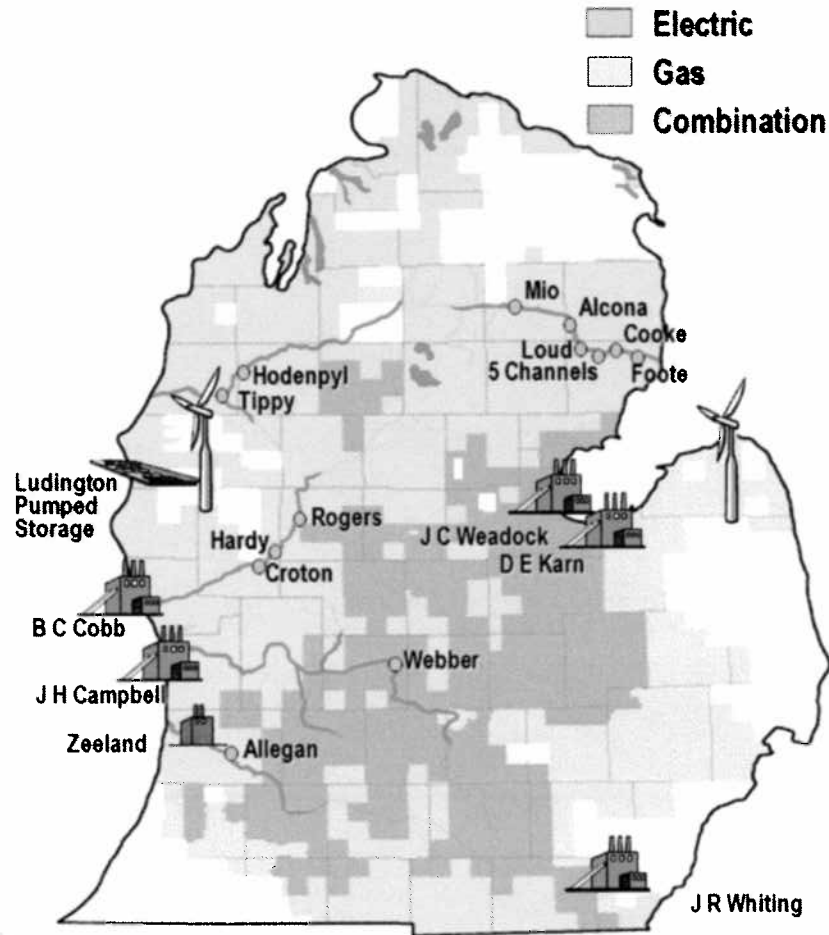


Michigan House Energy Committee Resource Adequacy and Michigan's Challenge

Tim Sparks
Vice President
Energy Supply Operations
February 25, 2015

Consumers Energy
Count on Us

Territory



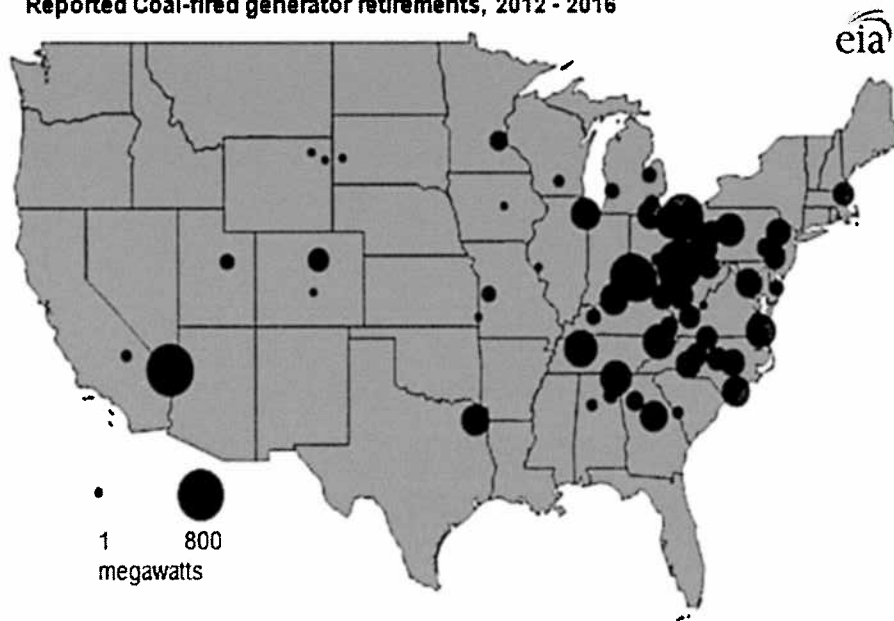
Overview

- Fourth largest combination utility in the United States
- 6.6 million Michigan customers in all 68 Lower Peninsula counties

2016 Projected Coal Retirements

*Midwest retirements
11-16 GW projected*

Reported Coal-fired generator retirements, 2012 - 2016



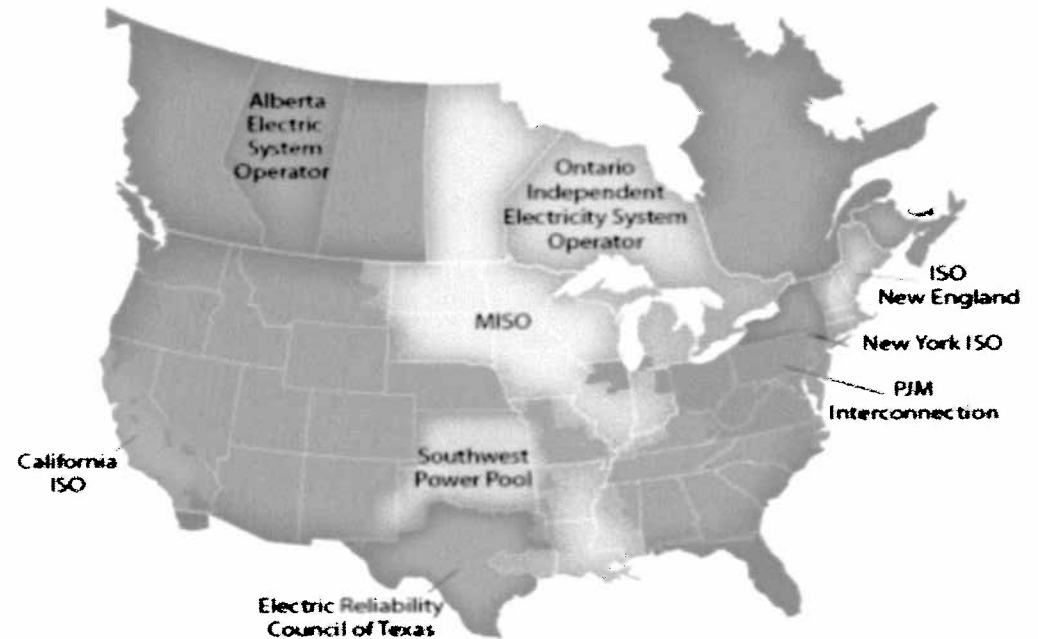
- Current EPA regulations driving shut down of nine Michigan coal plants in 2016 – including our “Classic Seven”
 - Loss of enough energy to supply 1 million customers
- Electric capacity surplus will disappear in Midwest and Michigan
- MISO concerned about having enough power to meet demand
- EPA’s Clean Power Plan will likely lead to more plant retirements after 2020

Michigan’s energy supply is hardest hit within MISO region.

Regional Transmission Organization Territories

4

- Established by the Federal Energy Regulatory Commission
- MISO ensures daily reliability and electric grid stability across 15 states and Manitoba
- MISO operates daily energy and ancillary service markets as well as an annual Planning Resource Auction



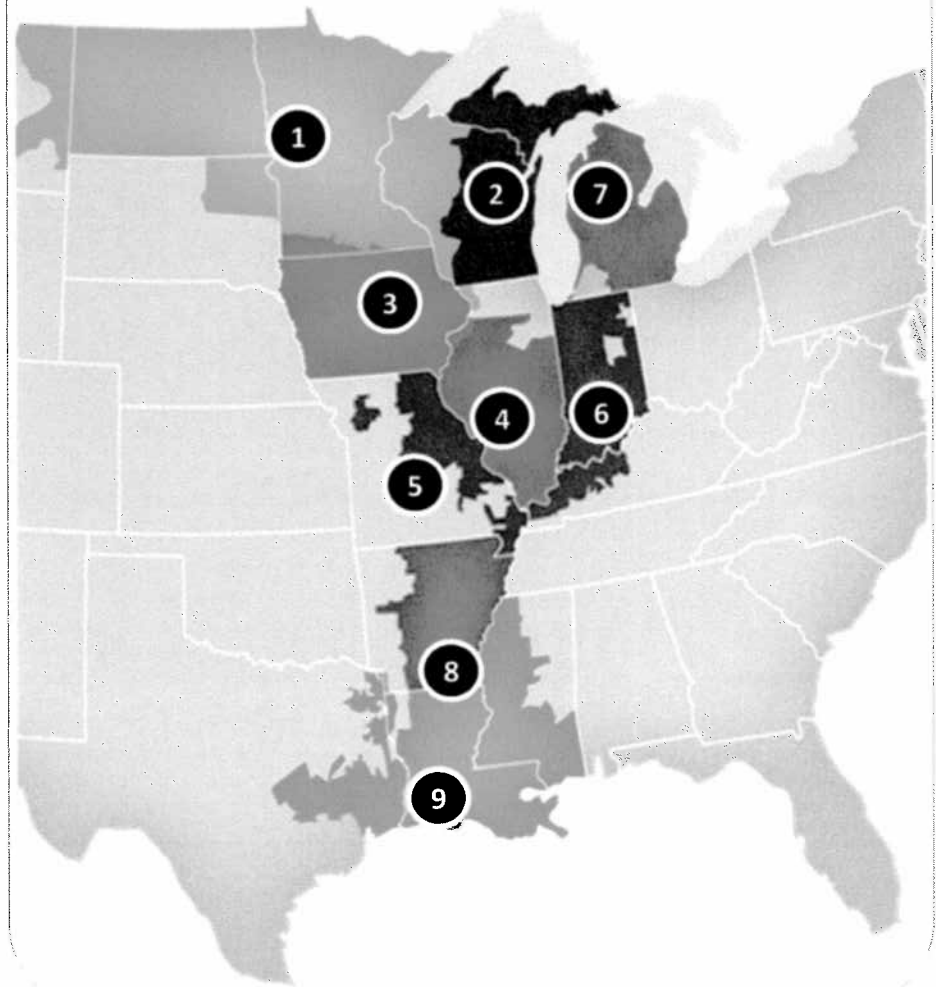
Transmission planning is federally regulated. Generation planning is state regulated.

Resource Adequacy Requirements

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- **Planning Reserve Margin (PRM)**
 - 115% of installed capacity
 - 107% of expected available capacity
 - Not all capacity is created equal
- **Local Reliability Requirement (LRR)**
Generation needed if Zone is an island
- **Local Clearing Requirement (LCR)**
 $LCR = LRR - \text{Import Capability}$

If LCR or PRM not met, capacity prices are expected to increase significantly

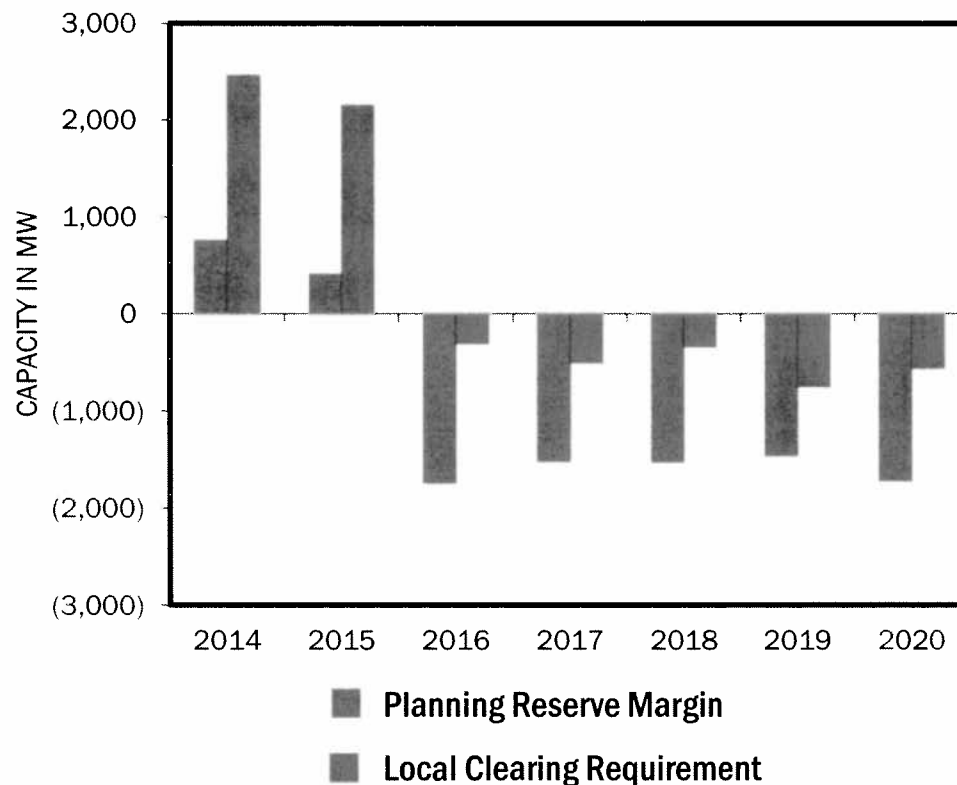


Requirements provide a cushion for our customers on the hottest summer day.

Zone 7 Capacity Position

6

Zone 7 Capacity Position Outlook



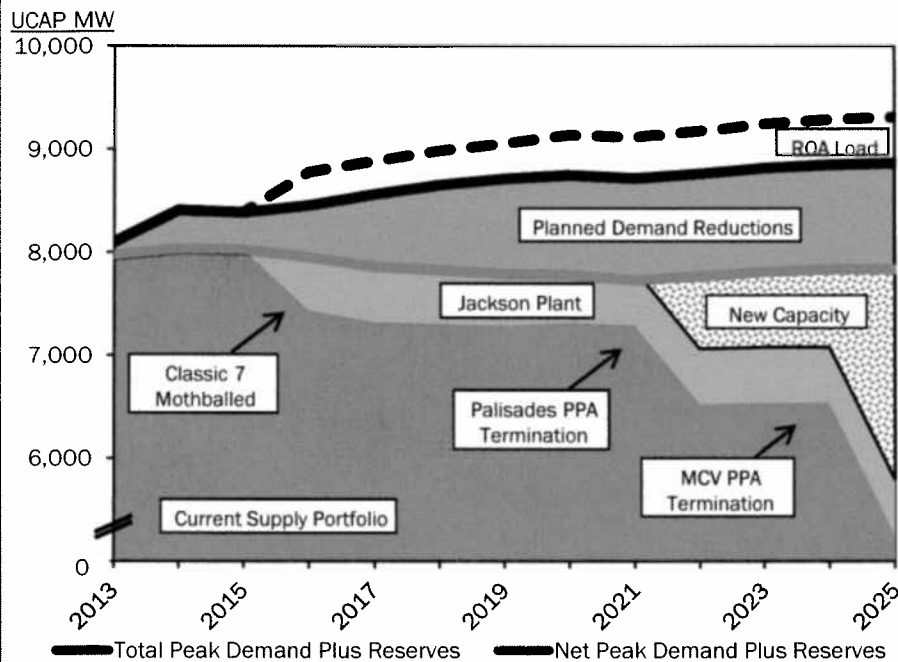
- Reliability risk in Zone 7 in 2016
 - Excess capacity gone
 - Minimum generation requirement not met
- MISO market prices rise
- ROA customers return
 - With minimal notice
- MISO market signals are insufficient to provide long term investments

...is short 2016 and beyond.

Consumers Energy's Plan

7

Consumers Energy Supply Portfolio



- **Owned Generation 5,200 MW**

- Retire Classic 7 - 900 MW
- Jackson Plant +540 MW

- **Power Purchase Agreements**

- 2,800 MW

- **Demand Side Management**

- 900 MW peak demand by 2019, of which 460 MW is energy efficiency reductions

- **ROA load not in CE plan**

Flexible, cost-effective and clean energy for our customers.

Summary

8

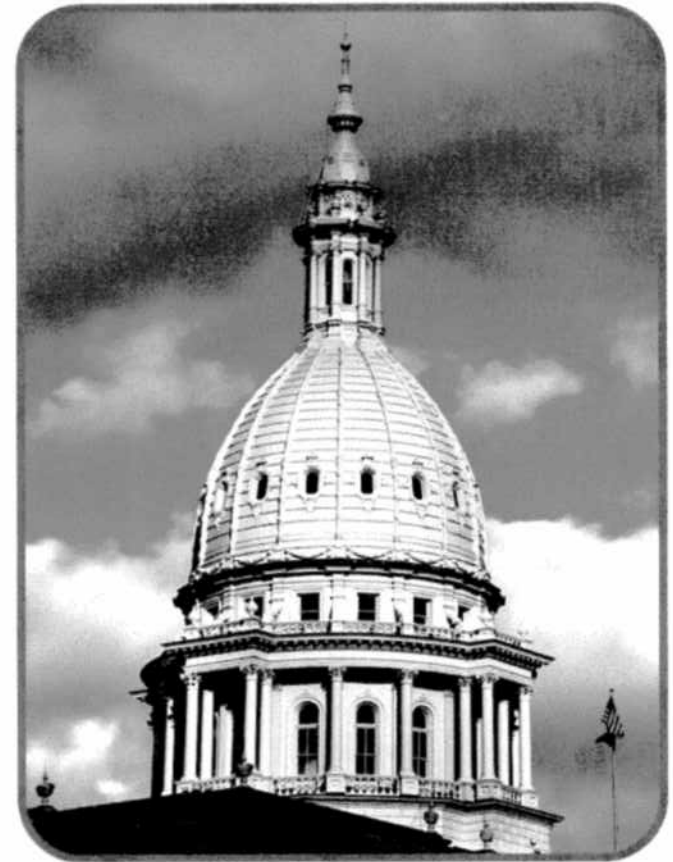
- EPA rules will shut down many coal plants by 2016
- A shortfall of capacity in Zone 7 is expected
- Market capacity prices are expected to rise to cost of a new plant
- Consumers Energy full-service customers are covered
- Shortfall appears to be with ROA customers
- ROA customers can return to full utility service with minimal notice
- Consumers Energy is currently not planning for ROA customers to return

Unfair for full-service customers to subsidize ROA customers.

A “Michigan First” Energy Policy

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- Address regulatory structure to stimulate new capacity investments
- Cost for new capacity needs to be borne by all that share in the benefits of reliability
- Relying on the Federal market structures will not be sufficient in meeting future energy needs
- Affordability, reliability and clean energy for Michigan families and businesses
- Flexible, responsible, cost-effective clean energy policies



Opportunity to build a sustainable, long-term energy policy for Michigan.

