



Power Struggle: Energy Insecurity in Michigan's Low-Income Communities

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EXECUTIVE SUMMARY

The high energy burden and unreliable service that Michigan residents experience erode standards of living, particularly for low-income residents. Households are absorbing significant rate increases nearly every year. On average, the energy burden for low-income Michiganders is about three times higher than the widely accepted affordability threshold of 6% of household income. Michigan has among the highest residential electric rates in the country, and residential customers have the highest rates in Michigan compared to industrial and commercial customers. As such, Michigan customers are paying hundreds of dollars for their utility bills every month and accumulating hundreds more in utility bill debt.

Utilities argue that these increases and high prices are necessary to cover their current costs for infrastructure and distribution and to upgrade the grid to improve reliability and safety. However, despite utilities' increasing investments, Michigan's electric reliability ranks among the worst in the United States. Electricity outages affect low-income households disproportionately as these households lack the savings and discretionary income necessary to deal with the costs of outages like spoiled food and temporary relocation. In addition, low-income homes are more likely to be poorly weatherized and unable to maintain tolerable living conditions during power outages.

Rather than improving reliability, rising investments in natural gas distribution systems are targeted chiefly to reduce leaks and improve safety. One consequence of this is steep, repeated rate increases that disproportionately impact low-income customers. While safety standards must be met, this upward trend in infrastructure spending is inconsistent with the MI Healthy Climate Plan's goal of steadily curtailing the use of natural gas. Drastic rate increases to fund investments in long-lived assets that the state intends to stop using are perverse and inequitable. If current trends persist, utilities' recovery of investments in gas distribution systems will result in unbearable rate increases for customers.

In addition to disproportionately feeling the rate impacts of gas and electric distribution system improvements, low-income customers also encounter higher barriers to managing their use of energy to reduce costs. Low-income households are more likely to live in less efficient homes, lack access to rooftop solar or other alternative sources of energy, and get lost in confusing systems to apply for and receive utility bill assistance. They often cannot afford to pay for energy efficiency improvements out of pocket and have limited access to financing solutions. While there are currently assistance programs and initiatives in place to reduce energy use and costs for low-income households, these programs are neither expansive nor effective enough to reduce bills to affordable levels. They also require time and effort these households do not have to spare.

It should not and does not have to be this way. Policymakers and other bodies have the authority and resources to remedy these issues. The summary recommendations in the table below aim to effectively address the difficulties low-income customers face when paying energy bills, seeking and receiving assistance, and understanding opportunities available to them.

Summary of Recommendations

Rate Case Processes	The Michigan Public Service Commission (MPSC) should require MPSC Staff to provide an analysis of the impact of any proposed rate increase on customers below 150% of the Federal Poverty Level (FPL), including: The change in average monthly electricity/natural gas bills for low-income customers. • The energy burden for low-income customers in the utility's service territory after the rate increase, compared to commonly used standards of affordability. • The MPSC should require that the utility provide data on low-income customers in its service territory necessary to support the aforementioned analysis. • The Legislature should extend the amount of time a utility must wait between rate-case filings to at least 24 months to allow enough time for changed rates to be implemented, data collected and analyzed, and to facilitate discussion about what should be done moving forward. The Utility Consumer Participation Board (UCPB) should adopt specific goals for the value of grants it makes to nonprofits representing environmental justice communities, give greater weight to non-intervenor input in rate cases and provide more support for participation of marginalized communities in other MPSC processes.
Cost Allocation	The MPSC should order a study to ensure that the allocation of costs among residential customers is as fair and reasonable as possible. The MPSC should limit fixed charges to both mitigate the disparate impact on low-income customers and provide a stronger financial incentive to reduce energy use.
Assistance	The MPSC, Michigan Department of Health and Human Services (MDHHS) and utilities should redouble efforts to collaborate to increase enrollment by income-eligible customers in assistance programs. Utilities and other assistance providers should automatically enroll customers into bill payment assistance programs based on categorical eligibility (i.e., participation in food, housing, or other assistance programs) or known qualifying data to streamline the process so that low-income customers can get assistance faster, with less effort and more reliably. The MPSC should remove caps on the numbers of households receiving Low Income Assistance and Residential Income Assistance credits. The MPSC should make Low-Income Assistance (LIA) bill credit amounts income-dependent, rather than crediting the same amount for all eligible households. The MPSC should require utilities to offer Percentage of Income Payment Plans (PIPPs) using a 6% percentage-of-income target for combination customers and 4% for gas- or electric-only customers. PIPPs should also: • Provide arrearage forgiveness if participants are not more than two months in arrears, recognizing that low-income customers have variable incomes and little ability to absorb unexpected expenses. • Not require annual re-verification of eligibility. • Not require participants to receive SER before becoming eligible to participate in PIPPs.

Reliability	The MPSC should adopt an outage credit of at least \$2 per hour for residential customers, increasing to higher values after outage duration passes thresholds to be determined by a stakeholder workgroup. The MPSC should ensure reliability standards are designed to incentivize utilities to work harder to reduce outage frequency and duration and not reward utilities for unfocused or insufficient progress in improving reliability. The MPSC should increase the use of performance-based incentives for reliability but should permit incentive payments to reward improvements only by utilities that meet all statutory service quality and reliability standards and not for improving against individual standards. The MPSC should require utilities to report outage credits by zip code and census tract to support better analysis of the efficacy and equity of the credits.
Energy Optimization	Utilities and energy services providers should provide integrated home energy optimization assessments that compare energy waste reduction (EWR), electrification, and replacement-in-kind options side by side. Assessments should include measures and costs for synergistic make-ready needs, building repairs and weatherization, and estimated credits, rebates, and financing costs and sources. Utilities, community action agencies, public assistance agencies, and local governments should collaborate to engage more low-income households and property owners to undertake non-emergent energy optimization projects, which allow time for more careful assessment, sequencing of measures and fuel-switching. Policy makers should consider authorization of Property-Assessed Clean Energy (PACE) financing for single-family residences and seek ways to stimulate greater use of PACE financing for multi-family housing. Greater use of on-bill financing should also be encouraged, to ensure that whoever benefits over time from an energy improvement contributes fairly to its original cost.
Energy Waste Reduction	Annual reports on EWR programs should include health indicator improvements and quantify them as benefits of EWR spending. Effectiveness of low-income EWR programs should be evaluated by outcomes and not only by inputs. Continued investment and support of mitigating “walkaway” problems should be allocated to facilitate attainment of low-income EWR goals

Efficient Electrification	The MPSC, state agencies, utilities, and home energy contractors should collaborate to develop outreach, education, and assessment programs to encourage low-income homeowners to switch from propane to electric space and water heating prior to equipment failure. These groups should also implement proactive enabling measures such as electrical system upgrades, home repairs, and weatherization. The MPSC, state agencies, utilities, local governments, home builders, and home energy contractors should collaborate to create technical education, standards and financial incentives for new-build residential properties to be all-electric. The MPSC's review of energy optimization plans should encourage utilities and their contractors to evaluate home electrification measures side-by-side with EWR measures, including differences in optimal levels of weatherization and repairs, required make-ready work, available financial incentives, and payback periods.
Access to Clean Technology	Community solar groups and advocates should work to create a policy framework to overcome utility opposition to community solar. Advocates and policy researchers should increase policymakers' overall education and awareness of community solar to help build support for legislation authorizing true community solar.
Consumer Protections	Regarding disconnections, the MPSC should require utilities to provide data and analysis demonstrating that their disconnection practices strike a reasonable balance between financial and social objectives. Regarding customer deposits, the MPSC should: • Study whether utility deposit practices minimize the cost of service for all ratepayers; • Require utilities to demonstrate that they exercise reasonable discretion in their deposit practices, such that their treatment of each customer reflects a reasonable assessment of the financial risk that customer represents; • Study whether allowing utilities to retain a deposit until a customer has paid on time for 12 consecutive months reduces risk of loss that justifies the continued burden on the customer. Regarding cash-payment requirements, the Commission should: • Revise the Billing Rules either to prohibit or strictly limit cash-payment requirements; • If the Commission does not prohibit the practice outright, limits should include: – Bar imposition of the cash-payment requirement on senior customers, who may have limited mobility and personal safety concerns that make the process of securing and delivering cash unduly burdensome; – Bar assessment of a third-party payment agent fee for required cash payments; – Mandate adoption and communication of a clear and fair process for customers to appeal imposition of the cash payment requirement; – Require the utility to accept payment by cash or check from another household member or guarantor, provided they do not pay from an account shared with the customer whose payment was declined, and provided that the alternative payor has not defaulted on a utility bill or had a past payment declined.

The MPSC should reinstate and implement its order adopting the 15/15 aggregation standard as a minimum standard for aggregated datasets for residential and commercial customers and the 4/50 aggregation standard as a minimum standard for aggregated datasets for industrial customers.

The MPSC should improve the quality and completeness of reliability data reported by utilities in the case no. U-21122 docket. Specifically, the Commission should study and improve the quality of outage-cause data and should require utilities to complete all data fields in the template.

The MPSC should make publicly available the zip-code and census-tract level reliability data as reported by utilities in the case no. U-21122 docket.

INTRODUCTION –CHALLENGES FOR MICHIGAN’S LOW-INCOME UTILITY CUSTOMERS

When a single, working mother in Michigan saw her latest energy bill was over \$700, bringing her balance due over \$1,000, she worried she would be unable to keep food on her table without having her electricity and gas turned off.¹ This is not a unique story among Michiganders, especially for low-income residents. Michigan has among the highest energy costs in the country,² making energy unaffordable for low-income residents throughout the state. The average American household spends about 3% of their income on energy, but low-income households spend nearly three times that level on average.³

What is energy equity?

The Michigan Public Service Commission (MPSC) defines energy equity as

...the goal of achieving fair and just treatment, meaningful participation, and opportunities in the energy system for all while building better outcomes for overburdened communities.

An equitable energy system is one in which technologies and investments promote and, together with other essential systems, achieve energy security, affordable and clean -energy, participation, and reasonable choice for all.

Energy equity may be improved through the consistent and transparent application of equity metrics, through prioritizing and monitoring historic and present impacts and disparities to overburdened communities, and through equitable planning approaches.⁴

This report reviews the state of energy equity in Michigan, summarizes recent improvements and recommends additional steps.

Economic Inequity Underlies Energy Inequity

Energy inequity is rooted in economic inequity. This report focuses on energy equity and does not purport to provide solutions to the broader problem of economic inequity. It is important, however, to acknowledge that in focusing on energy equity we are largely addressing symptoms, not causes, of the underlying problem.

According to the University of Michigan Poverty Solutions, 12.9% or 1.29 million Michiganders live at or below the federal poverty level,⁵ compared to 11.6% for the U.S. overall.⁶ Furthermore, the United Way found that 26% of Michigan households, or 1.05 million households, are ALICE (Asset Limited, Income Constrained, Employed), putting them among the working poor—those who make more than the federal poverty level but still struggle to meet basic needs.⁷

¹ WZZM13. "More consumers energy users frustrated by large bills amid meter switch," June 2023. <https://www.wzzm13.com/article/news/investigations/help-team/more-consumers-energy-users-frustrated-by-large-bills/69-f8ae42a7-938c-44a8-97ac-b7b9f415a49b>

² Citizens Utility Board of Michigan. "Utility Performance Report 2025 Edition," September 2025, figs. 28 and 29. <https://cubofmichigan.org/reports/utility-performance-report-2025-edition/>

³ Dreihobl, et al. "How high are energy household burdens? An Assessment of National and Metropolitan Energy Burden across the United States," American Council for Energy-Efficient Economy, September 2020. <https://www.aceee.org/sites/default/files/pdfs/u2006.pdf>.

⁴ MPSC, December 21, 2023, order in case no, U-20757, p.36.

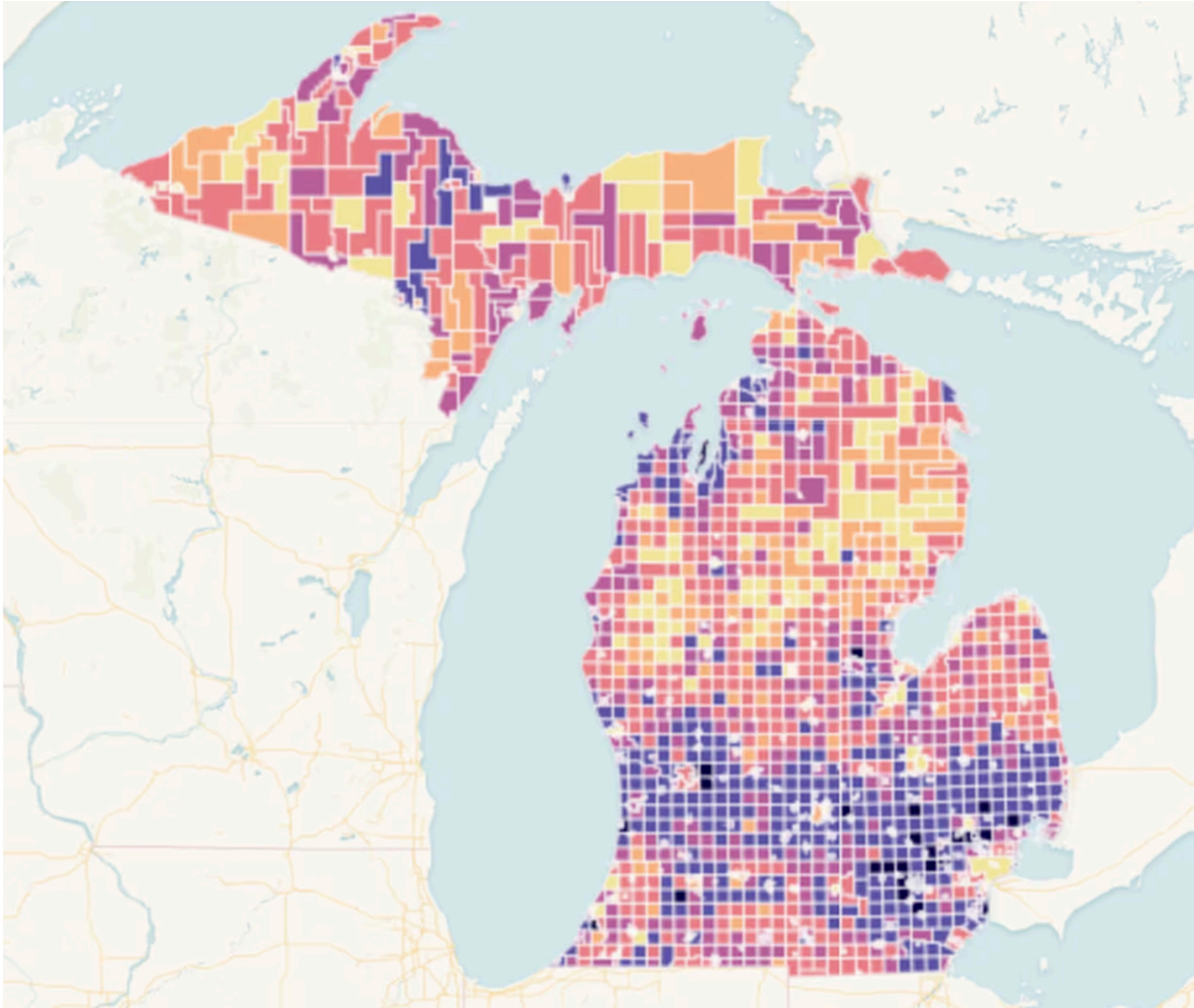
⁵ "Michigan Poverty & Well-Being Map."

⁶ U.S. Census Bureau. (n.d.). "Persons in poverty, percent," U.S. Department of Commerce, accessed September 2023. <https://data.census.gov/>.

⁷ Michigan Association of United Ways. "ALICE in the Crosscurrents: COVID and Financial Hardship in Michigan," April 2023. <https://michiganassociationofunited.app.box.com/s/0djoyw0f1pisx258i025vsnhggyai8sx>

For a sense of income distribution across the state, MLive used 2020 Census data estimates to map the median income, averaged over the previous five years, in cities and townships across the state with lighter colors representing lower incomes⁸ and darker colors representing higher incomes. Communities that experience higher rates of poverty are found throughout Michigan. (Figure 1)

Figure 1⁹ : Map of Five-Year Average of Median Household Income in Michigan by City/Township, 2015-2019



It is evident that economic inequity is widespread across Michigan and should be recognized as a root cause of energy unaffordability. While a broader examination of economic inequity would fall beyond the scope of this report, we will address causes and consequences of inequity within the energy system that create unfair and damaging outcomes for utility customers.

Michigan's energy regulators and policymakers should be aware of the impacts economic inequity has on energy security and affordability. This report is focused on practical and attainable solutions including fair rate structures, sufficient and accessible energy assistance resources, reliability, and equitable access to clean energy and energy efficiency resources for low-income customers.

⁸ "Michigan Poverty & Well-Being Map."

⁹ Mack and Levin. "Michigan cities and townships ranked by median household income, based on new Census data," MLive, Dec. 14, 2020. <https://www.mlive.com/public-interest/2020/12/michigan-cities-and-townships-ranked-by-median-household-income-based-on-new-census-data.html>.

Energy Burden and Energy Insecurity

The State of Michigan and the MPSC have not defined a threshold for energy affordability. However, several other state regulatory commissions have set benchmarks indicating that “affordable” rates will consume no more than 6% of a household’s income. This includes both electricity and natural gas combined. For the purposes of this framework, affordability also requires that neither gas or electric rates consume more than 3% of a household’s income individually.¹⁰ The ratio of energy expenditures to household income is known as “energy burden”.

Energy Affordability

CUB of Michigan will soon publish another report focused on energy affordability, and we will not dive deeply into that topic here. However, as affordability underpins low-income energy issues, we will review the topic as context for our recommendations.

The MPSC defines energy affordability as:

...the extent to which a household has the resources to meet their home energy needs for heating, cooling, and other uses in a healthy, sustainable and energy efficient manner without compromising a household’s ability to meet other basic needs.

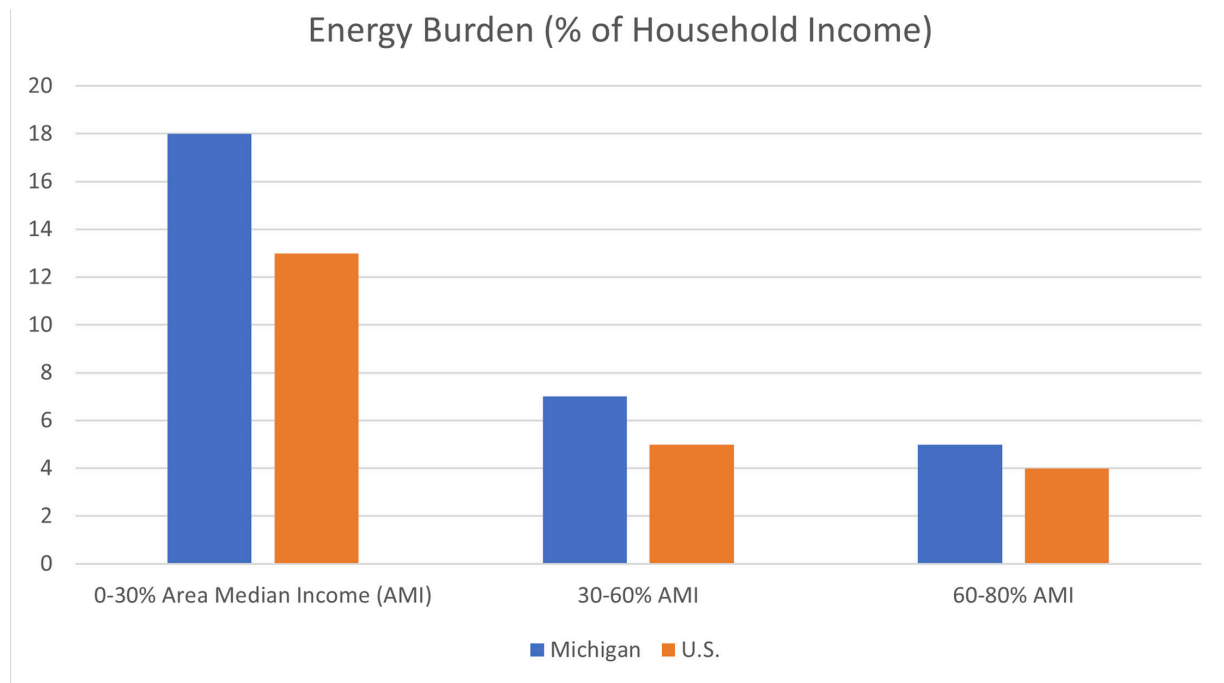
In response to the order in which the MPSC adopted this definition, CUB of Michigan, with others, commented that “...the only way to ultimately address affordability is to have more affordable rates”. This common-sense observation highlights that the adopted definition focuses on household income rather than on affordability of rates, which is a backwards definition of what energy affordability really is. The distinction is not merely semantic, but instead has practical implications. For a variety of reasons that will be discussed later in this report, many utility customers who are eligible for energy assistance do not receive it. While it is important to make energy assistance programs easier to understand and access, the starting point should be to make rates affordable for as many people as possible so they will **not need assistance to begin with**. In short, the MPSC’s definition should recognize that the root cause of the problem is unaffordable rates, not ineffective assistance programs. While both approaches may help customers pay their bills, they are not equivalent in practicality.

The March 2022 report “Lights Out” from Outlier Media and ProPublica told the story of Cassia Haywood, a resident of Detroit’s West Side. Ms. Haywood reported using about \$200 worth of energy each month, equivalent to about 10% of her total income. Furthermore, when hundreds of dollars from payments toward debt she owed to her electric utility were factored in, her energy burden comprised a much higher 34% of household income.¹¹ Unfortunately, stories like this are not uncommon; many families in Michigan spend significantly more than 6% of their household income on energy. Nearly one in five Consumers Energy customers spends over 8% of their income on electricity alone. As 2 shows, in January 2024 the US Department of Energy reported that the energy burden for customers at various income levels is higher in Michigan than the US averages.

¹⁰ Direct testimony of Roger Colton filed on behalf of AG Dana Nessel and CUB, Consumers Energy Electric Rate Case U-20697, June 24, 2020. <https://mi-psc.my.site.com/sfc/servlet.shepherd/version/download/068t000000C1xgNAAT>

¹¹ Alvarez and Philip. “Lights out: Profitable utility company shut off electricity to homes hundreds of thousands of times,” Outlier Media and ProPublica, March 18, 2022. <https://www.propublica.org/article/lights-out-profitable-utility-company-shut-off-electricity-to-homes-hundreds-of-thousands-of-times>

Figure 2¹²

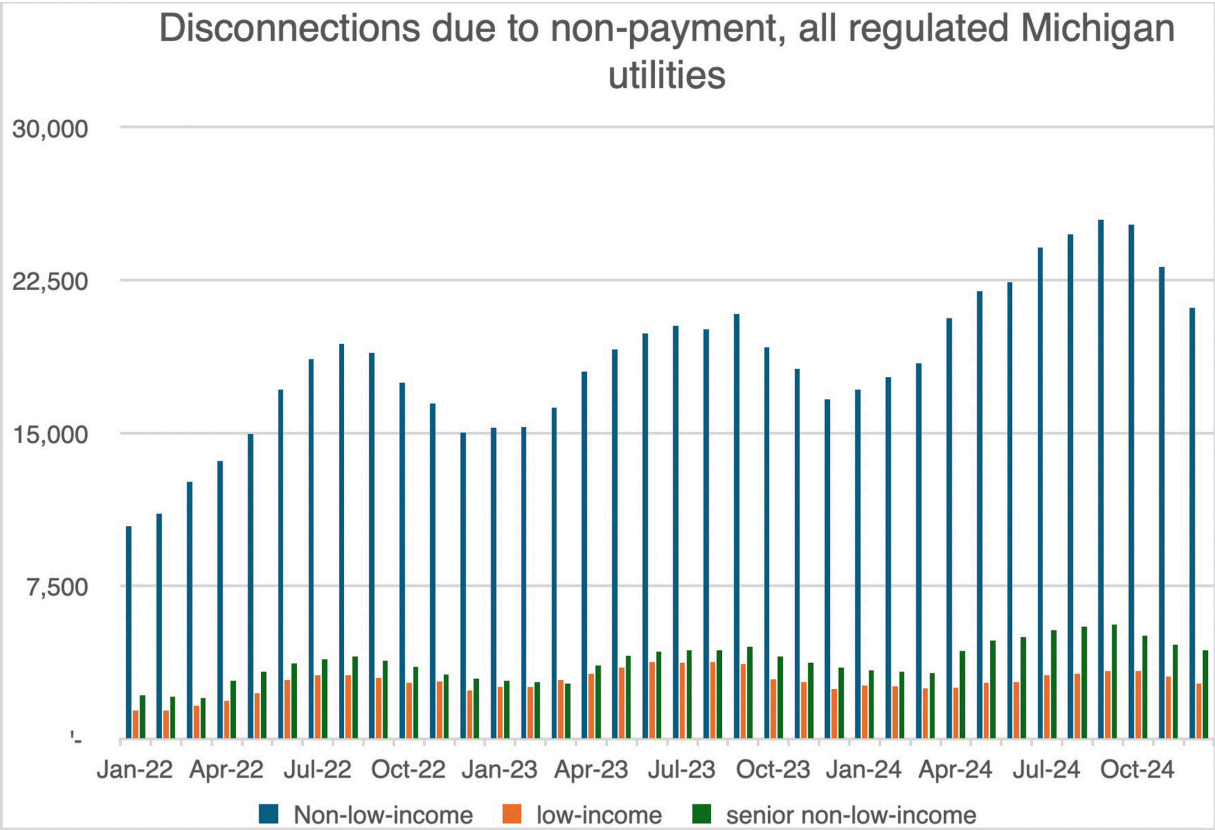


The most dramatic and consequential outcome for low-income households that cannot afford to pay their utility bills is disconnection owing to non-payment. MPSC data show that the number of residential customers whose power and/or gas remain disconnected owing to non-payment has risen steadily since the end of the shutoff moratorium that was implemented during the COVID-19 pandemic (Figure 3). The number of households without electric or gas service in the last six months of 2024 was 80% higher than in the first six months of 2022, which was about one year after COVID restrictions were lifted. Disconnections of identified low-income customers were 65% higher and non-low-income seniors¹³ saw 90% more disconnections.

¹² United States Department of Energy, Low-Income Energy Affordability (LEAD) Tool, available at: <https://www.energy.gov/eere/slsc/maps/lead-tool>. Accessed January 2024. The Department of Energy under President Trump has withdrawn public access to the LEAD tool.

¹³ "Non low-income seniors" may include some customers who would qualify as low-income but have not been identified as such by their utilities.

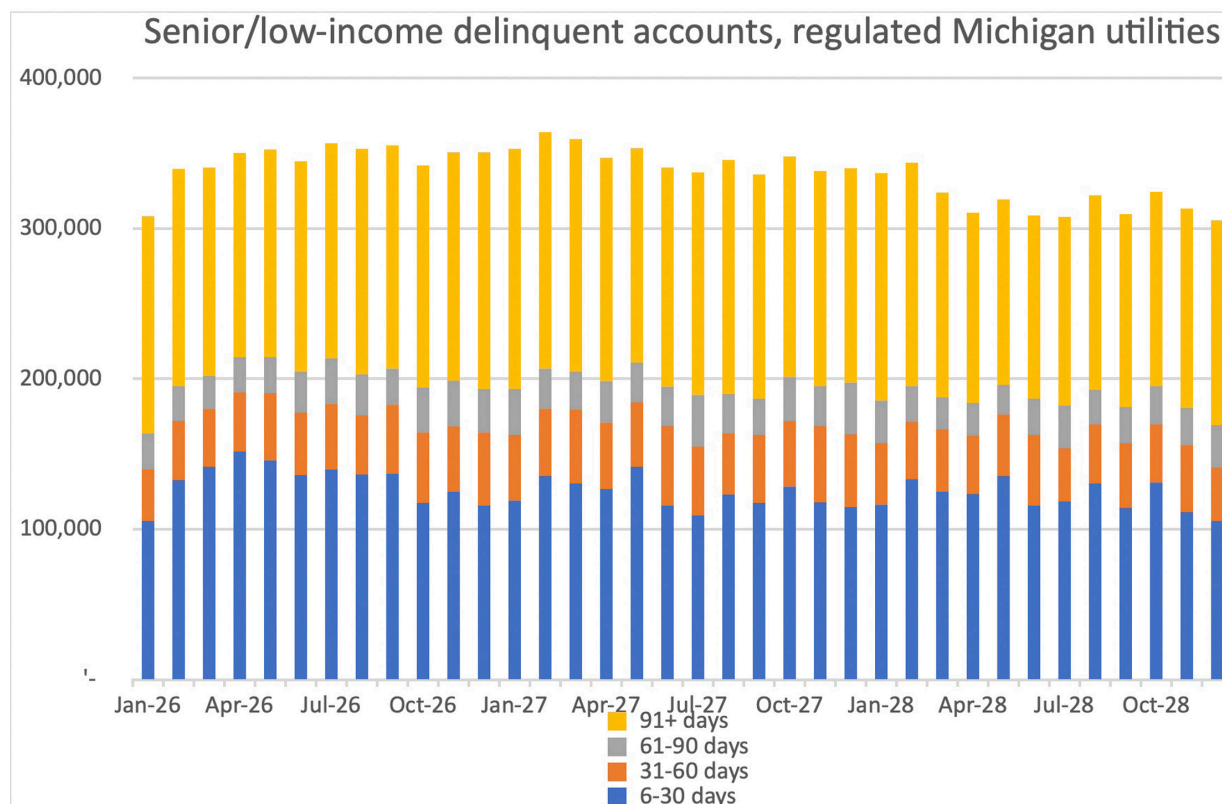
Figure 3



Source: MPSC, U-20757 "COVID docket" data.

This trend of increasing numbers of households whose utility services remain disconnected at the end of each month has occurred even while the number of delinquent accounts has declined. Compared to the first six months of 2022, 12.6% fewer known senior and low-income customer accounts were delinquent in the last six months of 2024 (Figure 4).

Figure 4

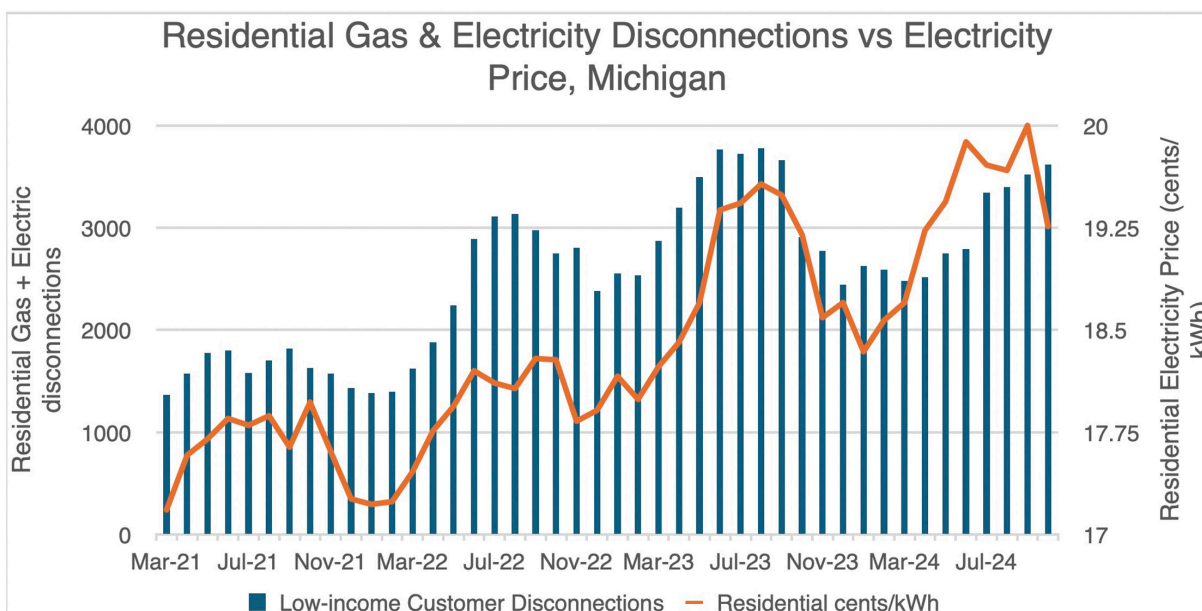


Source: MPSC case no. U-20757, "COVID docket" data.

Intuitively, we would expect to see disconnected households decline along with delinquencies, but instead the count has risen sharply. Additionally, census data reveal that there are many more senior and low-income households in Michigan than utility records have identified. These unidentified vulnerable customers are not eligible for shutoff protections and assistance programs. Rising energy costs may squeeze them financially until they fall into delinquency and get disconnected. This under-identification of senior and low-income customers by utilities may explain why overall disconnections are rising even while delinquent accounts among known senior and low-income customers are declining.

MPSC data also reveal a striking parallel between rising numbers of households disconnected owing to nonpayment and rising electricity prices, strongly suggesting a causal association (Figure 5).

Figure 5



Source: MPSC, case no. U-20757 Utility Customer Payment Data (<https://www.michigan.gov/mpsc/regulatory/reports/other/utility-customer-data>) and electric rates data (<https://www.michigan.gov/mpsc/consumer/electricity>)

Energy Burden Correlates with Health and Environmental Risk Factors

The health impacts on low-income households experiencing high energy burden are significant. A 2021 study found that a 1% increase in energy burden correlates with a 7% increase in residents who report fair or poor health and a more than five-year decrease in average life expectancy.¹⁴ Additionally, high energy burdens have been linked to mental illnesses such as chronic stress, anxiety, and depression.¹⁵

Programs that hold great potential for making energy more affordable often fail to address this issue because the processes for securing assistance are so difficult or cumbersome that customers struggle to simply navigate the system. With a high energy cost burden and not enough assistance to combat it, families must make difficult choices: between having electricity or having adequate groceries for the month; between keeping their lights on or purchasing essential medications; or one of a myriad possibilities of unreasonable and life-threatening tradeoffs. These are heartbreaking, unacceptable and unnecessary dilemmas that are regularly faced by families across the state.

For decades, low-income customers have been afflicted by gross inequities when it comes to utility services. These customers are most likely to live in areas polluted by power plant emissions, resulting in chronic sickness and health problems. They also experience poorer energy reliability and are more likely to live in energy-inefficient buildings, leading to greater energy use and higher utility bills.

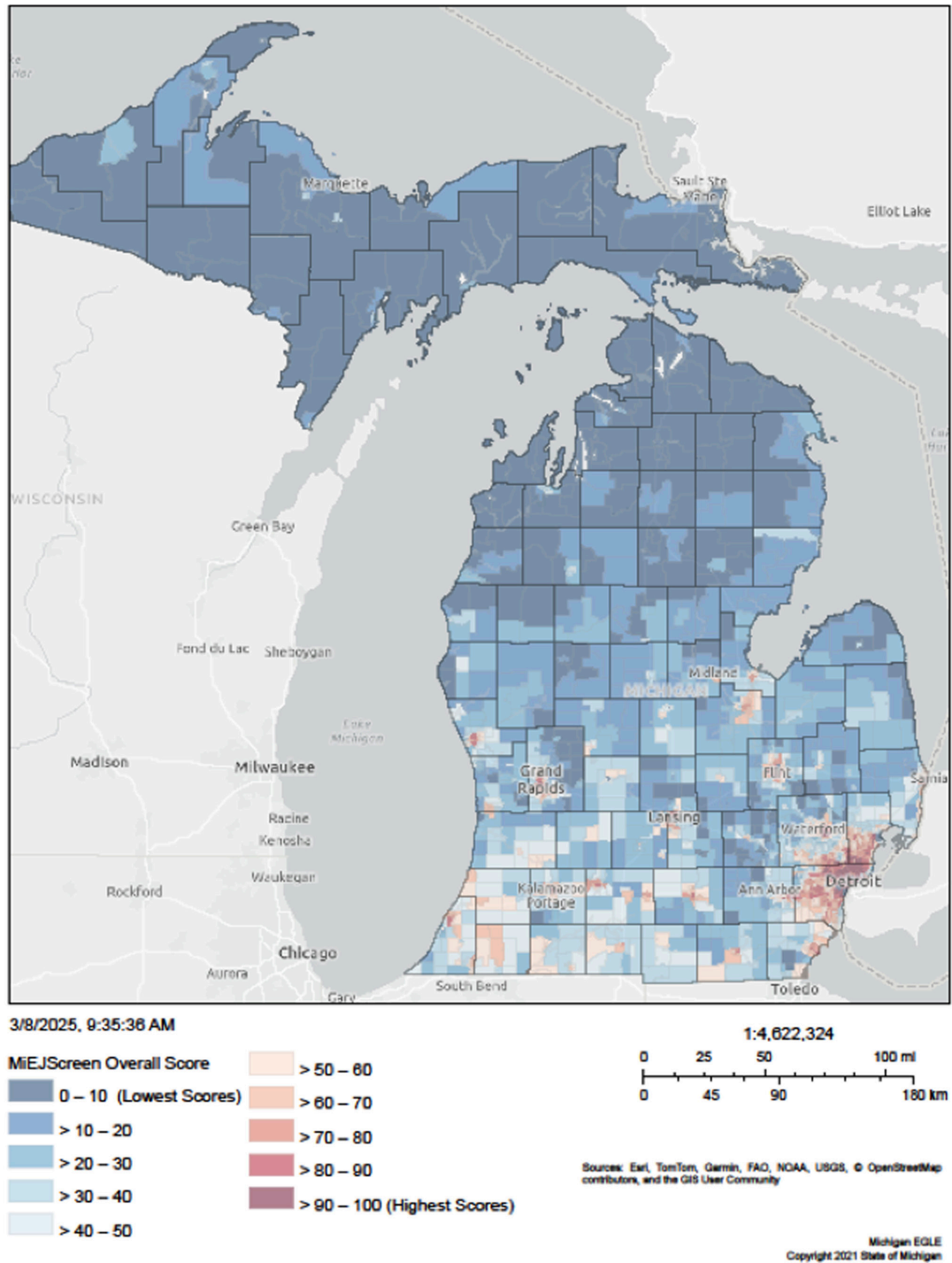
Low-income customers also struggle to claim benefits for which they are eligible. Billpayer assistance supports far fewer people than are eligible. Energy waste reduction programs are less likely to create significant, lasting benefits

¹⁴ Reams, et. al. "Exploring the Nexus of Energy Burden, Social Capital, and Environmental Quality in Shaping Health in US Counties," *International Journal of Environmental Research and Public Health*, January 2021. <https://www.mdpi.com/1660-4601/18/2/620/html>

¹⁵ Drehabl, *ibid*.

for low-income customers. While these inequities happen across the nation, they are particularly prevalent in Michigan. The state is plagued by elevated poverty levels¹⁶ and significant elements of economic and racial segregation that have concentrated marginalized groups in highly polluted areas. Figure 6, created using the Michigan Environmental Justice Mapping and Screening Tool (MiEJScreen), depicts how environmental hazards and low socioeconomic status overlap. The redder an area is shaded, the higher its environmental justice and pollution burden is. The locations with the highest scores are areas with large concentrations of marginalized groups and low-income communities.

Figure 6



¹⁶ University of Michigan Poverty Solutions. "Michigan Poverty & Well-being Map," accessed December 2023. <https://poverty.umich.edu/research-funding-opportunities/data-tools/michigan-poverty-well-being-map/>

Recent Progress

The Legislature, MPSC and state agencies have given energy equity issues increasing attention in recent years and have taken important steps. The impacts will take time to assess.

Recent Changes in Michigan Law

In December 2024, Governor Whitmer signed into law several improvements to low-income energy assistance programs. In summary, the changes increased the number of households eligible for energy assistance and the level of funding for assistance; lowered energy assistance application barriers; and broadened how and when energy assistance funds may be spent to benefit customers.

Public Acts 170 and 198 of 2024:

- Expand eligibility for Michigan Energy Assistance Program (MEAP) affordable payment plans and crisis payments from customers below 150% of the Federal Poverty Level (FPL) to 60% of State Median Income (SMI), with the effect of making more households eligible for assistance. For a household of four, 150% of FPL in 2024 was \$46,800 and 60% of SMI was \$61,861.
- Add a definition of “vulnerable populations” and requires that they be prioritized for assistance:
 - Individuals under 5 years of age and over 60 years of age
 - Individuals with disabilities
 - Individuals who have experienced homelessness within the last 12 months and need energy assistance to secure housing.
- Require coordination of assistance services, not only to improve self-sufficiency but also to reduce energy insecurity. Referrals to weatherization and energy waste reduction programs are now considered to be part of self-sufficiency services.
- Require DHHS to consider opportunities to incorporate categorical eligibility for assistance services, meaning that participation in other low-income assistance programs could automatically qualify a household for energy assistance without need of additional eligibility verification.
- Eliminate the requirement that 70% of LIEAF funds must be spent during the crisis season (November 1 to May 31).

Public Acts 168 and 169 of 2024 made funding, reporting and administration changes to LIEAF:

- Remove the \$50 million fund cap and allow MPSC to increase the monthly LIEAF surcharge (currently \$0.87/ meter) by up to \$0.25/ meter annually up to \$2.00 total.
- Require that MEAP funds are returned to eligible low-income customers in the geographic area from where the funds were collected, to the extent possible.
- Require that DHHS, MPSC, energy providers and MEAP coordinate to ensure that, to the extent possible, low-income customers in a geographic area receive funds proportional to the amount collected from all customers in that area.
- Utilities serving fewer than 45,000 customers may opt out of collecting LIEAF but must provide their own energy assistance program similar to MEAP and equal to the revenue that would have been collected from the LIEAF surcharge.

Narrower changes were enacted in 2023 to improve delivery of energy efficiency benefits to low-income customers. PA 229 of 2023 mandates that energy providers design and fund programs that achieve energy waste reduction levels for low-income customers similar to or greater than benefits realized by other customers. The law also requires electricity providers to direct at least 25% and gas providers to direct at least 35% of their EWR spending to the benefit of low-income customers. The law allows investments in health and safety measures that aid the implementation of EWR for low-income customers. In addition, PA 229 encourages utilities to develop strategies for efficient electrification, which involves replacing fossil fuel-based systems with electric alternatives that are more energy-efficient. Helping low-income customers electrify their homes will be especially important as the state implements its climate plan, because electrification is usually capital-intensive and has long payoff periods. This means the barriers are highest for low-income customers.

In general, the 2023 and 2024 energy laws improved funding levels, eligibility, delivery, and coordination of energy assistance benefits for low-income customers. The impacts of these changes will play out over time and cannot be fully assessed yet. At the same time, the steady drumbeat of rate hikes and the discouraging increase in disconnections for non-payment signal that low-income customers face continuing challenges. The balance of this report examines additional solutions that Michigan's policy makers should consider.

Regulatory Changes by the MPSC

The MPSC in recent years has taken steps to formulate new approaches for low-income customer concerns. These include research, engagement, and policy development through the MI Power Grid process; the Energy Affordability and Accessibility Collaborative (EAAC); and the Low-Income Energy Policy Board (LIEPB). The LIEPB includes representatives of state agencies, environmental groups, low-income advocates, utility companies, and other stakeholder groups who work together to coordinate statewide low-income policy and programs. We discuss many of these efforts throughout the report as context for additional recommendations.

Improving Michigan's Approach for Low-Income Utility Customers

The recommendations throughout this report are designed to complement or enhance the efforts of the MPSC, EAAC, LIEPB, state and local agencies, utilities and others by pointing to changes that will help low-income customers and would be relatively simple to implement.

Included are recommendations to tackle low-income energy inequities through expanded assistance programs and better use of data. A related section on rate design examines how inequity is built into customer rates and suggests ways to address that structural issue. We also pay special attention to the problem of poor reliability, how it disproportionately affects low-income customers and recommend measures that the MPSC could take to relieve some of the harm these customers experience due to frequent and long-duration power outages.

Later, we discuss the need to expand access and remove barriers to critical assistance programs for low-income customers and communities. The benefits of energy efficiency and efficient electrification programs should be more widely shared with low-income customers and communities. The MPSC should also expand accessibility to newer clean and advanced energy technologies like distributed energy and demand side management. We discuss needs to institute stronger protections against unfair or ineffective utility billing and collections practices. In addition, we outline steps regulators should take to improve data collection and reporting to give stakeholders more knowledge about energy justice.

I. RATES AND RATE CASE REQUIREMENTS

According to CUB of Michigan's 2025 Utility Performance Report, Michigan had the 11th-highest residential electric rates in the nation in 2023.¹⁷ Rates should be distinguished from burdens, which capture the total energy expenditure of households encompassing electricity, gas, delivered fuels and more in relation to household income. Rates express the cost per unit of energy used. In Michigan, although electricity rates are high, the electricity burden is not as high because Michigan customers generally use less electricity than customers in other states with high rates. That does not mean that Michigan customers have an overall lower energy burden, though, because they also use more gas or delivered fuels than customers in those other states, owing to our colder climate. In 2022, Michigan households spent 4.04% of statewide median income on energy, the 14th highest in the nation.¹⁸

In Michigan, and most of the United States, rates are determined through an analysis of the "cost to serve" each rate class. The usual rate classes are residential, commercial, industrial, and lighting with subcategories within each. A utility establishes the total cost to provide service in its service territory. Costs are then allocated among the rate classes based on cost to serve, establishing required revenue for each class. Within each class, rates are then designed to recover the required revenue from customers. A regulated utility cannot change its rates without filing a contested case proceeding before the MPSC, which provides MPSC Staff and other intervenors the ability to scrutinize and contest the requests.

While CUB and other groups intervene in these cases and file comments and testimony drawing attention to low-income customer concerns, no group—including MPSC Staff—is *required* to evaluate how a proposed rate change would affect affordability for low-income groups. Requiring the evaluation of these low-income affordability issues would raise the visibility of low-income concerns.

The MPSC rate case process is not conducive to customer participation in general, making it that much more difficult for already disadvantaged populations to ensure adequate representation in the regulatory process. Decisions about rate increases or programs are based on MPSC's governing law and the record of evidence in the specific case. Evidence may be placed on the record only by parties to the case, who must meet stringent requirements of legal standing and expertise to participate. Low-income customers are unlikely to meet these requirements to provide evidence or have the technical knowledge and credentials to participate. Additionally, low-income people cannot reasonably be expected to dedicate the dozens of hours required to discuss, analyze and prepare filings in the latest rate case on top of the already strenuous demands this population faces in their daily lives.

There are two categorical solutions to these issues:

1. Ensure that low-income customer data and analyses are presented in rate case filings
2. Make it easier for low-income customers, or their representatives, to participate in such proceedings.

Requiring an analysis of the effect of a rate increase on affordability for low-income customers could be a stepping stone for bigger changes in utility policies. If each rate case had reporting from the MPSC Staff on low-income issues, those reports would anchor discussions among intervenors around ways to revise the rate request to improve treatment of low-income customers. The MPSC would then have a basis to rule on rate cases accordingly. Additionally, to complete this analysis effectively and ensure that a new rate's impact on low-income customers is thoroughly scrutinized, an extended period between rate proposals would be beneficial. Currently, state law allows utilities to file a new rate case 12 months after filing the previous one; DTE and Consumers usually file as soon as they can. While the MPSC cannot change this statute, a formal recommendation from the MPSC to the Legislature to increase this time could be influential. Utilities can also agree to delay filing a rate case through what is colloquially termed a "stay-out agreement" that may be part of a rate-case settlement agreement with intervenors, but would expect something valuable in return.

¹⁷ CUB Utility Performance Report 2025 Edition, fig. 32, p.43.

¹⁸ CUB report, Fig. 28, p.36.

In addition to making sure that low-income ratepayer concerns are represented in rate cases, steps should be taken to ensure that low-income communities can effectively advocate for themselves. An important component of Michigan's regulatory process pertaining to ratemaking is the Utility Consumer Participation Board (UCPB). This five-member, governor-appointed board grants funds to applicants, mostly from the nonprofit sector, to intervene in rate cases and other regulatory proceedings on behalf of residential customers.¹⁹

In late 2023, as part of the major reforms made to Michigan's energy laws that year, the state legislature attempted to amplify the role of the UCPB to help high-energy burden communities with a provision that the "board shall encourage grant making to nonprofits representing environmental justice communities and communities with the highest energy burdens."²⁰

The language of the law, however, is vague on exactly what actions the term "encourage" entails, and exactly how a nonprofit should conduct itself to be considered as "representing" those communities.

Recommendations:

The MPSC should require MPSC Staff to provide an analysis of the impact of any proposed rate increase on customers below 150% of the FPL, including:

- *The change in average monthly electricity/natural gas bills for low-income customers*
- *The energy burden for low-income customers in the utility's service territory after the rate increase, compared to commonly used standards of affordability.*

The MPSC should require that the utility provide data on low-income customers in its service territory necessary to support the aforementioned analysis.

The Legislature should extend the amount of time a utility must wait between rate-case filings to at least 24 months to allow enough time for changed rates to be implemented, data collected and analyzed, and to facilitate discussion about what should be done moving forward.

The UCPB should adopt specific goals for the value of grants it makes to nonprofits representing environmental justice communities, give greater weight to non-intervenor input in rate cases and provide more support for participation of marginalized communities in other MPSC processes.

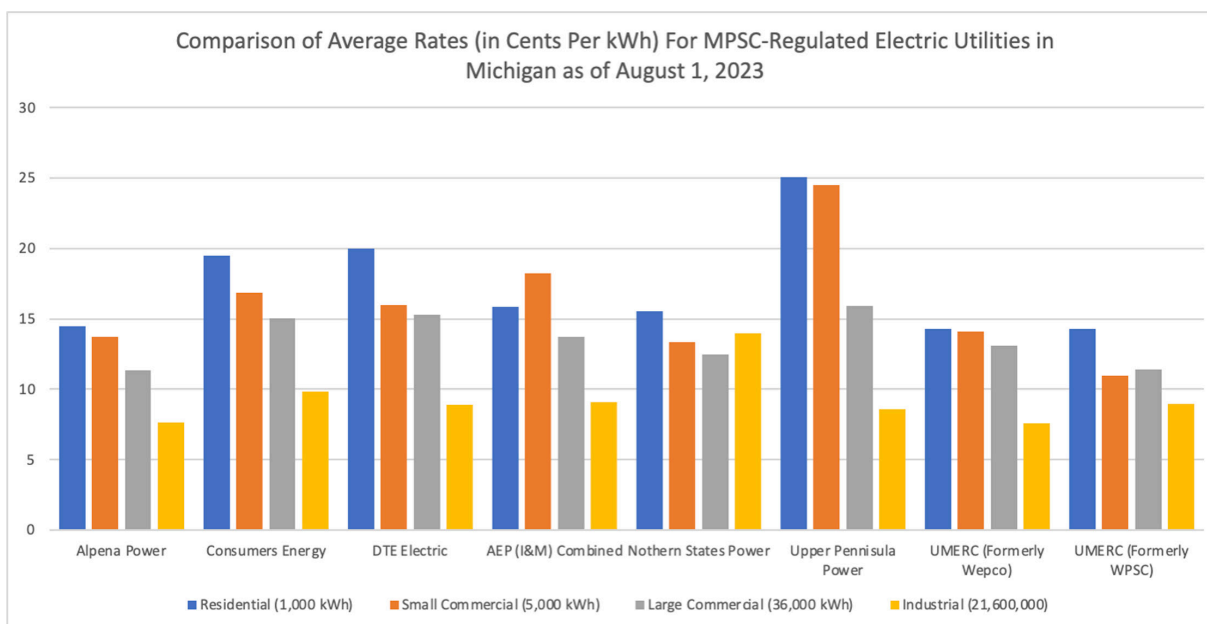
Customer Classes

Residential customers have the highest rates amongst all customer classes in Michigan. Figure 7 shows the difference in per kilowatt-hour costs for the different major customer classes of Michigan's investor-owned utilities (IOUs).

¹⁹ The UCPB is a primary source of funding for CUB of Michigan.

²⁰ Enrolled Senate Bill No. 502. Filed with Secretary of State Nov. 29, 2023. <https://www.legislature.mi.gov/documents/2023-2024/publicact/htm/2023-PA-0231.htm>

Figure 7²¹



Extreme weather and infrastructure requirements drive residential rates notably higher but are less impactful on other classes. Residential energy consumption skyrockets during very hot and cold days. To meet spiking residential demand, utilities turn on their older, less efficient and more expensive power plants. Accordingly, residential rates cover most of these peak demand costs. Energy usage of industrial and commercial customers varies less with weather conditions, allowing utilities to build plants that meet their energy needs at lower cost.

Distribution infrastructure also drives residential rates higher. This infrastructure includes the poles, wires, and facilities that run energy to houses and commercial businesses. Commercial customers also pay for distribution infrastructure, but at a lower per-kWh rate, because businesses generally require the same amount of infrastructure but use a larger total of annual energy. Since industrial customers often connect directly to primary or transmission infrastructure, their limited use of distribution infrastructure results in fewer distribution costs being included in their rates. While all customer classes pay some amount per-kWh for the generation costs of producing electricity, these charges vary among customer classes in ways that CUB of Michigan has continually demonstrated to be unfair.

Among other considerations, energy production and distribution systems must be designed to meet peak demand – to which not everybody contributes equally. Industrial customers, as highlighted above, have relatively constant demand, while residential customers drive critical peaks. These peaks most often occur on hot summer afternoons as people arrive home from work and turn on energy-intensive air conditioning systems. Because these critical peaks are mostly caused by residential customers, the costs of generating and distributing that additional power are mostly allocated to residential rates.

Allocation of Costs Among Residential Customers

While peak demand costs are allocated equally across all residential customers, they are not being created equally across all residential customers. Studies find that low-income households' energy spending is often less responsive

²¹ Michigan Public Service Commission Utility Rate Books

to extreme weather than that of other households.²² Not surprisingly, low-income families are less likely to have air-conditioned homes, and those that do are less likely to turn it up on very hot days because they cannot afford to generate higher bills. Yet they still pay the same high peak-demand rates that are spread evenly across all residential customers. This type of rate design creates inequitable outcomes by treating all residential customers the same, without regard to their actual contributions to peak demand. The Commission should examine rate design strategies that could alleviate this inequitable allocation of costs within the residential customer class.

Rate design can drive inequitable treatment within the residential customer class in other ways. A chief example is the effect of high fixed charges on different types of residential customers. Fixed charges, such as a monthly meter charge that is not tied to the amount of electricity consumed, are theoretically meant to recover the utility's fixed costs, which represent how much it costs for a customer to simply remain hooked to the grid. For example, the cost of installing a meter at a residence does not vary according to how much electricity the household uses. Utilities often prefer to have higher fixed costs to make their revenue more predictable. The issue with high fixed costs is that they disadvantage customers who use very little electricity, who are often poorer customers, or customers trying to conserve electricity.

Table 1 below shows a simplified example of how one customer (Customer A) could use half of the electricity of another customer (Customer B) but still wind up paying *more* per kWh because of inequitable fixed costs. Figure 11: Average (2018-2022) System Average Interruption Frequency Index (SAIFI) (interruptions per customer)

Table 1

	Customer A	Customer B
Energy Usage	500 kWh	1000 kWh
Utility Volumetric Rate	\$0.15	\$0.15
Total Volumetric Charges	\$75	\$150
Fixed Charge	\$10	\$10
Total Utility Bill	\$85	\$160
Average Total Cost per kWh	\$0.17	\$0.16

This hypothetical example shows how the customer who uses more electricity pays a lower rate for it—a poor incentive for efficiency and an undue burden on low-income customers.

Designing rates to accurately differentiate cost causation between low-income and other residential customers would add a layer of complexity to the already challenging task of allocating costs among rate classes. It might be simpler to provide assistance to low-income customers when rates are deemed unaffordable instead of fixing the underlying problem. While simple solutions can be tempting, they are not always better. Charging unfair rates

²² Doremus, et al. "Sweating the energy bill: Extreme weather, poor households, and the energy spending gap," Journal of Environmental Economics and Management, March 2022. <https://www.sciencedirect.com/science/article/abs/pii/S0095069622000018>

burdens low-income customers unnecessarily. Their only recourse is to utilize assistance programs that currently serve a small minority of eligible customers. A more ideal approach would be fair rate design, which would significantly reduce the number of low-income customers who need assistance in the first place. Fortunately, the advent of automatic meters, time-of-use rates and other technological and ratemaking innovations make more data-driven and nuanced approaches to ratemaking feasible.

Recommendations:

The MPSC should order a study to ensure that the allocation of costs among residential customers is as fair and reasonable as possible.

The MPSC should limit fixed charges to both mitigate the disparate impact on low-income customers and provide a stronger financial incentive to reduce energy use.

II. FINANCIAL ASSISTANCE

Energy assistance in Michigan is delivered in several forms and through several channels, which complicates efforts to coordinate enrollment and delivery processes among providers and may hinder customer understanding of options and processes. Each funding source—federal government, state government and utilities—has eligibility and process requirements that may be difficult to harmonize; for example, Michigan has limited influence on how federal energy assistance dollars may be spent here. In this section we review the various assistance programs, challenges for assistance providers and customers, and suggest potential improvements. Here we focus only on direct financial assistance. Energy waste reduction is a critical component of energy assistance programs that should always be coordinated with financial assistance. This is a large topic in its own right with challenges distinct from provision of financial assistance. As such, we cover it later in this report.

Bill Payment Assistance Programs

Low-income customers face many barriers when it comes to accessing support through state and federal bill payment assistance programs. When the cognitively disabled son of Eaton Township resident Lisa Sepeter was removed from an energy payment assistance program, she made dozens of calls to get him re-enrolled. Her son lives on \$7,000 a year and is among a significant number of Michigan residents who depend on state and federal energy bill assistance programs to pay their utility bills. Sepeter was finally able to get him re-enrolled after four months of calls, letters, and inquiries about her son's case. She noted her frustration that Michigan residents like her son must fall behind to qualify and receive ongoing help.²³

Several state and federal programs help customers pay their energy bills. Almost 57,000 households in Michigan received at least one form of assistance from the Michigan Energy Assistance Program (MEAP) in 2023.²⁴ However, the relief from this assistance does not mitigate the chronic problem of unaffordability. Policy goals should focus on long-term solutions to reduce the need for assistance and aim to reduce reliance on band-aid solutions to acute affordability crises when shutoff is imminent.

²³ Thompson. "Fixed-income Michigan residents face extra hurdle to qualify for Heat Assistance Program," Lansing State Journal, Feb. 9, 2000. <https://www.lansingstatejournal.com/story/news/2020/02/10/fixed-income-michigan-meap-ser-heat-assistance/4529223002/>

²⁴ MPSC, "Michigan Energy Assistance Program Report to the Legislature – Fiscal Year 2023," p.5.

Figure 8

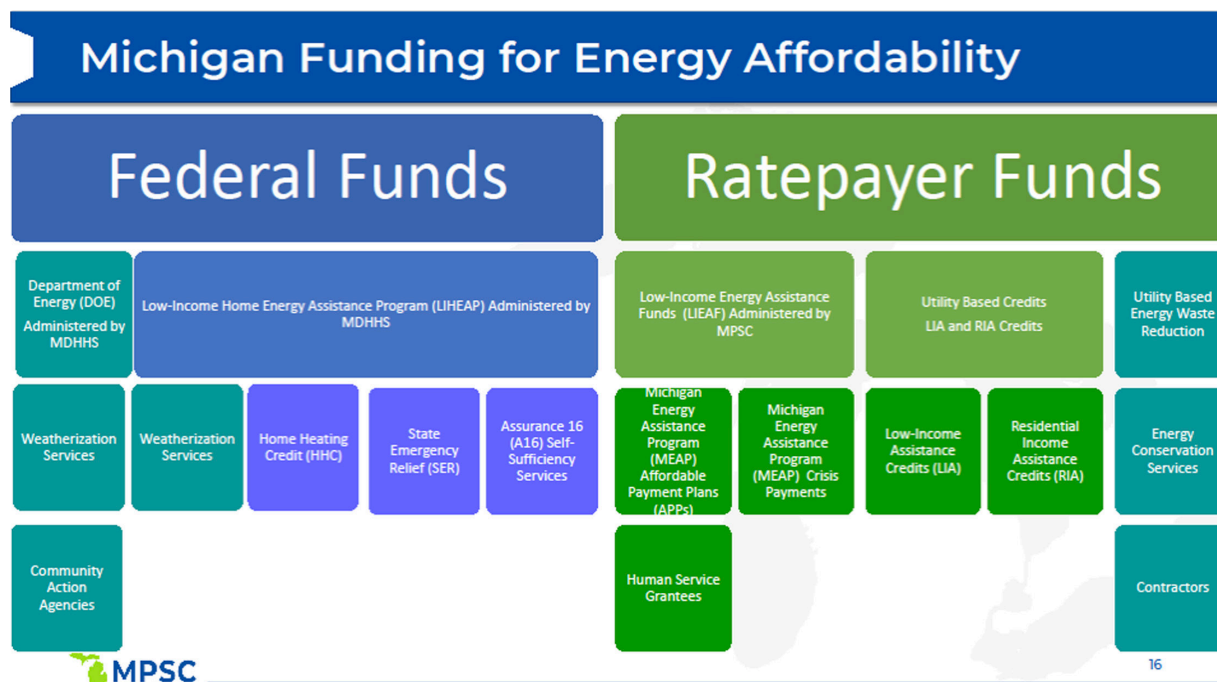


Figure 8 displays the options residents have for energy payment assistance programs in Michigan. Customers can receive assistance sourced from federal funds or ratepayer funds. Scanning through the graphic immediately illustrates how complex and difficult navigating these programs can be for ratepayers. The small differences in eligibility between programs are subtle and take time to understand. Applicants are then required to demonstrate eligibility by submitting required paperwork, an additional burden requiring more time that low-income households often do not have. Once everything is done and submitted, the actual assistance may not arrive for several more months.

Federal Energy Assistance Programs

Federal funds are administered by the Michigan Department of Health and Human Services (MDHHS). Michigan has limited influence over how federal funding is targeted. We limit our recommendations here to opportunities for improved coordination with ratepayer-funded programs.

The U.S. Department of Energy provides funding for weatherization services, an important complement to ratepayer-funded EWR programs which are administered by utilities. DOE funds also support community action agencies, which administer weatherization programs and LIHEAP assistance.

LIHEAP

Michigan's fiscal year 2025 LIHEAP application to the federal government showed that Michigan planned to use 30% of the funding on the Home Heating Credit (HHC), 45% on State Emergency Relief (SER) and 10% on the Weatherization Assistance Program (WAP), with another 10% going to administration and other services.²⁵ Additionally, the Assurance 16 program, which provides services to help households receiving emergency assistance with needs assessment, budgeting assistance, energy education and assistance enrolling in affordable payment plans, received \$5 million in federal funding in 2024.

²⁵ Michigan Department of Health and Human Services, Proposed LIHEAP State Plan for FY2025, retrieved on February 26, 2025 from <https://www.michigan.gov/mdhhs/inside-mdhhs/reports-stats/plans-regs/plans-regs/low-income-home-energy-assistance-program-liheap-state-plans>

HHC is designed to assist low-income renters and homeowners by offsetting their heating expenses and is managed by the Department of Treasury. HHC does not require an applicant to be in an emergency to apply. However, applicants must be at or below 110% of the federal poverty line to qualify.

SER is designed to help households with their utility bills or the costs of delivered fuel when unexpected emergencies arise. As such, it is distinct from programs intended to address chronic financial difficulties. SER is managed by MDHHS and applicants must be at or below 150% of the federal poverty line to qualify.

WAP provides energy conservation and related health and safety services for eligible low-income households at no cost. These services include home energy audit, air sealing, wall/attic/sill box insulation, and programmable thermostat installation. WAP is administered by local Community Action Agencies around the state.

Ratepayer-funded Assistance

Ratepayer funds are derived from surcharges on customers' utility bills and are managed either by MPSC or the utilities. Changes to ratepayer-funded assistance programs are made either through MPSC rate cases or EWR plan cases and are therefore more amenable to modification by state policymakers, utilities, and other stakeholders.

LIEAF

The Low-Income Energy Assistance Fund (LIEAF) grants about \$50 million annually to MEAP providers²⁶ which use those funds for bill payment assistance and related services. LIEAF was established by the legislature in 2016 and is funded with a charge on residential utility bills, which was updated to \$0.88 per meter per month under a July 2023 MPSC order.²⁷

About \$40 million was spent on MEAP assistance in 2023. Of that amount, \$24 million supported the Low-Income Self-Sufficiency Plan (LSP), a 24-month program that sets up low-income customers with fixed monthly bills. The portion of the energy bill not covered by the fixed rate is paid out of LIEAF funds. In addition, any outstanding arrears from the time of LSP enrollment are reduced by 1/24th of pre-program arrearage balance each time a monthly bill is generated for a customer over a two-year period. Recently, the LSP program was linked to SER to streamline the assistance process and reduce the administrative burden on the nonprofits that administer LSP. This change made the assistance process faster and less burdensome for service providers and recipients. The 2024 energy laws²⁸ increased the income eligibility threshold from 150% of FPL to 60% of State Median Income, making many more customers eligible.

Another \$16 million of LIEAF funding was spent on one-time (mostly crisis) assistance and other payment assistance. 41,675 households received self-sufficiency services including needs assessment, vendor advocacy, energy education, financial counseling and short- and long-term case management services.²⁹

Utility-Based Credits

Utility energy assistance programs are financed by surcharges on customer bills. Utilities project costs of these programs and propose surcharges in their rate cases to recover the costs from all ratepayers. Historically, costs that utilities could recover for these programs were capped at the amounts approved in rate cases, but the MPSC now

²⁶ A list of MEAP grantees is available here: <https://www.michigan.gov/mpsc/consumer/energy-assistance/2020-meap-grant-program-fact-sheets>.

²⁷ MPSC Case U-17377, Order, July 26, 2023.

²⁸ Public Acts 170 and 198 of 2024. See "Recent Changes in Michigan Energy Laws" section above.

²⁹ MPSC, "Michigan Energy Assistance Program Report to the Legislature – Fiscal Year 2023." https://www.michigan.gov/mpsc/-/media/Project/Websites/mpsc/regulatory/reports/MEAP-Reports/2023_MEAP_Report_to_Legislature.pdf?rev=cc66d50f1c404b0fa3ea8890059251ca&hash=FC2CE59ED6761EDE009641467A025547

allows deferred recovery of costs in excess of projections, meaning that the utilities can recover unexpected costs after-the-fact through subsequent rate cases.

Low-Income Assistance Credit

LIA is a program run and administered by utilities that provides a monthly bill credit for low-income households with incomes at or below 60% of the state median income. In its order for case no. U-21534 in January 2025, the MPSC raised DTE's LIA credit to \$50/household/month.

Residential Income Assistance Credit

RIA is a program offered by utilities that provides a monthly bill credit (typically limited to the monthly customer charge, usually less than \$10) for low-income customers at or below 150% of the federal poverty line. It serves many more customers than LIA but at much lower average amounts since the credit is linked to the fixed monthly customer charge.

While eligibility for both LIA and RIA credits is income-contingent, every eligible household receives the same credit regardless of income. A \$50 LIA credit may reduce energy burden for a household at 150% of the federal poverty line, bringing their net energy costs below the 6% high energy burden mark discussed earlier. But a household at less than 50% of the federal poverty line would likely still pay more than 10% of household income toward utility bills, placing them in the category of a "severe" energy burden and slipping inexorably closer to crisis. Because eligibility for LSP—the credits for which vary with income—depends on a household first getting a disconnection notice and receiving State Emergency Relief, RIA and LIA are the primary programs serving households not already in crisis. Eligibility and credits should be determined to prevent those households from going into crisis owing to high energy bills. The best approach would be to vary RIA and LIA credits in accordance with household income, targeting higher monthly amounts to households with lower incomes.

EWR low-income assistance programs are reviewed in a subsequent section of this report.

Bill Payment Assistance Program Challenges

These assistance programs play a vital role, yet they fail to serve many eligible households even though their funding, as previously noted, is not always fully expended. For example, the U.S. Department of Health and Human Services estimated that in 2022, only 31% of income-eligible households in Michigan were served by any type of LIHEAP assistance.³⁰ Similarly, Consumers Energy estimates that only one-in-six low and moderate income customers engage in the company's assistance programs.³¹ Efforts are needed to improve awareness of assistance programs so they are more accessible to eligible households.

The MPSC has acknowledged this lack of awareness. In its February 2021 order in Case No. U-20757, the MPSC created the Energy Affordability and Accessibility Collaborative (EAAC), which seeks broad and diverse input from residents, non-profits, utilities, and state agencies to address energy equity and affordability. From the EAAC, the Affordability, Alignment, and Assistance (AAA) subcommittee was created to promote energy affordability and improve systems of energy assistance. One recommendation from the AAA subcommittee was to "provide additional outreach to assistance customers so they are aware of utility credits that may be available to them."³² While an indispensable element, additional outreach alone seems inadequate to the objective of multiplying the number of households served.

³⁰ Custom report tool from U.S. Department of Health and Human Services Administration for Children and Families. Accessed January 2024. https://liheappm.acf.hhs.gov/datawarehouse/custom_reports.

³¹ MPSC case no. U-21806, direct testimony of Consumers Energy witness Jessica R. Byrom, p. 19, lines 9-10.

³² MPSC, "Energy Affordability and Accessibility Collaborative U-20757 Interim Progress Report," March 17, 2023. <https://mi-psc.my.site.com/sfc/servlet.shepherd/version/download/0688y000007DkxqAAC>

There are several possible explanations for this gap between the number of customers receiving assistance and the number of low-income customers in the service territories of the state's biggest utilities. Among those explanations could be that many customers who could benefit from assistance may not be aware of its existence. If they are aware, they may not know how to apply. Others may hesitate to apply due to a cultural stigma attached to financial assistance programs.

Raising income thresholds for assistance eligibility can help but does little to make more people aware of assistance options or help them apply. State agencies, community action agencies, the MPSC and utilities must continue to find ways to collaborate, to simplify processes, reach out more effectively to low-income customers and make application processes as simple and convenient as possible.

Bill Payment Assistance Programs: Solutions

Assistance programs help households in need; however, they are a band-aid to mask the underlying issue of affordability, which should be addressed through wise rate design. Unless and until rate reforms take hold, utilities can expand their assistance programs by automatically enrolling food and housing assistance recipients to receive RIA or LIA credits ("categorical eligibility"). This change would help thousands of low-income households who are behind on their bills and are not receiving any assistance, likely because they do not know it is available or are having difficulty enrolling.

Another solution is to revisit income thresholds for assistance eligibility—in other words, reset the low-income threshold amount. The U.S. Department of Health and Human Services uses the Census Bureau's poverty guidelines to set income eligibility limits for federal support programs. A family or household with income above those limits faces reduced or eliminated eligibility for various forms of assistance. Many energy assistance programs use higher income thresholds to determine eligibility. For example, Michigan families earning up to 200% of the federal poverty level are eligible for LIHEAP (Low Income Home Energy Assistance Program) assistance. Still, a family of four would be ineligible for LIHEAP assistance if its income exceeded a mere \$59,000 (or less than \$30,000 each for two working adults and two children) in 2023.

Percentage of Income Payment Plans

Aside from charging low-income households a lower rate than other customers, the most straightforward way to reduce energy burden is to limit customers' total monthly energy bills relative to their household income. As discussed previously, households that spend more than 6% of their income are generally considered to have a high energy burden. Those spending more than 10% of household income are generally considered to have a severe energy burden. If the objective is to ensure that households do not exceed these burdens, the most direct solution is to limit monthly energy bills in proportion to household income using a Percentage of Income Payment Plan (PIPP). The amount a customer owes each month under a PIPP is based on their household income, in contrast to LSPs which set monthly payment requirements at the same level for all households in each FPL band. Both PIPPs and LSPs feature progressive arrearage forgiveness for customers, with some operational and eligibility differences, recognizing that arrearage payments contribute to energy burden.

Both DTE and Consumers Energy launched two-year PIPP pilots in 2022. DTE concluded its pilot, the Payment Stability Program (PSP), in late 2024 and filed a report with the MPSC in docket no. 20929 in January 2025. The Consumers Energy pilot concluded early in 2025 and the final report was filed in docket no. 21021 in May 2025. In both programs, the difference between monthly bills and actual usage was covered by a PIPP credit. Any pre-existing arrears were forgiven progressively over the 24-month term of enrollment, with an installment applied for each month in which the customer paid their current bill on time. DTE's pilot limited utility bills to 10% of income for combination electric and gas customers, and 6% for gas or electric alone.³³ Consumers' pilot applied the 6% energy burden limit

³³ Alvarez, "Detroit's heavy burden: High electric rates, tens of thousands of shut-offs and a looming price hike," Outlier Media, March 18 2022. <https://outliermedia.org/detroits-heavy-burden-high-electric-rates-tens-of-thousands-of-shut-offs-and-a-looming-price-hike/>

favored by most advocates for combination customers and 4% for single-service customers. While acknowledging that 10% is regarded as a severe energy burden, DTE's report does not explain why it chose that level rather than 6%.

The difference between energy burden targets set by the two pilots affords opportunity to compare customer outcomes including arrearages, on-time payments, program retention and disconnections.

DTE PIPP outcomes

DTE noted in its pilot program report that “when comparing key PSP program outcome metrics to LSP (Low-income Self-Sufficiency Plan), the Company found similar results with marginal differences in terms of on-time payment rate, NPS³⁴ score and cost. However, the LSP disconnect rate was considerably higher than that of PSP.”³⁵ One reason for this difference may be that customers do not qualify for LSP until they have received a disconnection notice and have qualified for State Emergency Relief, whereas PSP enrolled participants who were not already in crisis. Also, the PSP pilot ended relatively recently, whereas there are years of data to track outcomes for LSP participants after they “graduate” by paying off the last of their arrearages. These observations cast doubt on the rigor of DTE's claim that the PSP reduced disconnections compared to the LSP.

DTE reported differences in outcomes according to the federal poverty level of the participants. Customers above 111% of FPL actually had higher monthly payments due than before they had enrolled in the program, and their actual monthly payments were higher than those for the same income groups served by the LSP. Across almost all income groups and customer types, LSP customers reduced their arrearages much more than did PSP customers, although direct comparison is tricky because LSP participants automatically receive arrearage forgiveness for every month they stay in the program, whereas PSP participants received forgiveness only when they paid their monthly bills on time. Most PSP participants who stuck with the program for all 24 months—which would have seen their entire starting arrearage forgiven had they made on-time payments every month—still had substantial arrearage balances when the pilot ended, suggesting that forgiving arrears as a reward for making payments on time was not a very potent incentive for many participants.

On-time payment rates among PSP customers fell from 87% before the pilot to 73% during the pilot, suggesting that the incentive that forgave 1/24 of original arrearage balance with each on-time payment was insufficient to overcome the causes of late payments. The on-time payment bonus assumes that low-income customers have the money to pay their bills but need a stronger incentive to prioritize paying the utility before other bills. The weak outcomes of DTE's arrearage-forgiveness offer suggests, instead, that customers do not feel they have the discretion to forgo other expenses – food, rent, health care – even if they get a higher financial return from paying the utility instead.

Only about 18% of PSP participants completed the full 24-month pilot, suggesting that many did not regard it as worthwhile; 34% did not submit required income re-verification paperwork going into the second year of the program. Another 11% requested to be removed from the program. In sum, nearly half of the participants stopped participating before the pilot ended. Another 11% missed payments and were removed, even though they could have seen their entire arrearages forgiven had they made timely payments and stuck with the PSP. The high “defection” and missed payment rates seem readily attributable to the limited advantages PSP offered participants compared to affordable payment plans. It stands to reason that customers would defect from PSP once they realized their bills had increased and their arrearage forgiveness credits were essentially the same as they had received under DTE's affordable payment plans.

Because so few participants stayed in the pilot, and on-time payment rates also declined compared to pre-program, cumulative arrearage forgiveness was also low. The average DTE pilot participant started with \$520 in arrears and still had \$327 when the pilot ended.

Despite these scarcely promising customer outcomes, DTE regards the pilot as successful and recommends that the

³⁴ NPS = Net Promoter Score, the difference between the percentage of pilot customers who would recommend the program to others versus those who would not.

³⁵ “DTE Energy PSP Pilot Program Report Out to MPSC Staff,” January 29, 2025, pp. 84-85. Available in case no, U-20929 public docket.

Commission authorize a permanent program. DTE believes that it can serve fewer customers on PSP than under pre-existing assistance programs and deliver fewer assistance dollars with little change in customer outcomes. DTE also cites the pilot's Net Promoter Score, which is about the same as that of the LSP program, but apparently sampled only the 21% of participants who were happy enough with PSP to stay with the pilot from start to finish.

Consumers Energy PIPP pilot

Consumers’ pilot program design was very similar in most respects to DTE’s with the important distinction being its lower cap of 6% of household income. Not surprisingly, the Consumers pilot had somewhat more positive outcomes than DTE reported.

Consumers reported, however, that success metrics of the PIPP program were almost identical to the affordable payment plans, which include the Consumers Affordable Resource for Energy (CARE) program and the CARE modified budget. Consumers also noted that the PIPP program costs exceeded those of the affordable payment plans.

On the other hand, about 66% of Consumers’ original participants “graduated” from the program, vastly higher than the 18% graduation rate that DTE reported, suggesting that Consumers customers were much more satisfied with their pilot. In addition, on-time payment rates rose from 62% pre-PIPP to 70% during the pilot. Thanks to the high retention and on-time payment rates, Consumers pilot participants saw their arrearages decline by **90%** by the end of the program, much higher than the **36%** reduction reported by DTE. Little difference in disconnection rates was observed between Consumers’ PIPP and affordable payment programs.

Because Consumers saw similar outcomes for PIPP as for the affordable payment plans, but significantly higher costs, it recommended to continue its existing plans and against the launch of an ongoing PIPP program. CUB disagrees with Consumers’ understanding of the pilot outcomes.

Comparison and Analysis of PIPP pilots

A tabular comparison of key outcomes of the Consumers pilot to DTE’s shows important differences.

	Graduation rate	Change in on-time payment rate	Arrearage reduction	Change in monthly required payment
Consumers	65.8%	+7%	90%	-\$169 or 73%
DTE	\$0.15	-13%	36%	-\$55 or 33%

Differences in required payment levels—10% of household income for DTE versus 6% for Consumers—readily explain these different outcomes. Many DTE participants had higher monthly required payments under PIPP than they had under DTE’s pre-existing assistance programs. The increased monthly payments help explain why fewer DTE participants paid on time under PIPP than they had before. Those two factors together explain why the DTE participants saw so little reduction in arrearages. They had higher monthly bills, leaving less cash available to pay down arrearages; and they left the pilot before it concluded, giving up the monthly arrearage forgiveness they otherwise would have earned.

Insignificant changes in disconnection rates in both programs are disappointing but not surprising. Low-income customers pay their utility bills late because other things happen in their lives—lower-than-expected monthly earnings, unexpected medical and car repair bills, rising food costs, back-to-school and holiday expenditures, to name a few. Expecting a higher on-time payment rate under PIPP rests on the dubious assumption that low-income

customers are not sufficiently motivated to pay their utility bills or are disorganized and forgetful, propositions that have little evidentiary support. PIPP should not be evaluated by changes in disconnection rates.

Moderate changes in customer energy use should also not be important factors in evaluating PIPP programs. Because PIPP customers' monthly bills are capped according to income, they face little incentive to use energy efficiently above their monthly cap: if they use more energy, it will not increase their bill. Therefore, evidence that they use energy wastefully might be reason to limit the benefits or otherwise modify the PIPP. However, we should not conflate increased energy use with wasteful energy use. Many low-income customers are known to engage in potentially unhealthy or unsafe energy self-deprivation practices in order to keep their bills manageable. Analogically, a food-assistance program in which recipients did not eat more or better would surely be deemed a failure; as a basic necessity, we should think of energy assistance in similar terms. That is, for many low-income customers, increased energy use is a desirable outcome, not a drawback, of PIPP. We should not interpret moderate changes in energy use by PIPP customers as unambiguous indicators of wasteful behavior. Because neither the DTE nor Consumers pilots observed consistent and significant changes, energy use patterns should not be central factors in deciding whether to offer PIPPs permanently.

Paradoxically, Consumers recommends against continuation of PIPP despite reporting better customer outcomes than DTE, while DTE recommends going forward with the program. The underlying rationale for both companies' recommendations appears to rest primarily on program cost considerations rather than on low-income customer outcomes. Consumers interprets that the increased ratepayer cost of PIPP outweighs the marginal benefit to PIPP customers, while DTE believes it could reduce assistance costs and assist fewer customers by transitioning them to PIPP. Because both companies are under pressure to reduce rate growth, their focus on ratepayer impact is relevant, but reflects an ignorance of broader social contexts. The very nature of PIPP programs is to reduce how much customers pay for energy to a sustainable level; accomplishing this necessarily entails spending more on assistance. In their evaluations of PIPP, both companies want to hold it to a standard antithetical to its core objective: they want to find ways to spend less on assistance and to assist fewer people. That Consumers would spend more per customer in PIPP than under its affordable payment plans is a feature of PIPP, not a flaw, and declaring it a failed experiment for accomplishing its central goal reflects misplaced priorities.

Our key recommendation is that all utilities adopt the same 6% of income payment level as Consumers' PIPP pilot for combination customers, and a 4% level for electricity-only or gas-only customers. A lower monthly payment is likely to retain more participants for the full 24-month design enrollment. Another effective strategy for retaining participants would be implementation of a straightforward and frictionless verification and reverification process. Retaining more participants would also reduce arrearages more effectively than DTE's pilot did. Finally, it is apparent that making arrearage forgiveness contingent on on-time monthly payments was not effective. This observation challenges the implicit assumption that low-income customers fail to pay timely due to negligence, instead suggesting that nonpayment is a result of constrained household resources and pressure to pay other, non-discretionary bills.

The MPSC will consider recommendations from the utilities, intervenors and its Staff in determining the future of PIPPs in Michigan. CUB continues to support the core PIPP objective of limiting household energy expenses to 6% of income and recommends that the Commission either adopt PIPP or realign affordable payment plans to focus on limiting energy burden as their overriding goal.

Billpayer Assistance Program Recommendations:

The MPSC, MDHHS and utilities should redouble efforts to collaborate to increase enrollment by income-eligible customers in assistance programs.

Utilities and other assistance providers should automatically enroll customers into bill payment assistance programs based on categorical eligibility (i.e., participation in food, housing, or other assistance programs) or known qualifying data to streamline the process so that low-income customers can get assistance faster, with less effort and more reliably.

The MPSC should remove caps on the numbers of households receiving Low Income Assistance and Residential

Income Assistance credits.

The MPSC should make LIA bill credit amounts income-dependent, rather than crediting the same amount for all eligible households.

The MPSC should require utilities to offer PIPPs using a 6% percentage-of-income target for combination customers and 4% for gas-only or electric-only customers. PIPPs should also:

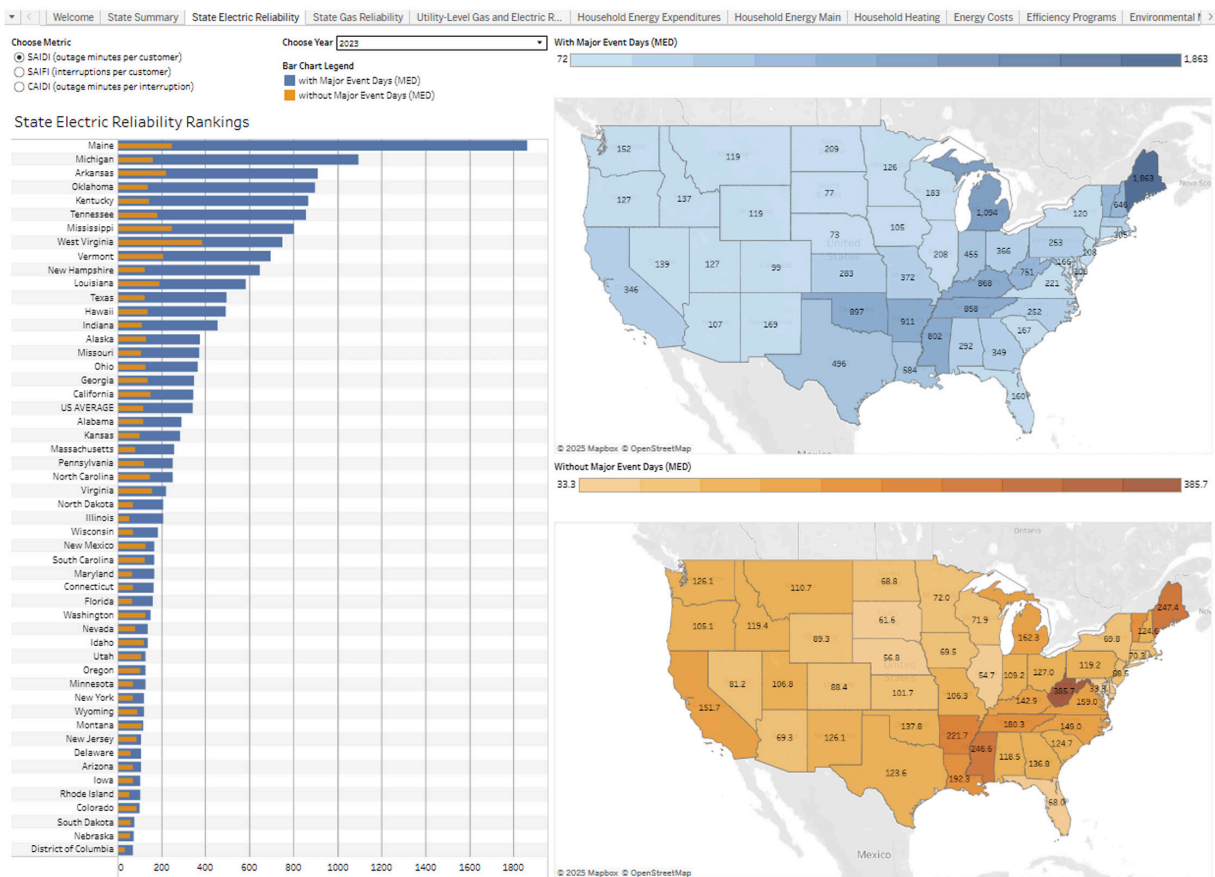
- Provide arrearage forgiveness if participants are not more than two months in arrears, recognizing that low-income customers have variable incomes and little ability to absorb unexpected expenses.*
- Not require annual re-verification of eligibility.*
- Not require participants to receive SER before becoming eligible to participate in PIPPs.*

III. INFRASTRUCTURE AND RELIABILITY

Michigan's performance for electric reliability leaves abundant room for improvement. In the Citizens Utility Board's 2025 Electric Utility Performance Report, Michigan ranked as the 6th-worst state for average duration of outage per customer in the five years through 2023.³⁶

SAIDI (System Average Interruption Duration Index), considered the best overall measure of electric reliability, is the average number of minutes of outages per year per customer. SAIDI can include or exclude Major Event Days (MEDs), which refers to days with exceptionally abnormal conditions, such as ice storms, windstorms or wildfires that create widespread outages. MEDs distinguish outages caused by extreme weather and other natural events from "blue sky" outages, which occur almost solely due to failures in utility maintenance and operations. As the graphs below display, Michigan's rank relative to other states—both including and excluding MEDs—is poor.

Figure 9: SAIDI with and without MEDs, 2023, Michigan vs other states



It should be recognized that while major weather events cannot be controlled, their impacts on the electric grid can be reduced with proper planning and maintenance. Utilities are responsible for reducing the scale and duration of these impacts by clearing lines in advance, hardening other distribution system assets, adding redundancy to the system, investing in technology to detect and work around faults quickly, and pre-positioning restoration crews before predicted storms to facilitate a rapid response.

³⁶ CUB Utility Performance Report 2025 Edition, fig. 6, p. 17.

This data is troubling for low-income residents who are more likely to experience significant impacts from power outages.³⁷ Low-income households have fewer resources to keep their homes cool or warm, replace spoiled food, or temporarily relocate. With the effects of climate change increasingly affecting weather patterns, utilities should invest in technology and take a more proactive approach towards better infrastructure.

Outage credits are bill credits provided to customers who experience certain exceptional outage conditions. In addition to supporting ratepayers impacted by severe outages, these credits act as a penalty to the utilities, incentivizing performance improvements. In 2023, the MPSC ordered that all Michigan investor-owned utilities increase their power outage credits to \$35 for a sustained outage, plus an additional \$35 for each day the power stays out and disburse the credit to customers automatically. The dollar amount is updated annually in accordance with inflation; in 2024, the MPSC increased the credit amount to \$40, and in 2025, increased it again to \$42.

The power outage credit is in effect after 96 hours during catastrophic conditions, defined as a utility having 10% or more of its customers without power, after 48 hours during gray sky conditions affecting between 1% and 10% of a utility's customers, and after 16 hours during normal conditions. Prior to this mandate, the credit was only \$25 per qualifying outage and required customers to apply with their utility.

While the increase and automatic application of the credit were welcome changes, the amount of the credit still fails to fully compensate low-income and vulnerable customers. Necessities eat up a bigger portion of more limited incomes. Financially-strained households are less able to absorb the costs of replacing lost necessities, such as purchasing groceries to restock a refrigerator that lost power over an extended period. Michigan regulations do not account for this disparity in economic impact based on income and vulnerability. The state's policies provide the same credit amount to all households, regardless of each household's circumstances.

These credits should more accurately reflect the costs of outages for customers, especially low-income and vulnerable populations.³⁸ With the use of the Lawrence Berkeley National Laboratory's Interruption Cost Estimate (ICE) Calculator, CUB has estimated that a reasonable credit to residential customers for an outage equates to \$3 to \$4 per hour. In Case U-20629,³⁹ CUB proposed a lower amount of \$2 per hour, aligning with MPSC Staff's same proposal. It is important to note this amount is still very conservative and does not fully compensate customers for the impact of the outages, especially when considering the exponential nature of outage costs. As an outage persists, so do the costs of that outage. Over time, more food will spoil as refrigerators and freezers defrost. Pipes become more likely to burst as houses cool. The need for relocation intensifies as exposure to unsafe temperatures continues.

Despite the high costs of outages, the Commission settled on a credit of \$35 per day, or about \$1.46/hour. This amount is much less than CUB's proposal, falling drastically below the actual costs absorbed by customers. The disparity is particularly wide during extended outages.

Reliability Recommendations:

The MPSC should adopt an outage credit of at least \$2 per hour for residential customers. The dollar amount should increase as the outage duration meets certain thresholds. These thresholds should be determined by a stakeholder workgroup.

The MPSC should ensure reliability standards are designed to incentivize utilities to work harder to reduce outage frequency and duration. These standards should not reward utilities for poorly focused or stagnant reliability improvement efforts.

³⁷ Andresen, et al. "Understanding the social impacts of power outages in North America: a systematic review," Environmental Research Letters, May 2023.

³⁸ The MPSC holds that outage credits are meant to penalize utilities for poor performance, which makes rate recovery of the credits more difficult. According to this perspective, credit amounts are not calculated to make customers whole for losses caused by outages, but to motivate better performance.

³⁹ Citizens Utility Board of Michigan, Comments on Service Quality and Reliability Standards for Electric Distribution Systems (U-20629). <https://mi-psc.my.site.com/sfc/servlet.shepherd/version/download/068t0000009Xmw1AAC>

The MPSC should increase the use of performance-based incentives for reliability. It should permit incentive payments to reward improvements only by utilities that meet all statutory service quality and reliability standards. Utilities should not be rewarded for meeting or improving individual standards.

The MPSC should require utilities to report outage credits by zip code and census tract to support an analysis of the efficacy and equity of the credits.

IV. ENERGY OPTIMIZATION

Households that experience energy poverty are more likely to live in old and less efficient housing stock, which further exacerbates their disproportional energy burden. Age also affects the overall structural health of a home, leading to degraded roofs and foundations. These structural issues can render improvements like insulation ineffective. Energy optimization may create outsized benefits for low-income customers, not only reducing costs but also improving overall living conditions and health.

To help more households realize the benefits of energy projects, Michigan's PA 229 of 2023 brought energy optimization plans back to the state's regulatory framework, encompassing both energy waste reduction (EWR) and efficient electrification. Policymakers paired electrification with EWR in recognition that the MI Healthy Climate Plan cannot be realized through efficiency alone. It also calls for extensive electrification of heating fuel uses, or "fuel switching."

EWR and electrification plans also share similar opportunities, methods, and barriers:

- Project opportunities that arise for EWR often present opportunities for electrification as well. Examples include new builds, renovations, changes of ownership and failed-equipment replacements. As such, EWR and electrification projects—as well as make-ready work building repairs and weatherization—should be evaluated side-by-side.
- Both project types are most effective when they are planned in advance instead of being implemented in response to an emergency. For example, when making an emergency structural repair or replacing a failed heating unit, the need to quickly restore safe living conditions can preclude the opportunity for anything other than a replacement in-kind.
- Both project types may require multiple and/or different service providers. These distinct providers may have limited ability or willingness to coordinate their scopes and schedules.
 - A related barrier is the tendency of service providers to prefer familiar methods and equipment. This preference may lead providers to steer property owners away from newer, more efficient equipment or fuel switching options.
- Low-income households often cannot afford either type of improvement. Projects that require larger up-front investments and long payback periods present the greatest barriers for those who lack savings and financing options.
- Neither landlords nor tenants have compelling incentives to improve the performance of low-income rental housing. Landlords have little financial incentive to invest in energy efficiency upgrades since they bear the upfront costs, while tenants, who pay the utility bills, reap the savings and comfort benefits. This misalignment—often called the "split incentive" problem—discourages property owners from making improvements like better insulation or energy-efficient appliances, even when such upgrades could reduce overall energy consumption and costs.
- Low-income customers often do not understand the financial, health, and comfort advantages of energy optimization projects, and often lack the time and energy to learn. Trusted providers are needed who can guide them to their best options, bundling and coordinating various services together and identifying credits, rebates, and sources of financing.

Energy Optimization Recommendations

Utilities and energy services providers should provide integrated home energy optimization assessments that compare EWR, electrification, and replacement-in-kind options side by side. Assessments should include measures and costs for synergistic make-ready needs, building repairs and weatherization, and estimated credits, rebates, and financing costs and sources.

Utilities, community action agencies, public assistance agencies, and local governments should collaborate to engage more low-income households and property owners to undertake non-emergent energy optimization projects, which allow time for more careful assessment, sequencing of measures and fuel-switching.

Policy makers should consider authorization of Property-Assessed Clean Energy (PACE) financing for single-family residences and seek ways to stimulate greater use of PACE financing for multi-family housing. Greater use of on-bill financing should also be encouraged, to ensure that whoever benefits over time from an energy improvement contributes fairly to its original cost.

Next, we review issues specific to either EWR or efficient electrification programs that may require policy changes in addition to the overall energy optimization policy recommendations provided above.

Energy Waste Reduction

The inefficiency of low-income homes can generate substantial, avoidable utility expenses every year. Low-income residents typically lack the up-front resources to pay for improvements that would reduce their monthly bills. Outlier Media and ProPublica reported on the story of Donald Lutas, a retiree on a fixed income living in a 105-year-old Detroit home. Despite replacing windows, adding insulation and making other improvements to his drafty home, his energy bills remained a heavy burden. He could not afford further improvements that were needed to make his energy bills affordable. As a result, he had to sacrifice primary health care visits in order to pay his DTE bills.⁴⁰ His story is relatable for many Michigan residents.

In a study of the 48 largest cities in the country, Drehoobl and Ross (2016) estimated that if low-income housing stock were brought up to the efficiency level of the median U.S. household, the energy burden of low-income households could fall from 7.2% to 5.9%.⁴¹ Such a drop would eliminate 35% of the difference between the energy burden for low-income households and the energy burden for all households.⁴²

Many low-income residents are renters. Tenants incur a higher energy burden than non-renters because rental units tend to be less energy efficient than owner-occupied homes.⁴³ Rentals consume considerably more energy than other homes on a per-square-foot basis than owner-occupied homes and have higher energy costs.⁴⁴ This disparity occurs because landlords have little incentive to improve energy efficiency, since they would bear the costs of energy improvements but would usually not recoup the cost because most tenants pay the utility bills. Raising rent to recoup project costs is usually infeasible for amenities that prospective tenants cannot easily see. Tenants, for their part, have weak incentives to invest in a building they do not own and may not occupy for long. Financing methods that make sure whoever pays for a project also reaps the benefits exist but are not widely used.

Michigan Public Act 342 of 2016 established Energy Waste Reduction (EWR) (energy efficiency) requirements for utilities that allow the cost of EWR programs to be paid for by surcharges on each customer's bill.⁴⁵ EWR measures include insulation, LED lightbulbs, air sealing, replacement windows and doors, and more efficient HVAC systems and appliances. Often EWR services are paired with an energy audit to identify the most cost-effective measures based on the characteristics of a building.

⁴⁰ Alvarez and Philip.

⁴¹ Drehoobl, et al. "Lifting the High Energy Burden in America's Largest Cities: How Energy Efficiency Can Improve Low Income and Underserved Communities," American Council for an Energy-Efficient Economy, April 2016. <https://www.aceee.org/sites/default/files/publications/researchreports/u1602.pdf>.

⁴² Ibid.

⁴³ Carliner. "Energy Cost Burdens in Rental Housing," Joint Center for Housing Studies of Harvard University, January 2014. <https://www.jchs.harvard.edu/blog/energy-cost-burdens-in-rental-housing>

⁴⁴ La Jeunesse. "Energy Consumption in the Residential Rental Sector, and Promoting Efficiency," Joint Center for Housing Studies of Harvard University, January 2016. <https://www.jchs.harvard.edu/blog/energy-consumption-in-the-residential-rental-sector-and-promoting-energy-efficiency>

⁴⁵ Enrolled Senate Bill No. 438. Filed with Secretary of State Dec. 21, 2016. <https://www.legislature.mi.gov/documents/2015-2016/publicact/htm/2016-PA-0342.htm>.

Despite the availability of EWR services, utilities struggle to deliver them effectively to low-income households. Figure 10 shows 2023 savings for income-eligible households reported by Energy United, which administers EWR programs for smaller regulated utilities. Among them, these utilities serve about 25,000 identified low-income customers, meaning that these utilities were able to deliver EWR service to only about 1 in every 200 known low-income customers in 2023. Because low-income households are dramatically undercounted in utility records, the actual proportion of low-income households served may be closer to 1 in every 1,000 per year. These estimates are provided not as a direct critique of Energy United or the utilities, but to illuminate how difficult it is to identify, engage and serve low-income households with EWR services. As an additional challenge, Energy United cited workforce impacts often felt more severely in low-income residential communities, a problem that low-income workforce development programs might address.

Figure 10⁴⁶

Provider	Number of Participants	Annual kWh/Therms Goal	2023 kWh/Therms Achieved	2022 Carryforward Savings	Total kWh/Therms Achieved	% of Goal Achieved
Electric Utilities						
Alpena	1	55,102	2,612	18,367	20,979	38%
UMERC – Electric	8	112,530	87,998	37,510	125,508	112%
Xcel Energy – Electric	27	42,905	69,416	-	69,416	162%
Total Electric	36	210,537	160,026	55,877	215,903	103%
Natural Gas Utilities						
MGU	116	91,393	22,510	27,646	50,156	55%
UMERC – Gas	2	238	440	-	440	185%
Xcel Energy – Gas	4	826	235	-	235	28%
Total Natural Gas	122	92,456	23,184	27,646	50,831	55%

The Legislature and MPSC have both acted recently to improve EWR services for low-income households. In March 2022, the MPSC approved Consumers Energy's new EWR plan for 2022-2025 that included giving additional assistance to low-income electric and gas customers and connecting assistance programs with their EWR efforts.⁴⁷ Other utilities have gained MPSC approval of similar efforts.

The passage of the aforementioned Public Act 229 of 2023 also served as a step forward for low-income energy efficiency as it strengthened low-income related requirements for utility EWR programs. Among other provisions, the law requires utilities to direct at least 25% (in the case of electric utilities) or 35% (in the case of natural gas utilities) of their EWR program spending on low-income residential customers. Any utility that is spending below those levels as of the bill's effective date of Feb. 13, 2024 has until Jan. 1, 2029 to meet or exceed that level.⁴⁸ PA 229 also authorizes EWR spending on "walkaway" problems—the need for other repairs to a structure before EWR measures can be implemented. A common example is the need to repair a leaking roof before installing or replacing new attic insulation.

⁴⁶ Savings achieved by Efficiency United's Income Qualified Energy Efficiency Assistance Program in Michigan in 2023. Efficiency United, "2023 Efficiency United Annual Report," accessed May 2024. <https://www.michigan.gov/mpsc/-/media/Project/Websites/mpsc/regulatory/reports/3rdparty/Efficiency-United-2023-Annual-Report.pdf?rev=7a5b93407f9d48b695888e65494eb54&hash=9E6714E6A0B0BCDDDB58976DEAE97EBE>

⁴⁷ MPSC, "MPSC approves \$1.7M rate increase for customers of Northern States Power Co. in Upper Peninsula," March 17, 2022. <https://www.michigan.gov/mpsc/commission/news-releases/2022/03/17/mpsc-approves-nsp-rate-increase>

⁴⁸ Michigan House Fiscal Agency, "Legislative Analysis of Senate Bill 273 As Enacted," Feb. 5, 2024. <https://legislature.mi.gov/documents/2023-2024/billanalysis/House/pdf/2023-HLA-0273-E9814B6A.pdf>

The MPSC should build on this work by taking more steps toward equity in utility EWR programs. PA 229 requires more funding to support low-income EWR efforts, which may not translate to equitable results. Because low-income customers often cannot afford to pay their share of EWR project costs—or do not want to invest their scarce dollars to improve a residence they do not own—EWR projects benefitting low-income customers tend to be measures that require less capital contribution from the customer and deliver smaller and less durable benefits. If a low-income customer cannot afford to pay their share of a more efficient furnace or improved insulation, they may turn to more incremental, lower-cost measures like LED lightbulbs and water-heater blankets. As a result, the 25%/35% spending requirement may not achieve the PA 229 objective that low-income EWR programs “be designed and funded with the goal that low-income residential customers achieve levels of energy waste reduction similar to or greater than the levels of energy waste reduction of other residential customers.”⁴⁹ The MPSC should consider requiring low-income energy waste reduction programs to plan for and demonstrate the same savings achieved for non-low income customers based on measurements of energy saved, be it kilowatt hours of electricity or cubic feet of gas.

As previously noted, a high energy burden correlates with poor occupant health. To the extent that it can reduce energy burden, EWR may also mitigate these health impacts, leading to significant benefits including lower mortality, improved mental health and more. But neither the MPSC’s annual report on EWR programs⁵⁰ nor the annual report from state-selected plan administrator Efficiency United⁵¹ attempt to quantify these health benefits. An actual accounting of these benefits could strengthen the case for low-income EWR to policymakers and others.

Energy Waste Recommendations:

The MPSC should require that utilities’ annual EWR reports include health indicator improvements and quantify them as benefits of EWR spending.

The MPSC should evaluate effectiveness of low-income EWR programs primarily by outcomes, not inputs.

Electrification

Public Act 229 of 2023 does not require but does allow utilities to include “efficient electrification” in their energy optimization plans. Inclusion of the word “efficient” signifies a barrier generally higher for beneficial electrification efforts than for EWR measures. Switching existing homes from natural gas to electricity for space and water heating uses may not pay off well in savings captured by the property owner or tenant, even after rebates and credits are realized. Rocky Mountain Institute found that in Chicago:

“In existing buildings, heat pump retrofits are more expensive than replacing natural gas furnaces and water heaters with new gas devices. However, compared to replacing both natural gas systems and air conditioners simultaneously, heat pumps are lower cost.”⁵²

Heat pump efficiency and cost (including tax credits) have both improved since RMI’s study was published in 2018, making it likely that more conversion scenarios now have positive payoffs. The key takeaway is that financial feasibility of building electrification depends on many variables. These include climate, comparative energy costs, building performance and financing assumptions. As such, positive financial return on investment cannot be assumed.

⁴⁹ Enrolled Senate Bill No. 273. Filed with Secretary of State Nov. 29, 2023. <https://www.legislature.mi.gov/documents/2023-2024/publicact/htm/2023-PA-0229.htm>

⁵⁰ MPSC, “2021 & 2022 Utility Energy Waste Reduction Programs: Annual Report on the Implementation of PA 295,” Oct. 4, 2023. https://www.michigan.gov/mpsc/-/media/Project/Websites/mpsc/regulatory/reports/pa295-ewr/2021-2022_EWR-Report-to-the-Legislature.pdf?rev=006c2b9caa2843f6baa6f5b78eb03355&hash=BE5E260764E047BED1FD0960EA095535

⁵¹ Efficiency United.

⁵² Rocky Mountain Institute, “The Economics of Electrifying Buildings” (2018), p.36. Chicago was the city closest to Michigan climate that RMI evaluated. Some difference in climate and energy costs impact applicability of the study to Michigan, and does that age of the study.

However, several steps can be taken to improve both the economic benefit and ease of adoption for electrified technologies that can make these options more accessible to the low-income population. The American Council for an Energy-Efficient Economy (ACEEE) released a report in March 2025 titled “Electricity Rates That Keep Bills Down after Electrification of Home Heating”, which speaks to how utilities and policymakers can bolster the case for electrification of home heating.⁵³ ACEEE found that electric rates have a significant impact on the financial calculus of electrification. Notably, it finds that heat-pump-specific rates—especially those that consider time-of-use, demand-based rate structures and seasonal variations (winter discounts)—can improve the financial case for heat electrification while adhering to cost-of-service ratemaking principles. ACEEE also acknowledges potential non-financial barriers to electrification. Their recommendations focus on building trust and clearly communicating with customers to overcome status-quo bias and complexity in these decisions. The need to foster clear understanding is even stronger with low-income populations because of the additional pressures these individuals face and their outsized potential for institutional mistrust.

Because most residences in Michigan use natural gas for space and water heating, the variable financial case for electrification may hinder achievement of the Michigan Healthy Climate Plan goals. PA 229 of 2023 addresses that challenge by allowing utilities for the first time to apply EWR funds to support “fuel switching” from heating fuels to electricity. The Inflation Reduction Act (IRA) also provides tax credits for installation of high-efficiency heat pumps, heat pump water heaters, and induction cooktops, among other measures.⁵⁴ While a step in the right direction, these measures may not fully overcome the financial disadvantages of some natural gas conversions to electric. Additional, bold measures will be needed to overcome this gap.

Fortunately, there are several electrification project types for which the financial case is fairly clear, subject to case-by-case analysis. Homes heated by propane—a common feature of low-income households in rural areas of Michigan—can generally reduce total energy costs by switching to high efficiency heat pumps. All-electric new construction can also be cheaper than dual-fuel because of the avoided cost of installing heating fuel equipment and infrastructure. Finally, low-income homes that currently lack air conditioning may realize health and comfort benefits from switching from heating fuels to electric heating, resulting in overall household benefits even though energy costs may increase. In these circumstances, a remaining barrier to electrification is knowledge and adaptability of developers, builders, energy service providers and property owners.

The need for advanced, whole-premises planning is especially acute for electrification projects. The optimal level of investment in weatherization is often higher for an electrification project than when simply replacing a natural gas furnace or water heater with a more efficient gas model. Additionally, conversion to electric often requires upgrading of electric panels and wiring, which creates delays and expense that may be intolerable if existing equipment has already failed. Older homes, common in low-income communities, have greater need for the make-ready work, home repairs, and weatherization necessary to make electrification feasible. Identifying and implementing these enabling measures must be done before existing equipment fails if lower-income households are to participate in electrification.

Efficient Electrification Recommendations

The MPSC, state agencies, utilities, and home energy contractors should collaborate to develop outreach, education, and assessment programs to encourage low-income homeowners to switch from propane to electric space and water heating prior to equipment failure. These groups should also implement proactive enabling measures such as electrical system upgrades, home repairs, and weatherization.

The MPSC should work with utilities and stakeholders to explore alternative rate designs—including specific time-of-use, demand-based, and seasonal considerations—that encourage more electrification, and consider additional incentives and support for low-income customers adopting heat pumps

⁵³ Sussman, Reuven, Paul Mooney, Grace Lewallen, and Matt Malinowski. 2025. Electricity Rates That Keep Bills Down after Electrification of Home Heating. Washington, DC: ACEEE. www.aceee.org/researchreport/b2502.

⁵⁴ These federal tax credits will sunset at the end of 2025 under the recently passed “One Big Beautiful Bill”.

The MPSC, state agencies, utilities, local governments, home builders, and home energy contractors should collaborate to create technical education, standards and financial incentives for new-build residential properties to be all-electric.

The MPSC's review of energy optimization plans should encourage utilities and their contractors to evaluate home electrification measures side-by-side with EWR measures, including differences in optimal levels of weatherization and repairs, required make-ready work, available financial incentives, and payback periods.

V. ACCESS TO CLEAN ENERGY AND ADVANCED TECHNOLOGIES

The foundations of the energy industry are changing at a lightning pace. The production and distribution systems that served national energy needs for over a century are being replaced with fundamentally different assets that are both cleaner and more distributed. These emerging technologies have the potential to assist low-income customers in unprecedented ways. But if left unmanaged, the energy transition could actually worsen inequality. Early stages of the transition have benefited more affluent communities that can afford to adopt more efficient technologies and cleaner resources. In contrast, low-income communities which already struggle to meet basic needs have not yet shared equally in the fruits of these changes.

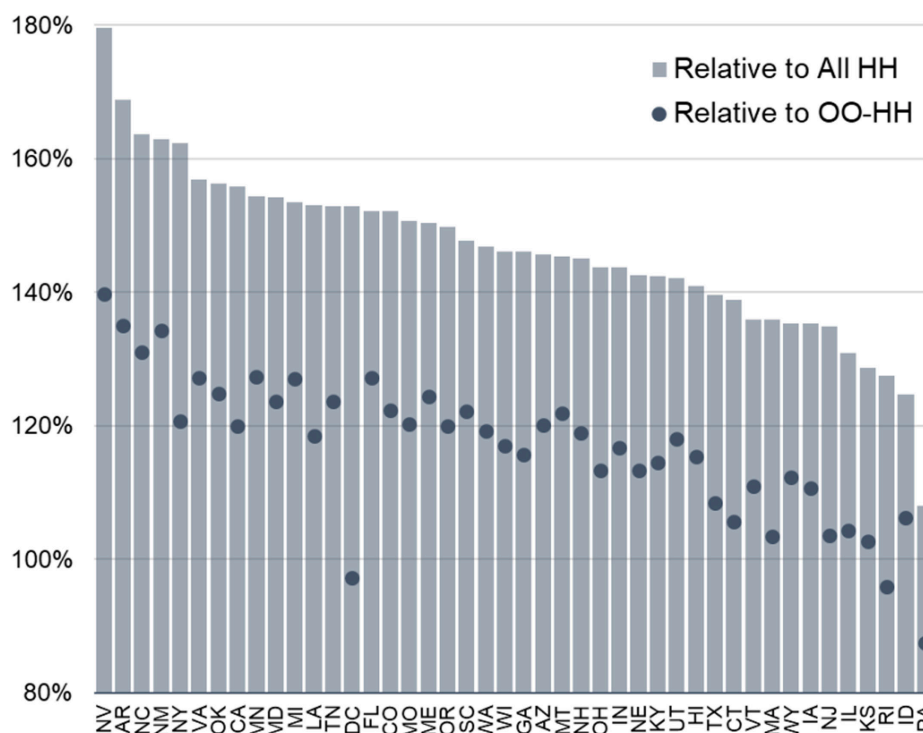
Rooftop Solar

Distributed energy resources, such as rooftop solar panels, have been steadily growing in popularity in Michigan. As is common with emergent technologies, early adopters have tended to be relatively high-income. But as solar panel and battery prices have declined, so has the average income level of adopters.⁵⁵ The median income of Michigan solar adopters in 2022 was over 150% of the median income across all households, somewhat higher than in most other states (Figure 11). It is particularly noteworthy that Michigan's median solar-adopter relative income was higher than that of neighboring Ohio, Indiana, and Illinois, yet lower than Wisconsin. This suggests that Michigan lags behind its neighbors in encouraging home solar adoption by low-income customers.

⁵⁵ Forrester, et al. "Residential Solar-Adopter Income and Demographic Trends: 2023 Update." Lawrence Berkeley National Laboratory, December 2023. <https://emp.lbl.gov/publications/residential-solar-adopter-income-2>.

Figure 11

Median Solar-Adopter Relative Income (2022 Adopters, % of State Current Median Income)



HH = Household; OO-HH = Owner-Occupied Household

There may be a particularly low ceiling in Michigan for adoption of rooftop solar by lower-income groups. That is because third-party owned systems⁵⁶ are responsible for most of the decline in incomes of the median solar adopter over the several years leading up to those 2022 statistics described above. If the statistics are restricted to rooftop solar installations that are owned by the host (such as a homeowner), the median income has been flat for years.

This is problematic for potential low-income Michigan rooftop solar adopters because they are less likely to be homeowners than those in other groups. As such, they are less likely to be able to host a rooftop solar system, making them disproportionately reliant on third parties to access solar benefits. But as explained in the following section on community solar, Michigan residents have relatively low access to buy solar from non-utility, third party-owned systems. That restricted access is due to the state's lack of a cohesive legal structure for community solar.

Policies commonly implemented to increase access to rooftop solar include financial incentives for all rooftop solar adopters; incentives for low and moderate-income (LMI) adopters specifically; models for customers to lease rather than buy solar installations; Property Assessed Clean Energy (PACE) financing; and bulk purchasing of solar PV systems (such as the Solarize campaigns).⁵⁷ Of these, the incentives for LMI adopters have the greatest impact reducing the income bias associated with solar adoption, an analysis from Lawrence Berkeley National Laboratory found. The analysis defines these policies as "means-tested incentives to households under certain income thresholds," and notes that they "tend to be relatively small, generally on the order of 1% of all incentives distributed."

⁵⁶ Forrester, et al. "That downward trend in solar-adopter incomes is associated primarily with third-party owned (TPO) systems, as median adopter incomes for host-owned systems have remained relatively flat over time." <https://emp.lbl.gov/news/new-berkeley-lab-report-solar-adopter-0>

⁵⁷ Barbose, et al. "The impact of policies and business models on income equity in rooftop solar adoption," Nature, January 2021. https://www.nature.com/articles/s41560-020-00724-2.epdf?no_publisher_access=1&r3_referer=nature

Community Solar

Rooftop solar is generally prohibitively expensive for low-income customers and they may even lack access to roofs or ground space where panels would be installed. Low-income residents have a higher chance of being renters who lack the ability to install rooftop solar on their residences. Low-income homeowners still face barriers to installation as their roof or structure is more likely to be older, deteriorated, and otherwise less able to accommodate panels. All of these obstacles are in addition to a lack of financial flexibility that typically precludes the coverage of installation costs.

Shared or community solar poses a straightforward solution to these problems,⁵⁸ but customer access to community solar is heavily dependent on the regulatory environment. As a result, about 72% of total community solar capacity in the U.S. is concentrated in just four states: Florida, Massachusetts, Minnesota, and New York.⁵⁹

Michigan has seen minimal development of community solar, with only a handful of standout projects. The primary barrier to community solar is that utilities are not required to grant community solar developers access to their distribution systems, which are needed to move electricity from where it is generated to the subscribing households. A small number of utilities have been supportive of projects. These include the East Lansing Community Solar Park, a 1,000-panel array that came online at the end of 2018 and allows customers of the Lansing Board of Water & Light to lease solar panels in the project for 25 years.⁶⁰ The Village of L'Anse in the Upper Peninsula has built a 340-panel community solar array.⁶¹ The Cherryland Electric Cooperative, in cooperation with the Michigan Agency for Energy and the Northwest Michigan Community Action Agency, launched a community solar program for 50 low-income households. The program allows participants to receive weatherization upgrades to their homes and receive monthly credits on their electric bills provided by solar panels in which they lease shares.⁶²

These examples illustrate that in order for any community solar project to succeed under the current rules in Michigan, it is vital to win the support of the local utility. In the cases of both the East Lansing and L'Anse projects, the local utilities were non-profit, municipal utilities. Most Michigan residents are instead served by the investor-owned utilities DTE and Consumers Energy. These for-profit power providers have been resistant to community-owned solar projects in their service territories.

The definition of terms is important here, as both DTE and Consumers Energy claim they offer community solar programs. However, their offerings lack the community ownership features that are key for customers to receive the full benefits of community solar. For example, DTE has said its first "community solar" project is a 20-MW project in Washtenaw County that customers can subscribe to through DTE's MIGreenPower "green tariff" program.⁶³ But while DTE calls its Washtenaw County solar project "community solar," the utility exclusively owns the solar panels. Ownership by the utility is a key distinction between the DTE project and conventional community solar projects, which are owned by ratepayers. In addition, for most MIGreenPower subscribers, the project is not located in their local community. Consumers Energy has a similar program called Solar Gardens, which the utility describes as "a community solar program" that allows customers "to support the development and generation of solar energy without having to own their own installations."⁶⁴

⁵⁸ "The U.S. Department of Energy defines community solar as any solar project or purchasing program, within a geographic area, in which the benefits flow to multiple customers such as individuals, businesses, nonprofits, and other groups. In most cases, customers benefit from energy generated by solar panels at an off-site array." U.S. Department of Energy. "Community Solar Basics," accessed March 2024. <https://www.energy.gov/eere/solar/community-solar-basics>

⁵⁹ Paulos. "Bringing the Benefits of Solar Energy to Low-Income Consumers: A Guide for States & Municipalities," U.S. Department of Energy and Clean Energy States Alliance, May 2017. <https://www.cesa.org/wp-content/uploads/Bringing-the-Benefits-of-Solar-to-Low-Income-Consumers.pdf>

⁶⁰ Schaap. "Brownfield Developments: East Lansing Community Solar," "Clean Energy in Michigan" Series, Number 8, April 2020. <http://graham.umich.edu/media/pubs/Solar-East-Lansing-Community-Solar-Project-46936.pdf>

⁶¹ Michigan Technological University news release. March 2020. <https://www.mtu.edu/news/2020/03/solar-for-the-people.html>

⁶² Michigan Technological University news release. March 2020. <https://www.mtu.edu/news/2020/03/solar-for-the-people.html>

⁶³ Fine. "DTE Energy Working on Community Solar Project in Washtenaw County," Solar Industry magazine, October 2021. <https://solarindustrymag.com/dte-energy-and-michigan-community-create-solar-project-in-washtenaw-county>

⁶⁴ Consumers Energy. "Solar Gardens Frequently Asked Questions." Accessed May 2024. <https://www.consumersenergy.com/residential/renewable-energy/solar-gardens/faq>

But for both Solar Gardens and MIGreenPower customers, the ability to use the solar energy they purchase from these programs to reduce their energy bills—a key feature of community solar—is uncertain at best and nonexistent at worst. MIGreenPower subscribers receive a credit that represents the capacity and energy from the underlying, DTE-owned renewable energy projects. This credit is variable from year to year. When the credit is negative—as it was for several years until 2024⁶⁵—subscribers can reduce their electric bills by participating. But when MIGreenPower’s credit is positive, participants must pay a premium on top of their bills. This added expense is unlikely to stimulate MIGreenPower enrollment among low-income customers. In contrast with community solar, where the output from solar panels always reduces a participant’s electric bill, MIGreenPower customers’ ability to save money depends on DTE’s costs operating its non-community-based wind and solar projects.

Consumers Energy’s description of its Solar Gardens program is cautionary about the risks participants take when choosing to participate: *“Although the value of the solar energy credit may increase over the life of the program, there is no guarantee the value will be greater than the subscription payment and customers should not participate in this program with any expectation of profit or financial gain...”*⁶⁶

Efforts have been underway for several years to create legal frameworks in Michigan to make true community solar project development feasible. In both the 2023 and 2024 sessions, Michigan House and Senate members fruitlessly continued their bipartisan push to allow communities to generate their own energy. Legislators reintroduced bills that would allow communities to create community solar projects, installing solar panels in available spaces and sharing the generated energy with members throughout the community.⁶⁷ None of these bills advanced as far as a floor vote in either chamber.

Solar PV Recommendations:

Community solar groups and advocates should work to create a policy framework to overcome utility opposition to community solar.

Advocates and policy researchers should increase policymakers’ overall education and awareness of community solar to help build support for legislation authorizing true community solar.

Demand-side Management

Low-income communities should be targeted for a wide array of approaches that fall under the banner of demand-side management (DSM), a strategy used by electric utilities to encourage customers to change their timing and pattern of usage. Where EWR programs seek to change *how much* energy people use, DSM programs focus primarily on *when* they use it, an effort to match demand with the amount of energy available at any given time. As our energy system transitions to renewable sources, the ability to adjust demand to follow production becomes increasingly important.

DSM approaches include financial incentives, educational outreach, and direct control of customer equipment. DSM seeks to create durable changes in behavior and energy use and is related to demand response, which offers customers incentives to motivate immediate, temporary demand reductions. Access to DSM is stacked against low-income people for several reasons. One of these is a lack of qualifying credit or finances to upgrade technology. This in turn leads to an inability of low-income households to shift electricity use to non-peak hours due to less efficient

⁶⁵ For example, as of May 2024, according to DTE’s MIGreenPower website, a customer using 650 kWh who uses MIGreenPower to attribute 20% of their energy from DTE to clean energy would see their electric bill lowered by 44 cents per kWh. <https://solutions.dteenergy.com/dte/en/Products/DTE-CleanVision-MIGreenPower/p/MIGPGREEN>

⁶⁶ Consumers Energy. “Solar Gardens Terms and Conditions.” Accessed May 2024. <https://www.consumersenergy.com/-/media/CE/Documents/renewables/Solar%20Gardens/solar-gardens-terms-and-conditions.pdf>

⁶⁷ Davidson. “Lawmakers revive bipartisan community solar efforts as Dems work toward clean energy goals,” Michigan Advance, June 18, 2023. <https://michiganadvance.com/2023/06/18/lawmakers-revive-bipartisan-community-solar-efforts-as-dems-work-toward-clean-energy-goals/#:~:text=Senate%20Bill%20152%2C%20introduced%20by,the%20electricity%20generated%20by%20the>

appliances or outdated controls. There is also a frequent lack of trust among lower-income community members for utility and state programs.

A wide array of technologies and services fall under the DSM umbrella, but this report will focus on demand response only. Demand response refers to the practice of encouraging customers, typically through monetary incentives, to shift electricity demand to other times, such as when overall demand is lower. Current Michigan utilities' residential demand response programs include smart thermostats that automatically reduce air conditioner use during peak events to help lower electricity bills and peak pricing to encourage customers to use less electricity during high-demand periods. Residential customer use of demand response could help low-income customers decrease their energy use and save money.

As demand and popularity of these services continue to grow, the price and availability of interconnected devices continues to drop. But barriers such as high upfront costs can prevent demand response from being widely shared among socioeconomic groups even as adoption increases overall. Demand response adoption is expected to be stronger among higher-income customers than among lower-income customers. A study by Guidehouse performed for the MPSC projected the potential capacity reductions demand response could achieve from 2021 to 2040. The study found that the single family home low-income group and the multi-family low-income group made up just 10% and 5%, respectively, of the potential growth in demand, compared to 37% for the single family non-low-income group.⁶⁸ The study defines low-income as those households that make less than 200% of the federal poverty line, and nearly 30% of households in Michigan fell in that category in 2022.⁶⁹

Demand-Side Management Recommendations:

Utilities should target deployment of new technologies, including enrollment in DSM and acquisition of equipment to enable DSM, to communities with high energy burdens.

Utilities and the MPSC should shift resources toward DSM for low-income communities to overcome upfront costs and other barriers that inhibit adoption among those communities.

⁶⁸ Guidehouse. Draft of "Michigan Demand Response Statewide Potential Study (2021-2040)," MPSC, August 2021. https://www.michigan.gov/documents/mpsc/MI_DR_Statewide_Potential_Study_Final_Draft_Report_733542_7.pdf

⁶⁹ Kaiser Family Foundation. "Distribution of the Total Population by Federal Poverty Level (above and below 200% FPL)," accessed January 2024. <https://www.kff.org/other/state-indicator/population-up-to-200-fpl/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>

VI. BILLING RULES AND PRACTICES: COLLECTIONS PRACTICES

Low-income customers encounter a variety of utility billing practices that are meant to minimize utilities' losses on bad accounts, while protecting the rights, health and safety of customers. All households have a stake in avoiding utility losses since they are ultimately passed on to paying customers. The MPSC's Billing Rules are designed to balance this interest in preventing losses, which drive up the overall cost of service, against the social need to protect customers against unreasonable billing practices that may cause unnecessary distress and harm. The Billing Rules govern several collections practices including but not limited to late payment fees, disconnection procedures, customer deposit, and cash-payment requirements. The Billing Rules afford various protections to low-income customers, and utility tariffs may provide additional protections. These protections are insufficient or ambiguous in various respects. The bigger issue is that these protections do too little for most of the low-income households the utilities have not identified. While always striving to identify, engage and serve more low-income households, utilities and the MPSC must be attuned to billing and collections issues among other households which may indicate burdens borne by unidentified low-income customers.

From a financial perspective, the threshold for justification of a collection practice is evidence that it minimizes the cost of service. Collections practices cost money to implement, and if they cost more than the revenue they bring in then they are not worth doing because they will end up increasing rates. For example, all bill collectors know that continuing to pursue payment from a customer who never responds and never sends any money eventually becomes a waste of time, achieving little more than harassment of the customer.

Cost of service provides only the threshold justification for collections practices because utility services are a basic necessity of life; there are more than cost considerations at play. MPSC Billing Rules also protect customers from shutoff when extreme cold or hot weather is forecasted because the social interest in protecting customers' basic health and safety outweighs the utility's responsibility to minimize the cost of service. This kind of balancing of interests occupies much of the agenda of the MPSC's Energy Accessibility and Affordability Committee (EAAC), and progress has been made on several fronts. The MPSC should carefully scrutinize and potentially limit utility disconnection practices, customer deposit, and cash payment requirements. In each of these areas, there is little evidence that current practices are minimizing the cost of service and their application clearly burdens customers.

Disconnection Practices

As shown in Figures 3 and Figure 4 above, utilities in Michigan are steadily increasing their disconnections of low-income and senior customers even though numbers of delinquent accounts have declined. Given the evidence that low-income customers identified by the utilities represent a small minority of the known low-income population, it is reasonable to suspect that many of these disconnections are in fact impacting low-income households.

One simple interpretation of these trends is that utilities have gotten better at using disconnections to motivate customers to pay their bills, and that this success should be reducing uncollectible expenses that get passed on to other customers through rates. Utilities currently face no requirement to demonstrate that their disconnection practices have any such financial benefits. Given the human impact of disconnections, we recommend that the MPSC require utilities to provide data and analysis demonstrating that their disconnection practices strike a reasonable balance between financial and social objectives. Such a demonstration could illustrate the relationship between disconnections of customers at various arrearage balances, aging and status (i.e. low-income/senior) compared to changes in uncollectible costs. This study could be led by MPSC or could be pursued in a contested rate case. Remedies available include disallowing recovery of utility collections costs that are deemed to be unreasonable and amending the Billing Rules concerning disconnections to better protect low-income and senior customers.

It should be noted that the Billing Rules already restrict—but do not prohibit—disconnections of known low-income and senior customers during the winter heating season. These regulations can only help low-income customers that

have been identified as such by the utility. Those who are identified and assisted through shutoff protection are likely to accumulate such large arrearages that they inevitably get disconnected after the winter protection season ends. Under-identification of low-income customers, rather than changes in collections practices, may explain why disconnections are rising. An unidentified low-income customer is not eligible for energy assistance and shutoff protections. As rates rise, these customers are most likely to experience financial stress, fall further and further into utility debt, and eventually have their service disconnected. Because so many low-income customers are not identified as such, the Commission currently has no good way of knowing to what extent the recent upward trend in disconnections is impacting that group as a whole. Without that information, the Commission cannot make well-informed decisions about efforts to improve identification and assistance for those customers. Further, the Commission cannot consider whether changes to disconnection practices, cost recovery and the Billing Rules may be warranted.

Customer deposits

Utilities are permitted to request customers to provide a security deposit under various circumstances spelled out in the Billing Rules, but most deposits are requested from customers who have previously been disconnected for nonpayment. This practice has a veneer of plausibility: the utility is collecting the deposit to secure itself against the risk of an uncollectible expense caused by a customer with a bad payment record.

Under the Billing Rules, utilities can request customers to provide a deposit equal to two months' average bill and can hold it until the customer has paid their bill on time for twelve consecutive months. Utilities incur administrative expenses to collect and manage deposits and must also pay 5% annual interest on each deposit, payable to the customer when the deposit is returned. The utility recovers interest expenses from all customers through its rates. In order for this practice to be financially justifiable, the utility's administrative and interest costs associated with customer deposits should be less than the uncollectible costs that deposits purportedly prevent. If deposit costs are greater than uncollectibles prevented, then the utility is oversecuring itself against losses and recovering unreasonable administrative expenses from ratepayers.

The veneer of financial plausibility supporting the collection of deposits is easily peeled away. Utilities have simpler, more effective, and less burdensome ways to protect against uncollectible costs. Before restoring service to a customer who has been disconnected for nonpayment, the utility collects a significant portion of the amount past due. As such, the utility has already limited its potential losses prior to restoring service. The utility also requires the customer to agree to a payment plan for any remaining balance, and often helps that customer find assistance to stay current on bills going forward. If the customer fails to resume paying their monthly bill and make satisfactory progress paying off the arrearage, the utility can disconnect their service again. The possibility of a disconnection is a much more compelling motivation to the customer than the threat of a longer hold on their deposit. All of this means utilities would likely be sufficiently protected against uncollectible expenses without deposit requirements.

The customer's deposit confers little additional protection against loss but imposes a significant burden on the customer and makes it harder for them to pay their bill on time. The net effect may well be that requiring customers to provide deposits increases the likelihood of late payments, disconnections and uncollectible expenses. These outcomes are opposite to those the deposits are intended to achieve.

While there is little evidence that utilities are flouting the Billing Rules with their deposit practices, the MPSC should study three topics.

First, whether utility deposit practices minimize the cost of service for all ratepayers by providing data and analysis comparing the administrative and interest costs of deposit programs to the savings realized by preventing uncollectible costs. Mere adherence to the Billing Rules cannot justify utilities incurring unreasonable costs and imposing unnecessary burdens on customers.

Second, the MPSC should require utilities to demonstrate that they exercise reasonable discretion in their deposit practices. The Rules do not state that utilities must collect deposits as a condition of service restoration from every customer who has been disconnected; they do not say that the deposit amount must equal two average months; and they do not say that the utility must hold every customer's deposit until they have paid on time for twelve months straight. Customers who meet the conditions under which the utility may request a deposit do not all pose the same level of risk to the utility, and treating them all identically is inequitable. The Billing Rules provide utilities with discretion in their application of deposit requirements. Utilities should demonstrate that they employ that discretion reasonably, or it should be taken away.

Third, the Commission should revisit the Rule allowing utilities to retain a deposit until a customer has paid on time for twelve consecutive months. Low-income customers are prone to variable earnings from month to month, and they often hold savings inadequate to cover unexpected expenses. If the central objective of holding a deposit is to protect against uncollectible expense, then the better metric of progress is changes in arrearage balance during the period the deposit is held. The MPSC should study this question and depending on its findings either require utilities to use more nuanced discretion when they extend deposit periods or change the Billing Rules to limit the practice altogether.

Cash-payment requirements

In 2023, DTE required about 50,000 of its residential customers to pay their monthly bills in cash. In most cases, this requirement was imposed on customers whose payments were declined by their financial institutions—for example, bounced checks or declined credit cards. Consumers Energy also requires some customers to pay by cash. Customers can pay in cash at some utility locations without incurring an additional fee, but there are many more third-party payment agents (such as grocery stores) that can accept payment in return for a transaction fee.

While data is not available showing how many of these customers are low-income, it is reasonable to assume that many of them are. Even if that is not correct, the impact of cash payment requirements on affected low-income customers is likely to be amplified compared to other customers. For example, they are less likely to have a car to get to a bank and a payment location. They may live in areas where carrying cash is unsafe, or their work schedules may not afford them the extra time needed to pay in person.

As with customer deposit requirements, there is a thin veneer of financial justification for this practice: any business is going to hesitate to accept another check from a customer whose last check bounced. A business that receives payment before providing goods or services can protect itself from losses this way, but a utility bills *after* its services have been provided. If the objective is to reduce uncollectibles, requiring cash payment exerts an opposing force: making it harder for customers to pay their bills is obviously going to make them less likely to pay their bills.

The MPSC recently ruled that the Billing Rules allow utilities to require cash payments of some customers, in a narrow order that did not touch on the fairness or cost effectiveness of the practice.⁷⁰ The Commission did suggest that DTE provide an appeal process and allow people other than the customer whose check bounced to pay the bill with check or credit card. The order stated that concerns are “essentially disputes with the current language of the billing rules” and suggested revisiting the issues next time the rules are revised.

Billing and Collections Practices recommendations

Regarding disconnections, the MPSC should require utilities to provide data and analysis demonstrating that their disconnection practices strike a reasonable balance between financial and social objectives.

⁷⁰ U-21534 order, April 10, 2025.

Regarding customer deposits, the MPSC should:

- *Study whether utility deposit practices minimize the cost of service for all ratepayers;*
- *Require utilities to demonstrate that they exercise reasonable discretion in their deposit practices, such that their treatment of each customer reflects a reasonable assessment of the financial risk that customer represents;*
- *Study whether allowing utilities to retain a deposit until a customer has paid on time for 12 consecutive months reduces risk of loss sufficiently to justify the continued burden on the customer.*

Regarding cash-payment requirements, the Commission should:

- *Revise the Billing Rules either to prohibit or strictly limit cash-payment requirements;*
- *If the Commission does not prohibit the practice outright, limits should include:*
 - *Bar imposition of the cash-payment requirement on senior customers, who may have limited mobility and personal safety concerns that make the process of securing and delivering cash unduly burdensome;*
 - *Bar assessment of a third-party payment agent fee for required cash payments;*
 - *Mandate adoption and communication of a clear and fair process for customers to appeal imposition of the cash payment requirement;*
 - *Require the utility to accept payment by cash or check from another household member or guarantor, provided they do not pay from an account shared with the customer whose payment was declined, and provided that the alternative payor has not defaulted on a utility bill or had a past payment declined.*

VII. DATA COLLECTION AND ACCESS

Requirements for data collection, reporting, and availability are ongoing topics of discussion at the MPSC.⁷¹ The gathering and regular reporting of data by utilities is critical to enacting some of the key recommendations in this report. It is also necessary to measure changes in utility service to evaluate their alignment with the MPSC on reliability, equity, and affordability goals. Availability of their own data is important to low-income customers as it gives them greater control of their energy usage and cost. Utility and third-party access to customer data can help identify customers who may be struggling to pay their bills or have unusual energy usage patterns which may indicate a need for EWR services or other support. The ability to use data to identify these types of customers must be balanced with those customers' privacy rights. In addition to customer-specific data, system reliability data can help to identify areas where low-income customers may be receiving lower-than-average service.

Access to Customer Data

The MPSC hosted a Customer Education and Participation workgroup. As stated in the commission's March 2022 final report resulting from that workgroup, "[e]nsuring customer access to the energy data, protecting the privacy of their data, and ensuring opportunities for customers to understand and participate in that use is crucial to enabling customers to make the energy use decisions that are in the best interest of them and their families."⁷² The final report made several recommendations pertaining to customer data privacy, standards for sharing data with third parties, and customer access to their own energy data. Among many other recommendations, those of relevance to this report include:

"Recommend nationally recognized standards and protocols that provide customers and their chosen third parties with easy, secure, and portable access to energy usage information to further empower them in monitoring and managing their energy usage."

Easy access to their own energy use data is a prerequisite to engaging and serving low-income customers. Significant progress has been made in this area. Several utilities now offer customers the ability to download their energy use data in one-hour increments, and to grant proxy access to third parties of their choosing, such as energy efficiency or solar PV contractors.

"Require that whole building data be interoperable with Energy Star Portfolio Manager as it is the current national standard for building level energy tracking and assessment. Building owners whose tenants do not meet the aggregation thresholds should also be able to request information in the Energy Star Portfolio Manager compatible format after obtaining consent from all tenants."

Adoption of this recommendation would give building owners better information about the energy performance of their properties, which they often lack as units are individually metered and the customers/tenants receive the bill. This data could help landlords improve the energy performance of their multi-unit buildings, which would likely benefit low-income households who are often tenants in these dwellings.

Customer Data Aggregation and Anonymization

A critical issue that has seen less progress is customer data aggregation and anonymization. As noted above, utilities have identified only a small minority of actual low-income households they serve, hampering provision

⁷¹ See: https://www.michigan.gov/mpsc/0,9535,7-395-93307_93312_93593_95590_95594_95685-508655--,00.html

⁷² <https://www.michigan.gov/mpsc/-/media/Project/Websites/mpsc/workgroups/MPG-Customer-Education--Participation-Workgroup--Final-Report-20220325.pdf?rev=52583844e0fe484585b49a8cbe5170d3&hash=352B6077B68122DAD048B322F1796A43>, p.ii

of services and extension of protections to them. Adoption of data aggregation standards—including anonymization standards to protect customer privacy—would allow utilities to provide geographically segmented data to third parties. Local governments could then identify eligible households and provide outreach. Finely granular geographic data is needed to inform targeted and effective energy efficiency and other energy assistance and affordability programming.

In its September 8, 2022 order, the Commission accepted its Staff's recommendation to formally adopt the 15/15 aggregation standard as a minimum standard for aggregated datasets for residential and commercial customers.⁷³ Similarly, staff recommends the formal adoption of the 4/50 aggregation standard as a minimum standard for aggregated datasets for industrial customers. DTE and Consumers Energy both filed for rehearing on this topic and other aspects of the order. In its December 23, 2023 order in case no. U-21959, the Commission affirmed its earlier orders pertaining to data aggregation and anonymization and interoperability with Energy Star Portfolio Manager and the Green Button standard. However, it took no specific implementing action, stating "[t]he Commission takes no further action on these matters at this time but may provide direction and subsequent deadlines on these topics in a future order, as deemed advisable."⁷⁴ There has been no subsequent Commission action or staff reports on these topics; data aggregation and anonymization were not discussed at all in the February 20, 2025 Staff recommendations following up the Commission's 2023 order. Given the importance of this data for serving low-income customers, we recommend the Commission take prompt action to implement these standards.

Utility System Data Reporting and Access

The data use cases described above depend on availability of aggregations at the smallest geographic level consistent with protection of customer privacy, because the ultimate aim is to deliver services to individual households. For purposes of evaluating and regulating utility performance, aggregated data are needed. While zip code level data may also be offered, census tract data is preferable for several reasons. Data at the census tract level is ideal to capture the geographic distribution of information needed to understand low-income concerns such as:

- Outage occurrences and durations
- Geographic representation of distribution system investments
- Geographic representation of program spending amounts (EWR, demand response, pilot programs)
- Concentration of identified low-income and senior households
- Indicators of financial distress suggesting need for energy, financial and social services, including: arrearages, disconnection notices, receipt of State Emergency Relief, disconnections and restorations.

Data at the census-tract level can easily be correlated with publicly available demographic data on:

- Race
- Average income
- Energy burden
- Housing statistics
- Environmental justice score (see below)
- Health statistics

Census tracts are smaller in population than most zip codes, making it easier to identify and serve households most in need. Also, unlike zip codes, census tract boundaries commonly follow political boundaries, which are relevant for city, township, village, and county leaders as they plan and deliver programs.

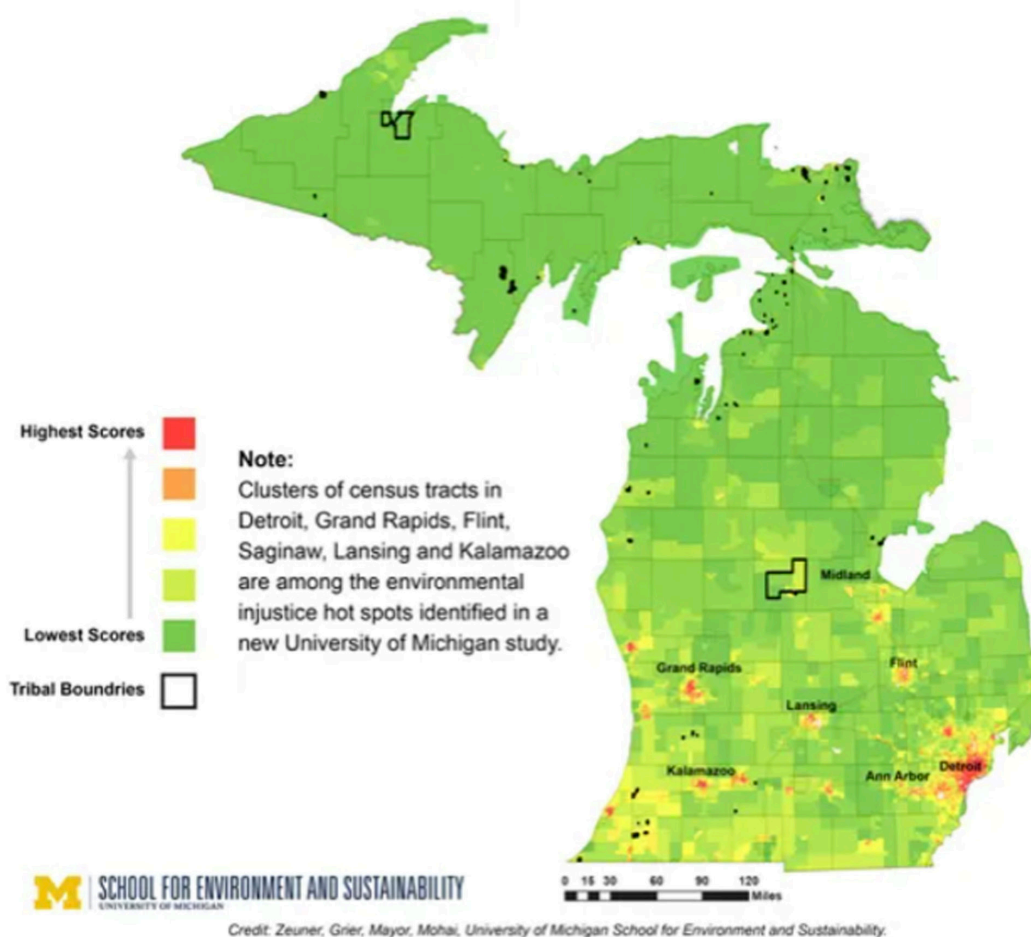
⁷³ 15/15 is an aggregation standard meaning that a bundle of residential data must include at least 15 customers, and no single customer can represent more than 15% of total usage in the bundle. 5/40 represents the same conditions for bundling of commercial customer data.

⁷⁴ MPSC order, case no. U-21959, 12/23/23, p.34

Geographic data from utilities allow for comparison with MiEJScreen, a tool under development at the University of Michigan School for Environment and Sustainability (SEAS) program, which assesses and maps pollutant levels and health outcomes by census tract. The image from SEAS below shows the environmental justice centers of the state (Figure 12.).

Figure 12⁷⁵

Heat Map of Michigan Census Tracts Ranked by Environmental Justice Scores



The MPSC has made large strides to improve specificity and granularity of utility reporting of reliability data. In a 2022 order, the MPSC directed its Staff to create a template for utilities to regularly report a large amount of reliability data, such as storm type; customers interrupted; storm duration and restoration in days; the amount of dollars spent for each storm event; and dollars paid in customer outage credits.⁷⁶ The template also requires utilities to report on which census tracts and zip codes its worst-performing circuits travel through.

Regulated utilities have been reporting their reliability data, organized by both zip code and census tract, using the template since July of 2023. The MPSC has developed a new webpage offering the data in tabular and chart data organized by reporting period and utility, with data download functionality.⁷⁷ The MPSC receives the data for each zip

⁷⁵ University of Michigan News. "U-M study reveals hot spots of environmental injustice across Michigan." July 25, 2019. <https://news.umich.edu/u-m-study-reveals-hot-spots-of-environmental-injustice-across-michigan/>

⁷⁶ Michigan Public Service Commission. "MPSC takes next steps in review of 2021 storm outages," March 2022. <https://mi-psc.my.site.com/sfc/servlet.shepherd/version/download/0688y000002DDcMAAW>

⁷⁷ <https://www.michigan.gov/mpsc/consumer/electricity/distribution-system-reliability-metrics>

code and census tract. The information is not publicly posted, however detailed reports are available upon request. We recommend the MPSC take three steps to ensure the information is accurate and useful.

First, the MPSC should study the wide variation in reported outage causes among zip codes and census tracts and determine whether additional reporting guidance or reporter training are needed. Outages caused by equipment failure, trees, and by wind, snow, ice, hail and rain are the three leading reported causes. However, their frequencies vary greatly, even among neighboring census tracts, suggesting that different crews may observe different reporting definitions. Separately, “unknown causes” are frequently cited, again with wide variance in frequency across locations. The MPSC and other stakeholders cannot accurately judge what is necessary to improve reliability in a specific area if the outage cause statistics are unreliable. Clearer definitions or better training may be needed.

Second, the MPSC should make publicly available and downloadable geographically segmented data, preferably on the Distribution System Reliability Metrics webpage or, alternatively, in the case no. U-21122 public docket.⁷⁸

Third, the MPSC should require utilities to complete all data fields in the U-21122 reporting template. To date, utilities have not provided data in the reporting fields for Meter Reading Factor, New Service Installation Factor, Wire Down Relief Factor, or Line Clearing/Tree Trimming.

Data Collection and Access Recommendations:

The MPSC should reinstate and implement its order adopting the 15/15 aggregation standard as a minimum standard for aggregated datasets for residential and commercial customers and the 4/50 aggregation standard as a minimum standard for aggregated datasets for industrial customers.

The MPSC should improve the quality and completeness of reliability data reported by utilities in the case no. U-21122 docket. Specifically, the Commission should study and improve the quality of outage-cause data and should require utilities to complete all data fields in the template.

The MPSC should make publicly available the zip-code and census-tract level reliability data as reported by utilities in the case no. U-21122 docket.

⁷⁸ <https://data-michiganpsc.hub.arcgis.com/>

CONCLUSION

Low-income customers have been an afterthought in utility regulation and rate making for too long. These customers have had to constantly forgo other necessities to pay their utility bills, experience longer power outages and live in less energy efficient buildings and rental units. Michiganders are struggling with these issues at staggering rates and there is a need for greater governmental action to remedy these problems. The MPSC, utilities and other working bodies have the resources and tools necessary to reduce this burden and make prices more affordable. Although the primary focus of this report is to discuss how to reduce the price of energy and the high energy burden for low-income customers in Michigan, our recommendations also touch on how policymakers can help low-income households reduce their energy use, shift towards cleaner energy and be more engaged with utility regulatory proceedings. The recommendations, compiled in the summary table at the beginning of this report, are designed to improve energy equity and affordability for low-income households in Michigan and reduce the energy burden confronting too many households in Michigan.