

How Can Energy Efficiency Support Grid Resiliency

*Midwest Energy Solutions Conference
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*Dan Scripps, Chair
Michigan Public Service Commission*

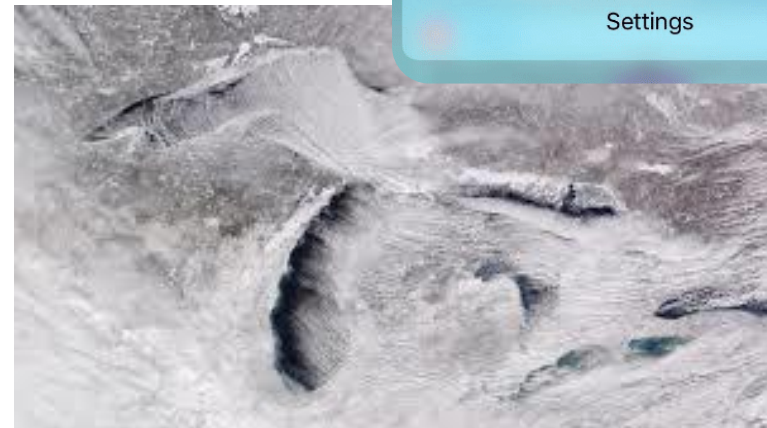
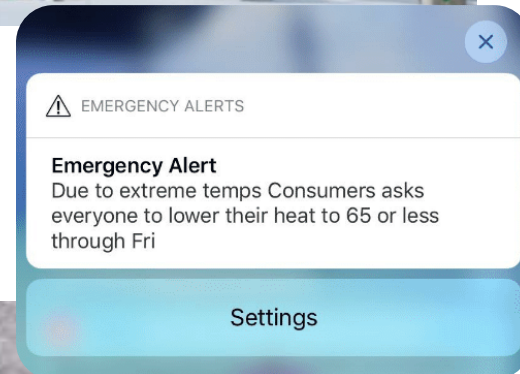


Experiences from PV2019 and Statewide Energy Assessment

- Following a January 2019 polar vortex that triggered overlapping energy emergencies, Michigan Gov. Gretchen Whitmer requested MPSC review the supply, engineering, and deliverability of natural gas, electricity, and propane
- Final Assessment issued in Sept. 2019 included a number of recommendations relating to energy efficiency and resilience:
 - Increased focus on electric demand response tariffs, including notification and penalty provisions during emergency events
 - Development of demand response programs for natural gas utilities
 - Consideration of the value of resilience, particularly relating to DERs, and that resilience should be considered in utility investment decisions
 - Encouragement to MISO to more carefully consider non-transmission alternatives, including those on the distribution system



Image: Todd McInturf/
Detroit News via AP

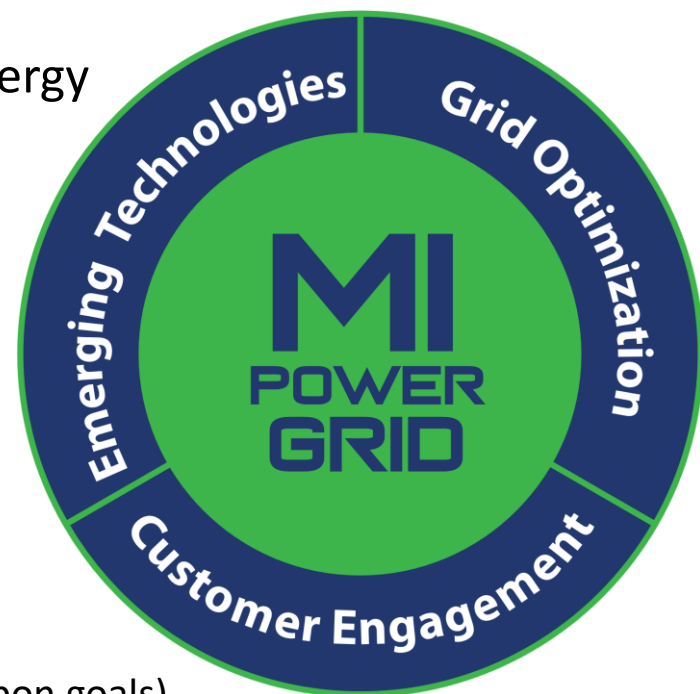


Energy efficiency and demand response in resource planning

- PA 341 of 2016 added requirement that regulated utilities file “integrated resource plans” based on 5-, 10-, and 15-year energy and capacity outlooks
- Integrated resource plans (IRPs) are required to include the following:
 - Long-term forecasts of utility sales and peak demand
 - Generation technologies, as well as proposed capacities and fuel costs
 - Projections on energy purchased or produced by renewable resources and cogeneration
 - Details on plans to reduce energy waste, including annual EWR projections
 - Projected load management and demand response savings, and associated costs
 - Analysis of potential new or upgraded transmission options
- In evaluating IRPs, the MPSC must find that the plan represents “the most reasonable and prudent” means of meeting the utility’s energy/ capacity needs
 - Factors to be balanced include resource adequacy and ability to meet anticipated load; competitive pricing; reliability; diversity of generation supply; and whether the levels of peak load reduction and EWR are reasonable and cost effective
- Sec. 6x authorizes shared savings mechanism for EWR and DR programs to “ensure equivalent consideration of EWR resources within the integrated resource planning process”
- IRP’s holistic approach to planning, combined with incentives under PA 342, have led to significantly higher incorporation of EWR in long-term utility plans

Efficiency and resilience in the MI Power Grid initiative

- Multi-year stakeholder initiative to maximize the benefits of the transition to clean, distributed energy resources for Michigan residents and businesses
- Focus is on **action**; initial priorities:
 - Updating interconnection rules
 - Round two of distribution planning
 - Energy programs and technology pilots
 - Enhancing demand response
 - Updates to grid security and reliability rules
- Recent actions launched under Phase II
 - New competitive bidding workgroup
 - Launched new tech and business models workgroup
 - Continued advanced planning workgroup (inc. Gov's carbon goals)
 - Initiating rate design study for DERs at request of Michigan Senate
- EWR and resilience considerations of MI Power Grid
 - Distribution planning, including considering of EWR as a non-wires alternative
 - Continued review of demand response framework
 - Consideration of microgrids and combined-heat-and-power (CHP) as part of new technologies and business models workgroup
 - Investigating value of resilience as part of advanced planning work group
 - Reflects recommendation from Statewide Energy Assessment



MI Healthy Climate Plan

- In February 2019, Gov. Gretchen Whitmer announced Michigan was joining the U.S. Climate Alliance, and would reduce emissions from 2005 level 28% by 2025
- In September 2020, she expanded this commitment, announcing the MI Healthy Climate Plan, targeting net-zero economy-wide emissions by 2050
- Members of the Council on Climate Solutions announced earlier this month include thought leaders and representatives of business, labor, utilities, and environmental, health, and environment justice advocates
 - Also formalized connections with Michigan Advisory Council on Environmental Justice and Michigan Council on Future Mobility and Electrification
 - Council also includes representatives from 8 different state departments and commissions
 - UP Energy Task Force recommendations may also connect to climate discussion
- Five technical workgroups also announced:
 - Energy Production, Transmission, Distribution, and Storage
 - Transportation and Mobility
 - Buildings and Housing
 - Energy Intensive Industry
 - Natural Working Lands and Forest Products
- Council will advise the Governor and EGLE in formulating and overseeing the MI Healthy Climate Plan, including:
 - Identifying strategies to reduce greenhouse gas emissions
 - Identifying solutions to address impact disparities for communities disproportionately affected by climate change