

Storms, outages, and reliability work

March 2023 update



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Commissioner

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The role of the MPSC

- ❑ The MPSC is the regulator of electric and natural gas utilities operating in Michigan

- ❑ The Commission
 - Sets rates for Investor-Owned Utilities which, by law, must allow the utilities to recover their reasonably and prudently incurred costs to serve customers plus a reasonable profit
 - Establishes [rules](#) governing utility service including
 - ❑ Consumer Standards and Billing Practices
 - ❑ Technical Standards
 - ❑ Service Quality and Reliability Standards
 - ❑ Interconnection Standards

MPSC Authority: A Creature of Statute

- ❑ The Commission is a “Creature of Statute” and has only the authority provided by the Legislature ([MCL 460.6](#))
 - The Commission has broad authority to regulate investor owned electric and natural gas utilities
 - The Commission may regulate “all rates, fares, fees, charges, services, rules, conditions of service” and other matters of formation, operation and direction of the utilities
 - The Commission has power and jurisdiction “to hear and pass upon all matters pertaining to, necessary, or incident to” the regulation of the utilities
 - **BUT** the Commission does not have authority to make management decisions for the utilities (*Union Carbide Corp. v. Public Service Commission*, 431 Mich 135 (1988))

Leading factors impacting reliability

1. The changing climate

- Increasing frequency and severity of storms

2. Poor vegetation management

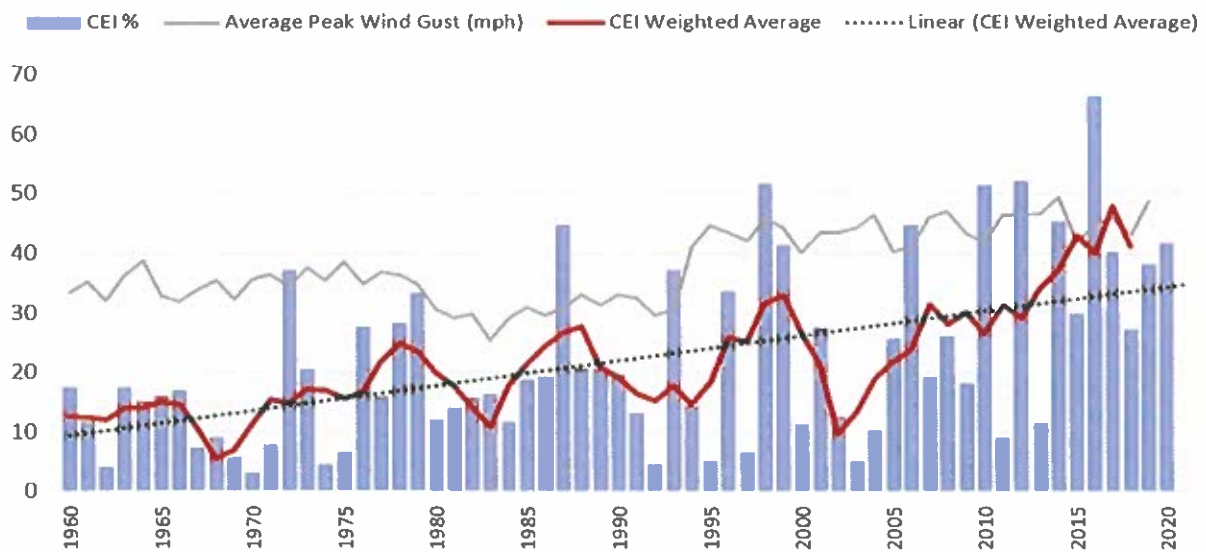
- Overgrown tree branches fall and contact wires

3. Deteriorating distribution infrastructure

- Poles, wires, transformers, substations need regular maintenance

Increasing frequency and severity of storms

Upper Midwest Climate Extremes Index and Wind 1960-2020



Does Tree Trimming Work?

- ❑ Commission has approved enhanced tree trimming programs for both utilities, and has ring-fenced these investments to ensure that enough is being spent on this basic method to improve reliability

- ❑ As a result of these Commission actions:
 - Customer interruptions on the [DTE](#) enhanced tree trim circuits were reduced by 74% in the first year, and the length of outages was reduced by 67%.
 - [Consumers Energy](#) saw similar improvements.

Improving Reliability: Commission Action

Commission work on reliability concerns has been ongoing for several years but has been spurred by major outage events following catastrophic storms in the Summer of 2021 and August 2022

□ Pre-2021

- [Statewide Energy Assessment](#)
- New distribution and maintenance investment planning processes and reporting (U-[20147](#))
- [MI Power Grid](#) – Updates to Service Quality and Technical Standards
- Updated tree trimming and vegetation management standards
- Participation in national discussions to develop best practices in comprehensive planning and reliability
- Several storm investigations going back to 2014

Improving Reliability: Commission Action

“... [T]he Commission and the utilities must do more and must do it faster. . . [T]he Commission needs more data on what is being done, more transparency around planning, and more engagement in how best to prepare and harden Michigan’s distribution system . . . The commission also seeks to put customers at the center of this discussion . . .”

Aug. 25, 2021 Order in U-21122, p. 7

- ❑ [August 2021 order](#) – **Understanding baselines and options for how to improve**
 - Reporting on reliability, resilience, and readiness for extreme weather events
 - Information on cost, maintenance, reliability, and safety of undergrounding overhead electrical lines
 - Invited public comment on the utilities’ filed distribution plans
 - Set up a 2-part technical conference
- ❑ [March 2022 order](#) – **Public accessibility of reliability data**
 - Directs Commission Staff to develop a webpage to display regulated utilities’ distribution system reliability, customer outages, and storm response metrics
 - ❑ Webpage live Friday, March 24
 - ❑ First utility data due May 15
 - Requires that reliability data include the ability to aggregate by circuit, zip code, and census tract

Reliability Reporting: Template Draft Preview

RELIABILITY DATA TEMPLATE

Utility:	<input type="checkbox"/> Required Fields
Reporting Month:	<input type="checkbox"/> Optional Fields

RELIABILITY DATA REPORTED BY CENSUS TRACT														
Census Tract Number	Wire Down Relief Factor R460.732 (c)		Outage Restoration				CEM4	Line Clearing/ Tree Trimming					Total Customer outages	
	<i>Number of Minutes until Police/Fire Guarded Downed Wires Reached in Metropolitan Statistical Areas</i>	<i>Number of Minutes until Police/Fire Guarded Downed Wires Reached in Non-Metropolitan Statistical Areas</i>	All Conditions R460.732 (d)	Normal Conditions R460.732 (e)	Gray-Sky Conditions R460.732 (f)	Catastrophic Conditions R460.732 (g)	Sustained Interruptions R460.732 (h(1))	Amount of Line Cleared (miles)	Capital Spend (\$000)	O&M Spend (\$000)	Quarterly Line Clearing Target (miles)	Quarterly Line Clearing Target (% target)	Cumulative Line Clearing Target (%)	Total Customer outages
Census Tract 1														
Census Tract 2														
Census Tract 3														
Census Tract 4														
Census Tract 5														
Census Tract 6														
Census Tract 7														
Census Tract 8														
Census Tract 9														
Census Tract 10														
All Census Tracts (month)														
All Census Tracts (year to date)														
MPSC Annual Performance Standard	90% or more within 120 minutes in MSAs	90% or more within 180 minutes in non-MSAs	90% or more customers restored in 36 hours or less	90% or more customers restored in 8 hours or less	90% or more customers restored in 24 hours or less	90% or more customers restored in 48 hours or less	6% or less before 2030; 5% or less in 2030 or later							



Service Quality Rules Updates

- ❑ The MPSC issues standards for utility distribution system service quality and reliability
- ❑ These have been recently updated, and are expected to be issued by next Friday

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

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	\$35, plus \$35 for each additional day AUTOMATIC
Gray Sky			48 hrs	
Catastrophic	120 hrs	\$25	96 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
Non-Metropolitan Area	360 minutes	180 minutes

Outage Credits for Repetitive Interruptions				
All Areas	Current Rules		Revised Rules	
	8+ interruptions in 12 months	\$25	6+ interruptions in 12 months	\$35 AUTOMATIC

Improving Reliability: Commission Action

“Simply commencing another examination of the response of the utilities to increasingly predictable extreme weather conditions is no longer the reasonable and prudent course of action . . . The Commission has taken this route many times, and the results remain unacceptable . . . Additional measures are necessary.”

Oct. 5, 2022 Order in U-21305, p. 4

Oct 5, 2022 Commission [Order](#) in U-21305

- Response to Aug. 2022 storm outages and downed-wire fatalities and injuries
- Directs Consumers and DTE to **file a report** with the Commission:
 - Compliance with Commission rules for grid operations, performance, and safety
 - How downed wires are identified and responded to
- Initiates an **independent third-party audit** of the Consumers and DTE distribution systems
 - Physical** audit of installed infrastructure
 - Audit of **programs and processes**, including operations of the system and prioritization of maintenance

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?

Federal Funding for Resiliency and Affordability

"The Commission is interested in ensuring that the opportunities provided in the IIJA are realized and the benefits of this federal funding are maximized for utility customers in Michigan"

May 12, 2022 Order in [U-21227](#) p. 2

- Tracking numerous opportunities in the Infrastructure Investment & Jobs Act ("IIJA") and Inflation Reduction Act ("IRA") for utilities and/or State of Michigan to pursue, while encouraging utilities to apply, in aims of reducing impacts on ratepayers.
 - ✓ **Example: Grid Resilience & Innovation Partnership ("GRIP") - \$10.5 billion**
Primary focus is to reduce the likelihood and consequences of disruptive events through designing a more resilient grid.
 - ✓ **Example: Loan Program Section 1706 - \$250 billion** Low-cost debt through this federal program to fund needed utility improvements at a lower cost to ratepayers.

More to Come

- ❑ **Technical conference:** further investigate resiliency pathways
 - More info coming soon

- ❑ **Townhalls:** to hear directly from customers
 - March 20, Noon – 2:30 PM at American Credit Union 1 Event Center, Jackson, MI
 - March 20, 5:30 – 8:00 PM at Fordson High School, Dearborn, MI
 - March 21, 6:00 – 8:00 PM via Microsoft TEAMS

Questions & Discussion

Thank you



