**To:** **Honorable Mayor and City Council**

**From:** **Melissa R. Marsh, City Manager**

**Subject:** **DTE Reliability for Madison Heights**

**Date:** **October 7, 2024**

This report is being prepared to update the Mayor and City Council, as well as the residents of Madison Heights, on the actions taken by City staff to follow up on DTE electricity reliability issues.

April 2024 – The City Council **approved the City's membership in the Michigan Municipal Association for Utility Issues (MI-MAUI)**. See the attached report for more details. In summary, The City of Madison Heights individually lacks the staffing capacity, technical and legal knowledge, and economic or political power to consistently and effectively monitor and influence proceedings of the Michigan Public Service Commission (MPSC) and other regulatory bodies or to influence the business policies and practices of regulated utilities to ensure better reliability of electricity services. By joining other municipalities in the Michigan Municipal Association for Utility Issues (MI-MAUI), we will hopefully have a more powerful, consistent, informed, and unified voice in regulatory and utility matters.

May 20, 2024 – with the support of MI-MAUI, Madison Heights submitted letters of support opposing rate-payer-funded incentive payments to utilities that fail to meet the state's reliability performance standards. This resulted in MPSC staff backing the award from this proposal and instead changing their stance to explicitly being incenter.

July 26, 2024 – MI-MAUI testified on behalf of municipalities in the DTE rate case. (testimony is attached) In summary, the testimony focused on three areas: local street lighting, coordination of DTE projects with municipal infrastructure projects, and objection to requiring cash payments from approximately 2% of their residential customers.

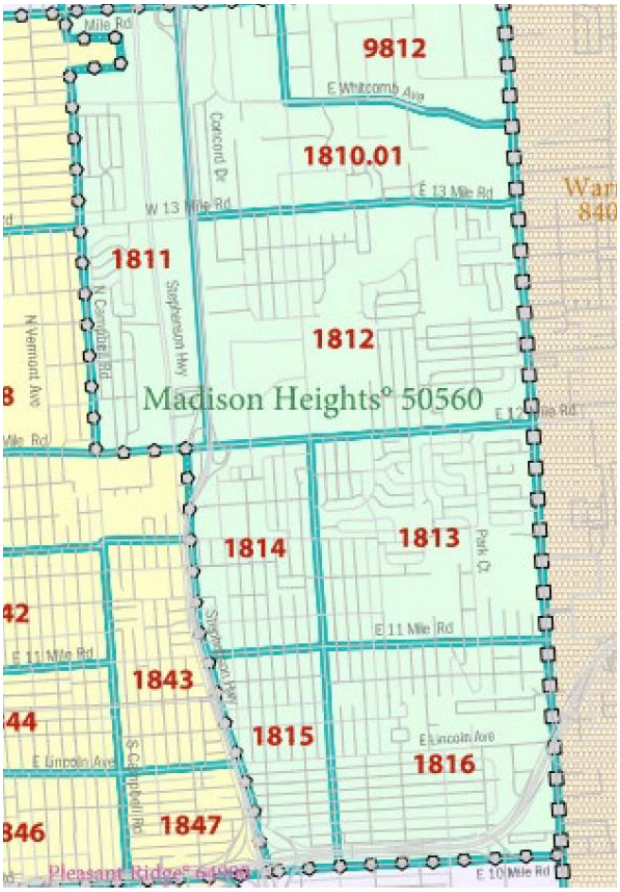
August 8, 2024 – Contacted our DTE Local Government representative to discuss the increase in complaints about reliability and required a report of the reliability date as well as improvements DTE has made and is scheduled to make in the near future. Schedule a meeting with DTE on September 17th.

August 28, 2024 – staff requested DTE's reliability report in preparation for the upcoming meeting.

September 17, 2024 – Met with DTE representatives and regional engineering staff (see attached report) specifically asked about what is causing the outages in Madison Heights. When it is storm damage, the problem is overwhelmingly caused by trees or branches falling on the lines; they expressed issues with trimming private property trees, including residents having the ability to refuse a trim outside their DTE row, which is 15' from the electrical line. They discussed the tree trimming plan, the new online activity tracker, and modernizing equipment, creating resiliency and redundancy, and the need to increase money for capital improvements.

September 24, 2024 – Received updated reliability report for Madison Heights from MPSC (see attached report). Specifically asked DTE to explain:

- almost 2/3 of MH outages were in tracts 1813 and 1816.
- tract 1813 has many more equipment failure outages than the other tracts - about 2/3 of the total for all 8 tracts It also had the second-highest number of outages caused by wind, snow, ice, hail, and rain, which intuitively correlates with old. Failure-prone equipment.
- Tract 1816 had the most outages caused by trees, weather, and animal interference. It is clear a lot more tree trimming needs to take place in this area, but it could be difficult depending on where the trees are located. We have asked DTE about coordinating tree trimming efforts with the City to get trees on private property trimmed.
- Tract 1812 also had a lot of equipment failures; the worst two in this category accounted for about 90% of all equipment failure outages in the city.
- The three rightmost columns average the monthly outage frequency and duration for each census tract.
    - Total CAIDI gives the average outage duration, in minutes, for customers who actually experienced outages.
    - SAIDI gives the overall monthly average interruption duration - including customers who experienced no outages. So, the average customer in MH would have experienced 55 minutes of outage per month over those 12 months, but customers who actually experienced outages were out for 332 minutes on average (5-1/2 hours).
    - SAIFI tells you how frequently people experience outages. A total of .122 tells you that an average of 12.2% of MH customers each month experienced an outage.



**To:** **Mayor and City Council**

**From:** **Melissa Marsh, City Manager**

**Date:** **March 28, 2023**

**Subject:** **Michigan Municipal Association for Utility Issues (MAUI) Membership**

## BACKGROUND

Local governments and the communities they serve have little influence over the rates, regulations and business practices that determine one of their most significant expenses—what they pay for energy. A growing number of local governments also want to reduce their energy footprints but are again at the mercy of complex rules and regulations that often hinder what they can achieve. By joining together in the Michigan Municipal Association for Utility Issues (MI-MAUI), local governments and public agencies gain collective clout, focus and expertise to influence regulatory processes and utility practices. MI-MAUI connects municipal leaders, aligns them along common interests, and produces energy cost savings and innovative solutions to community challenges. Thank you for the City of Farmington Hills' interest in the Michigan Municipal Association for Utility Issues and in joining the municipal intervention in DTE's electric rate case, U-20836

I'm writing in response to your request for information on our programs, membership requirements and costs. I'm also including information on our 2022 priorities, so you'll have a sense of what the dues support.

## MEMBERSHIP DUES AND BENEFITS

Annual dues are figured as 0.3% of a municipality's annual billings from regulated energy utilities (in your case, DTE) for electric and gas usage but not project-related payments (e.g. LED streetlight conversion fees). For Madison Heights this fee is calculated at $1,887.

MAUI represents local governments and other independent public agencies served by investor-owned utilities throughout Michigan, focusing on municipal operations including:

- municipal street lighting tariffs, technologies and maintenance practices;
- electric/gas tariffs and utility practices affecting municipal buildings, water treatment plants;
- tariffs and policies related to solar PV and microgrids serving municipal facilities;
- rates and rules for utility green-power programs.

MAUI also addresses issues not directly related to municipal costs and operations, including issues that affect residential ratepayers such as cost, reliability, energy efficiency and renewable energy programs.

## DTE PRIORITIES

*DTE Electric rate case U-20836*

MAUI has two general priority areas in this rate case:

> For municipal operations and costs, we are focused on street lighting rates and tariffs. Our top concern is that DTE is requesting to raise street lighting rates an average of 18%. Even worse, the

Company proposes to increase rates for company-owned lights served by overhead wires an average of 24%. Aside from cost, we are also focused on reliability – lights fail too often, DTE takes too long to repair them, and no improvements have occurred despite widespread installation of LEDs.

For residential electric issues, we will focus on reliability and cost of service. DTE customers suffered through multiple, extended power outages this past summer. DTE has significantly below-average reliability performance nationally, but significantly above-average residential rates. The Company proposes to raise residential rates about 10%, citing the cost of improving reliability. MAUI will work to make sure the investments make sense, are cost-effective and that costs are fairly allocated. Our work on residential issues in this case is funded by the state Utility Customer Protection Board, so there are no incremental costs to members; but we do need municipalities to be members to increase our representative power in the case.

**RECOMMENDATION**

The City of Madison Heights individually lacks the staffing capacity, technical and legal knowledge and economic or political power to consistently and effectively monitor and influence proceedings of the MPSC and other regulatory bodies, or to influence the business policies and practices of regulated utilities to insure better reliability of electricity services. By joining other municipalities in the Michigan Municipal Association for Utility Issues (MI-MAUI), we will hopefully have a more powerful, consistent, informed, and unified voice in regulatory and utility matters. Therefore, staff and I recommend City Council adopt the MAUI membership resolution and authorize members due not to exceed $2,000.

Michigan Municipal Association for
UTILITY ISSUES
MI-MAUI

**Date: March 24, 2023**
**Number: 202301**

# Invoice

**To:**
Melissa Marsh
City Manager
Madison Heights, Michigan

**From:**
MI-MAUI
4989 Earhart Road
Ann Arbor, MI 48105
USA

| Description of work |
| --- |
| 2022 MI-MAUI membership assessment<br>*= 0.3% of $628,890.69 annual DTE spend.* |

| | |
| --- | --- |
| 2022 membership | $1,887.00 |

*Please remit payment within 21 days of invoice date, to address above or via electronic payment.*

**Resolution**

WHEREAS, the City of Madison Heights ("City") strives to reduce energy use and expenditures in its operations and encourages and supports its residents, businesses and others to make similar efforts; and,

WHEREAS, the viability of many local government energy-related initiatives is determined by regulations set by state or federal regulatory agencies, such as the Michigan Public Service Commission (MPSC); and,

WHEREAS, implementation of many local government energy-saving efforts depends on the support and participation of regulated utilities; and,

WHEREAS, the infrastructure and operations of regulated utilities may also impact economic development, environmental quality, quality of life, uses of roadways and public easements and other issues of vital concern to local governments; and,

WHEREAS, the ability of regulatory agencies and regulated utilities to consider and serve the needs of municipal governments may be hindered by lack of organized priorities, agreed positions, consistent and expert representation among the hundreds of local governments within the state of Michigan; and,

WHEREAS, municipalities individually lack the staffing capacity, technical and legal knowledge and economic or political power to consistently and effectively monitor and influence proceedings of the MPSC and other regulatory bodies, or to influence the business policies and practices of regulated utilities; and,

WHEREAS, the Michigan Municipal Association for Utility Issues (MI-MAUI), a non-profit research and education organization, has formed to give municipalities a more powerful, consistent, informed and unified voice in regulatory and utility matters; and,

WHEREAS, membership in MI-MAUI is open to any local government in the State of Michigan, with membership fees determined according to each member's annual utility billings; and,

THEREFORE, be it resolved, that the City of Madison Heights is joining MI-MAUI at a 2023 membership cost not to exceed $2,000; and,

Further, be it resolved that the City of Madison Heights appoints City Manager, Melissa Marsh to serve as its representative to MI-MAUI.

Roslyn Grafstein
Mayor

Toya D. Aaron
Councilwoman

Mark A. Bliss
Mayor Pro Tem

Sean D. Fleming
Councilman

Emily J. Rohrbach
Councilor

David M. Soltis
Councilor

Quinn J. Wright
Councilor

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the Commission's own motion to establish a workgroup to investigate appropriate financial incentives and penalties to address outages and distribution performance moving forward.
_____/

Case No. **U-21400**

**MICHIGAN PUBLIC SERVICE COMMISSION STAFF'S COMMENTS**

**MICHIGAN PUBLIC SERVICE COMMISSION STAFF**

Daniel E. Sonneveldt (P58222)
Assistant Attorney General
Public Service Division
7109 W. Saginaw Hwy., 3rd Floor
Lansing, MI 48917
Telephone: (517) 284-8140

DATED: May 3, 2024

## I. Introduction

On December 21, 2023, the Michigan Public Service Commission ("Commission") issued an order in Case No. U-21400 (Order) directing Commission Staff ("Staff") to convene an additional engagement session with interested parties to discuss the revised straw proposal coming out of the Financial Incentives and Disincentives workgroup.

That Order also directed Staff to file a report on the Financial Incentives and Disincentives workgroup's investigations and findings in this docket no later than 5:00 p.m. (Eastern time) on May 3, 2024.

## II. Attachment

Attached to this filing is a report (Attachment A) that identifies the workgroup's investigations and findings.

Respectfully submitted,

**MICHIGAN PUBLIC SERVICE COMMISSION STAFF**

Daniel E. Sonneveldt (P58222)
Assistant Attorney General
Public Service Division
7109 W. Saginaw Hwy., 3rd Floor
Lansing, MI 48917
Telephone: (517) 284-8140

**DATED: May 3, 2024**

# Attachment A

# Financial Incentives and Disincentives Workgroup May 2024 Report

## Revised Straw Proposal for Reliability Metrics

## Executive Summary

Since convening the Financial Incentives and Disincentives Workgroup ("workgroup") by order of the Commission in April 2023, the workgroup has reviewed two versions of a straw proposal for reliability metrics through several rounds of comments and three engagement sessions. After conducting this review, Staff reports the following findings:

- Improving distribution system reliability still remains a high priority in the near-term;
- Financial incentives and disincentives can complement the MPSC's other regulatory actions to improve reliability;
- Interested parties provided valuable feedback on the initial and revised straw proposals but recommended further revisions;
- This report suggests additional revisions to the straw proposal in response to the workgroup's feedback; and
- After concluding this initial focus on reliability, the workgroup's scope can shift to the "plus" portion of the Reliability-Plus framework envisioned in the opening order of this proceeding.[1]

## Background

On April 24, 2023, the Michigan Public Service Commission ("MPSC" or "Commission") issued the opening order in Case No. U-21400, which directed Commission Staff to convene a Financial Incentives and Disincentives workgroup as part of the MI Power Grid Initiative and file a report of the workgroup's investigations and findings by December 31, 2023.

In directing this action, the Commission referred to numerous prior decisions to address distribution system reliability and safety. The opening order also stated, "an initial focus of the Financial Incentives and Disincentives workgroup shall include developing appropriate metrics relating to reliability including, but not limited to, SAIDI [System Average Interruption Duration Index] (including and excluding MEDs [major event days]), SAIFI [System Average Interruption Frequency Index], CEMI [Customers Experiencing Multiple Interruptions], CAIDI [Customer Average Interruption Duration Index], and resilience, including, but not limited to, downed wire response and the frequency and duration of outages during extreme weather, and shall use the recently updated Service Quality rules[2] as a baseline."[3]

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[1] See Opening Order at p. 12., the Commission directed, "the workgroup shall also consider challenges around the readiness of utility distribution grids to effectively accommodate and leverage the increasing and further anticipated growth of distributed generation, EVs, and other DERs." This report identifies next steps for the workgroup's discussion of the reliability-plus framework.

[2] Service Quality rules refer to Michigan's Service Quality and Reliability Standards for Electric Distribution Systems.

[3] See Opening Order at p. 12. For reference, SAIDI, SAIFI, CEMI, and CAIDI are electric utility reliability metrics defined by the Institute of Electrical and Electronics Engineers ("IEEE").

On August 30, 2023, the Commission issued an order with a straw proposal for candidate distribution performance metrics and requested feedback from interested parties through comments and reply comments.[4] In addition, the Commission hosted technical conferences on October 10, 2023, and November 30, 2023. The first technical conference discussed the initial straw proposal and comments. Discussion in the second meeting focused on proposed revisions to the initial straw proposal based on feedback from interested parties.

On December 19, 2023, Commission Staff posted comments to this docket that included a status report and revised straw proposal. On December 21, 2024, the Commission issued an order requesting:

- Interested parties file comments on the revised straw proposal by February 2, 2024,
- Staff hold an engagement session on February 12, 2024,
- reply comments submitted by March 1, 2024, and
- Staff file a report on the Financial Incentives and Disincentives workgroup's investigations and findings by May 3, 2024.

By February 2, 2024, nine parties filed comments on the revised straw proposal.[5] On February 12, 2024, the Commission held an engagement session (see recording here). On March 1, 2024, seven parties submitted reply comments following the engagement session.[6]

This status report summarizes feedback received on the December 2023 revised straw proposal and describes additional revisions to reliability performance metrics based on feedback. The concluding section describes the next steps to discuss and develop the Reliability-Plus framework.

## Summary of Feedback on December 2023 Revised Straw Proposal

In reviewing the two rounds of comments and discussion during February engagement session, the following themes were shared by participants:

- Significant concerns expressed with incentive opportunities – A broad range of interested parties opposed the opportunity for utilities to earn an incentive for performance below current Service Quality rules and cited requirements that utilities fulfill Service Quality standards before earning an incentive. This update incorporates this feedback into the incentive/penalty metrics and requires utilities to meet all Service Quality rules to earn a net incentive.

[4] See August 30, 2023 Order issued in Case No. U-21400.

[5] The parties filing comments included: City of Ann Arbor, Michigan Energy Innovation Business Council (MIEIBC), Consumers Energy Company, DTE Electric Company, Michigan Municipal Association for Utility Issues, Association of Business Advocating Tariff Equity (ABATE), Department of Attorney General, Natural Resources Defense Council (NRDC), and Citizens Utility Board of Michigan (CUB). Comments from CUB were joined by the Ecology Center, Environmental Law & Policy Center, Michigan Municipal Association for Utility Issues, Union of Concerned Scientists, and Vote Solar. Comments from NRDC were joined by Michigan Environmental Council, Sierra Club, and Strategen.

[6] The parties filing reply comments included: Citizens Utility Board of Michigan (CUB), City of Ann Arbor, Consumers Energy Company, DTE Electric Company, ABATE, Department of Attorney General, and Indiana Michigan Power Company. Reply comments from CUB were joined by Michigan Municipal Association for Utility Issues, Union of Concerned Scientists, Environmental Law & Policy Center, Ecology Center, and Vote Solar.

- Expand proposed metrics – Interested parties provided mixed feedback on the revised metrics in the December 2023 revised straw proposal. The Attorney General recommended expanding the set of metrics with some support from Consumers Energy.[7] This update is informed by all the feedback from interested parties and aligns with the set of metrics proposed by the Attorney General for the reasons discussed below.
- Utility concerns about higher likelihood of penalties under proposed metrics – Utility comments have noted that the proposed SAIDI metrics have an asymmetric deadband and under current performance levels they are more likely to incur penalties in the near-term. The proposal in the update maintains the same structure as a major objective is to motivate rapid improvement in reliability performance across all weather conditions. The updated proposal retains opportunities for utilities to offset penalties with performance above current Service Quality rules.
- Interested parties suggested modifying the limit on incentives and penalties – This update proposes a maximum limit on penalties and incentives of $10 million and allocates a share of this total across the seven proposed metrics. The utilities' performance on the proposed metrics will determine if they incur penalties or result in net incentives (after meeting all Service Quality rules) under this framework. The proposed limit manages the risk of this new approach to customers and shareholders and aligns with the recommendation from the Attorney General.

The next section summarizes the proposed revisions to the Initial Straw Proposal and then describes each proposed metric in further detail.

## May 2024 Update on Straw Proposal for Reliability Performance Metrics

MPSC Staff have carefully reviewed the feedback provided through written comments and participation in the engagement sessions. Staff suggest several revisions to the straw proposal to address this feedback. Table 1 summarizes the key proposed revisions:

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**Table 1: Summary of Proposed Revisions in May 2024 Update**

| Key Revisions | Updated Proposal | Discussion |
|---|---|---|
| Add storm response metrics | Include 72-hour catastrophic storm response and 24-hour gray sky storm response | Complements SAIDI and 48-hour storm response; places high priority on improving reliability in all conditions and restoring customers after storm events |
| Include CEMI-4 metric | Symmetric incentive/penalty mechanism based on | Includes metric to address customers with excessive #'s of outages |

[7] Consumers Energy generally supported the Attorney General's Service Improvement Incentive Mechanism in their comments throughout this workgroup.

| | | |
|---|---|---|
| | Service Quality rule criteria (CEMI-4 < 6%) | |
| Reallocate incentive/disincentive share across metrics | Greater share on storm restoration metrics | Reflects high priority to improve reliability and storm response |
| Adjust limit on penalties/incentives for initial period | Reduce limit to $10 million | Address feedback on December 2023 proposal |
| Clarify treatment of incentives/penalties | Utilities must meet all Service Quality rules before earning net incentive; incentives can offset penalties | Address feedback on December 2023 proposal; Maintains symmetric incentive/penalty |

Table 2 displays the details for each performance metric in this update. The table shows the seven proposed performance metrics, current baseline performance for Michigan's two largest utilities (where available), potential target levels for each metric, and incentive/disincentive mechanism.

**Table 2: May 2024 Update – Straw Proposal for Reliability Performance Metrics**

| | **Baseline** | | **Target Performance** | | **Potential Incentive/Disincentive Mechanism** |
|---|---|---|---|---|---|
| **Metric** | DTE | Consumers | Penalty | Incentive | |
| **SAIDI** (Excluding MEDs) | 141 (average using minimum 2 of 3 years from 2021-2023) | 179 (average using minimum 2 of 3 years from 2021-2023) | 5% reduction from baseline over 5 years (linear glidepath) | 1 st. dev. deadband + 10% reduction from baseline over 5 years (linear glidepath) | Symmetric incentive/disincentive 15% of total pool Incentive/penalty scales linearly over 1 st. dev. range |
| **SAIDI** (All Weather) (5-yr average) | DTE (2022): 563 DTE (2023): 774 | CE (2022): 597 CE (2023): 698 | 5% reduction from baseline over 5 years (linear glidepath) | 1 st. dev. deadband + 10% reduction from baseline over 5 years (linear glidepath) | Symmetric incentive/disincentive 15% of total pool Incentive/penalty scales linearly over 1 st. dev. range |
| **Storm Restoration** (48-hour catastrophic storm response) | DTE (2023): 75% | CE (2023): 75% | Below Service Quality Rule (<=90%) | Exceed Service Quality Rule (>90%) | Scale penalty from 80%-90% and incentive from 90%-100% 25% of total incentive/disincentive pool |

| | | | | | |
|---|---|---|---|---|---|
| **Storm Restoration** (72-hour catastrophic storm response) | Not currently available | CE (2023): 88% | Below <=95% | Exceed >95% | Scale penalty from 85%-95% and incentive from 95%-100%<br><br>20% of total pool |
| **Storm Restoration** (24-hour gray sky response) | DTE (2023): 82% | CE (2023): 95% | Below Service Quality Rule (<=90%) | Exceed Service Quality Rule (>90%) | Scale penalty from 80% - 90% and incentive from 90%-100%<br><br>10% of total pool |
| **CEMI-4** | DTE (2023): 301,244 customers; approx. 13%<br><br>7%-13% over past 5 years | CE(2023): 200,458 customers; 11%<br><br>9%-13% over past 5 years | Below Service Quality rule (CEMI-4 => 6% of customers) | Exceeds Service Quality rule (CEMI-4 < 6% of customers) | Scale incentive from 0% - 6% and penalty from 6%-12%<br><br>Account for 10% of incentive/disincentive pool |
| **Worst performing circuits**<br><br>Circuits ranked by system-level SAIDI (exc MEDs) | Reports use multiple metrics | Reports by SAIDI (no MEDs) on a circuit basis | Circuits ranked by SAIDI (exc MEDs) on a system basis.<br><br>Circuit repeats in top 10 during any future 5-year period. | No circuit repeats in top 10 during any future 5-year period. | Symmetric<br>5% of total pool |

**SAIDI (excluding MEDs)**

*Metric description* – The revised proposal retains SAIDI (excluding MEDs) under the same incentive/penalty structure that was proposed in the December 2023 Status Report. This update proposes reducing the share of this metric to 15%.

*Current performance* – Table 1 displays proposed baseline values for DTE and Consumers using the average of lowest 2 values in the past 3 years. These were 141 minutes for DTE and 180 minutes for CE. The proposed baseline method addresses differences in the recent trends for each utility on this metric, which was highlighted in the presentation during the November 30, 2023 technical conference.

*Target performance* – The interim penalty thresholds are informed by the Attorney General's proposal to achieve a 5% cumulative reduction in this outcome over 5 years. The proposed revision treats this

threshold as a "backstop" for penalties. That is, utility performance needs to improve from the baseline during each year to avoid incurring a penalty. The penalty threshold for interim years would be defined by a linear glidepath to the 5% cumulative improvement over 5 years.

The incentive threshold is predicated on achieving faster progress towards the industry median benchmark for this outcome across both utilities. Currently, DTE would need to improve by approximately 10% over the next 5 years. The incentive threshold was developed utilizing this 10% improvement rate plus a deadband that incorporates the historic level of variability between 2012-2023 for this outcome. Figures 1 and 2 display the proposed trajectories for these utilities and Table 3 provides the numeric details on this metric for each utility.

*Incentive/Disincentive Mechanism* – The revised proposal allocates 15% of the total incentive/disincentive pool to this metric and retains a symmetric opportunity to earn an incentive or incur penalties for reliability below the threshold. This update also proposes to scale the incentive or penalty linearly over a one standard deviation range. Using Figure 1, the following example illustrates how the penalty mechanism would work. Using the values for 2024, the utility would incur a penalty if the metric (SAIDI excl MEDs) exceeds a value of 140 minutes. The penalty would increase for values above 140 minutes until reaching the maximum at 162 minutes. For values within this range, the penalty is scaled proportionately. A metric value of 151 is the midpoint of the range and would incur half of the total penalty. Metric values that exceed the maximum value would incur the maximum penalty. The incentive mechanism would operate symmetrically for metric values below the incentive threshold of 116 minutes and earn the maximum incentive value for performance below 93 minutes.

**SAIDI (All Weather)**

*Metric description* –This update proposes to also retain SAIDI (all weather) under the same structure proposed in December 2023 status report and reduce the allocation of this metric to 15%.

*Current performance* – Table 1 shows current performance by both utilities, which is in the 4th quartile according to the annual IEEE utility benchmarking study.

*Target performance* – DTE has expressed a goal of reaching industry median performance for this metric. However, in recent years and particularly for 2023, utilities' SAIDI (all weather) performance has been increasing (worse performance) and far exceeds industry median performance. As interim measures, this revision proposes a 5% cumulative improvement in the 5-yr average as a threshold for assessing penalties. For positive improvement towards the industry median, this update proposes a 10% improvement relative to recent performance with the addition of a deadband to address the significant annual variability in this metric.

This formulation is similar to the SAIDI (excluding MEDs) metric by using a "backstop" measure of performance as a threshold for penalties. For this metric, the penalty threshold still requires improvement from the current baseline. A deadband is applied to the incentive range to reduce the likelihood that a utility could earn the incentive solely by favorable weather. In addition, the outcome is measured using the 5-year average of performance, which further addresses annual variability from weather conditions.

Figures 3 and 4 display the proposed thresholds for DTE and CE on this metric. Table 4 shows the proposed values for both utilities.

*Incentive/Disincentive Mechanism* – This update proposes a weight of 15% for this outcome, which would result in the SAIDI performance metrics comprising 30% of the total. The update also proposes to reallocate from the SAIDI metrics primarily to the storm response metrics, which are discussed further below. With the proposed revisions, the SAIDI and catastrophic storm response metrics would now compose 75% of the total. The proposed revisions place a high priority on reducing outage duration and improving response to major storm events, which reflects consistent feedback that these are urgent problems.

**48-Hour Catastrophic Storm Restoration**

*Metric description* – This update also retains the metric for service restoration within 48 hours of a catastrophic event but modifies the penalty/incentive structure and increases the weight of this metric.

*Current performance* – Table 1 shows 2023 performance by both utilities.

*Target performance* – Under this updated proposal, utilities would be penalized for performing below the 90% level in the Commission's Service Quality rules and have an opportunity for an incentive for performance above the threshold.

*Incentive/Disincentive Mechanism* – This update proposes to retain a symmetric incentive/disincentive metric for this outcome for a maximum of 25% of the total incentive/penalty pool. The penalty and incentive would scale proportionately in a 10% range from the requirement in the Service Quality rules. The proposed ranges are displayed in Table 1.

**72-Hour Catastrophic Storm Restoration**

*Metric description* – The revised proposal includes a new performance metric for service restoration within 72 hours of a catastrophic event. The Attorney General recommended including this metric in addition to the other storm response metrics. The overall structure is similar to the AG's proposal.

*Current performance* – Utilities do not currently report this metric to the MPSC.

*Target performance* – Under the revised proposal, utilities would be penalized for performing below 95% service restoration and have an opportunity for an incentive for performance above 95%.

*Incentive/Disincentive Mechanism* – This update also proposes a symmetric incentive/disincentive metric for this outcome for a maximum of 20% of the total incentive/penalty pool. The penalty scales proportionately from 85%-95% and incentive from 95%-100%.

**24-Hour Storm Restoration – Gray Sky**

*Metric description* – The revised proposal includes a performance metric for service restoration within 24 hours of a gray sky event.[8] MPSC Service Quality rules require that utilities restore 90% of customers within 24 hours for these events.

*Current performance* – Table 1 shows DTE and Consumers Energy performance in 2023. DTE restored 82% of customers within 24 hours and CE achieved 95%.

[8] MPSC Service Quality rules define gray sky event as, ""conditions that result in sustained interruptions for greater than 1% but less than 10% of an electric utility's or cooperative's customers."

*Target performance* – Under the revised proposal, utilities would be penalized for performing below the 90% level in the Service Quality rules and an opportunity to earn an incentive above 90%. The penalty and incentives are proposed to scale proportionately from 80%-90% and 90%-100%.

*Incentive/Disincentive Mechanism* – The update proposes a symmetric incentive/disincentive metric for this outcome for a maximum of 10% of the total incentive/penalty pool. The potential ranges are illustrated in Table 1.

**CEMI-4**

*Metric description* – This update proposes to include the CEMI-4 metric to maintain focus on improving service to customers experiencing repeated outages. The Service Quality rules establish a value of 6% for the CEMI-4 metric. The revised metric proposes using the threshold in the Service Quality rule as the basis for the incentive/disincentive metric.

*Current performance* – Table 1 displays the current performance for DTE and Consumers Energy.

*Target performance* – Utilities would incur a penalty when utilities exceed the Service Quality rule for CEMI-4 and an opportunity for an incentive for performance below this level. The incentive and penalty mechanism is proposed to scale proportionately from 0%-6% and 6%-12% (lower levels reflect better performance).

*Incentive/Disincentive Mechanism* – The update proposes a symmetric incentive/disincentive metric for this outcome for a maximum of 10% of the total incentive/penalty pool. The potential ranges are illustrated in Table 1.

**Worst-Performing Circuits**

*Metric description* – The revised proposal focuses on system-level SAIDI (excluding MEDs) to rank each utility's 10 worst-performing circuits and aligns with the incentive/penalty mechanism proposed by the Attorney General.

*Current performance* – Starting in 2024, utilities will provide this information to the MPSC in the R 460.731 Annual Reports, to be filed in U-12270.

*Target performance* – Target performance is that circuits do not repeat in the top 10 over a 5-year period.

*Incentive/Disincentive Mechanism* – Under this revised proposal, utilities would be assessed a penalty if a circuit repeats in the top 10 within 5 years. If a circuit repeats, then the penalty would be assessed. The update proposes to allocate 5% to this metric.

## Limit on Penalties/Incentives and Allocation across Metrics

This update proposes to set an initial limit on potential penalties and incentives at $10 million per year. A utility would incur the maximum total penalty if they perform at or below the maximum penalty threshold on every metric. If they perform above the incentive threshold on a metric, the incentive could offset penalties from other metrics. To be eligible to earn a net incentive, the utility would need to meet all Service Quality rules and offset any penalties by performance on the other metrics.

The $10 million limit draws from the recommendations of the Attorney General to provide meaningful motivation to drive improved performance. The Attorney General's comments suggested two approaches to establish this limit based on share of utility net income and basis points of Return on Equity (ROE). The update adopts the AG's recommendation and reasoning for establishing a limit at $10 million.

## Implementation Steps

This status update provides further description on the key implementation steps for this proceeding and subsequent review. The following steps are anticipated for implementing performance metrics:

- **Incentive/Disincentive metrics implemented through contested case proceeding –** This revised proposal anticipates that the incentive/disincentive framework would be implemented in a contested case proceeding subsequent to this workgroup process. The final decision in the contested case would implement performance metrics for each utility.
- **Conduct a review every two years -** Given the early stage of experience with performance metrics in Michigan, the metrics should be reviewed on a frequent basis and this revision proposes a two-year review cycle.
- **"Offramp" mechanism should be included in framework –** This revised proposal also anticipates adopting an offramp mechanism to allow for review of performance metrics during exigent circumstances where waiting for the normal review period is impractical. The frequent (two-year) review cycle should mitigate many circumstances where an offramp may be considered but this revised proposed still recommends including an offramp mechanism during this stage.
- **Incentives/disincentives tracked in regulatory asset** – This update anticipates tracking the net value of incentive and disincentives annually in a regulatory asset, which is reviewed in the utility's next rate case. Final decisions on cost allocation of the net value can be made in the rate case when the regulatory asset can be reviewed comprehensively with the utility's revenue requirement and cost-of-service.

## Next Steps with Reliability-Plus Framework

In the order opening this proceeding, the Commission directed a focus on a "Reliability-Plus" approach to distribution grid performance, and, "of foremost and most immediate concern are issues involving distribution reliability and safety."[9] The Commission further detailed that the workgroup's initial focus, "shall include developing appropriate metrics relating to reliability including, but not limited to SAIDI (including and excluding MEDs), SAIFI, CEMI, CAIDI, and resilience, including, but not limited to, downed wire response and frequency and during of outages during extreme weather, and shall use the recently updated Service Quality rules as a baseline."[10] This status report proposes an updated set of performance incentive/disincentive mechanisms to address this initial focus area directed by the Commission.

[9] See Opening Order at p. 12.
[10] Ibid.

The opening order's description of the "Reliability-Plus" framework included a broader focus than immediate reliability concerns. On this topic, the Commission stated, "the workgroup shall also consider challenges around the readiness of utility distribution grids to effectively accommodate and leverage the increasing and further anticipated growth of distribution generation, EVs, and other DERs."[11] This status report recommends next steps for the Commission to continue developing a Reliability-Plus framework for distribution grid performance.

Specifically, this status report recommends that the Commission request feedback from interested parties on the following four topic areas: equity, grid modernization, distributed energy resource (DER) integration, and resilience. Furthermore, parties' feedback is encouraged to identify performance metrics, scorecards, and performance incentive mechanisms relevant to distribution system performance in each topic area. Each of these concepts and topic areas are further described below.

Performance metrics are the broadest category of measurement and reflect information that is tracked on a particular outcome, which could include an activity, program, or outcome. A scorecard reflects a performance metric combined with a target or benchmark outcome. Finally, a performance incentive mechanism combines a performance metric, target, and financial incentive/disincentive.

The initial focus of this workgroup identified a set of performance incentive mechanisms to address high priority concerns with poor distribution system reliability and storm response. In broadening the focus of the Reliability-Plus framework, this update recommends that the Commission solicit feedback on potential performance measures for the following topics:

*Equity* – During the workgroup's earlier comment periods, several interested parties identified equity as a high priority in reviewing and improving distribution system performance. In this stage, workgroup participants are encouraged to propose potential metrics, scorecards, and performance incentive metrics that can improve equity in distribution system performance outcomes.

*Grid Modernization* – This topic area includes metrics to evaluate overall distribution system performance and electric utilities' implementation of approved distribution system investments. The Commission has offered guidance on this topic in prior reviews and decisions approving distribution system investments. Interested parties should build on this guidance in their responses on this topic. Measures in this focus area could also include proposed performance metrics, scorecards, and performance incentive mechanisms to evaluate system operations and investment effectiveness.

*DER Integration* – As discussed in the opening order, this focus area includes measures to accommodate and leverage the anticipated growth of DERs, such as distributed generation, community solar, energy storage, electric vehicles, and building electrification. Performance metrics and incentive mechanisms under this topic could include interconnection timelines, grid services provided by DERs, and implementation of cost-effective, non-wires alternatives (NWAs).

*Resilience* - This update proposes several performance incentive mechanisms for storm response that immediately address outcomes where utilities currently perform below Michigan's Service Quality rules.

[11] Ibid.

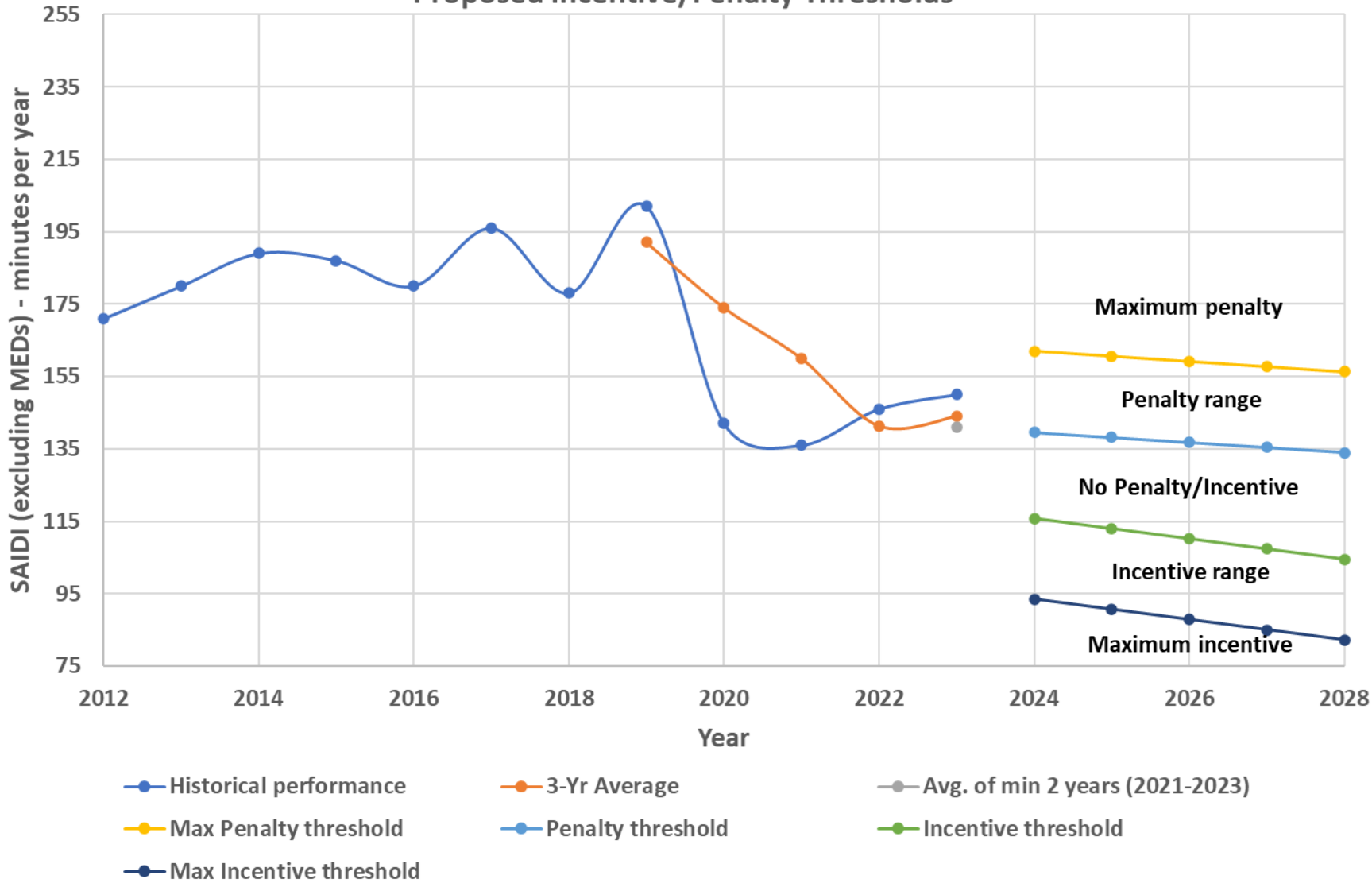
The focus area of resilience could include a broader set of measures and this update encourages interested parties to propose additional measures of resilience that could be tracked as metrics, scorecards, or performance incentive mechanisms, where appropriate.

## Proposed Procedural Steps for Reliability-Plus Framework

This update recommends that the Commission seek comments from interested parties on the above topics and then host an engagement session to discuss the comments. After the engagement session, interested parties would have an opportunity to file reply comments.

Commission Staff would then review this feedback and submit an update to the Commission recommending further actions on the recommendations for the Reliability-Plus framework.

Figure 1
DTE Historical Performance on SAIDI (excluding MEDS) and Proposed Incentive/Penalty Thresholds



## Figure 2
## CE Historical Performance on SAIDI (excluding MEDS) and Proposed Incentive/Penalty Thresholds

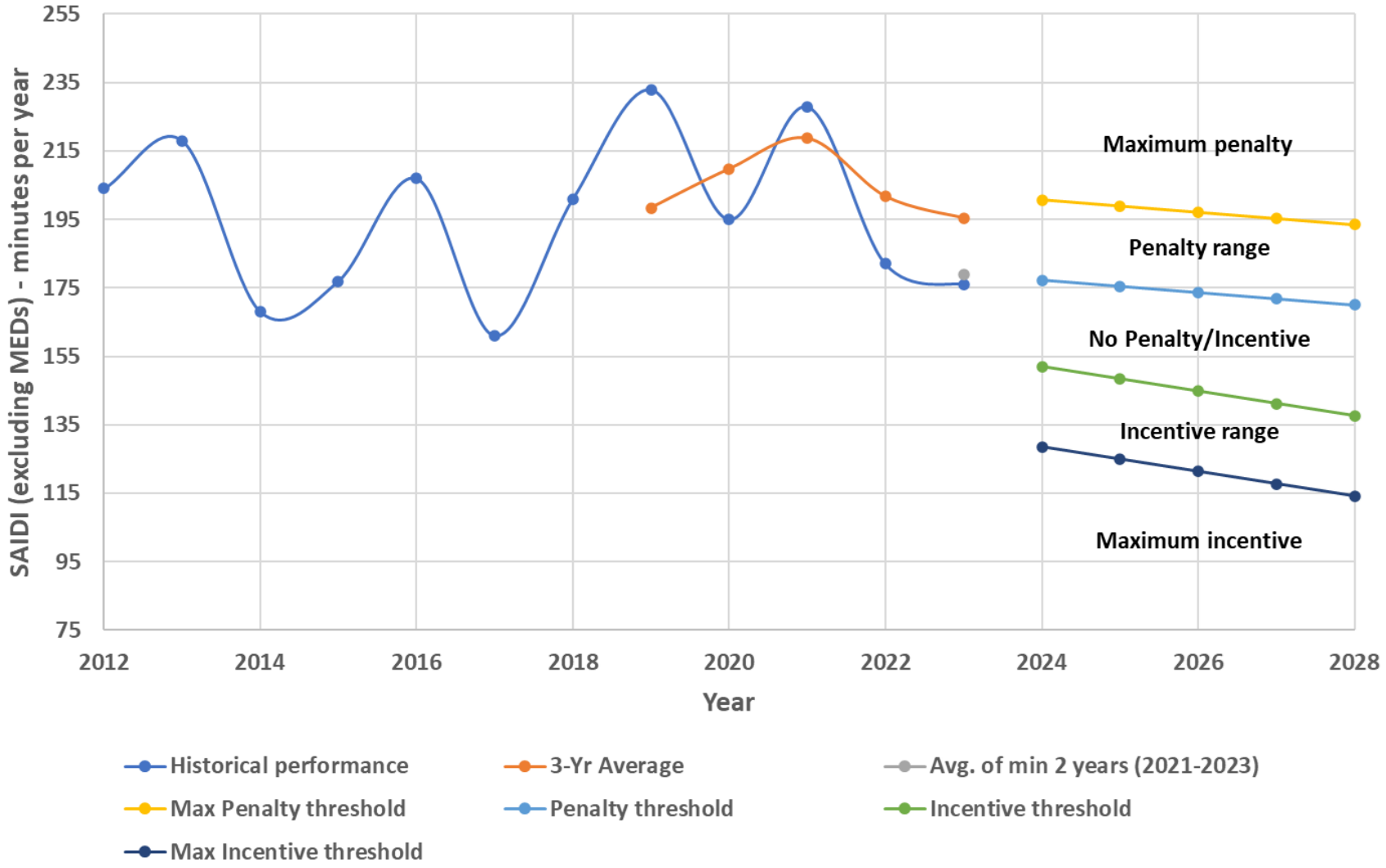
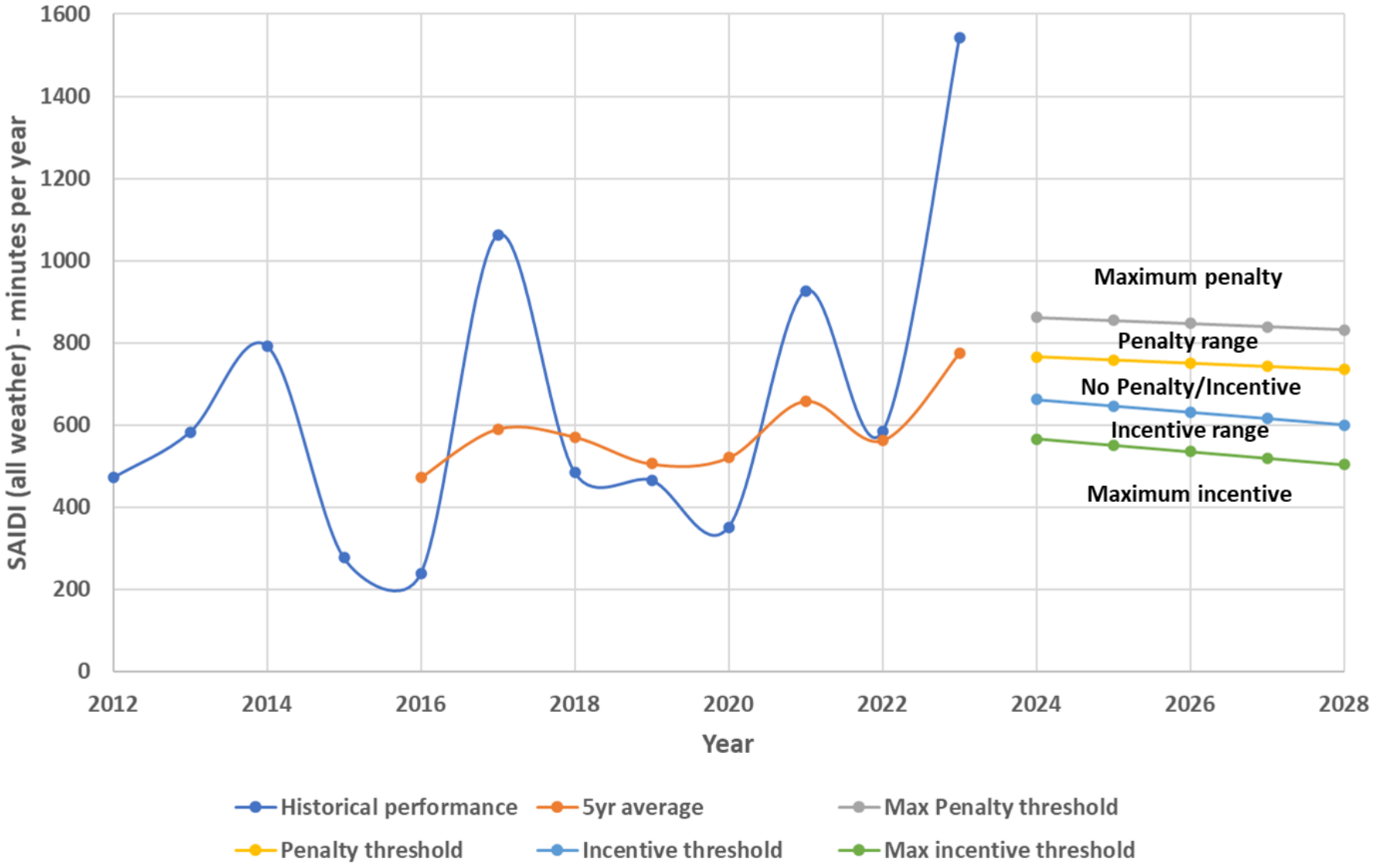
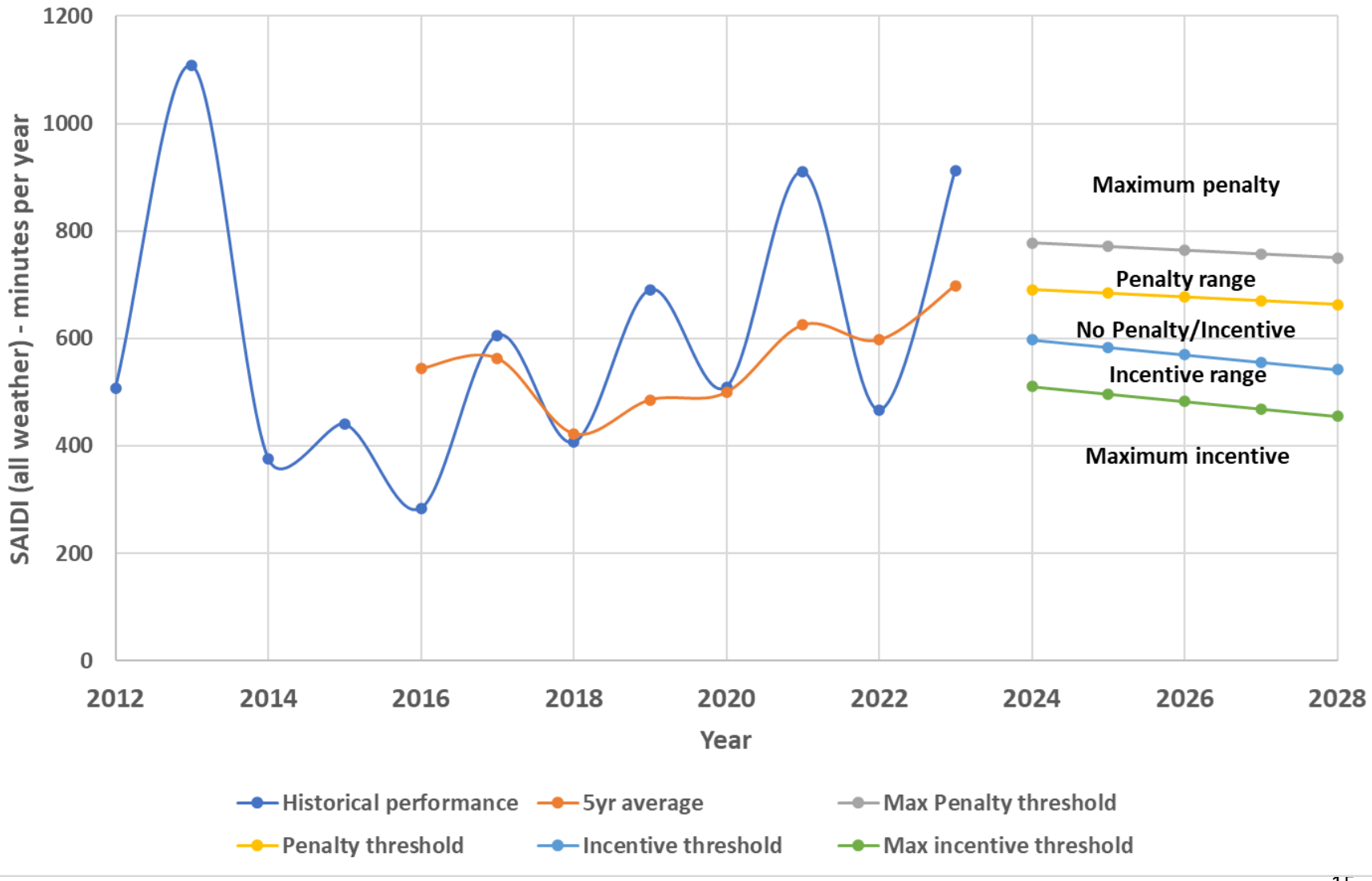


Figure 3
DTE Historical Performance on SAIDI (all weather) and Proposed Incentive/Penalty Thresholds



## Figure 4
## CE Historical Performance on SAIDI (all weather) and Proposed Incentive/Penalty Thresholds



# Table 3 - System Average Interruption Duration Index (SAIDI excluding MEDs)

**Definition**

Total amount of time average customer experiences a sustained interruption in a year excluding Major Event Days

**Key Considerations**

- Baseline uses avg. of lowest 2 yrs. from 2021-2023 to reflect recent improvements
- Long-term goal at median performance in IEEE benchmarking study
- Incentive/penalty scales linearly over 1 st. dev. range

| Key Parameters | DTE | CE |
|---|---|---|
| Baseline (est. 2023) | 141 | 179 |
| 5% Improvement Target | 134 | 170 |
| 10% Improvement Target | 127 | 161 |
| Long-Term Goal | 129 | 129 |
| 1 Standard Deviation (2012-2023) | 22 | 23 |
| Max Incentive/Penalty Allocation | 15% ($1.5 M) | 15% ($1.5 M) |

**DTE SAIDI (excl MEDs) Incentive/Penalty Mechanism**

| Year | Penalty | No Penalty/Incentive | Incentive |
|---|---|---|---|
| 1 | >162 – 140 | 140 – 116 | 116 – 93 > |
| 2 | >161 – 138 | 138 – 113 | 113 – 91 > |
| 3 | >159 – 137 | 137 – 110 | 110 – 88 > |
| 4 | >158 – 135 | 135 – 107 | 107 – 85 > |
| 5 | >156 – 134 | 134 – 105 | 105 – 82 > |

**CE SAIDI (excl MEDs) Incentive/Penalty Mechanism**

| Year | Penalty | No Penalty/Incentive | Incentive |
|---|---|---|---|
| 1 | >201 – 177 | 177 – 152 | 152 – 129 > |
| 2 | >199 – 175 | 175 – 148 | 148 – 125 > |
| 3 | >197 – 174 | 174 – 145 | 145 – 121 > |
| 4 | >195 – 172 | 172 – 141 | 141 – 118 > |
| 5 | >194 – 170 | 170 – 138 | 138 – 114 > |

# Table 4 - System Average Interruption Duration Index (SAIDI all weather)

**Definition**

Total amount of time average customer experiences a sustained interruption in a year under all weather conditions

**Key Considerations**

- Metric uses 5-yr average of SAIDI (all weather)
- Baseline uses 5-yr historical average to reflect recent improvements
- Long-term goal at median performance in IEEE benchmarking study
- Incentive/penalty scales linearly over 1 st. dev. range
- Includes a 1 st. dev. deadband to address variability

| Key Parameters | DTE | CE |
|---|---|---|
| Baseline 5-yr avg. (est. 2023) | 774 | 698 |
| 5% Cumulative Improvement | 39 mins | 35 mins |
| 10% Cumulative Improvement | 77 mins | 70 mins |
| Long-Term Goal | 250 | 250 |
| 1 Standard Deviation 5-yr avg. (2016-2023) | 96 | 87 |
| Max Incentive/Penalty Allocation | 15% ($1.5 M) | 15% ($1.5 M) |

**DTE SAIDI (all weather) Incentive/Penalty Mechanism**

| Year | Penalty | No Penalty/Incentive | Incentive |
|---|---|---|---|
| 1 | >863 – 766 | 766 – 663 | 663 – 566 > |
| 2 | >855 - 759 | 759 – 647 | 647 – 551 > |
| 3 | >847 – 751 | 751 – 632 | 632 – 535 > |
| 4 | >839 – 743 | 743 – 616 | 616 – 520 > |
| 5 | >832 - 735 | 735 – 601 | 601 – 504 > |

**CE SAIDI (all weather) Incentive/Penalty Mechanism**

| Year | Penalty | No Penalty/Incentive | Incentive |
|---|---|---|---|
| 1 | >778 – 691 | 691 – 598 | 598 – 511 > |
| 2 | >771 – 684 | 684 – 584 | 584 – 497 > |
| 3 | >764 – 677 | 677 – 570 | 570 – 483 > |
| 4 | >757 – 670 | 670 – 556 | 556 – 469 > |
| 5 | >750 – 663 | 663 – 542 | 542 – 455 > |

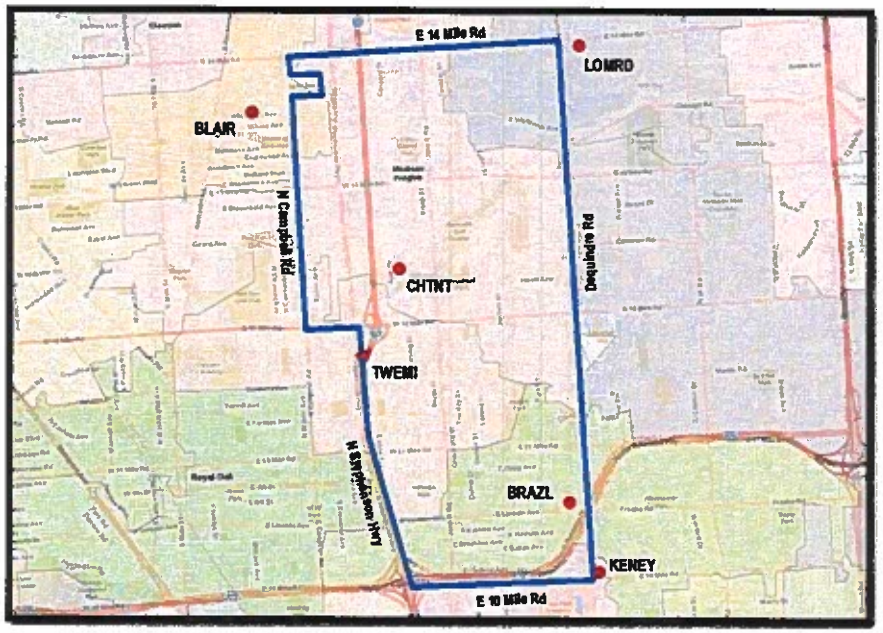
DTE

# Madison Heights Community Presentation

September 17, 2024

# DTE serves approximately 15,000 customers in Madison Heights

***MADISON HEIGHTS SERVICE TERRITORY FOOTPRINT BY SUBSTATION AREA***

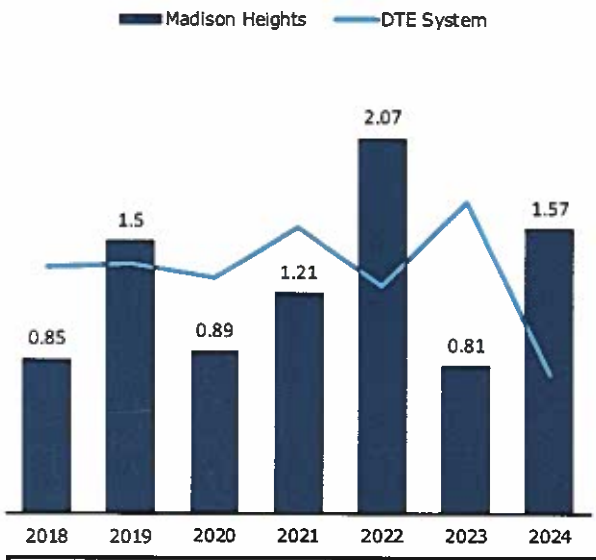



- DTE is committed to improving electric reliability in Madison Heights for the roughly 15,000 customers we serve.
- DTE maintains 6 substations feeding the Madison Heights area across 27 circuits.
- DTE has completed 109 miles of tree trimming, placing 72% of Madison Heights on a five-year cycle.

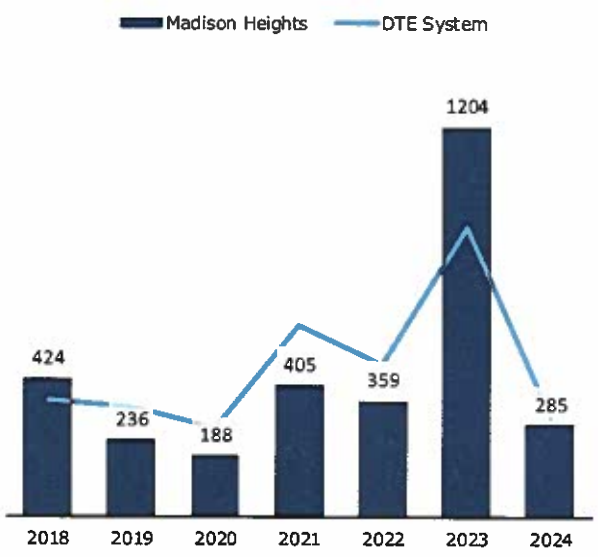
DTE

# In recent years, reliability performance in Madison Heights has been driven by severe weather events

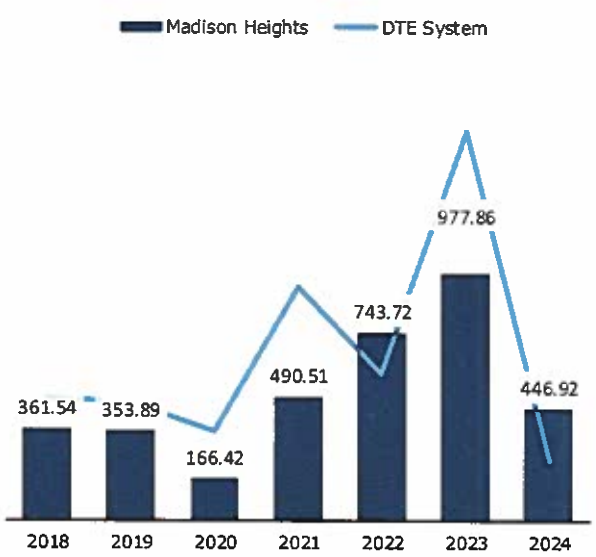
**SYSTEM AVERAGE INTERRUPTION FREQUENCY INDEX** *(Count)*




**CUSTOMER AVERAGE INTERRUPTION DURATION INDEX** *(Minutes)*




**SYSTEM AVERAGE INTERRUPTION DURATION INDEX** *(Minutes)*




*Recent performance has been heavily impacted by storms*
*Non-Storm SAIFI: 0.79 / Non-Storm CAIDI: 153 / Non-Storm SAIDI: 120.68*




• Metric Data is of 8/14/2024 and breakdown by circuit can be found in the appendix

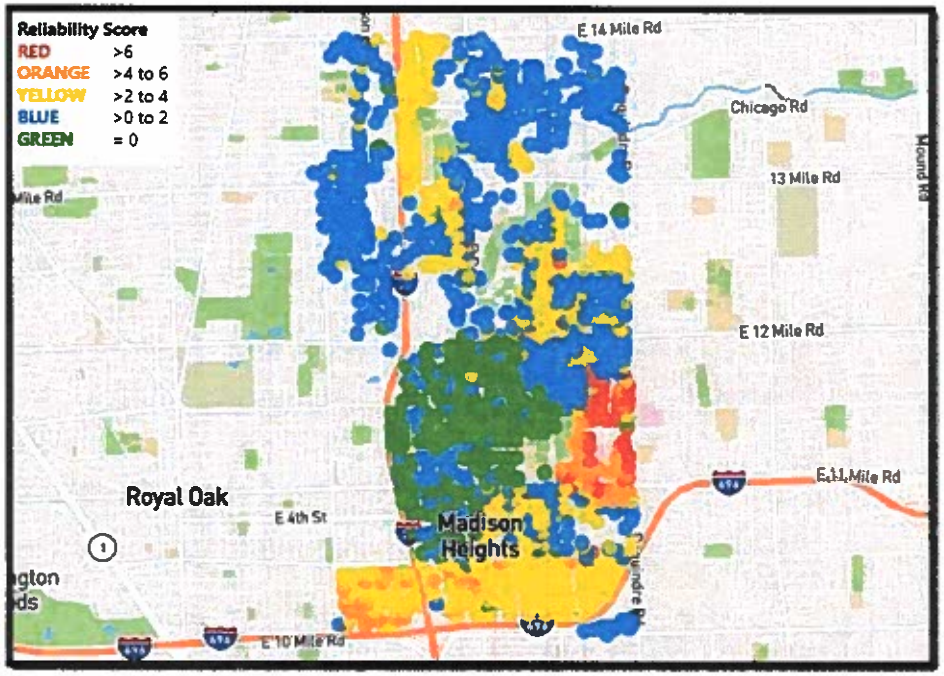
# DTE has activated its four-point plan to drive reliability and system improvements for our customers in Madison Heights.

| 1 Trimming Trees | 2 Updating Existing Infrastructure | 3 Rebuilding Significant Portions of the Grid | 4 Accelerating our Transition to a Smart Grid |
|---|---|---|---|
|  |  |  |  |
| **Strategic Focus** | | | |
| • **Complete tree trim surge.**<br>• **Optimize trim cycle.** | • **Ramp up maintenance to a 10-year pole and pole top cycle.** | • **Accelerate conversion of 4.8kV system.** | • **The grid will be fully automated in the next five to six years.** |
| **What we're doing in Madison Heights** | | | |
| • With more than 109 miles of trees trimmed, 72% of Madison Heights is on a five-year trimming cycle. | • Replace aging, at-risk infrastructure, including poles and crossarms.<br>• 67% of Madison Heights is on the 10-year pole top maintenance cycle. | • 56% of Madison Heights has previously been converted to 13.2kV. Plan to convert 100% of Madison Heights from 4.8kV to 13.2kV in future.<br>• Conversions include replacing poles and crossarms, reconductoring with larger primary, and installing additional lightning protection.<br>• Conversion supports EV charging and helps to facilitate connecting wind, solar and storage to the grid. | • Remote monitoring and control will be widely deployed, enabling our System Operations Center to isolate damage and remotely restore customers.<br>• Installation of automation devices is already underway with 7% of Madison Heights circuits projected to be automated by the end of 2024 and 100% is planned by end of 2027.<br>• focus on 4.8kV first due to safety |

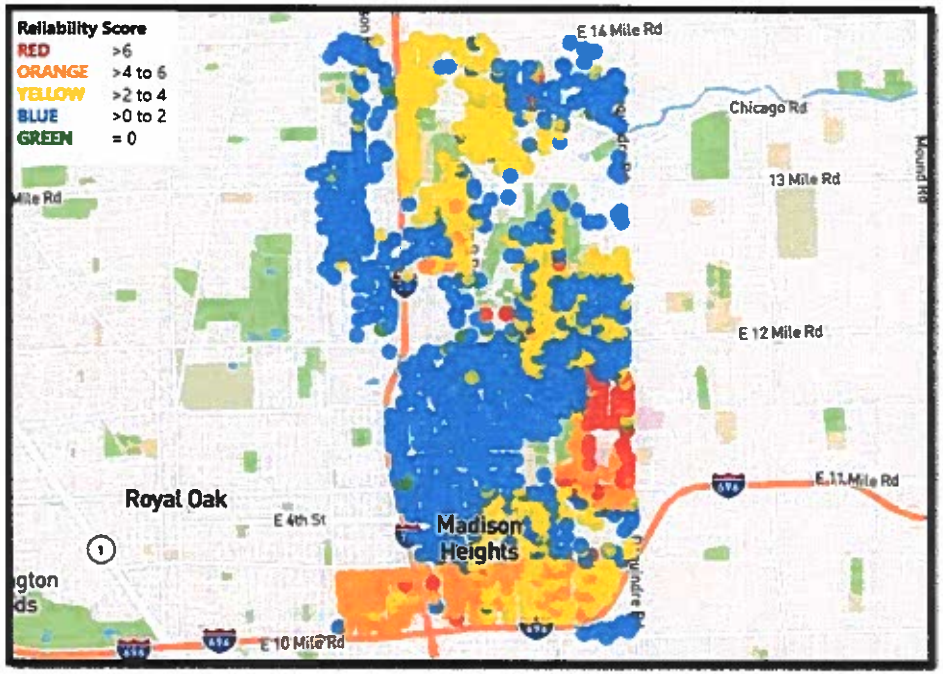
DTE

# Madison Heights Customer Outage Map in 2024

***MADISON HEIGHTS SYSTEM RELIABILITY MAP (Excluding Storm)***



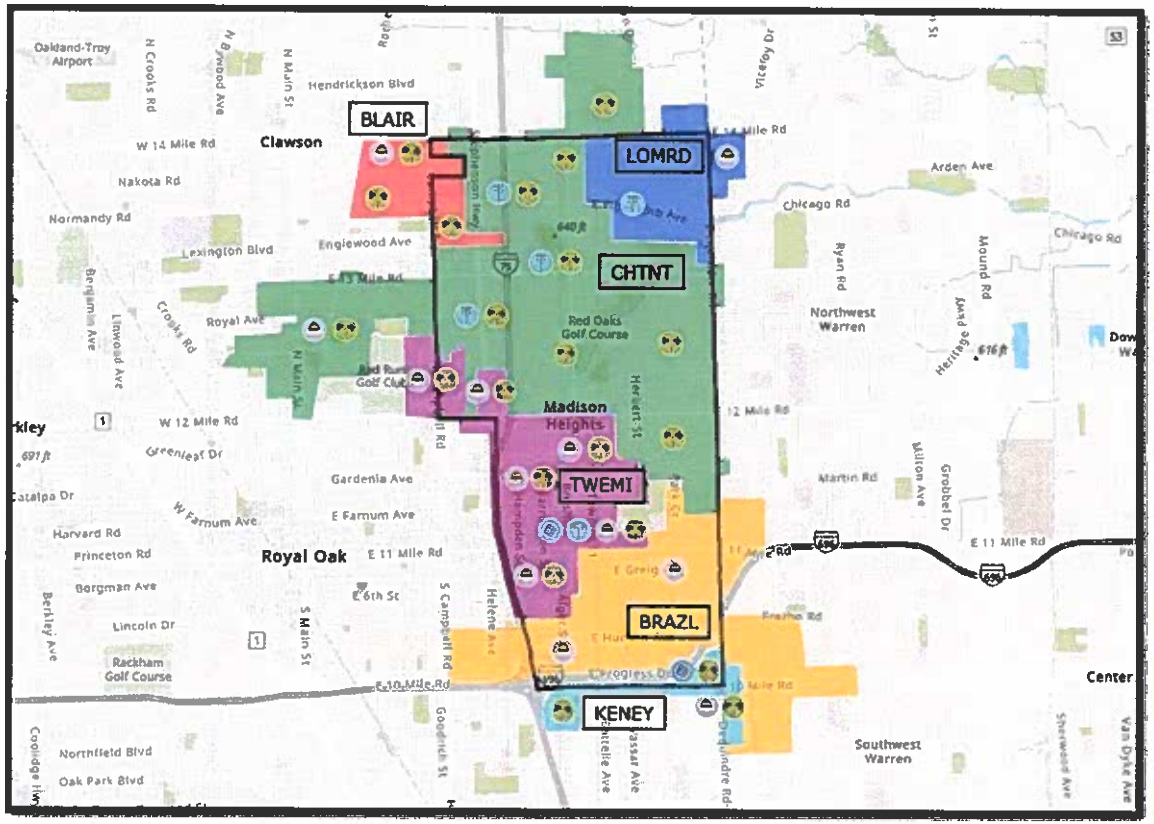

***MADISON HEIGHTS SYSTEM RELIABILITY MAP (Including Storm)***




DTE

# We are actively addressing the key priority areas across Madison Heights with tree trimming and equipment upgrades

***MADISON HEIGHTS SERVICE TERRITORY FOOTPRINT BY SUBSTATION AREA***




- Transitioning to a smart grid
- Upgrading existing infrastructure
- Rebuilding significant portions of the grid
- Trimming trees

DTE

U-21122 reliability data report

| | |
|---|---|
| Utility | DTE Electric |
| Reporting area | City of Madison Heights |
| Period | July 2023-June 2024 |

| Row Labels | Sum of Total Customer outages | Sum of Total number of outages caused by lightning | Sum of Total number of outages causes by equipment failure | Sum of Total number of planned and forced outages | Sum of Total number of outages caused by transmission or generation failure | Sum of Total number of outages caused by an act of the public at large | Sum of Total number of outages caused by trees | Sum of Total number of outages caused by wind, snow, ice, hail, and rain | Sum of Total number of outages caused by animal interference | Sum of Total number of outages caused by unknown causes | Sum of Total number of outages caused by other causes | Average of Customer Average Interruption Duration Index (contribution to total CAIDI) | Average of System Average Interruption Duration Index | Average of System Average Interruption Frequency Index |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26125181001 | 580 | 0 | 53 | 0 | 0 | 0 | 0 | 251 | 1 | 0 | 275 | 457.3 | 61.4 | 0.144 |
| 26125181100 | 1518 | 55 | 13 | 27 | 0 | 0 | 10 | 8 | 658 | 0 | 747 | 449.7 | 21.7 | 0.093 |
| 26125181200 | 1771 | 2 | 466 | 88 | 0 | 0 | 103 | 297 | 329 | 0 | 486 | 392.4 | 18.3 | 0.048 |
| 26125181300 | 5703 | 0 | 1351 | 0 | 0 | 0 | 1090 | 1616 | 289 | 0 | 1357 | 373.2 | 134.3 | 0.169 |
| 26125181400 | 1463 | 0 | 4 | 5 | 0 | 1 | 691 | 679 | 0 | 0 | 83 | 157.5 | 26.0 | 0.081 |
| 26125181500 | 1934 | 0 | 7 | 0 | 0 | 0 | 587 | 638 | 534 | 0 | 168 | 239.1 | 44.5 | 0.127 |
| 26125181600 | 6242 | 0 | 62 | 1 | 0 | 35 | 1724 | 1862 | 2250 | 0 | 308 | 336.6 | 85.8 | 0.215 |
| 26125981200 | 270 | 16 | 22 | 0 | 0 | 0 | 5 | 167 | 4 | 0 | 56 | 256.4 | 47.7 | 0.103 |
| Grand Total | 19481 | 73 | 1978 | 121 | 0 | 36 | 4210 | 5518 | 4065 | 0 | 3480 | 332.8 | 55.0 | 0.122 |