



Making the Most of Michigan's Energy Future

Financial Incentives and Disincentives Workgroup- Stakeholder Session #1



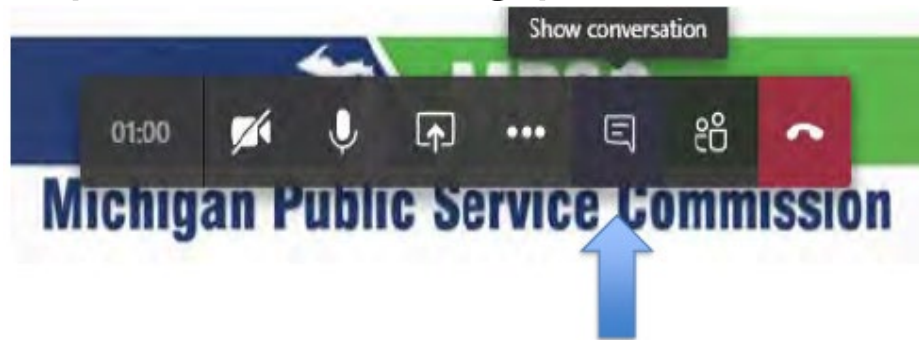
MPSC

Michigan Public Service Commission

Agenda Items		
2:00-2:10	Welcome & Opening Comments	Chair Dan Scripps
2:10-2:35	MPSC PBR Background & Case History	Mike Byrne, MPSC
2:35-3:00	Initial Straw Proposal	Jay Griffin, JPG Consulting
3:00-3:10	Break	
3:10-4:10	Straw Proposal Feedback- Presentations from Interested Stakeholders	Neal Foley, DTE Energy Heidi Myers and Sam Geller, Consumers Energy Sebastian Coppola, Attorney General Eli Asher and Ron Nelson, Strategen Jim Croce, JD Power
4:10-4:55	<p>Straw Proposal Feedback- Facilitated Discussion</p> <ol style="list-style-type: none"> Selected Performance metrics - Do you recommend changes to the metrics? If yes, please be specific on the changes that you suggest. Targets - Please discuss any recommendations for establishing interim and long-term targets. Incentive/Penalty Structure - Do you recommend changes to the incentive/penalty structure? If yes, please be specific on the changes that you propose? <ol style="list-style-type: none"> Where applicable, what is the recommended deadband for the metrics? Reliability Investment Efficiency – Please discuss measures to ensure that utilities invest efficiently to meet reliability targets. 	Mike Byrne, MPSC
4:55-5:00	Closing Remarks & Adjourn	Mike Byrne, MPSC

Housekeeping

- 1) This meeting is being recorded
- 2) Recording and slides posted on the workgroup website
- 3) All audience members will be muted upon entry
- 4) Please type questions into the chat box
- 5) Staff will monitor chat box questions during presentations
- 6) During the meeting, if clarification of your questions is necessary, we will ask you to unmute
 - Phone: Press *6
 - Teams: Click mic button
- 7) Please use the raise hand function if you would like to make a verbal comment during discussion
- 8) If Teams via web browser is not working, try a different browser





Making the Most of Michigan's Energy Future

Financial Incentives & Disincentives Workgroup

MPSC Background & Case History

Mike Byrne

Chief Operating Officer



MPSC

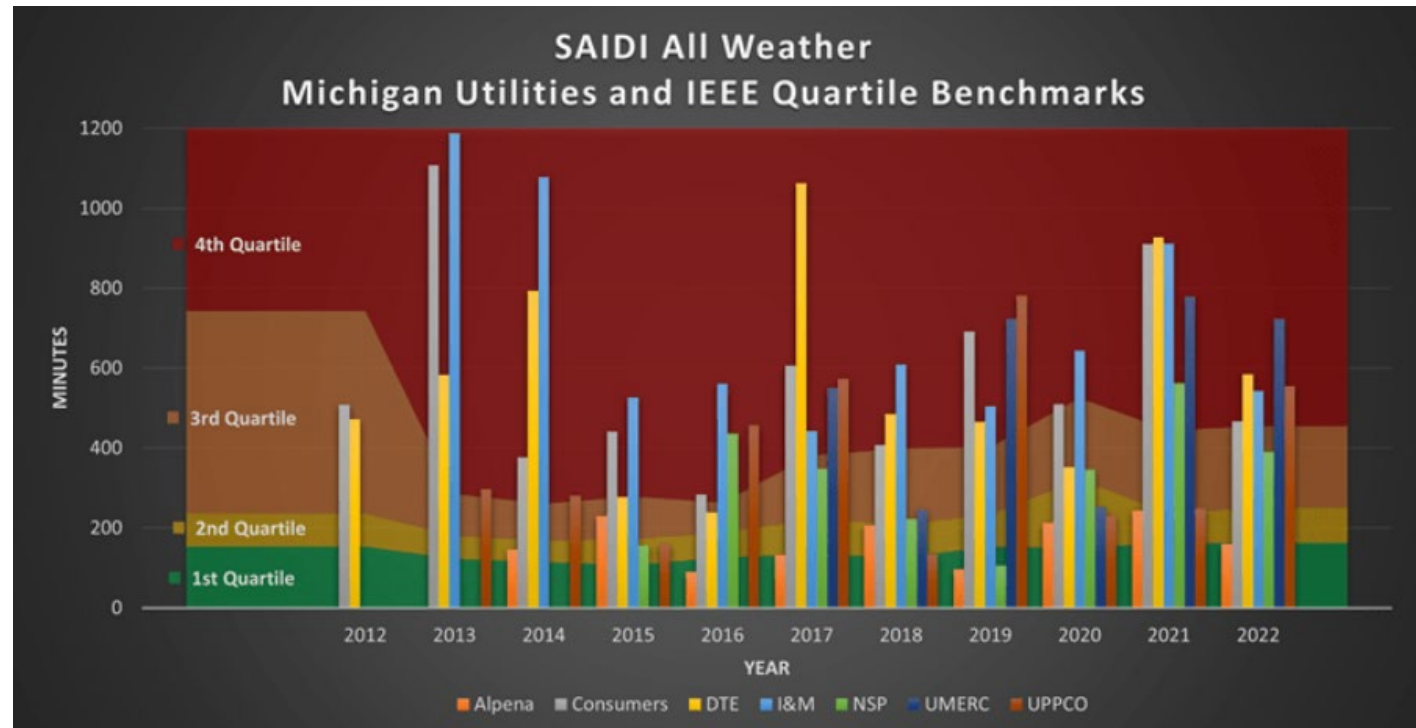
Michigan Public Service Commission

Distribution Grid Reliability Challenges

- Deteriorating Distribution Grid Infrastructure
- Increased Frequency & Severity of Storms
- Inadequate Vegetation Management

Leads to:

- Long outage durations
- Circuits with frequent interruptions
- Public safety concerns – downed wires
- Challenges in enabling modern grid



Major storms (250,000+ outages), 2013-2023

<i>Date</i>	<i>Customers Interrupted</i>	<i>Storm Type</i>
11/17/2013	719,854	Wind Storm
12/21/2013	388,950	Ice Storm
09/05/2014	414,619	Wind Storm
03/07/2017	1,103,539	Wind Storm
04/15/2018	288,976	Ice Storm
05/04/2018	254,867	Wind Storm
08/26/2018	255,763	Wind Storm
02/06/2019	255,000	Ice Storm
02/24/2019	298,543	Wind Storm
07/19/2019	642,319	Thunder Storms/ High Winds
07/18/2020	518,307	Thunder Storms/ High Winds
11/18/2020	371,358	Thunder Storms/ High Winds
08/10-12/2021	1,196,428	Thunder Storms/ Flooding
12/11/2021	310,400	Wind Storm
08/29/2022	462,000	Thunder Storms/ High Winds
2/22-3/3/2023	1,350,814	Ice Storm/ Snow Storm
8/26/2023	513,717	Thunder Storms/ High Winds/ Tornadoes

Source: MPSC (inc. utility reports and 2019 Statewide Energy Assessment 3

Commission Efforts

- Multiple Storm Investigations
- Utility Reporting on Distribution Performance, Power Quality
 - (Case Nos. U-12270, U-16065, U-16066, U-21122)
- Statewide Energy Assessment (2019)
- MI Power Grid
 - Distribution Planning – Case No. U-20147
 - Grid Security and Reliability Standards – Case No. U-21269
 - Financial Incentives and Disincentives -- Case No. U-21400
- Utility Audit
 - Case No. U-21305

Service Quality Rules Updates

- The MPSC issues standards for utility distribution system service quality and reliability

Unacceptable Customer Restoration Times				
During Service Interruptions				
Condition Type	Current Rules		Revised Rules	
	% Customers Out	Restoration Time for 90% of Customers	% Customers Out	Restoration Time for 90% of Customers
Normal	0-10%	8 hrs	0-1%	8 hrs
Gray Sky			1-10%	24 hrs
Catastrophic	10%+	60 hrs	10%+	48 hrs

Wire Down Relief Requests		
Number of minutes to respond to a request for relief of a first responder guarded downed wire 90% of the time	Current Rules	Revised Rules
Metropolitan Area	240 minutes	120 minutes
Non-Metropolitan Area	360 minutes	180 minutes

Outage Credits				
Duration of Outage				
Condition Type	Current Rules		Revised Rules	
	Customer Outage Length	Credit Amount	Customer Outage Length	Credit Amount
Normal	16 hrs	\$25	16 hrs	\$38, plus \$38 for each additional day AUTOMATIC
Gray Sky			48 hrs	
Catastrophic	120 hrs	\$25	96 hrs	

Outage Credits for Repetitive Interruptions				
	Current Rules		Revised Rules	
All Areas	8+ interruptions in 12 months	\$25	6+ interruptions in 12 months	\$38 AUTOMATIC

Utility Audit

Part 1: Physical Audit

- Does existing installed infrastructure match the company's internal records?
- Do actual infrastructure measurements comply with the company's engineering standards?
- How does the distribution system infrastructure compare to other utilities in similar climates and situations?

Part 2: Program and Process Audit

- Are existing programs and processes sufficient for emergency preparedness, storm restoration, system maintenance, and investment?
- Do maintenance programs meet the needs of the distribution system, now and into the future?
- Are distribution system accounting processes properly managed?
- Is maintenance properly prioritized?



- Focused, multi-year stakeholder initiative to maximize the benefits of the transition to clean, distributed energy resources for Michigan residents and businesses
- **Financial incentives/disincentives** will build on studies and actions addressing performance-based ratemaking and statutorily authorized incentive mechanisms to ensure utility investments are optimized for the benefit of customer service, system reliability, and safety.

(October 19, 2019 Order in Case No. U-20645)



MPSC PBR Report – 2018

- Sec. 6u of 1939 PA 3 (MCL 460.6u) required the MPSC to study performance-based regulation
- 2018 Report found:
 - The Commission's review of PBR mechanisms indicates that they can be used to augment the existing cost-of-service approach provided that they are tailored to the specific requirements associated with utility regulation in Michigan.
 - Integrating forms of PBR into the existing cost-of-service regulatory model could help utilities and regulators adapt to potentially profound changes affecting the energy industry.
 - Such transformative changes would not be made to the entire regulatory paradigm overnight; the Commission is more inclined to test the efficacy of PBR through specific natural gas and electric utility pilot programs or other targeted opportunities.

**REPORT ON THE
STUDY OF
PERFORMANCE-BASED REGULATION**

Sally A. Talberg, Chairman
Norman J. Saari, Commissioner
Rachael A. Eubanks, Commissioner

MICHIGAN PUBLIC SERVICE COMMISSION
Department of Licensing and Regulatory Affairs
In compliance with Act 341 of 2016

April 20, 2018



MPSC performance-based mechanisms

- Energy Waste Reduction program incentives
- Demand Response program incentives
- Natural Gas Infrastructure Recovery Mechanisms
- Incentives for Power Purchase Agreements
- Tree Trimming Securitization
- Shared Savings – Sec. 6x of 1939 PA 3

Distribution System Plans – Case No. U-20147

Commission-identified Elements for Consideration:

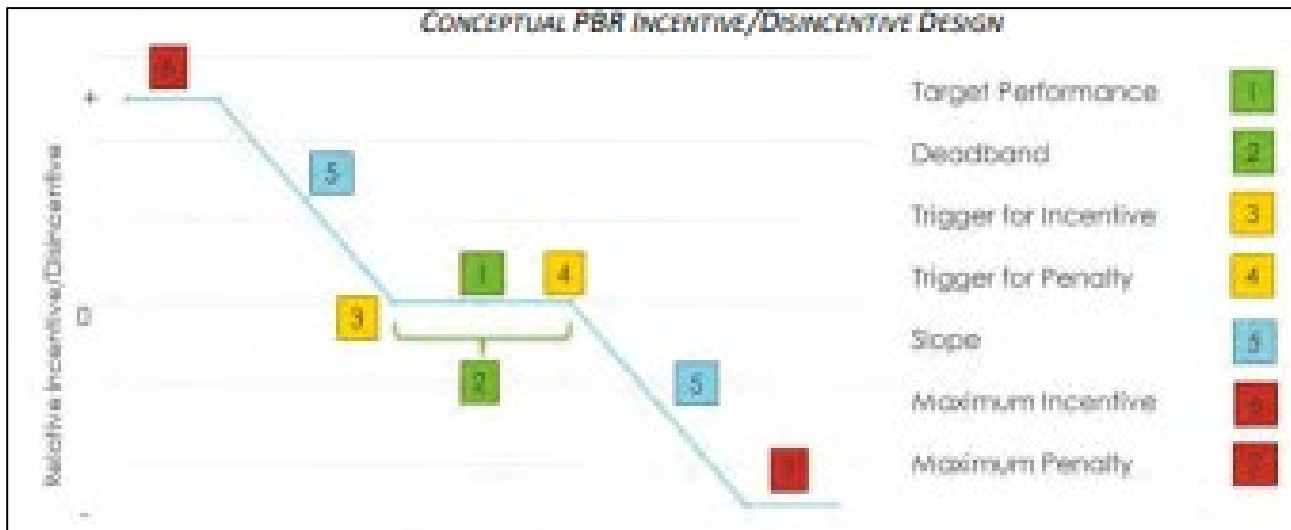
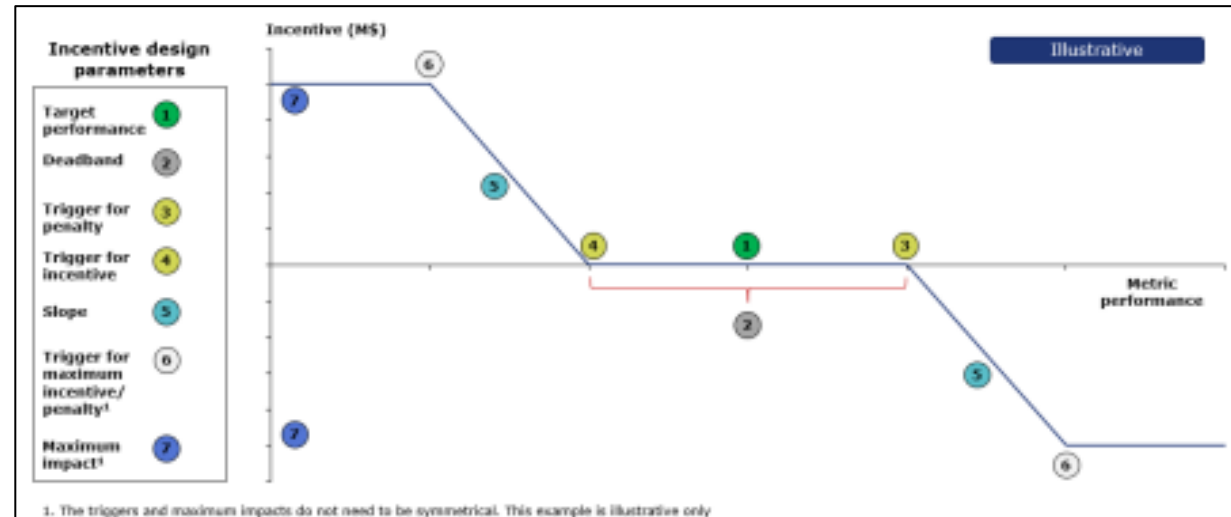
1. The utility's financial PBR system should include both incentives and disincentives based on performance; incentive structures should be holistically considered in terms of impacts on potential earnings;
2. The utility should consider the pros and cons of a comprehensive PBR system, which would avoid concurrent regular annual rate cases and separate PBR reconciliations;
3. Performance metrics should include outcome measures (e.g., CAIDI) and not be limited to output metrics such as number of poles replaced;
4. Performance metrics should be linked to regional, national, and/or peer utility benchmarks, where possible;
5. Data and calculation methodologies should be well defined, transparent, and open for auditing/verification purposes;
6. Targets should be utility-specific; and
7. Potential areas of performance focus are safety, customer service (end-use customers, builders, interconnecting generators, etc.), timeliness and quality, reliability and resiliency, long-term costs, and innovation.

(These metrics were first stated in U-20561 & U-20697 and reinforced in [U-20147](#))

Proposed PBR Frameworks in Case No. U-20147

DTE and Consumers Energy submitted proposed PBR frameworks in 2021 Distribution Grid Investment Plans

Stakeholder comments received from MPSC Staff, Attorney General Dana Nessel, MI-EIBC/AEU, Soulardarity, CEOs, CUB, MIMAUI/munis, NRDC



MPSC found **utility submissions to be insufficient to address the issue of financial incentives and penalties at this time** and that it will initiate a workgroup to focus on the creation of appropriate financial incentives and penalties to address outages and distribution performance moving forward. (U-20147 – 9/8/22)

Case No. U-21400

Financial Incentives and Disincentives

- April 24, 2023 Kickoff Order
 - Utilizing incentives/disincentives to better align utility financial performance with customer value and ongoing/emerging challenges on the distribution grid
 - Initial focus of workgroup is a “reliability plus” approach to distribution grid performance
 - Immediate concerns involving reliability and safety
 - Developing metrics around reliability (SAIDI including/excluding MEDs, SAIFI, CEMI, CAIDI) and resilience (downed wire response, frequency and duration of outages using Service Quality rules as baseline)
 - Consider challenges around readiness of utility distribution grid to accommodate and leverage the increasing and anticipated growth of DG, EV, and DERs.
 - Explore rate structure and methods by which incentives and disincentives can be applied.
 - Report investigations by Dec. 31, 2023

Case No. U-21400

MPSC Straw Proposal

- August 30 Order
 - Developed a straw proposal, identifying candidate distribution performance metrics and applicable methods by which incentives and disincentives may be applied.
 - Requested reaction to the candidate metrics, the proposed target performance identified for each metric, and the potential incentive/disincentive mechanisms to be applied to each metric.
 - Initial comments due September 22, 2023, and reply comments due October 20, 2023.

Reliability *Plus*

- Resilience

- Resilience Technical Conference (U-21388)
- Storm Response (U-21122)
- Downed Wires (U-20169)
- Statewide Energy Assessment

- Grid Modernization

- Metrics to incorporate DERs and DER integration in future distribution plans (U-20147)
- Behind the meter solar & storage (U-20898)
- Interconnection rules & procedures (U-21455, et al.)
- Distribution System Data Access/Grid Integration Study (U-21251)
 - Hosting Capacity Maps

Next Steps



Discussion of Reliability Metrics Straw Proposal

MI Power Grid Financial Incentive/Disincentive
Workgroup

Jay Griffin
JPG Consulting LLC

October 10, 2023

Presentation Agenda

#1 - Overview of Performance Metrics

Metrics



#2 - Review Targets and Mechanisms



	2022 Performance		Target Performance		Potential Incentive/Disincentive Mechanism
Metric	DTE	Consumers	Interim	Long-Term	
CAIDI (Excluding MEDs)	149 (2022 value)	189 (2022 value)	Stakeholder feedback; informed by DSP	118 (Median, 5-yr avg.)	Symmetric incentive/disincentive
CAIDI (Only MEDs)	298 (5-yr. average)	235 (5-yr. average)	135 (3rd/4th quartile, 5-yr average)	62 (2nd/3rd quartile, 5-yr average)	Symmetric incentive/disincentive
SAIFI (Excluding MEDs)	0.98	0.96	Stakeholder feedback; informed by DSP	0.86 (1 st /2 nd quartile, 5-yr average)	Symmetric incentive/disincentive
CEMI₄ (Customer count)	163,417	173,273	TBD	<5% of customers by 2030	Penalty
CEMI₇ (Customer count)	16,262	19,821	TBD	Industry benchmark	Penalty
Worst performing circuits	Reports use multiple metrics	Reports by Circuit-level SAIDI (no MEDs)	No circuits remain on list for more than 2 of past 5 years	No circuits remain on list for more than 2 of past 5 years	Penalty

#3 - Observations on Stakeholder Comments

#4 - Discussion with Workgroup

System-Level Metrics Address Customer Reliability Under All Weather Conditions

	Description	Intent
CAIDI (Excluding MEDs)	Traditional metric/definition	System-level metric focused on customer experience
CAIDI (Only MEDs)	Delta CAIDI more accurate $\text{Delta CAIDI} = \text{CAIDI}_{\text{all weather}} - \text{CAIDI}_{\text{excluding MEDs}}$	Address reliability under all weather conditions Differentiate metric risk during storm events
SAIFI (Excluding MEDs)	Traditional metric/definition	Continuous improvement as DSPs implemented

System-Level Metrics Address Customer Reliability Under All Weather Conditions

	Description	Intent
CAIDI (Excluding MEDs)	Traditional metric/definition	System-level metric focused on customer experience
CAIDI (Only MEDs)	Delta CAIDI more accurate $\text{Delta CAIDI} = \text{CAIDI}_{\text{all weather}} - \text{CAIDI}_{\text{excluding MEDs}}$	Address reliability under all weather conditions Differentiate metric risk during storm events
SAIFI (Excluding MEDs)	Traditional metric/definition	Continue improvement as DSPs implemented

CAIDI vs. SAIDI – CAIDI reflects customer experience, continue to review feedback

Delta CAIDI – Intent to address all weather conditions, reviewing alternatives

SAIFI – Reviewing feedback whether this is near-term priority

Customer- and Circuit-Level Metrics Target Local Reliability Performance

	Description	Intent
CEMI₄ (Customer count)	Traditional metric/definition	Continue alignment with service quality rules/standards
CEMI₇ (Customer count)	Traditional metric/definition	Address performance for customers experiencing significant outage frequency
Worst performing circuits	No circuits remain on list for more than 2 of past 5 years	Avoid continued poor performance on same circuits, address equity

Customer- and Circuit-Level Metrics Target Local Reliability Performance

	Description	Intent
CEMI₄ (Customer count)	Traditional metric/definition	Continue alignment with service quality rules/standards
CEMI₇ (Customer count)	Traditional metric/definition	Address performance for customers experiencing significant outage frequency
Worst performing circuits	No circuits remain on list for more than 2 of past 5 years	Avoid continued poor performance on same circuits, address equity

CEMI₄ and CEMI₇ – Multiple responses to simplify, use metric with benchmarks

Circuit-level performance – system- vs. circuit-level metric, more granular data

Initial Straw Proposal

Starting Point for Workgroup Discussion

	Target Performance		Potential Incentive/Disincentive Mechanism
Metric	Interim	Long-Term	
CAIDI (Excluding MEDs)	Stakeholder feedback; informed by DSP	118 (Median, 5-yr avg.)	Symmetric incentive/disincentive
CAIDI (Only MEDs)	135 (3rd/4th quartile, 5-yr average)	62 (2nd/3rd quartile, 5-yr average)	Symmetric incentive/disincentive
SAIFI (Excluding MEDs)	Stakeholder feedback; informed by DSP	0.86 (1 st /2 nd quartile, 5-yr average)	Symmetric incentive/disincentive
CEMI₄ (Customer count)	TBD	<5% of customers by 2030	Penalty
CEMI₇ (Customer count)	TBD	Industry benchmark	Penalty
Worst performing circuits	No circuits remain on list for more than 2 of past 5 years	No circuits remain on list for more than 2 of past 5 years	Penalty

Targets informed by Distribution System Plans, Industry Benchmarks, and Audits

Incentive structure should balance urgent need for corrective action with rewarding exemplary performance

Individual mechanisms viewed comprehensively

Observations on Stakeholder Comments

Stakeholder comments considered in updates and staff report

- Additional detail provides broader foundation for decision-making

Reviewing DSP filings to inform incentive/disincentive mechanisms

- Important implications for targets, investment efficiency

Divergent feedback on incentive/disincentive mechanisms

- Symmetric vs. downside/upside only
- Disagreement over use of bill credits

Thank you!

Discussion and Q&A



Perspectives on Performance Based Ratemaking

October 10, 2023

Many states are exploring PBR concepts, and each has a distinct focus based on the regulatory construct and policy objectives

Highlighted states with PBR

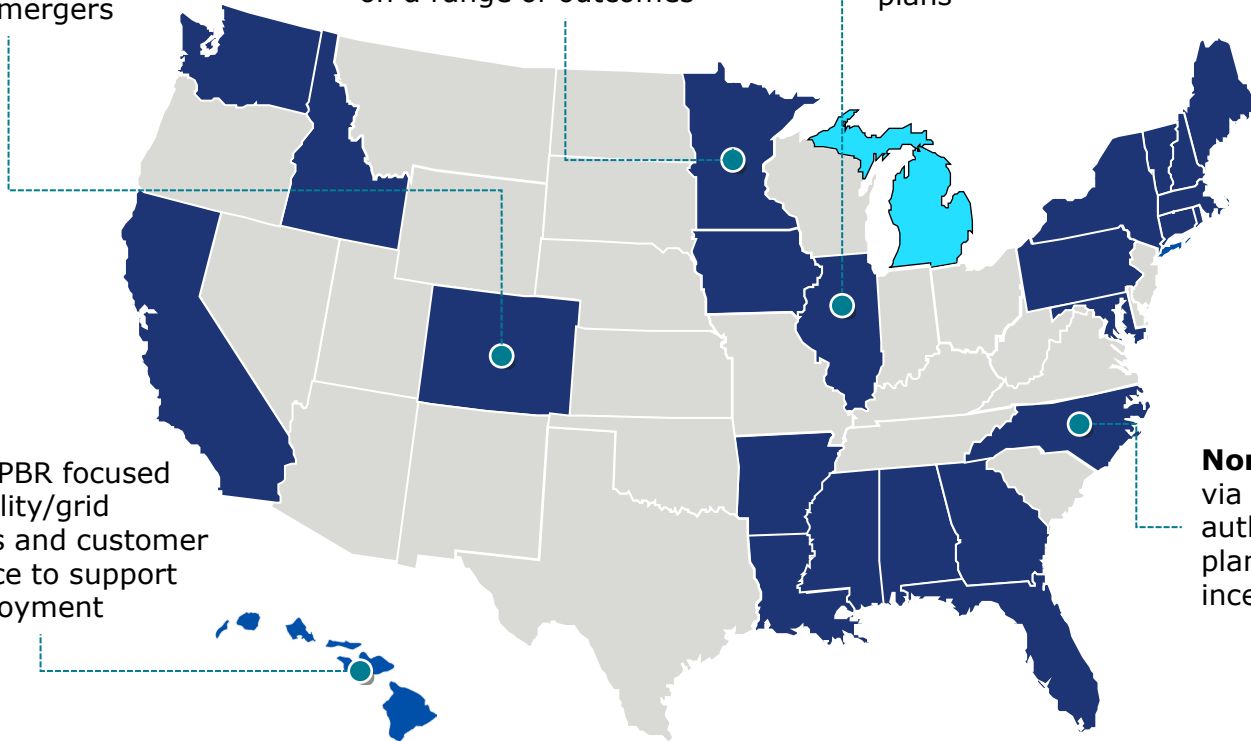
Colorado: Legislatively initiated PBR report in 2019; narrowly focused legacy PIMs in place as part of past mergers

Minnesota: deliberative PBR development including multi-year rate plans and performance metrics focused on a range of outcomes

Illinois: Beginning in 2011, PBR has included formula rates, PIMs, and multi-year rate plans

Hawaii: PBR focused on reliability/grid outcomes and customer experience to support DER deployment

North Carolina: PBR set out via 2021 energy legislation authorizing multi-year rate plans and performance incentive metrics



PBR should also recognize the existing obligations Michigan utilities have to provide credits to customers for poor performance

The Service Quality & Reliability Standards (SQRS) define four specific conditions under which Michigan electric utilities are obligated to provide credits to customers:

- **Frequent outage customers**, defined as $CEMI_6$ on a rolling 12-month basis
- **Customer restoration within 96-hours during catastrophic conditions** and additional payment for each additional day of outage
- **Customer restoration within 48-hours during gray sky conditions** and additional payment for each additional day of outage
- **Customer restoration within 16-hour outage during normal conditions**⁴ and additional payment for each additional day of outage

Given the elevated storm activity experienced in 2023, the Company anticipates **issuing approximately \$9M to customers in 2023** based on the SQRS

Based on extensive review of PBR implementations across the country, we believe that an effective mechanism should incorporate certain overarching principles

Achievable

Incorporates measures of performance that are within the utility's control and that the utility has adequate resources to achieve

- Should consider recent performance as the "starting point" when setting long-term targets
-

Deliberate

Should "start small," appreciating PBR is new and stakeholders must gain experience with the mechanism and evolve it over time

- Having a small, targeted set of metrics and limited financial exposure can reduce the risk of unintended consequences
-

Iterative

Pre-determined review cycles of a PBR mechanism (e.g., every 2 years) should be utilized to identify opportunities for improvement

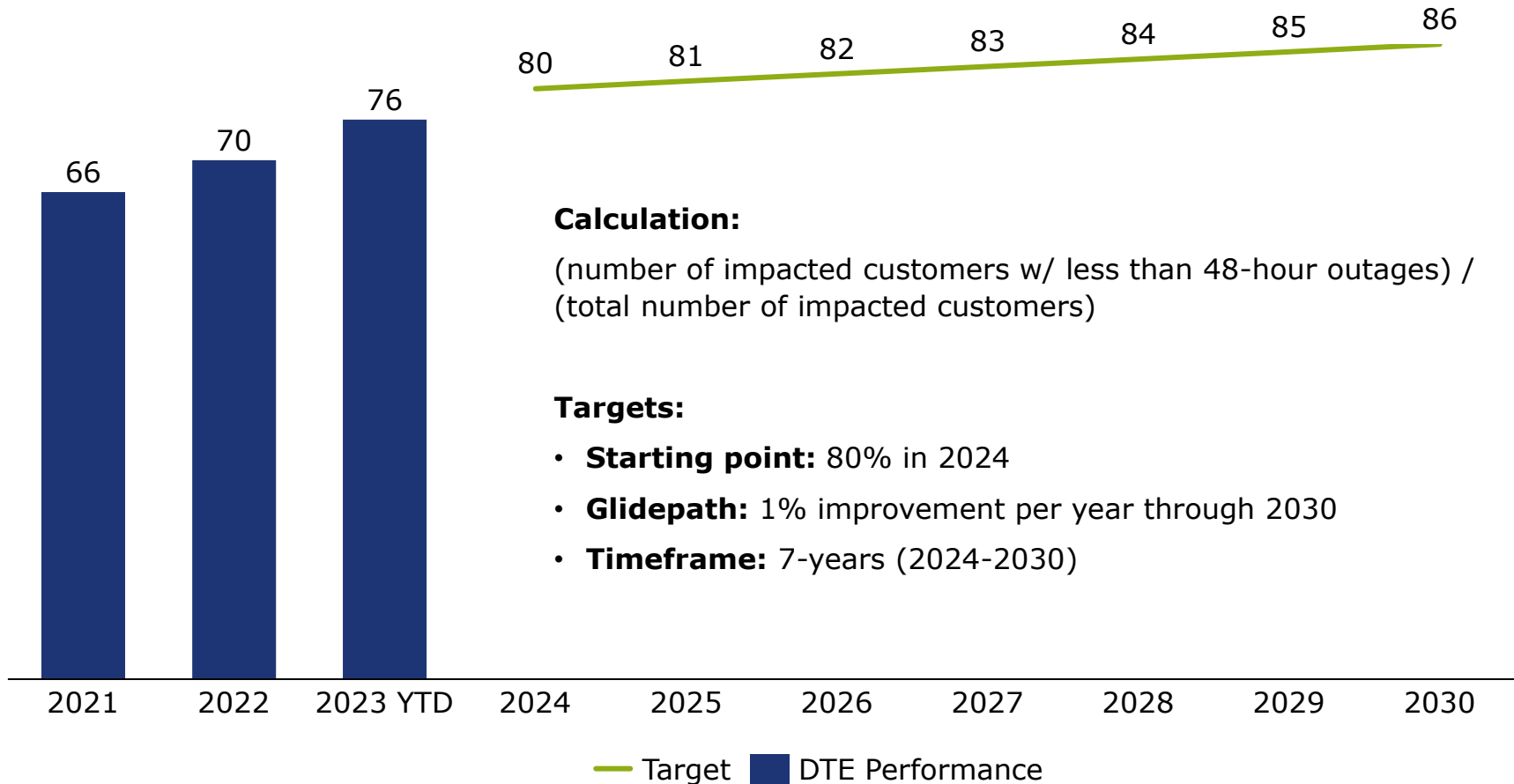
Symmetrical

Should provide equal opportunity for penalty and reward to incentivize not only meeting targets to avoid a penalty, but to exceed targets

- Bill credits, which are not symmetrical, are best reserved for the Service Quality & Reliability Standards rulemaking process

The Company proposed an alternative metric related to storm restoration in its comments which we believe effectively targets the customer experience

Example Target Design: 48-hr outage restoration during a CAT storm¹
(% of impacted customers restored within 48-hours)



Key takeaways

- PBR is not yet widespread or consistent across the industry; as such, we should start slowly and deliberately as we gain experience
- PBR in Michigan is likely to grow and evolve; we should build in regular, formal opportunities to assess the current structure and identify any areas of improvement
- PBR should consider the totality of incentives and disincentives the utility is subject to, including the incentives already established through the Service Quality & Reliability Standards
- PBR should be reflective of both current performance and targeted long-term performance, and provide equal opportunity for penalty and reward

MPSC Stakeholder Meeting

Financial Incentives and Disincentives Workgroup

October 10, 2023

Key Considerations in Driving Reliability Improvements through Incentives and Disincentives

Allow Time

The Commission should take the time needed to allow information from distribution plans and the 3rd party distribution audit to be considered in setting incentives and disincentives.

Timely Recovery

Timely rate recovery of capital and O&M expense needed to meet reliability goals is necessary.

Contested Proceeding

The setting of incentives and disincentives should take place in utility specific contested proceedings.

Risk Exposure

There should be reasonable fixed dollar bounds applied to individual metrics and in total for both incentives and disincentives.

Symmetry

There should be symmetrical incentives and disincentives.

Duplicative Metrics

Metrics should not be duplicative of Service Quality and Reliability Standards.

Metric Glidepaths

Glidepath of targets should start with current performance and be tied to the utility specific distribution planning for reasonably achievable metric improvements given planned distribution investment levels.

No MED Only Metrics

MED only metrics should not be used due to safety risks and lack of acceptance in the utility industry.

The recently published Reliability Roadmap aligns with the Commission's goals of improved reliability for customers

Roadmap Goals



Deliver reliability in the 2nd Quartile of nationwide utilities



No event with more than 100K customers out



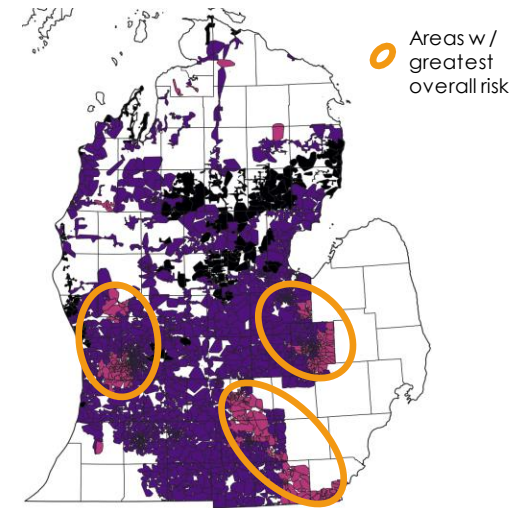
All customers restored within 24 hours



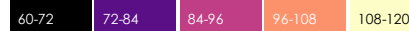
Increasingly severe weather will continue to challenge reliability

Greatest Climate Risks in Consumers Energy's Service Territory – 2030

More general storm days

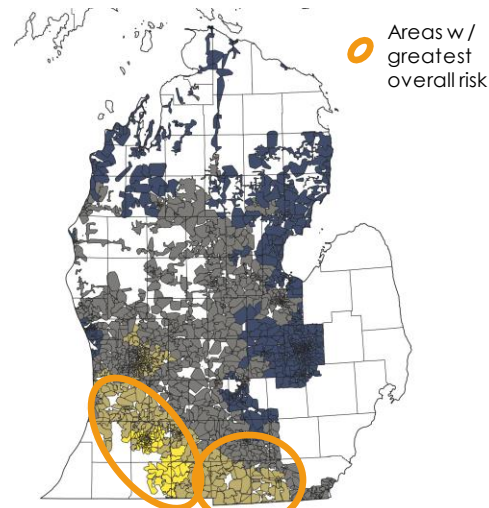


Other storm days

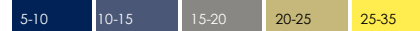


From 79 to 92 days (+16%)

More summer thunderstorms

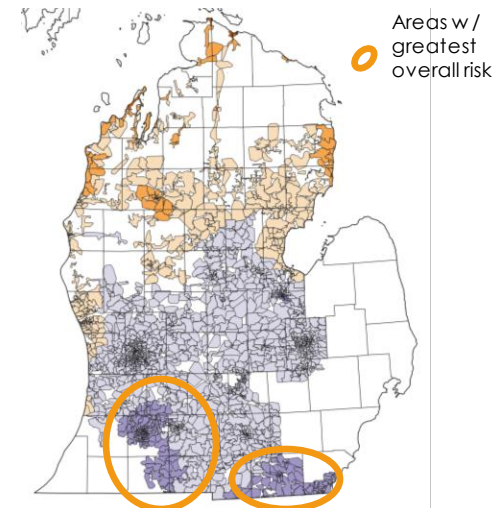


Hot thunderstorm (>70F) days

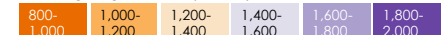


From 14 to 15 days (+6%)

Increasing temperatures



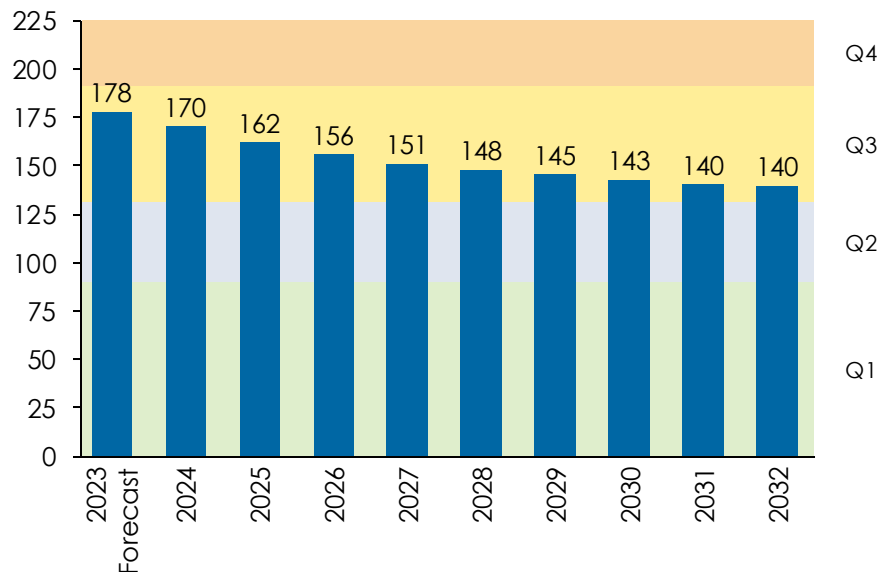
Cooling Degree Days (CDDs), annual sum



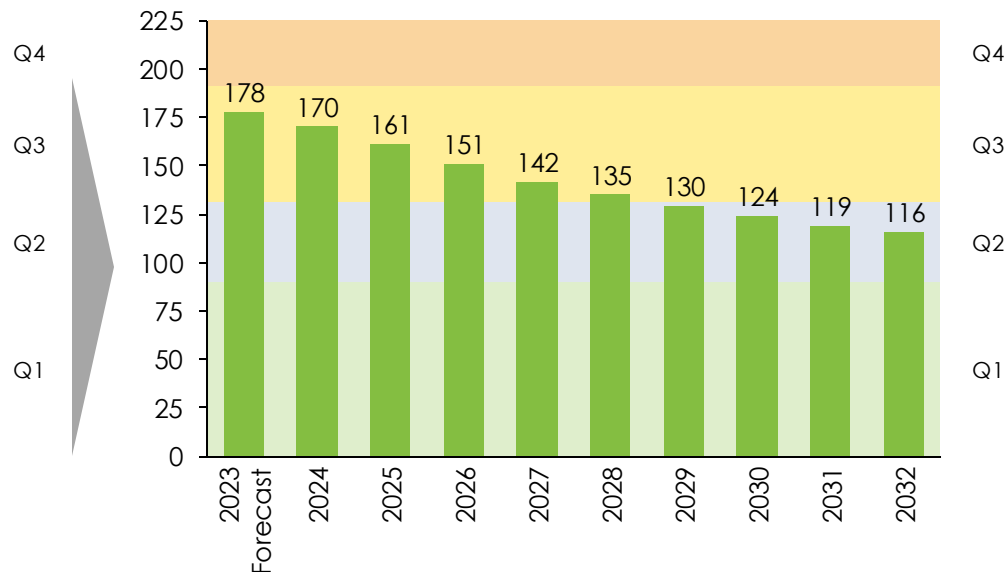
From 1,330 to 1,480 cooling degree days

Absent the increased investment per the Roadmap, the Company will be limited in the improvement in reliability provided to customers

SAIDI excluding MEDs – Status Quo
(minutes)



SAIDI excluding MEDs – Reliability Roadmap
(minutes)



Incentive & Penalty Mechanism Michigan Electric Distribution Systems MPSC Case No. U-21400

**Service Improvement Incentive Mechanism
(SIIM)**

**Proposed by
Michigan Attorney General**

October 10, 2023

Key Objectives

- **Focused:** Distribution Reliability Metrics, Reduce Power Outages, Restoration Time, Restoration Costs
- **Simple Metrics:** 10-12 metrics max, avoid duplicate metrics, comparison to peer group metrics over time
- **Accountability:** Link to Revenue Requirement Received from capital expenditures and O&M expense for Distribution Assets
- **Limits on Rewards & Penalties**
- **No Dead Bands**

Target Metrics

1. SAIDI with MEDs

- Set initial target at 5% improvement from five-year historical average
- 5% annual improvement from prior year target level during first 5 years of mechanism
- After 5 years, target is peer group average of utilities in five surrounding states (Illinois, Indiana, Ohio, Pennsylvania and Wisconsin)
- Compare actual five-year rolling average to target

2. SAIDI ex. MEDs

- Same target metrics and approach as with MEDs

Target Metrics

3. CEMI₅ – Number of Customer with 5+ Outages

- Set initial target at 5% improvement from three-year historical average
- 5% annual improvement from prior year target level during first 5 years of mechanism
- After 5 years, target is peer group average of utilities in five surrounding states (Illinois, Indiana, Ohio, Pennsylvania and Wisconsin)
- Compare actual annual results to target

4. No. Customers with Power Outages of 5 Hours+

- Set initial target at 3% improvement from three-year historical average
- 3% annual improvement from prior year target level during first 5 years of mechanism
- After 5 years, target is peer group average

Target Metrics

5. Catastrophic Conditions 24-hour Restoration Time

- Minimum of 70% of customers restored in 24 hours for each event

6. Catastrophic Conditions 48-hour Restoration Time

- Minimum of 90% of customers restored in 48 hours for each event

7. Catastrophic Conditions 72-hour Restoration Time

- Minimum of 95% of customers restored in 72 hours for each event

8. Non-Catastrophic Conditions 24-hour Restoration Time

- Minimum of 99% of customers restored in 24 hours for each event

Target Metrics

9. Restoration Costs

- Set initial target at 5% reduction from five-year historical average
- 5% annual improvement from prior year target level
- Adjust annually for inflation

10. Tree Trimming/Line Clearing Miles

- Annual target equal to miles included in approved expense in most recent rate case

Annual Performance Score

- Each Metric Has 10% Weight
- Actual Performance Result for each Metric multiplied by 10% weight to determine total score
 - Ex: Actual SAIDI-MEDs of 530 minutes vs. target level of 567 = 7% improvement (37/567) or 107% of target. Multiplied by its weight of 10% contributes 10.7 percentage points to the total performance score of the 10 metrics
 - 80% to 120% Allowed Range to avoid unusual circumstances

Financial Incentive or Penalty

- Award and Penalty Revenue Requirement Base (APRR Base)
 - 50% of the Revenue Requirement calculated from the capital additions to rate base in the most recent five years pertaining to electric distribution plant, i.e., the return on investment, depreciation expense, deferred taxes, property taxes, plus the distribution O&M expense included in customer rates
- Annual Incentive or Award = Actual Performance Score Differential from 100% of Target Multiplied by APRR
 - Ex: if the actual Total Performance Score is 97.9%, or 2.1% less than the 100% target, and the APRR Base amount is \$75 million, the utility would calculate a Performance Penalty of \$1,575,000 (\$75 million x 2.1%)

Financial Incentive or Penalty

- \$10 million Maximum Annual Award or Penalty Amount
- Annual Award or Penalty Deferred to Next Rate Case with Short-Term Interest Rate
- Company files Results, Calculation and Target Metrics for coming year within 60 days of end of calendar year
- Performance Results and Target Metrics audited by independent expert
- Implement SIIM in 2024, Revisit in 3 Years

Prepared By
Sebastian Coppola, President
Corporate Analytics, Inc

On Behalf of the
Michigan Attorney General

October 10, 2023

Michigan PSC Case U-21400: Reliability PIM Framework

The Natural Resources Defense Council and Strategen
Consulting | October 10, 2023 Stakeholder Session

Eli Asher, Manager, Strategen

Ron Nelson, Senior Director, Strategen

Introduction

Overview and Objective

- + **This presentation provides an overview of the comments submitted by NRDC, MEC, Sierra Club, and Strategen Consulting in Case No. U-21400, in response to the MPSC's Straw Proposal on Reliability PIMs.**
 - + Developing long-term and interim targets based on industry benchmarking is a strong approach, but the Straw Proposal requires additional detail for stakeholders to understand its full impact.
 - + Reliability PIMs should be penalty only.
 - + Reliability metrics should include a focus on equity and environmental justice.
 - + Metric data should be reported on as granularly as reasonably possible, including location-specific feeder level reliability.
 - + The MPSC must take measures to ensure reliability investment is cost-effective.
- + **This presentation also responds to the four prompts included in today's agenda.**

Reliability PIMs

Selected Performance Metrics

- + We support the majority of metrics proposed under the Straw Proposal, with two primary caveats:
 - + We recommend the addition of metrics, targets, and incentives explicitly focused on improving outcomes for customers in Environmental Justice (EJ) communities, as these customers are typically hardest-hit by outages and poor reliability.
 - + The reliability for these communities should be understood at the feeder level.
 - + To the extent feasible, these customers should receive targeted bill credits when impacted by poor reliability.
- + We recommend the MPSC consider an alternative, more granular approach to the Worst-Performing Circuits metric.
- + Circuits do not offer sufficient granularity to understand real-world impact on customers, as a mediocre-performing circuit, for example, can have branches with better or worse reliability.

Illinois (Ameren) Equity & Reliability PIM

Target

Annually Improve Reliability Indices by 1% in Environmental Justice & eligible Communities

PIM tracks SAIDI, SAIFI, CEMI, & CELID for EJ & eligible Communities

+/- 1 basis points to approved COE, based on annual performance

Target Development

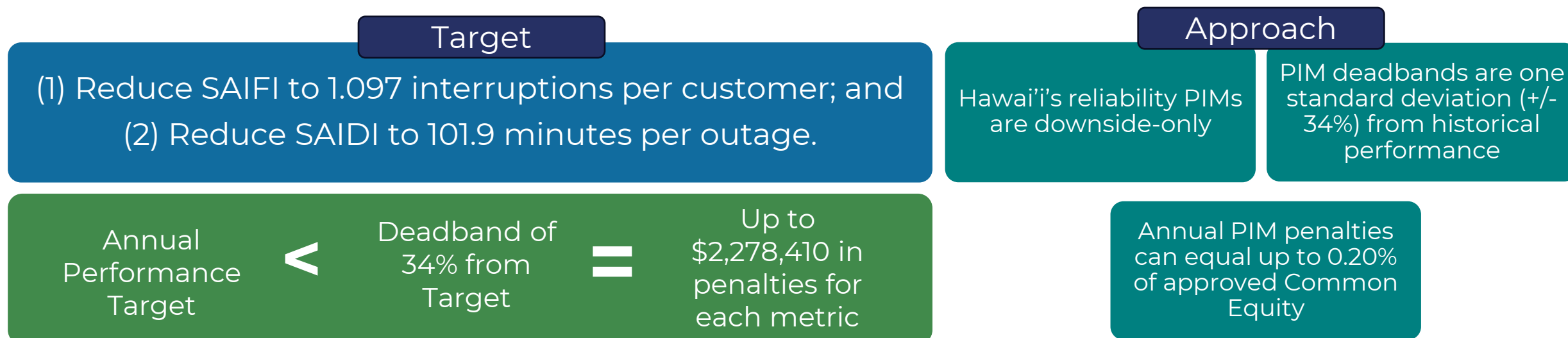
- + We support the approach to benchmark against industry peers as an approach to determining generalized interim and long-term targets.
- + However, these targets should serve as “guideposts” for PIM development and must be converted into actual annual improvement targets.
- + The final framework should clarify in what years utilities are expected to achieve these targets.

Metric	2022 DTE Performance	2022 Consumers Performance	Interim Target	Long-Term Target	Annual Improvement
CAIDI	149	189	TBD	118	→ ??
CAIDI (MEDs)	298	235	135	62	→ ??

Reliability PIMs

Incentive/Penalty Structure

- + We oppose the inclusion of upside incentives, which are most appropriate for emergent areas of utility performance, such as utilization of demand response or improvements to the DER interconnection process.
- + PIMs for core utility services such as reliability, that have been long-standing components of the utility business model, should include downside-only penalties.
- + The below example highlights Hawaii's approach to reliability PIMs:



Reliability Investment Efficiency

- + While there is clear need for the utilities to improve the reliability of the system today, given their lower quartile performance when judged against industry peers, the cost-effectiveness of those improvements may diminish over time.
- + In other words, once the utilities have sufficiently improved, further improvements may prove costly, and without corresponding performance improvement.
- + As such, the framework established here will require re-visiting or a sunset period, such that when utilities have materially improved reliability outcomes and enter a more reasonable quartile of performance, the MPSC and stakeholders can re-assess the need for and existing structure of the PIMs.
- + In the long-term, we recommend the consideration of PIMs and other performance mechanisms beyond just reliability, to ensure that utilities do not over-focus investment in one area only.



Quieting the Storm

Incorporating Voice of Customer Benchmark Metrics Into Utility Reliability Incentive Design

Presented to:
Michigan Public Service Commission
Financial Incentives and Disincentives
Stakeholder Session – October 10, 2023

Jim Croce, Senior Director
Utilities Intelligence

J.D. POWER

Agenda

1

Recommendation

2

Who we are and what we measure

3

Industry Insights

4

Conclusion

Recommendation

- Ensure the customers' voice is included in utility reliability incentive design
 - J.D. Power has objective utility reliability benchmark data to understand “what good looks like” on the things that matter most to customers

Customer Experience Benchmarking



THE VOICE OF THE CUSTOMER

Each year, J.D. Power interacts with millions of consumers to better understand their opinions, perceptions, and expectations



INDEPENDENT & UNBIASED

Designed entirely by J.D. Power research scientists and industry experts utilizing the proprietary J.D. Power Index Model



METRICS THAT MATTER

We capture key metrics, such as power quality & reliability performance, price/affordability — are all critical factors in satisfying customer satisfaction — and we scientifically demonstrate how and to what degree



ACTIONABLE INSIGHTS

Our ability to drive action is one of the biggest reasons clients seek guidance from J.D. Power - we deliver insights and data that are stable, trendable, and actionable

175
Annual
Benchmark
Studies Across 9
Industries

More Than
5,000,000
Consumers
Surveyed Annually

52 Years
of Experience,
Brand Recognition,
& Consumer Trust



What we measure ... Electric Residential Study

METHODOLOGY

100,000 surveys annually

145 utility brands covered

Large, midsize, and
cooperatives

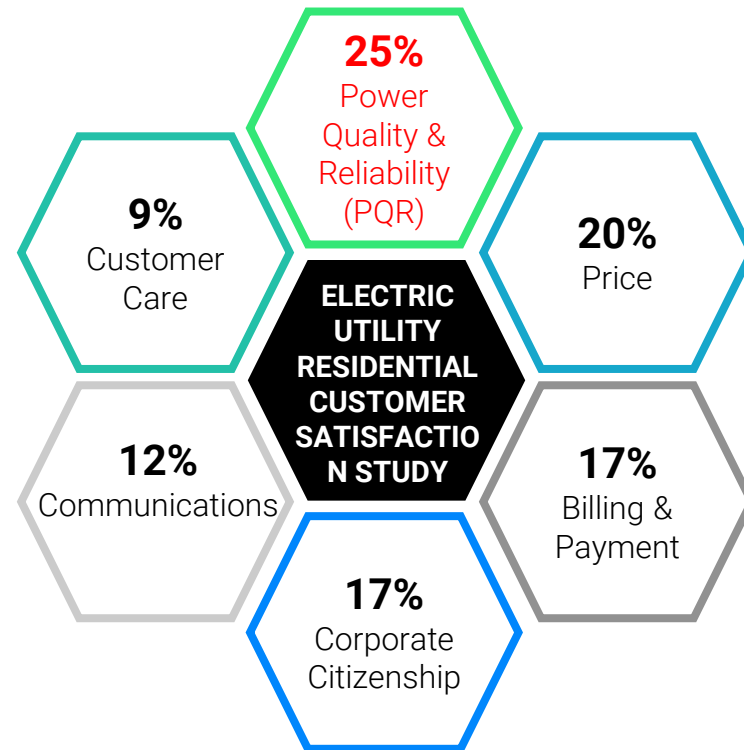
Four regional geographies

Surveys conducted
online methodology via
multiple panels

Median survey length of
20 minutes per interview

FACTOR MODEL*

41 **ATTRIBUTES**/6 **FACTORS**/+**DIAGNOSTICS**

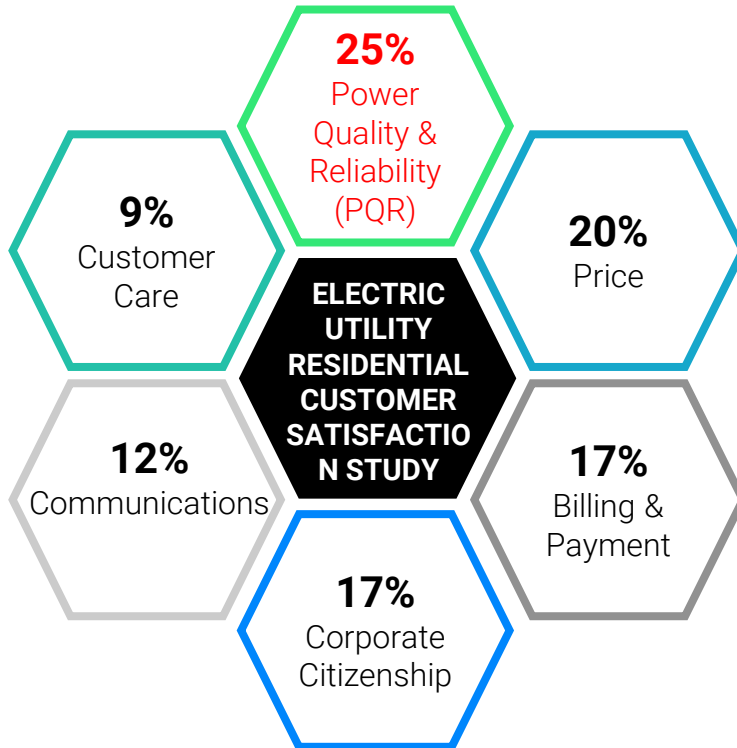


PQR performance rating derived from 6 **ATTRIBUTES**:

- Keep informed about an outage
- Promptly restore power after an outage
- Provide quality electric power
- Avoid brief outages
- Avoid lengthy outages
- Supply electricity during extreme temperatures

What we measure ... Electric Residential Study (continued)

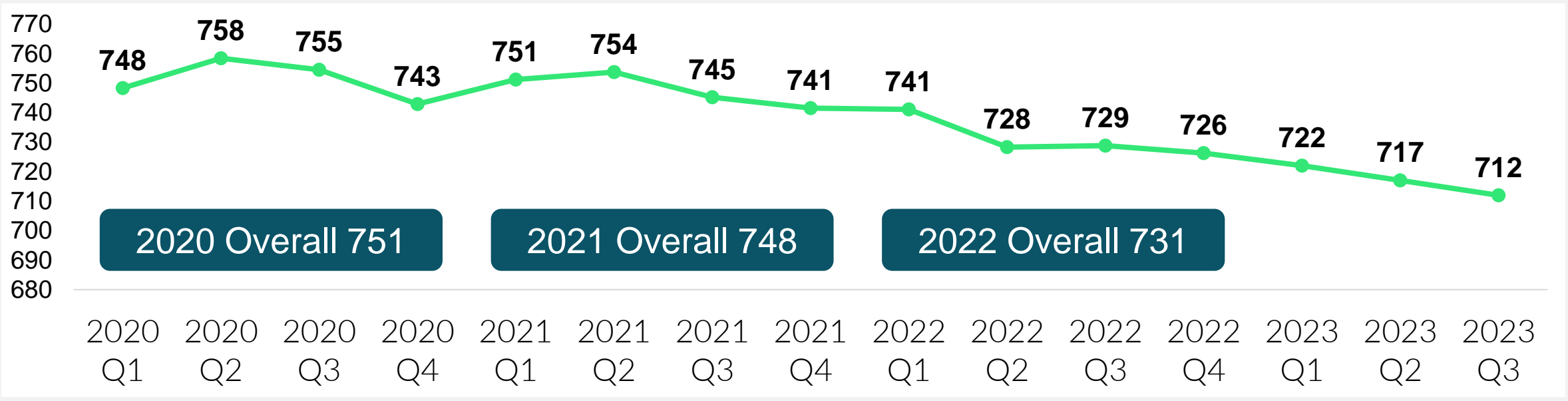
FACTOR MODEL* 41 ATTRIBUTES/6 FACTORS/+DIAGNOSTICS



17 PQR DIAGNOSTICS

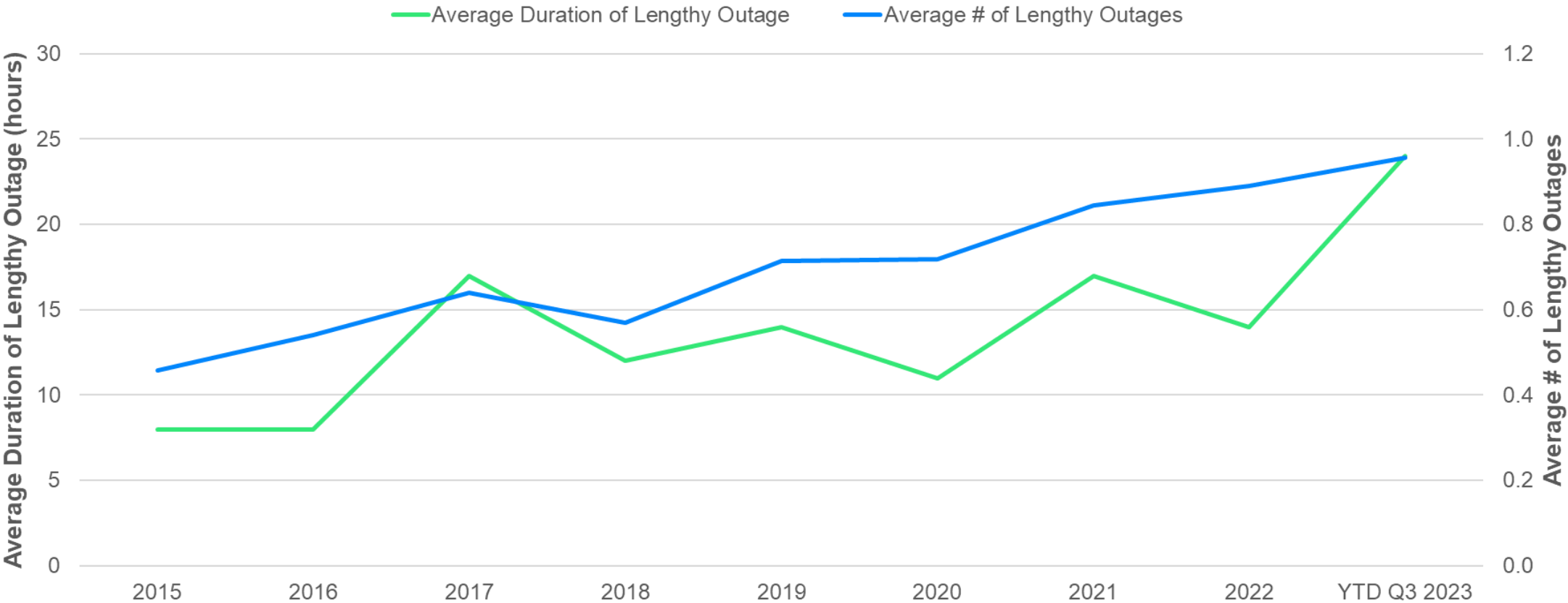
- Keep informed about an outage
- Power restored on time, before, or after time promised
- Actual restoration time vs. estimated (minutes)
- Utility contacted customer after restoration
- Length of longest outage (in minutes)
- # of brief interruptions (< 5 min)
- # of lengthy interruptions (> 5 min)
- Promptly restore power after an outage
- Types of information received about an outage
- Sources used to get outage information
- Cause of longest outage
- Provide quality electric power
- Utility maintains current infrastructure
- Supply electricity during extreme temperatures
- Noticed vegetation management
- Noticed ahead of time about scheduled utility work
- Have smart meter installed in home

After steady improvement over 2 decades, overall industry satisfaction peaked in 2020



Source: J.D. Power 2023 Residential Electric Customer Satisfaction Study (thru Q3)

Michigan Customer Reported Duration and Frequency Measures



While operational metrics such as SAIDI and SAIFI are critically important, customer *perceptions* of these measures and their impact on satisfaction levels are also important and valuable

Source: J.D. Power 2023 Residential Electric Customer Satisfaction Study (thru Q3)

Conclusion & Next Steps

- The customer voice should be included in any utility reliability incentive design
- J.D. Power is available to work with the Commission and stakeholders to inform the design of appropriate voice of customer metrics
 - What a great outage response looks like based on utility industry benchmarks
 - Key drivers of customer satisfaction-dissatisfaction with utility PQR

Thank you



Facilitated Discussion Questions

1. Selected Performance

metrics- Do you recommend changes to the metrics? If yes, please be specific on the changes that you suggest.

2. Targets- Please discuss any recommendations for establishing interim and long-term targets.

3. Incentive/Penalty

Structure- Do you recommend changes to the incentive/penalty structure? If yes, please be specific on the changes that you propose?

a. Where applicable, what is the recommended deadband for the metrics?

4. Reliability Investment

Efficiency- Please discuss measures to ensure that utilities invest efficiently to meet reliability targets.

Next Steps

