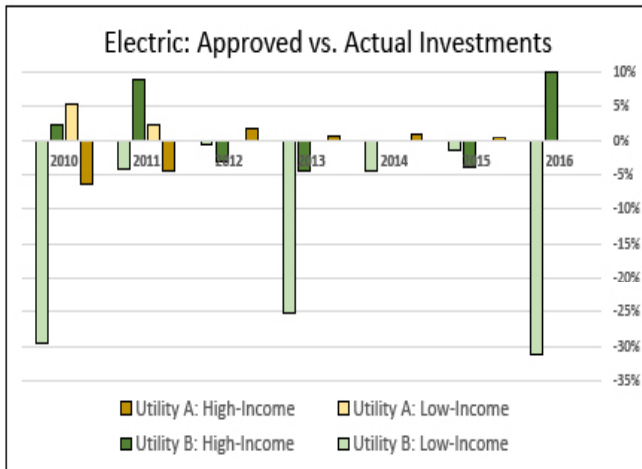


Figure 8. Variance in Electric Program spending (%) between EWR Plan approved and Actual spending for Utility A and Utility B (2010-2016).

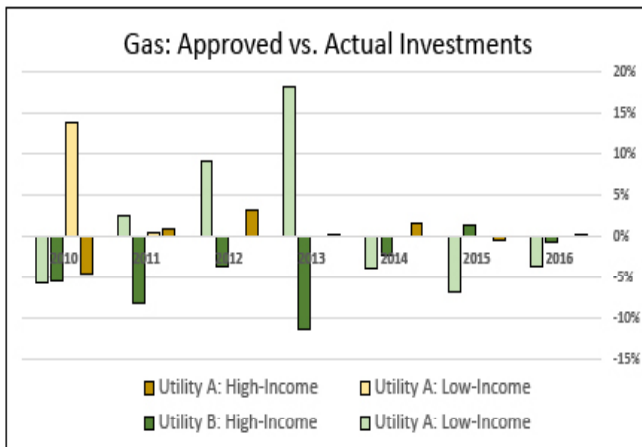


Figure 9. Variance in Gas Program spending (%) between EWR Plan approved and Actual spending for Utility A and Utility B (2010-2016).

Table 3. Summary of variance between Actual energy savings and Equitable (E3b) energy savings achieved (2010-2016).

EWR Program	Actual Energy Savings	Equitable Energy Savings	Energy Savings Deficit	Proportional Deficit
Utility-A Electric (Mwh)	26,352	374,615	-348,263	-93.0%
Utility-B Electric (Mwh)	130,851	618,160	-487,309	-78.8%
Total Electric (Mwh)	157,203	992,775	-835,572	-84.2%
Utility-A Gas (Mcf)	670,513	2,023,135	-1,352,622	-66.9%
Utility-B Gas (Mcf)	842,927	1,858,773	-1,015,846	-54.7%
Total Gas (Mcf)	973,778	2,476,933	-1,503,155	-60.7%

**POLICY BENEFITS:
 HOUSEHOLD ENERGY SAVINGS BENEFITS:**

While the allocation of energy savings are not as direct as utility investment allocations in the decision-making process, the energy savings outcomes for both electric and gas EWR programs show severe disparities when comparing Low- and High-Income program results. Total energy savings deficits, representing disparities in outcomes, show outcomes 84.2% (total electric), and 60.7% (total gas) below E3b (Table 3). Again, patterns vary substantially by energy type and utility (figure 10). On an annual basis, electric programs ranged from 88-97% (Utility A) and 71-89% (Utility B) under E3b for Low-Income programs, with weighted averages at 93% (Utility A) and 79% (Utility B). For gas programs, annual disparities in energy savings ranged from 39-81% (Utility A) and 45-62% (Utility B), with weighted averages of 67% and 55% respectively.

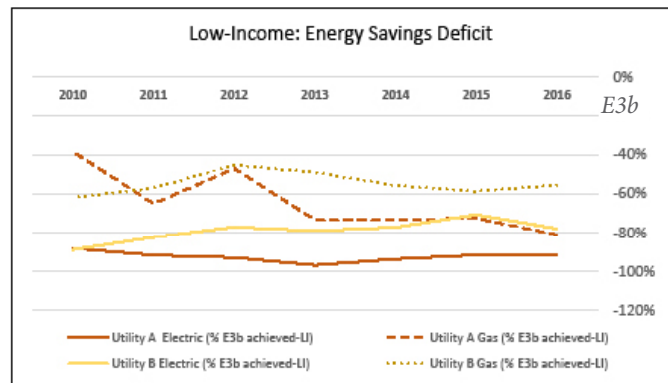


Figure 10. Summary comparison of EWR program energy savings (Actual vs. Equitable) between 2010-2016. *Source:* EWR Annual Reconciliation Reports (Utility A & Utility B, 2010-2016), US Census Bureau 5-year ACS 2015, Michigan Agency for Energy.

PER CAPITA COMPARISON: UTILITY INVESTMENTS & CONSUMER BENEFITS

Results show that for EWR Residential *electricity* programs overall, utilities are investing 3.1 times as much per capita on High-Income programs. This varied between energy providers, where Utility A invested 4.3 and Utility B invested 2.4 times greater in High-Income programs (Table 4). For EWR Residential gas programs overall, utilities invested



Table 4. Summary comparison of per capita investments and energy savings between Low- (LI) and High- (HI) income populations.

	LI Investment (\$ per capita)	HI Investment (\$ per capita)	Investment ratio (LI:HI)	LI Energy Saved (per capita)	HI Energy Saved (per capita)
Utility A Electric	\$11.79	\$51.14	4.34	16.6	362.7
Utility B Electric	\$25.86	\$63.13	2.44	84.4	594.0
Total Electric	\$18.75	\$57.50	3.07	50.1	485.5
Utility A Gas	\$43.29	\$37.39	0.86	467.1	1,813.0
Utility B Gas	\$26.48	\$34.54	1.30	590.3	1,775.2
Total Gas	\$34.91	\$36.28	1.04	528.5	1,798.2

only 1.04 times greater in High-Income programs. This also varied between gas providers, with Utility A and Utility B investing 0.86 and 1.30 times as much in High-Income programs.

In terms of per capita energy savings, high-income electric consumers received on average, 9.7 times greater household savings than low-income consumers. For natural gas, high-income received 3.4 times greater savings. Particularly high, was Utility A's ratio of 22:1 (High/Low-Income) electric savings while Utility B programs produced electric savings at a 7:1 ratio. For gas programs, Utility A produced a savings ratio of 4:1, while Utility B performed at a 3:1 ratio.

IV. DISCUSSION

IMPACTS ACROSS RESIDENTIAL SOCIOECONOMIC GROUPS

The results of this study demonstrate the occurrence of severe disparities in Michigan's state energy efficiency policy between 2010-2016. The degree of social equity highly depended upon energy type and the utility provider. The disparities in program outcomes can partially be attributed to substantially lower investments in Low Income programs and repeated reallocation of Low-Income funds from MPSC plan approved spending levels. However, one utility's investments in EWR Low Income gas programs exceeded equitable investment levels. Yet, low-income consumer savings produced were four times less per capita. This demonstrates that while equitable investments are important, it will not lead to equitable policy outcomes.

While some states have addressed social concerns through the establishment Low-Income program

investment standards, whether as a percentage of total program spending (ie. MA) or dependent upon utility size (ie. IL), this study demonstrates the need for further alignment in policy, regulatory processes and the underlying mechanisms for measuring costs and capturing benefits in order to achieve socially equitable outcomes. Further studies on alternative policy measures are necessary to guide policy makers, regulatory agencies and utility decision-makers towards a more just energy future.

V. RECOMENDATIONS

To achieve greater social equity in energy efficiency and consumption in the household across socio-economic groups, this study concludes with the following policy and regulatory recommendations:

- Establish investment standards for Low-Income programs that reflect the E3b tailored spatial and socioeconomic approach for each utility.
- Set a ceiling for inequitable policy outcomes (e.g. a max ratio of household energy savings benefits per capita, resulting from High and Low-Income programs).
- Develop further metrics for current state policy requiring the Commission to approve or reject proposed EWR plans based upon: availability, affordability, usefulness.
- Create Low-Income specific cost-benefit measures that capture the full social benefits of reducing severe home energy burdens. This includes non-energy impacts (NEIs) such as health, employment, education, safety.

Urban Energy Justice Lab
 University of Michigan

REFERENCES

1. Energy Information Agency (EIA): Residential Energy Consumption Survey (2015)
2. Simon, R (2008) Energy, Equity and the Future of the Fuel Poor. *Energy Policy* (36):12, 4471-4474.
3. Michigan 2016 HEAG Fact Sheet (2017) *Fisher Sheehan and Colton: Public Finance and General Economics*
4. Ibid.
5. Liddell C, Morris C (2010) Fuel Poverty and Human Health: A Review of Recent Evidence. *Energy Policy* (38)6:2987-2997.
6. Franklin M, Kurtz C (2017) Lights Out in the Cold: Reforming Utility Shut-off Policies as If Human Rights Matter. *Environmental and Climate Justice Program, NAACP*
7. Gronlund, C (2014) racial and Socioeconomic Disparities in Heat-Related Effects and Their Mechanisms: a Review. *Current Epidemiology Reports*. (1)3: 165-173.
8. Drehobl A, Ross L (2016) Lifting the High Energy Burden in America's Largest Cities: How Energy Efficiency can Improve Low Income and Underserved Communities. *ACEEE Report*.

DATA SOURCES

1. Michigan Licensing and Regulatory Agency Annual EWR Report (2016)
2. US Census Bureau American Communities Survey data (2010-2015)
3. Michigan Agency for Energy
4. DTE Annual EWR Reconciliation Reports (2010-2016)
5. Consumers Energy Annual EWR Reconciliation Reports (2010-2016)

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STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of **DTE ELECTRIC COMPANY** for authority to increase its rates, amend its rate schedules and rules governing the distribution and supply of electric energy, and for miscellaneous accounting authority

Case No. U-21534

ALJ Sally Wallace

PROOF OF SERVICE

I, Mark N. Templeton, certify that an electronic copy of the Direct Testimony of Jackson Koeppl on Behalf of Soulardarity and We Want Green, Too and Accompanying Exhibits DAO-1 to DAO-8 (Part 1 of 2) was served on the following on July 26, 2024.

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The statements above are true to the best of my knowledge, information, and belief.

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 Counsel for Soulardarity and
 We Want Green, Too

Date: July 26, 2024

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