

Resource Adequacy:
Not *Just* Keeping the Lights on

Sally Talberg, Commissioner
March 4, 2015



MICHIGAN PUBLIC SERVICE COMMISSION

Fundamentals

- Types of reliability
 - Operational (day to day) – Operating generation and transmission system within equipment and system limits to maintain stability
 - **Resource adequacy** – Ensuring enough resources to meet aggregate demand at peak times
 - Assumptions about future supply and demand
 - Buffer (reserve margin) to account for fluctuations in demand or supply
- Energy (kWh) vs. capacity (kW)

ENSURING MICHIGAN'S FUTURE

ASPIRATIONS | RENEWABLE ENERGY | *No Regrets* | ENERGY EFFICIENCY

ADAPTABILITY

- We should set a reasonable, achievable, and efficient range of goals for 2025
- Eliminate energy waste
- Reduce coal and replace it with lower-carbon technologies—natural gas and renewables

RELIABILITY

- Become a leader in reliability—be in the top quartile for the number of outages, and top half for duration
- Never experience massive outages due to lack of supply

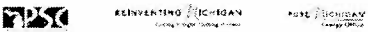
AFFORDABILITY

- Residential customers should spend less on their combined energy bills (electric and heat) than national averages
- Ensure energy-intensive industries can choose Michigan for job and investment decisions, to better compete

PROTECTION OF THE ENVIRONMENT

- Michigan's energy generation needs to be part of a healthier future
- **ELIMINATE** mercury emissions
- **REDUCE** pollution that creates acid rain
- **REDUCE** particulates in the air for the health of Michigan
- **DIVERSIFY** our renewable portfolio based on relative cost, reliability, and environmental benefits

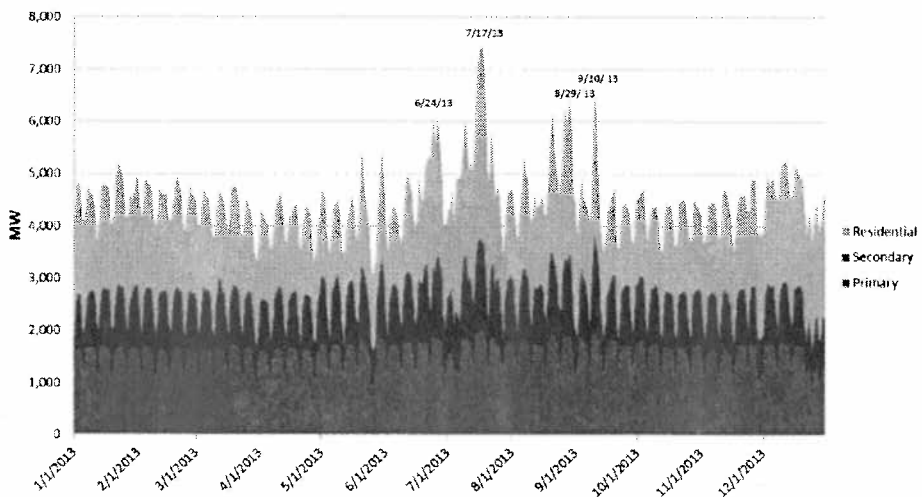
"Never experience massive outages due to lack of supply"

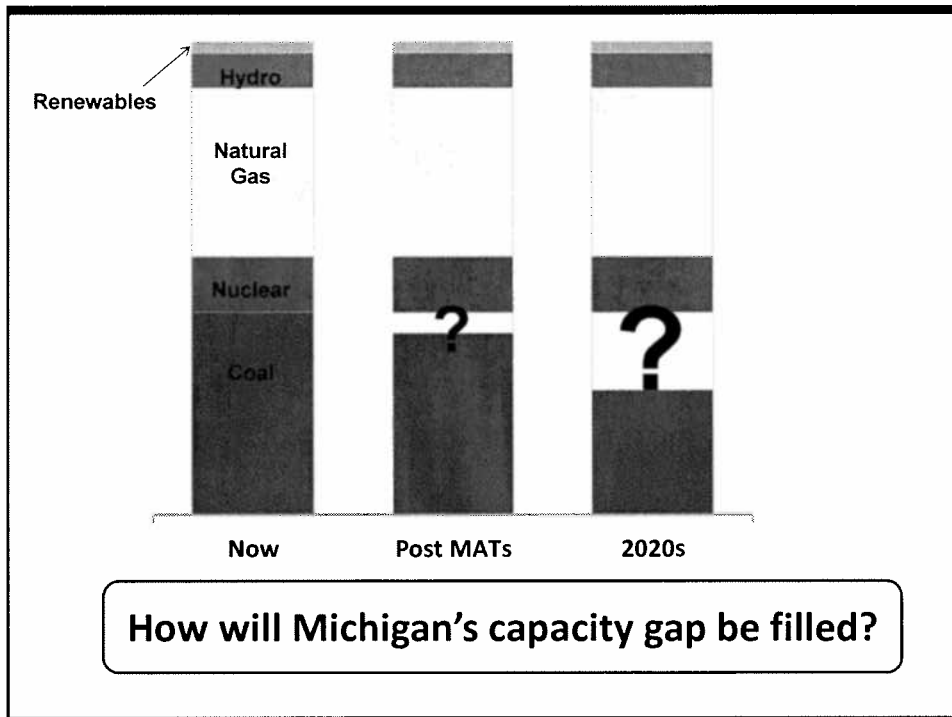
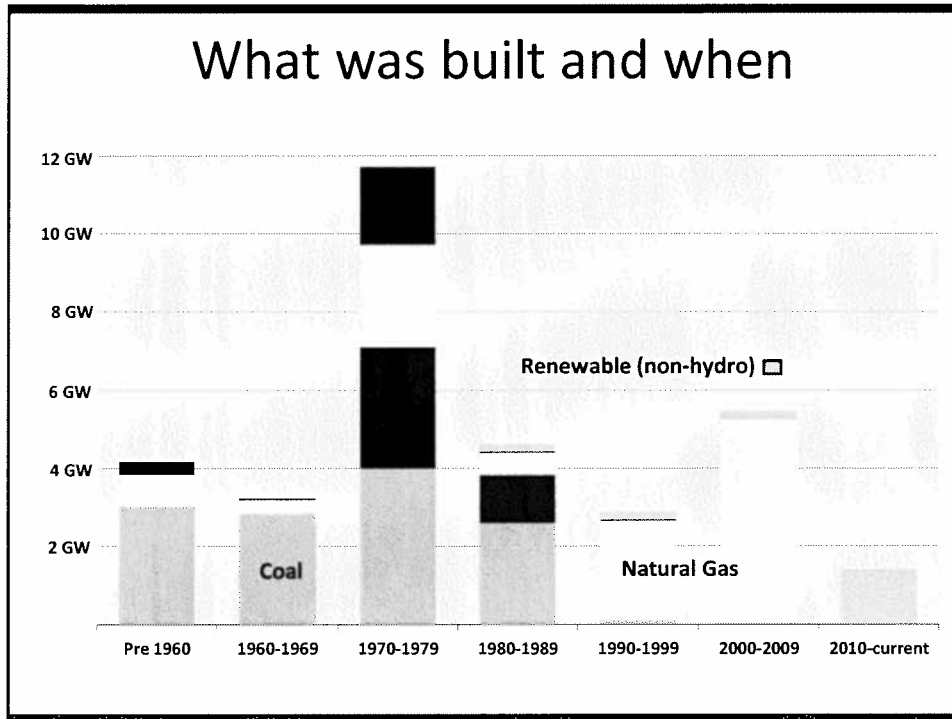


Before Super Bowl and snowstorm

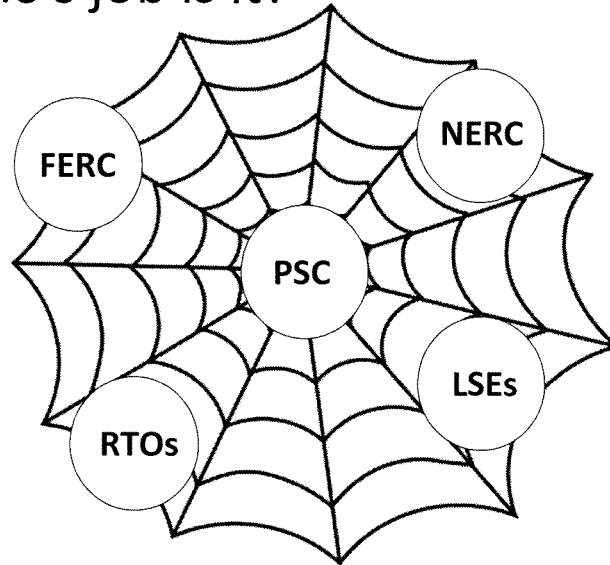


Electricity Demand Over One-Year Period





Who's job is it?



MPSC Resource Assessment

- Utilities and alternative suppliers asked to file assessments of plans to meet customer demand
 - Supply and demand five years out (2015-2019)
- RTOs, transmission companies, and others may file responses
 - Due April 6

Conclusion

- Primary objective: keep lights on
- State ultimately responsible for resource adequacy
- MPSC working with energy providers and others on scope of problem
- Going forward, makes sense to review the tools for solving these issues