ENVIRONMENTAL LAW & POLICY CENTER

August 16, 2024

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

RE: MPSC Case No. U-21534

Dear Ms. Felice:

The following are attached for paperless electronic filing:

- Rebuttal Testimony of William D. Kenworthy on Behalf of The Ecology Center, The Environmental Law & Policy Center, Union of Concerned Scientists, and Vote Solar

- Proof of Service

Sincerely,

Daniel Abrams
Environmental Law & Policy Center
dabrams@elpc.org
csb
c: Service List, Case No. U-21534

STATE OF MICHIGAN

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

REBUTTAL TESTIMONY OF

WILLIAM D. KENWORTHY

ON BEHALF OF

THE ECOLOGY CENTER, THE ENVIRONMENTAL LAW & POLICY CENTER, UNION OF CONCERNED SCIENTISTS, AND VOTE SOLAR

August 16, 2024

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I. INTRODUCTION AND SUMMARY

Q: PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A: My name is William D. Kenworthy (he/him). My business address is 1 South Dearborn Street, 20th Floor, Chicago, Illinois 60603.

Q. ARE YOU THE SAME WILLIAM KENWORTHY THAT PROVIDED DIRECT TESTIMONY IN THIS CASE?

A. Yes.

Q. PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS IN THIS TESTIMONY.

A. In this testimony, I make recommendations supporting Witness Douglas Jester's suggestion to create separate rate classes for residential customers based on dwelling type and space heating type and encouraging electrification by offering rates for electric space heat customers that are more closely aligned to cost causation. Additionally, I concur with DAAO Witness Koeppel's assessment of the need for a comprehensive low-income affordability program within DTE Electric's rate structure, and I recommend that the Commission consider elements of ComEd's low-income discount proposal and Xcel Energy's low-income credit pilot to design a broad affordability program aimed at achieving a 3% electric energy burden for DTE customers. Lastly, I recommend that if the Commission permits DTE to proceed with migrating customers participating in the D1.6 rate to the D1.11 rate with the Low Income Assistance credit, the Commission should also require DTE to conduct further analysis of the usage patterns of low-consumption, low-income customers to help identify the most vulnerable customers and to expand its outreach

and programs to help low-income customers understand and mitigate the adverse impact of switching to a time-of-use rate.

II. COST ALLOCATION AND RATE DESIGN: CREATING A SPACE HEATING RATE FOR SINGLE FAMILY HOMES

Q: WHAT DOES WITNESS DOUGLAS JESTER RECOMMEND ABOUT CREATING A RESIDENTIAL ELECTRIC SPACE HEATING CLASS IN THE RATE DESIGN SECTION OF HIS TESTIMONY?

A: Witness Douglas Jester[1] recommends that the Commission direct the Company to "present in its next rate case a cost-of-service study and corresponding rates" for customers based on the type of dwelling unit (single-family or multi-family) and the type of space heating they use (electric or non-electric).[2] He suggests that residential customers be divided into three groups: Multi-Family, Single-Family with electric space heating, and Single-Family with fossil-fueled space heating. Witness Jester notes that there are significant differences in load profiles and infrastructure requirements between these groups, which could justify their separation into different rate classes to more accurately reflect the cost of service and reduce current inequities in electric utility bills.

Q: WITNESS JESTER BASES HIS RECOMMENDATION IN PART ON THE ANALYSIS OF WITNESS DAVID GARD. WHAT DID WITNESS GARD FIND WITH RESPECT TO DIFFERENCE IN USAGE PATTERNS BETWEEN SINGLE FAMILY VERSUS MULTI-FAMILY HOMES?

[1] Witness Jester appears on behalf of Citizens Utility Board of Michigan (CUB), Sierra Club (SC), Michigan Environmental Council (MEC), and Natural Resources Defense Council (NRDC).
[2] Direct Testimony of CUB, SC, MEC, NRDC Witness Douglas Jester at 24.

A: Witness Gard's[3] analysis emphasizes the distinct load profile differences between single-family and multi-family dwellings, particularly in terms of electric space heating, with single-family residences showing higher summer peaks and lower winter loads. This variation in Cost of Service (COS) parameters suggests the need for separate customer classifications and the exploration of time-differentiated rate structures for electric heating customers. Gard underscores the importance of assessing the distribution system's capacity to handle increased electric heating demand, especially with the rise of building electrification rates, to avoid significant upgrades. His focus on single-family detached buildings highlights their unique load profile challenges and the critical need to evaluate transformer capacity as winter peak loads approach summer levels.[4]

Q: DO YOU HAVE ANYTHING TO ADD TO WITNESS GARD'S AND WITNESS JESTER'S RECOMMENDATIONS?

A: I support Witness Gard's and Witness Jester's recommendations to create separate rate classes for residential customers based on dwelling type and space heating type. I would like to offer some additional context on a similar approach currently in practice in Illinois, where ComEd has implemented different rates for these customer groups that reflect the cost of service and grid utilization.

Q: ARE YOU AWARE OF OTHER UTILITIES THAT HAVE SEPARATE RATES FOR DIFFERENT TYPES OF RESIDENTIAL CUSTOMERS BASED ON SPACE HEATING AND DWELLING TYPE?

[3] Witness Gard appears on behalf of CUB, MEC and NRDC.
[4] Direct Testimony of CUB, MEC, NRDC Witness David Gard at 3-5.

A: Yes. ComEd in Illinois has established separate rates for residential customers based on whether they live in single-family or multi-family dwellings and whether they use electric or non-electric space heating. These rate distinctions reflect the significant differences in daily and seasonal grid utilization among these customer groups. I am also aware that there are other similar proposed and approved rates for electric space heat.[5]

Q: HOW DO THE RATES VARY AMONG THESE DIFFERENT CUSTOMER CLASSES AT COMED?

A: The rates vary substantially among these classes due to the differences in load profiles and how they impact the grid. Single-family homes with electric space heating, for example, tend to have higher peak demands during winter, whereas single-family homes without electric space heating are generally summer-peaking. Similarly, multi-family dwellings also show distinct patterns depending on their heating type. The rates that result from the cost-of-service studies as implemented in Illinois ensure that each group pays rates that are more closely aligned with the costs they impose on the grid. ComEd's current delivery service rate structure consists of four delivery classes:

- Residential Single Family Without Electric Space Heat (SFNH)
- Residential Multi Family Without Electric Space Heat (MFNH)
- Residential Single Family With Electric Space Heat (SFH)
- Residential Multi Family With Electric Space Heat (SFNH)

The delivery service charges for each class consist of four cost components:

- Customer Charge (CC)

[5] Kresowik, Mark, New Electricity Rates Are Needed to Support Equitable Heat Pump Adoption, American Council for an Energy-Efficient Economy, July 11, 2024. Accessed on August 14, 2024 at https://www.aceee.org/blog-post/2024/07/new-electricity-rates-are-needed-support-equitable-heat-pump-adoption

- Standard Metering Service Charge (SMSC)
- Distribution Facilities Charge (DFC)
- Illinois Electricity Distribution Tax Charge (IEDT)

Two of these components are the same for each of the four customer classes (the Standard Metering Service Charge and the Illinois Electric Distribution Tax), so they are excluded from the table below. The table below illustrates the variation for the combination of the Customer Charge (which is a fixed monthly rate) and the Distribution Facilities Charge (a volumetric rate that includes most distribution facilities cost categories) for customers in these four classes. Also excluded from these charges is an adjustment factor for uncollectible costs, which does not vary. These rates are taken from the current ComEd Ratebook and are in effect for the current billing period.[6]

Customer Charges ($/month)	**No Space Heat**	**Space Heat**
Single Family	$ 12.45	$ 14.28
Multi Family	$ 9.33	$ 10.14
Distribution Facilities Charge ($/kWh)	**No Space Heat**	**Space Heat**
Single Family	$ 0.0488	$ 0.0234
Multi Family	$ 0.0373	$ 0.0222
Delivery Service Charges for 1,500 kWh	**No Space Heat**	**Space Heat**
Single Family	$ 85.70	$ 49.38
Multi Family	$ 65.33	$ 43.50

[6] Commonwealth Edison Company, Delivery Service Charges, Supplement to Rate MPP, Ill. C.C. No. 10, 3rd Revised Informational Sheet no. 64.

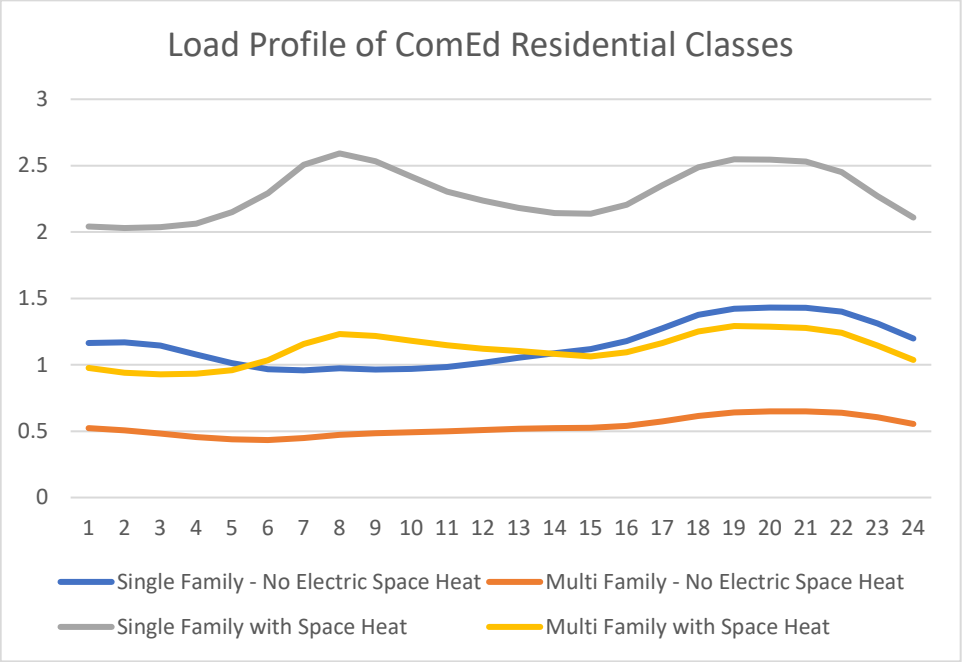
Q: WHAT DOES THIS CHART DEMONSTRATE ABOUT COMED'S DIFFERENT RATES?

A: Electric heating customers have a higher fixed customer charge which corresponds to higher demand peaks, but electric heating customers also pay significantly lower in volumetric distribution/delivery charges because of higher load factors and higher usage during times of low grid utilization.

Q: WHAT EVIDENCE SUPPORTS THESE RATE DISTINCTIONS?

A: I have prepared a figure that illustrates the load profiles of the different customer classes who participate in ComEd's residential real-time pricing program. The figure clearly shows the variations in daily and seasonal grid utilization among these classes, further illustrating the differences between different groups:

Figure 1: Load Shapes of ComEd Real Time Pricing Customers by Delivery Service Class



Q: HOW WOULD ADOPTING WITNESS JESTER'S RECOMMENDATION ALIGN WITH MICHIGAN'S DECARBONIZATION POLICY?

A: Adopting Witness Jester's recommendation to create separate rate classes for residential customers based on their dwelling type and heating source would strongly align with Michigan's policy of pursuing decarbonization. By recognizing the different cost implications and grid impacts of electric versus non-electric heating, this approach would create rate structures that encourage the electrification of building heat, a key strategy in reducing carbon emissions.

Q: HOW WOULD THIS RATE STRUCTURE ENCOURAGE ELECTRIFICATION?

A: The proposed rate structure would offer rates for electric space heat customers who are more closely aligned to cost causation and potentially lower for customers that choose electric space heating, especially during off-peak times when the grid is underutilized. This would make electrification more financially attractive, thereby encouraging more customers to switch from fossil-fueled heating to electric alternatives, which are essential for achieving the state's decarbonization goals.

Q: WHAT IMPACT WOULD THIS HAVE ON LOW-INCOME CUSTOMERS?

A: Adopting this recommendation would make electrification more accessible to all customers, including low-income households participating in whole home energy upgrades. By offering rate structures that reflect the true cost of electric heating, low-income customers could benefit from lower energy costs, especially when combined with energy efficiency upgrades. This could be particularly impactful for those in multi-family dwellings with electric heating, helping to reduce energy burden and support broader adoption of clean energy solutions among low-income populations.

Q: WHY IS THIS IMPORTANT FOR MICHIGAN'S ENERGY POLICY?

A: Aligning rate structures with the state's decarbonization policy not only supports the transition to cleaner energy sources but also ensures that all customers, regardless of income, can participate in and benefit from this transition. By making electrification of building heat more affordable and accessible, Michigan can accelerate its progress towards its decarbonization goals while promoting energy equity.

Q: WOULD YOU CHANGE ANYTHING ABOUT WITNESS JESTER'S RECOMMENDATION?

A: I would suggest that the Commission also consider including a separate rate class for multi-family units with in-unit electric space heating, as this group may have different load profiles and cost implications than single-family units with electric space heating. This would further enhance the accuracy and equity of the rate structure and encourage more low-income customers in multi-family dwellings to switch to electric heating.

Q: WHAT WERE WITNESS GARD'S RECOMMENDATIONS REGARDING A MORE ROBUST TIME DIFFERENTIATED RATE FOR ELECTRIC SPACE HEAT CUSTOMERS?

A: Witness Gard provided analysis that demonstrated the impacts of different decarbonization approaches to grid utilization. In addition to creating a separate rate class for electric space heat customers, Gard also recommended consideration of a "robustly time-differentiated rate structure" to further strengthen the price signal encouraging beneficial electrification and improving grid utilization.[7]

[7] Gard Direct at 10.

Q: DO YOU SUPPORT DEVELOPING MORE ROBUSTLY TIME DIFFERENTIATED RATES?

A: Yes, for the reasons cited by Witness Gard. In addition, I would note that Solar Energy Industry Association Witness Kevin Lucas provided testimony on behalf of the CEO groups in DTE's 2022 rate case, U-20836, in which he "recommended[ed] the Commission direct the Company to redesign its D1.11 rate to substantially increase the TOU differential to better reflect the underlying cost of providing energy during peak hours."[8]

Q: WHAT RECOMMENDATION WOULD YOU MAKE TO THE MICHIGAN PUBLIC SERVICE COMMISSION (MPSC) REGARDING THIS ISSUE?

A: I recommend that the Commission adopt Witness Jester's recommendation to require DTE Electric to conduct a cost-of-service study and propose corresponding rates for the three residential sub-classes that he recommends: Multi-Family, Single-Family with electric space heating, and Single-Family with fossil-fueled space heating. In addition, I recommend that the Commission also consider including a separate rate class for multi-family units with in-unit electric space heating. Given the significant differences in grid utilization among these groups, as demonstrated by ComEd's experience in Illinois, this approach would lead to more equitable and cost-reflective rates for Michigan's residential customers.

[8] Case No. U-20836, Direct Testimony of Kevin Lucas on behalf of the Ecology Center, the Environmental Law & Policy Center, Vote Solar and the Union of Concerned Scientists at 25.

III. ENERGY AFFORDABILITY PROPOSALS

Q: WHAT DID DETROIT AREA ADVOCACY ORGANIZATIONS (DAAO) WITNESS JACKSON KOEPPEL PROPOSE REGARDING A LOW-INCOME AFFORDABILITY PROGRAM?

A: Witness Jackson Koeppel proposed the creation of a comprehensive low-income affordability program within DTE Electric's rate structure.[9] His proposal aimed to address the existing affordability gap for electricity bills in DTE Electric's service territory.

Q: HOW LARGE IS THE AFFORDABILITY GAP THAT DAAO WITNESSES IDENTIFIED, AND WHAT DID THEY PROPOSE TO CLOSE IT?

A: In his testimony, DAAO Witness Yunus Kinkhabwala identified an electricity affordability gap of $380 million in DTE Electric's service territory.[10] After accounting for existing affordability programs, Witness Koeppel estimates that an additional $304 million is needed to close the electric affordability gap.[11] He proposed including this amount as an operating expense in DTE Electric's revenue requirement, which would be distributed equally across all customer bills to help cover the affordability gap.

Q: HOW WOULD THE PROPOSED AFFORDABILITY PROGRAM WORK?

A: The program would involve DTE Electric verifying a customer's income and their electricity costs over the last twelve months. If these costs exceeded 6% of the customer's annual income, DTE Electric would immediately credit the amount accrued in excess of that threshold to the customer's account. Additionally, the company would calculate the

[9] Witness Koeppel provided testimony on behalf of the Detroit Area Advocacy Organizations, consisting of Soulardarity and We Want Green Too.
[10] Direct Testimony of DAAO Witness Yunus Kinkhabwala at 36.
[11] Direct Testimony of DAAO Witness Jackson Koeppel at 24.

percentage of the customer's bills that exceeded the affordability threshold and apply a monthly affordability credit moving forward.

Q: WHAT RATIONALE DID WITNESS KOEPPEL PROVIDE FOR ADDRESSING AFFORDABILITY THROUGH THE RATE STRUCTURE RATHER THAN THROUGH LEGISLATIVE ACTION?

A: Witness Koeppel argued that addressing the affordability crisis through the rate structure would provide a complete solution within the context of regulatory intervention, removing the need for legislative action. He also noted that this approach would help eliminate costly and punitive collection practices that disproportionately affect low-income customers.[12]

Q: DO YOU CONCUR WITH THE AFFORDABILITY GAP IDENTIFIED BY JACKSON KOEPPEL AND DAAO WITNESS YUNUS KINKHABWALA?

A: Yes. I concur with the affordability gap of $380 million that was identified by Jackson Koeppel and DAAO Witness Yunus Kinkhabwala.[13]

Q: DO YOU AGREE WITH THE NEED FOR A LOW-INCOME BILL ASSISTANCE PROGRAM?

A: Yes. I agree with the need for a low-income bill assistance program that would be spread across the entire rate base as an operating expense. This program should be designed to reduce the electric energy burden to 3% of income for customers who use non-electric space heat sources, such as gas or propane, for building heat and to 6% of income for customers who use electric space heating.

[12] Koeppel Direct at 26.
[13] Kinkhabwala Direct at 36.

Q: CAN YOU PROVIDE EXAMPLES OF A POTENTIAL LOW-INCOME ASSISTANCE PROGRAM THAT COULD BE CONSIDERED?

A: Yes. I would like to provide an example of a potential program that could be considered: the ComEd Low Income Discount Rate, which is currently under consideration in Illinois in ICC Docket No. 24-0163. Additionally, I will discuss Xcel Energy's proposed pilot program in Minnesota to provide automatic bill credits for customers in certain low-income, high-energy-burdened areas.

Q: WHAT IS COMED'S LOW INCOME DISCOUNT RATE (LID) PROPOSAL CURRENTLY UNDER CONSIDERATION IN ILLINOIS?

A: ComEd's Low Income Discount Rate (LID) proposal, as detailed in the Illinois Commerce Commission (ICC) Docket No. 24-0163, aims to provide financial relief to low-income customers by offering a percentage-based discount on their electricity bills. The LID program is designed with five income tiers, segmented by delivery class (such as single-family or multi-family, and space heating or non-space heating). Residential customers with incomes between 0% and 300% of the Federal Poverty Level (FPL) will qualify for the discount, which will be applied to all enrolled customer bills. The program's goal is to ensure that enrolled customers maintain an energy burden—defined as the total home energy costs as a percentage of household income—within the threshold of 3% for electric-only households or 6% for households using electric space heating.

Q: HOW DOES COMED PLAN TO IMPLEMENT AND FUND THIS LID PROGRAM?

A: The costs of ComEd's LID program will be recovered from all customers, including those enrolled in the program. This approach ensures that the financial responsibility for the

discount is shared across the entire customer base, allowing ComEd to provide meaningful assistance to low-income customers while minimizing the bill impacts on non-enrolled residential and commercial customers. The program also includes provisions for automatic enrollment for customers already identified as low-income, with the flexibility for these customers to apply through existing channels.

Q: DO YOU SUPPORT COMED'S LOW INCOME DISCOUNT RATE PROPOSAL?

A: Yes. I supported the proposal with qualification and recommendations for improvement detailed in my testimony in that case. While the proposal effectively addresses the needs of low-income customers and aligns with affordability and equity goals, certain aspects of the program might require adjustments to better serve the target population. Despite these qualifications, the proposal provides a valuable framework that can be considered and further refined in our discussions.

Q: ARE THERE ANY OTHER EXAMPLES OF PROGRAMS THAT PROVIDE ASSISTANCE TO LOW-INCOME CUSTOMERS THAT SHOULD BE CONSIDERED?

A: Yes. As mentioned in my Direct Testimony, Xcel Energy in Minnesota recently unveiled a two-year pilot that would provide automatic bill credits for customers in certain low-income, high-energy-burdened areas. Specifically, if approved, the Automatic Bill Credit Pilot Petition will bring the median energy burden in all census block groups in Xcel Energy's service territory down to 4%; the bill credit will go to approximately 23,000 households in 77 census block groups. The automatic credit occurs without active enrollment from the household, eliminating the need for customers with high energy

burdens to apply for energy assistance. The pilot petition is currently pending before the Minnesota Public Utilities Commission, and a decision is expected by the end of 2024.

Q: DO YOU SUPPORT WITNESS KOEPPEL'S RECOMMENDATION TO FORM A STAKEHOLDER GROUP TO IMPLEMENT HIS AFFORDABILITY PROPOSAL?

A: Yes. I support Witness Koeppel's suggestion to form a stakeholder group to consider and potentially implement an affordability proposal. I understand that the Commission may not have the authority to order implementation of a low-income discount rate in this proceeding. However, I believe that convening a diverse group of stakeholders, including community representatives, to collaboratively explore and refine these proposals would be a valuable step towards developing a low-income affordability program that effectively addresses the needs of vulnerable populations and ensures equitable access to energy.

IV. <u>CLOSING RATE D1.6</u>

Q: WHAT IS DTE ELECTRIC PROPOSING WITH REGARD TO THE D1.6 RATE AND D1.11 RATE?

A: DTE Electric is proposing to close the D1.6 rate, which is a declining block rate, and transition customers currently on this rate to the D1.11 rate, which is a Time-of-Use (TOU) rate.

Q: WHAT CONCERNS DID DAAO WITNESS KOEPPEL AND THE DAAO RAISE REGARDING THIS PROPOSAL?

A: Witness Koeppel expressed concerns that transitioning customers from the D1.6 rate to the D1.11 TOU rate could negatively impact low-income and vulnerable customers. He argued that TOU rates might not align well with the energy consumption patterns of these

customers, potentially leading to higher bills or difficulty in managing energy usage during peak periods.

Q: DID WITNESS KOEPPEL AND THE DAAO OPPOSE THE IMPLEMENTATION OF TOU RATES?

A: While he did not outright oppose TOU rates, Witness Koeppel emphasized the need for a comprehensive analysis of the potential impacts on low-income and vulnerable customers before making the transition. He stressed that any rate changes should not exacerbate the financial burdens on these populations.

Q: WHAT DID WITNESS KOEPPEL RECOMMEND REGARDING THE TRANSITION FROM THE D1.6 RATE TO THE D1.11 RATE?

A: He recommended that DTE Electric should conduct a thorough impact study to assess the effects on low-income and vulnerable customers. He also advocated for providing adequate protections or alternative rate options for these customers and suggested delaying or modifying the transition until these concerns are adequately addressed.

Q: WHAT SPECIFIC SHORTCOMINGS DID WITNESS KOEPPEL IDENTIFY IN DTE'S ANALYSIS?

A: He pointed out that DTE's analysis lacked a comprehensive evaluation of the financial and practical implications for customers currently on the D1.6 rate. The analysis did not consider how these customers, many of whom are low-income, might struggle with the variability of TOU rates, potentially leading to higher overall energy costs or increased difficulty in managing their energy use effectively.

Q: HOW DID WITNESS KOEPPEL SUGGEST THAT DTE'S ANALYSIS COULD BE IMPROVED?

A: He suggested that DTE should conduct a more thorough impact study that specifically focuses on the unique challenges faced by low-income and vulnerable customers. This study should include an assessment of energy consumption patterns, the ability of these customers to shift usage to off-peak times, and the potential financial impacts of the rate change. Additionally, he recommended that DTE explore alternative rate structures or protective measures to mitigate any negative effects identified in the analysis.

Q: DID DTE CONDUCT THE STUDY RECOMMENDED BY WITNESS KOEPPEL?

A: No.

Q: DID YOU CONDUCT ANY ANALYSIS ON HOW LOW-INCOME CUSTOMERS WOULD HAVE BEEN IMPACTED IF THEY WERE ON THE D1.11 RATE IN PREVIOUS YEARS INSTEAD OF THE CURRENT D1.6 RATE?

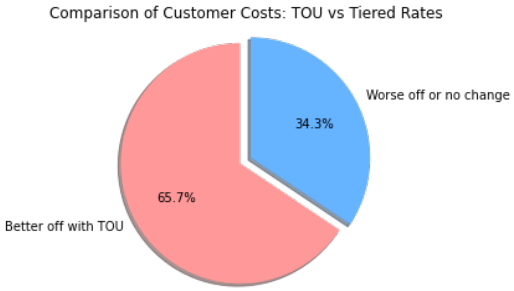
A: Yes. I conducted a preliminary analysis to determine the savings or losses that low-income customers would have experienced had they been on the D1.11 Time-of-Use (TOU) rate rather than the D1.6 declining block rate in previous years.

Q: WHAT WAS THE METHODOLOGY OF YOUR ANALYSIS?

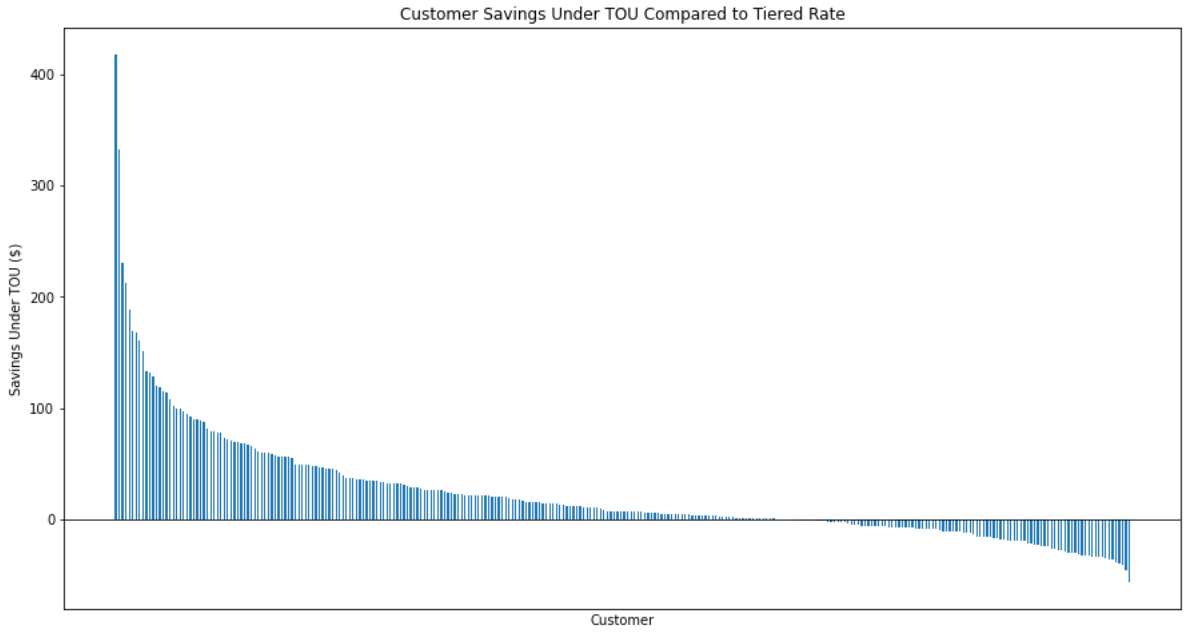
A: The methodology involved comparing the charges that customers would have incurred under the current D1.11 TOU rates with the charges they would have incurred under the current D1.6 rates for the years 2021, 2022, and 2023. The analysis focused solely on volumetric power supply costs and did not include any riders, fixed charges, taxes, or fees. I used data provided by DTE in response to CEO Discovery Request 1, which included hourly interval data for 300 customers participating in income-qualified programs from 2021 to 2023.

Q: WHAT WERE THE KEY FINDINGS OF YOUR ANALYSIS?

A: The results of my analysis showed that nearly two-thirds of customers (65.7%) would have been better off under the TOU rate.



Additionally, the customer savings for the entire group were generally larger than any losses. This suggests that low-income customers are generally better off under a TOU rate.



Q: WHAT CONCLUSIONS DID YOU DRAW FROM YOUR ANALYSIS?

A: I found that low-income customers in the sample provided by DTE generally benefit from being on a Time-of-Use rate.

Q: WHAT COULD THE COMPANY DO TO MITIGATE THE POTENTIAL NEGATIVE IMPACTS OF ADVERSELY IMPACTED LOW-INCOME CUSTOMERS OF TRANSITIONING TO TIME-OF-USE RATES?

A: With some simple behavioral changes, most customers will have the opportunity for increased savings under a time-of-use rate. For those customers who would experience losses (in the form of higher bills compared to the declining block rate), I recommend that the Company expand its outreach to low-income customers. This outreach should focus on educating them about opportunities to save money and providing them with the tools—such as low-income energy efficiency programs, weatherization, and technology like smart thermostats—to further reduce their bills without compromising comfort or safety. To the extent that such adjustments are not possible, the Company should develop programs to directly address the energy burden of those customers, such as the low-income discount discussed above. Finally, I also recommend that the Commission direct DTE to develop a plan to use smart meter data to identify and address customers who engage in energy-limiting-behavior that is averse to health and safety.

Q: PLEASE EXPLAIN WHAT YOU MEAN BY ADVERSE ENERGY-LIMITING-BEHAVIOR.

A: In testimony submitted in ComEd's integrated grid plan case in Illinois in 2023, Dr. Destenie Nock addressed her studies on energy-limiting-behavior by low-income customers and adverse impacts on low income customers.[14]

Q: WHAT DOES DR. NOCK MEAN BY "ENERGY-LIMITING-BEHAVIOR"?

[14] Nock, Destenie. Direct Testimony on Behalf of Environmental Law & Policy Center, Natural Resources Defense Council, Union of Concerned Scientists, Vote Solar, and Environmental Defense Fund. ICC Docket No. 22-0487, May 11, 2023.

A: Dr. Nock defines energy-limiting-behavior as the practice where households reduce their energy usage significantly below the level required to maintain a comfortable and safe indoor environment. This is often a consequence of financial constraints, where households, particularly low-income ones, cannot afford to pay their energy bills and, therefore, use less energy than needed to avoid excessive costs.

Q: HOW DOES ENERGY-LIMITING BEHAVIOR AFFECT LOW-INCOME CUSTOMERS?

A: Energy-limiting behavior can severely impact low-income customers by forcing them to live in unsafe conditions. For example, during heatwaves or cold winters, low-income households may delay turning on air conditioning or heating to save on energy costs, which can lead to heat-related illnesses, respiratory problems from cold and damp environments, or even death in extreme cases. This behavior highlights the intersection of energy poverty and health risks, as families are forced to choose between financial stability and their well-being.

Q: WHY IS THIS DISCUSSION OF ENERGY-LIMITING BEHAVIOR RELEVANT IN THIS CONTEXT?

A: It is possible that energy-limiting-behavior could be exacerbated by a transition to a time-of-use rate. Addressing this phenomenon should be part of the plan to identify customers who may not be able to respond to time-of-use signals or who are experiencing adverse energy-limiting-behavior

Q: WHAT OTHER ISSUES SHOULD THE COMMISSION CONSIDER IN THE TRANSITION FROM THE CURRENT DECLINING BLOCK STRUCTURE TO TIME-OF-USE RATES FOR LOW-INCOME CUSTOMERS?

A: The current D1.6 rate is based on a declining block rate, which is itself regressive. Under this pricing structure, basic consumption is charged at a higher rate, while larger consumers pay less for each additional unit of electricity. This places a heavier burden on low- and moderate-income households, which typically consume less electricity but pay a higher rate for their basic needs. As a result, declining block rates exacerbate income inequality by making electricity more affordable for wealthier consumers, while lower-income households bear a relatively higher cost as a percentage of their income.

Q: WHAT DO YOU RECOMMEND?

A: I recommend that, if the Commission permits DTE to proceed with migrating customers participating in the D1.6 rate to the D1.11 rate with the Low Income Assistance credit, the Commission should also require DTE to conduct further analysis of the usage patterns of low-consumption, low-income customers to help identify the most vulnerable customers and to expand its outreach and programs to help low-income customers understand and mitigate the adverse impact of switching to a time-of-use rate.

V. CONCLUSION AND RECOMMENDATIONS

Q: PLEASE SUMMARIZE YOUR RECOMMENDATIONS.

A: In my rebuttal testimony I make the following major recommendations:

1. Cost Allocation and Rate Design:
    - Support for creating separate rate classes for residential customers based on dwelling type and space heating type.
    - Encourage electrification by offering rates for electric space heat customers who are more closely aligned to cost causation.
2. Energy Affordability Proposals:

- Concur with Witness Koeppel's assessment of the need for a comprehensive low-income affordability program within DTE Electric's rate structure.
- Recommend that the Commission consider the elements of ComEd's low-income discount proposal and Xcel Energy's low-income credit pilot in designing a broad affordability program designed to achieve 3% electric energy burden for DTE customers.

3. Closing Rate D1.6:

- If the Commission permits DTE to proceed with migrating customers participating in the D1.6 rate to the D1.11 rate with the Low Income Assistance credit, that the Commission should also require DTE to conduct further analysis of the usage patterns of low-consumption, low-income customers to help identify the most vulnerable customers and to expand its outreach and programs to help low-income customers understand and mitigate the adverse impact of switching to a time-of-use rate.

Q: DOES THIS CONCLUDE YOUR TESTIMONY?

A: Yes.

STATE OF MICHIGAN

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

PROOF OF SERVICE

I hereby certify that a true copy of the foregoing *Rebuttal Testimony of William D. Kenworthy* was served by electronic mail upon the following Parties of Record, this Friday, August 16, 2024.

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