



MI Summer 2021

Storms, outages, and reliability work

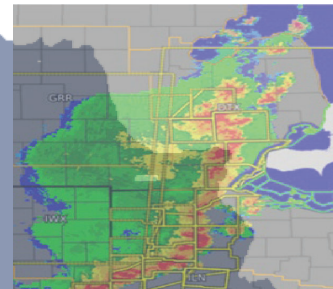
Dan Scripps, Chair
Michigan Public Service Commission
October 13, 2021
House Energy Committee



Summer of 2021: Significant Infrastructure Challenges

June 21 – Sept. 22

- 33 reportable outage events between
- Each of Michigan's IOUs experienced at least 1 reportable event
- Average of 4.6 days between storms in DTE service Territory
- 2,484,701 outages reported to the MPSC
- Significant flooding in SE Michigan exacerbated the challenges



Service Reliability: A Front of Mind Concern

2014

2014 Actions

- Changes in tree trimming specifications
- Establishment of Outside the Right of Way programs

2018

2018 Actions

- DTE Enhanced Tree Trim Program, addressing backlog and putting company on a 5-year trimming cycle
- Consumers Energy ramping up trimming to a 7-year cycle (from a 16-year cycle)
- Commission directed Consumers, DTE, and I&M to file 5-year distribution plans

2019-2021

2019-2021 Actions: The Statewide Energy Assessment and MI Power Grid

- Recommended changes to the Commission's Service Quality and Reliability Rules; Rulemaking process currently underway
- Recommended changes to the Commission's Technical Standards for Electric Service; Rulemaking process currently underway
- Required Consumers and DTE to include distribution outage metrics in their updated distribution plans; plans were filed over the summer

Measuring Results

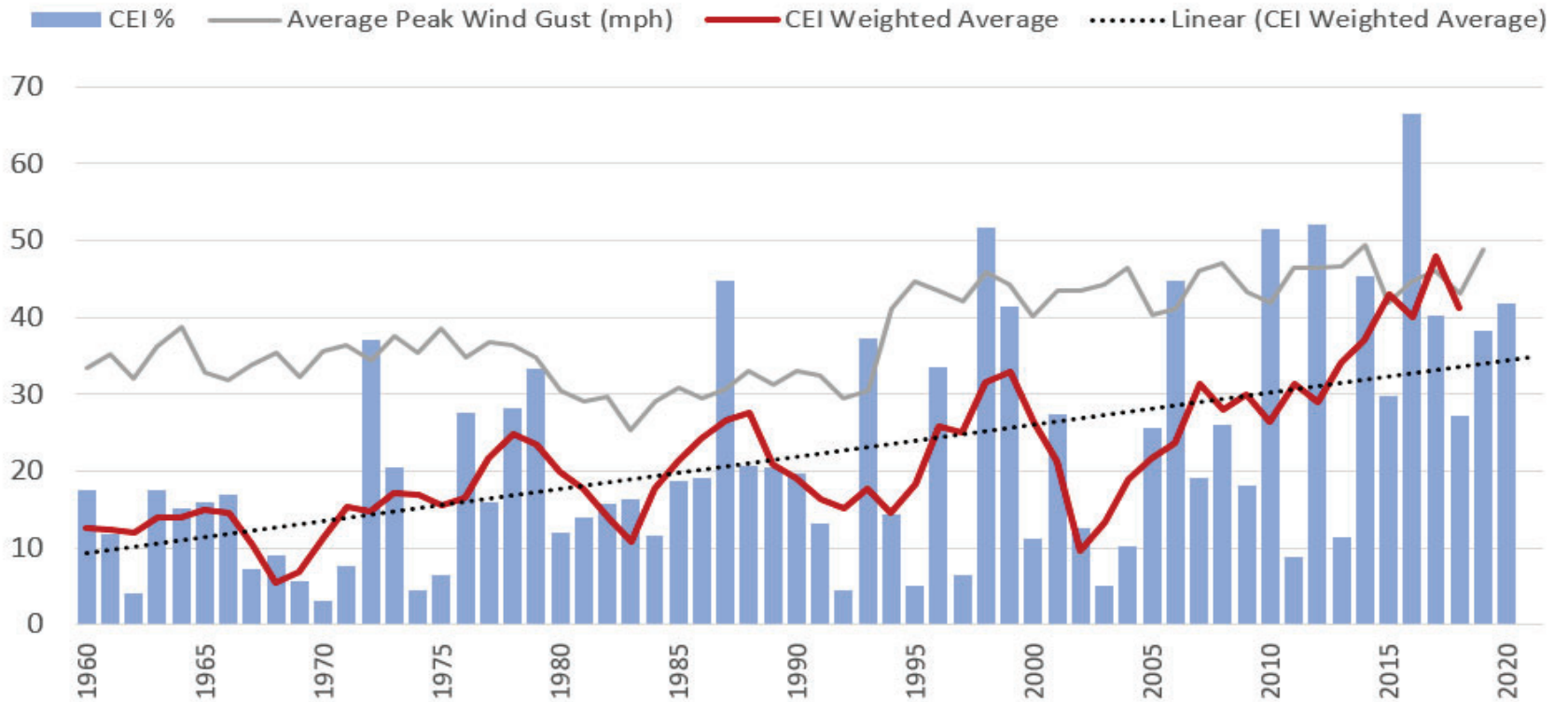
DTE Enhanced Tree Trimming Program 2021 Report in U-20162

Over
75%
fewer tree-caused outages

Outages are
60%
Shorter than non-ETTP circuits

Extreme Weather: A Challenging Pattern

Upper Midwest Climate Extremes Index and Wind 1960-2020



Source: National Oceanic and Atmospheric Administration reports

Note: Wind data gathered from several locations near Detroit (Detroit Metro and Willow Run airports) at various methods of measurement since 1960 including fastest 1 minute, peak wind, maximum 5 second and maximum 3 second

Measuring Results

The Storms

Statewide, high winds, flooding, tornadoes

Impacts

- Damage to trees, utility poles and equipment
- Almost 1 Million Customers lost service

Restoration Challenges

- Limited mutual assistance crews available
- Inclement weather
- High heat and humidity
- Outstanding customer outages from the previous storm



August 10-12, 2021 Storm Series

Utility	Affected
DTE	500,000
CE	372,000
Great Lakes Energy	72,000
I&M	20,000
Cherryland	14,560
Presque Isle	8,172
Cloverland	3,140
Midwest	3,100
Homeworks Tri-County	2,956
Total Outages Reported	996,428

The Commission's Response

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The Commission's focus is on the issues of reliability, resilience, and readiness for these extreme [weather] events. Ratepayers have a right to expect the utilities to anticipate extreme weather events, to provide a hardened grid that can withstand extreme weather, and to be prepared to restore power expediently when the grid fails; and the Commission is committed to implementing improvements in these areas.

Aug. 25 Order in MPSC Case No. U-21122, page 3

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The Commission Order

- Directed the utilities to file reports containing information on a number of areas of interest
- Invited comment from interested stakeholders on utility distribution plans and current investment and upgrade planning processes
- Announced a technical conference on Emergency Preparedness, Distribution Reliability, and Storm Response will be held October 22 and November 5

Where We Go From Here

"The all-electric F-150 Lightning features available Ford Intelligent Backup Power that can provide full-home power for up to 3 days on a fully charged battery, or as long as 10 days if rationing power."



Exploring best use cases for cost-effective undergrounding of distribution lines

Updating interconnection rules and removing barriers to distributed energy resources through the MI Power Grid initiative

Improving forecasting to account for more frequent and increasingly severe extreme weather events

Enabling added resilience through new technologies

Continued focus on reducing outages through planning, grid hardening, and tree trimming

Building Resilience Together

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MPSC Technical Conference on Emergency Preparedness, Distribution Reliability, and Storm Response

October 22

November 5

Additional information available at Michigan.gov/MPSC