



**ENSURING MICHIGAN'S FUTURE**

AFFORDABLE AND RELIABLE ENERGY, NO REGRETS FOR OUR FUTURE

# Testimony to Senate Energy and Technology Committee

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# Michigan's Energy Successes Need to Continue

- We solved a major reliability crisis that quickly became a major competitiveness crisis
- Our environmental impact from our electric sector has been declining, and is much lower than other states in our EIA region
- We did this while becoming more economically competitive
- Michigan must continue to improve, adapt

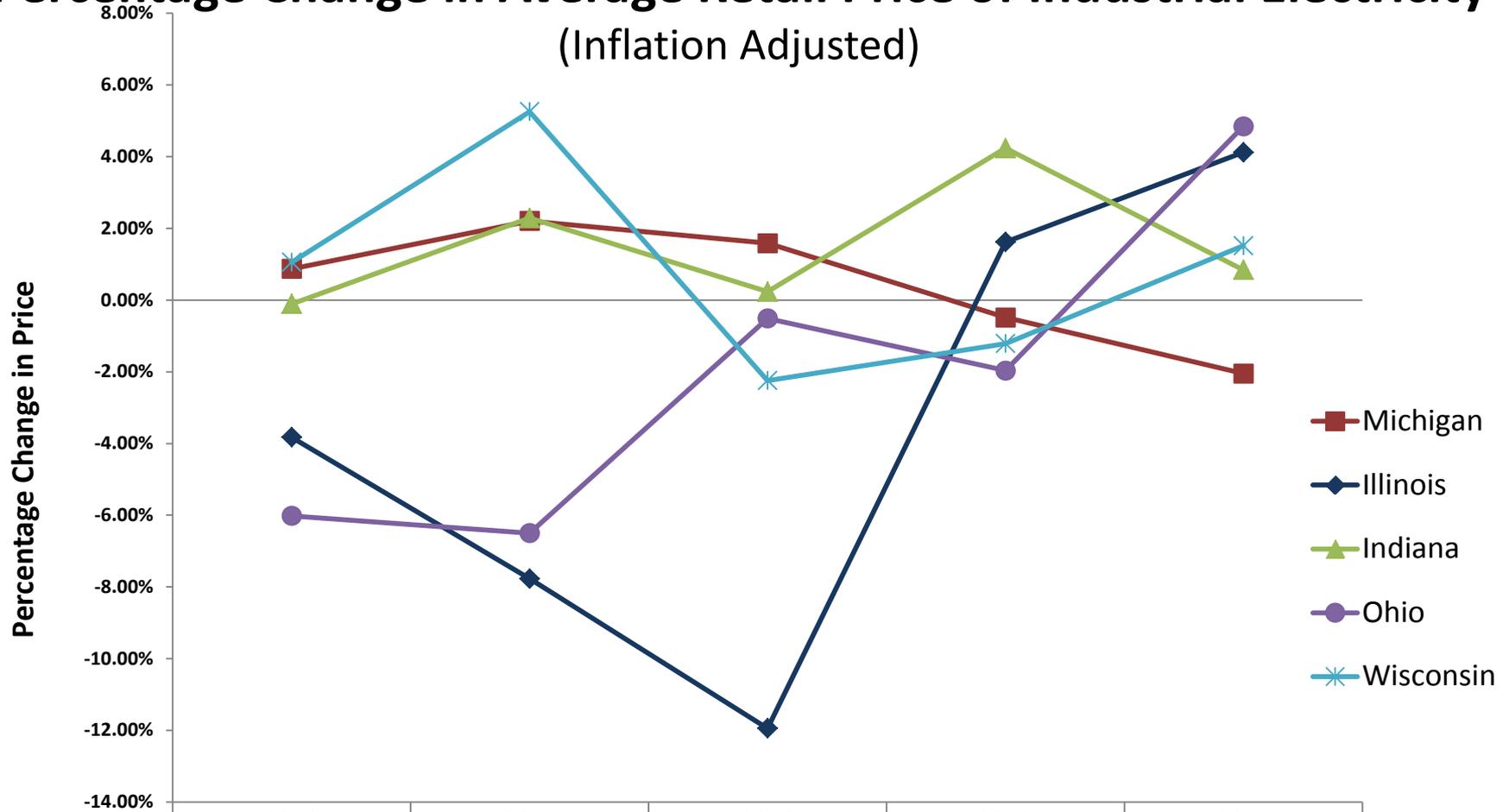
# Michigan's Competitiveness

**Average Price of Electricity for Industrial Customers (cents/kWh)**

	June 2014	June 2015	Percent Change
Michigan	8.02	7.39	- 7.9 %
Illinois	6.35	6.11	- 3.8 %
Indiana	6.89	6.70	- 2.8 %
Ohio	6.76	7.14	+ 5.6 %
Wisconsin	7.94	8.25	+ 3.9 %

Source: EIA data

# Percentage Change in Average Retail Price of Industrial Electricity (Inflation Adjusted)



	2010	2011	2012	2013	2014
Michigan	0.87%	2.21%	1.59%	-0.49%	-2.05%
Illinois	-3.83%	-7.77%	-11.94%	1.62%	4.12%
Indiana	-0.11%	2.29%	0.23%	4.23%	0.84%
Ohio	-6.02%	-6.50%	-0.51%	-1.97%	4.85%
Wisconsin	1.05%	5.25%	-2.24%	-1.21%	1.52%

Source: EIA data, MAE analysis

# We Are At a Crossroads

- We can continue to make our own decisions, being ready to adapt to what lies ahead, or we can allow the federal government to step in and dictate our energy future.
- To protect Michigan's jurisdiction and our ratepayers and citizens, we need:
  - The ability to craft our own reliability solutions
  - Better, more adaptable decision making
  - Continued focus executing no-regrets options
- If we don't choose our path soon, the feds will choose it for us.

# MI Utility Coal Plant Retirements

Utility	Plant	Location	Number of Units	Nameplate	
				Capacity (MW)	Retirement Date
<b>DTE Electric</b>	Harbor Beach	Harbor Beach (Huron Co.)	1	121	2013
<b>DTE Electric</b>	Trenton Channel	Trenton (Wayne Co.)	2	240	2016
<b>Consumers Energy</b>	BC Cobb	Muskegon (Muskegon Co.)	2	312	2016
<b>Consumers Energy</b>	JC Weadock	Essexville (Bay Co.)	2	312	2016
<b>Consumers Energy</b>	JR Whiting	Erie (Monroe Co.)	3	345	2016
<b>Michigan South Central Power Agency</b>	Endicott	Litchfield (Hillsdale Co.)	1	55	2016
<b>Holland Board of Public Works</b>	DeYoung	Holland (Ottawa Co.)	3	63	~2017
<b>Lansing Board of Water and Light</b>	Eckert	Lansing (Ingham Co.)	6	335	~2018
<b>Wisconsin Electric</b>	Presque Isle	Marquette (Marquette Co.)	5	450	2020
Source: MPSC Staff		<b>Total:</b>	<b>25 units 2233 MW</b>		

# Our Reliability: MPSC Findings

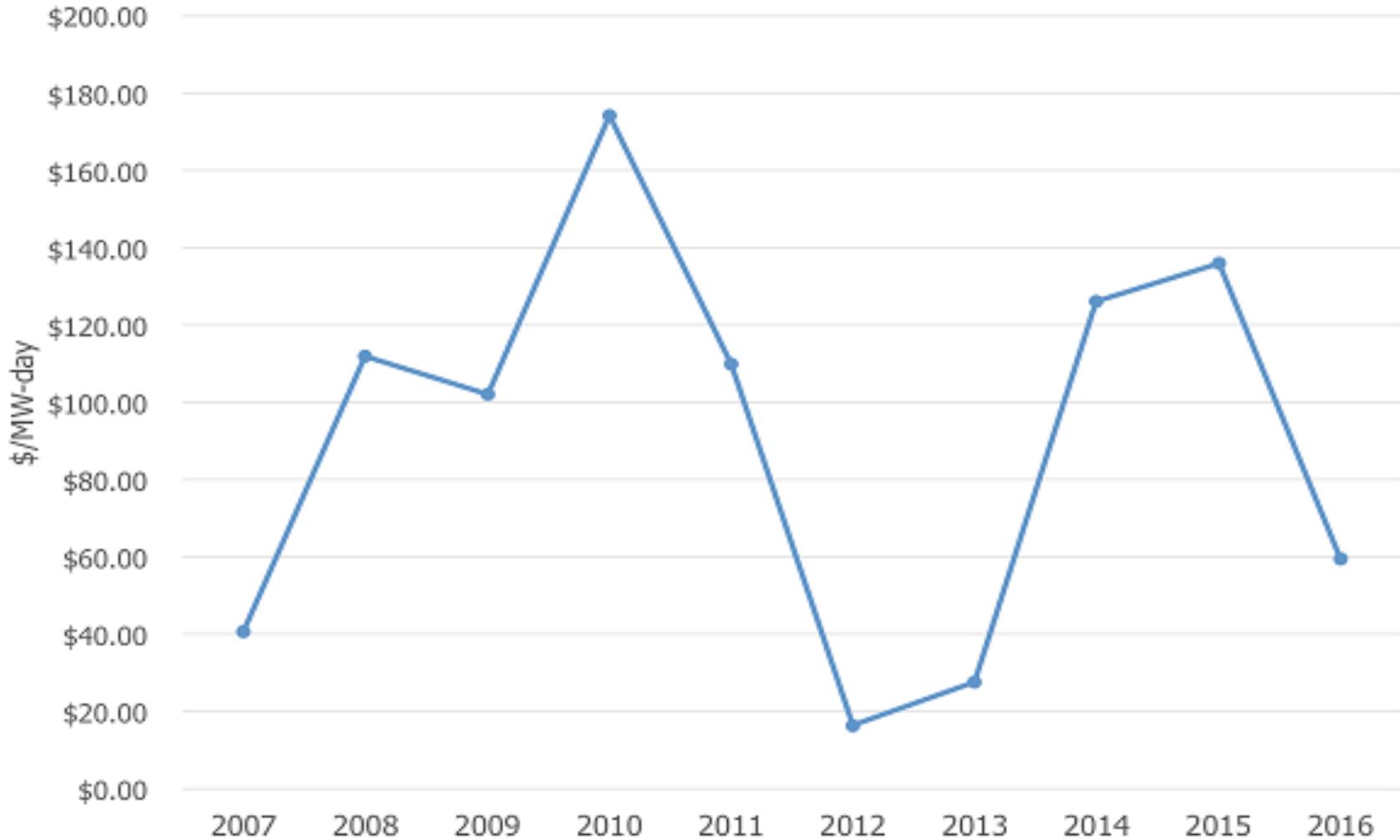
- MPSC does not expect a large-scale outage due to lack of supply between now and 2020.
- We will be purchasing on the market to prevent that, at the auction price.
- If those prices spike (e.g. if a contraction of supply drives prices up), costs can go up dramatically in a very short time period for all Michigan consumers.



# UP: A Taste of the Future?

- When you have “must run” plants and no plan in place to respond to reliability need, we lose jurisdiction over:
  - Costs ratepayers pay for operating those plants
  - Which ratepayers will pay
  - What alternative, at what cost, and who will pay for that
- Reclaiming jurisdiction from feds extremely hard
- Even with guaranteed payments for must-run facilities, large plants need a long-term customer base for financing

# PJM Capacity Auction Clearing Prices



Source: PJM Interconnection, LLC



# PIPP: Lessons Learned

- We need to know where we are getting our capacity, and ensure support from all customers for it – to protect all energy consumers from unexpected rate hikes
- We need better planning that looks at the whole portfolio and whole range of solutions
- We need to get in front of the feds – be they MISO, FERC, or the EPA

# Better Decision-Making Builds on Michigan's Successes

- Certificate of Need with Integrated Resource Planning
  - Have seen it both allow a utility to make large investments in capacity and cause a utility to opt for not building itself
  - Offers pre-approval of costs, but puts projects to a much more stringent test than other investments (**most** reasonable and prudent)

# CON/IRP proposal

- Goal: approve a portfolio that is the **most** reasonable and prudent alternative, which is cost-effective, complies with applicable reliability standards and environmental regulations, and maximizes adaptability.
- Look at things holistically, be able to “roll up” the plans to ensure compliance
- Avoid conflicting mandates
- Offer an off-ramp if the world changes

# A Successful CON/IRP

- Must weigh both capital (a new gas plant or wind farm) and non-capital alternatives (waste reduction, demand response), and ensure economic incentives for best alternatives are similar to those for less good alternatives
- Must have a financial reward for higher test
- Must allow alternatives to come in and “make their case”

# Why This Is Improvement

- **Adaptability Increased**
  - Better comparisons. Higher standards. Off-ramps. Better information.
- **Affordability Increased**
  - Higher standards. More options compared, open process. Finds best way to meet multiple goals.
- **Reliability Increased**
  - Requires more planning, allows region-wide approach
- **Environmental Protection Increased**
  - No artificial limits or lack of compensation for no emission resources (e.g. peak shaving, waste)

# Why An Improvement Over Current Law

- Puts all investments on equal footing
  - No barrier to putting renewable energy to same test (CON standard now does not allow that)
  - Gets rid of \$500M threshold so smaller plants/investments with big cumulative totals get put to same test as one investment does
  - Not limited to new plants, investments, or long PPAs; allows similar benefits to accrue to alternatives

# Why An Improvement Over Current Law

- Much tougher standard for all investments (“**most** reasonable and prudent” instead of “just and reasonable”)
- Wider potential for pre-approvals should lower financing costs (lower risk)
- More adaptable with an off-ramp for changing conditions

# Why An Improvement Over Current Law

- Limitations of current energy waste law
  - Cap on amount that can be spent is 2% of total retail sales, even if alternatives cost much more
    - Independent study predicted this will limit electric waste reduction to 0.6%- 0.7%/yr by 2025.
  - Limits on compensation make it non-preferred even when cost-effective
    - Electric decoupling not authorized
    - Limit on amount of peak shaving that can be compensated (10% of waste reduction)
    - No pre-approval via CON

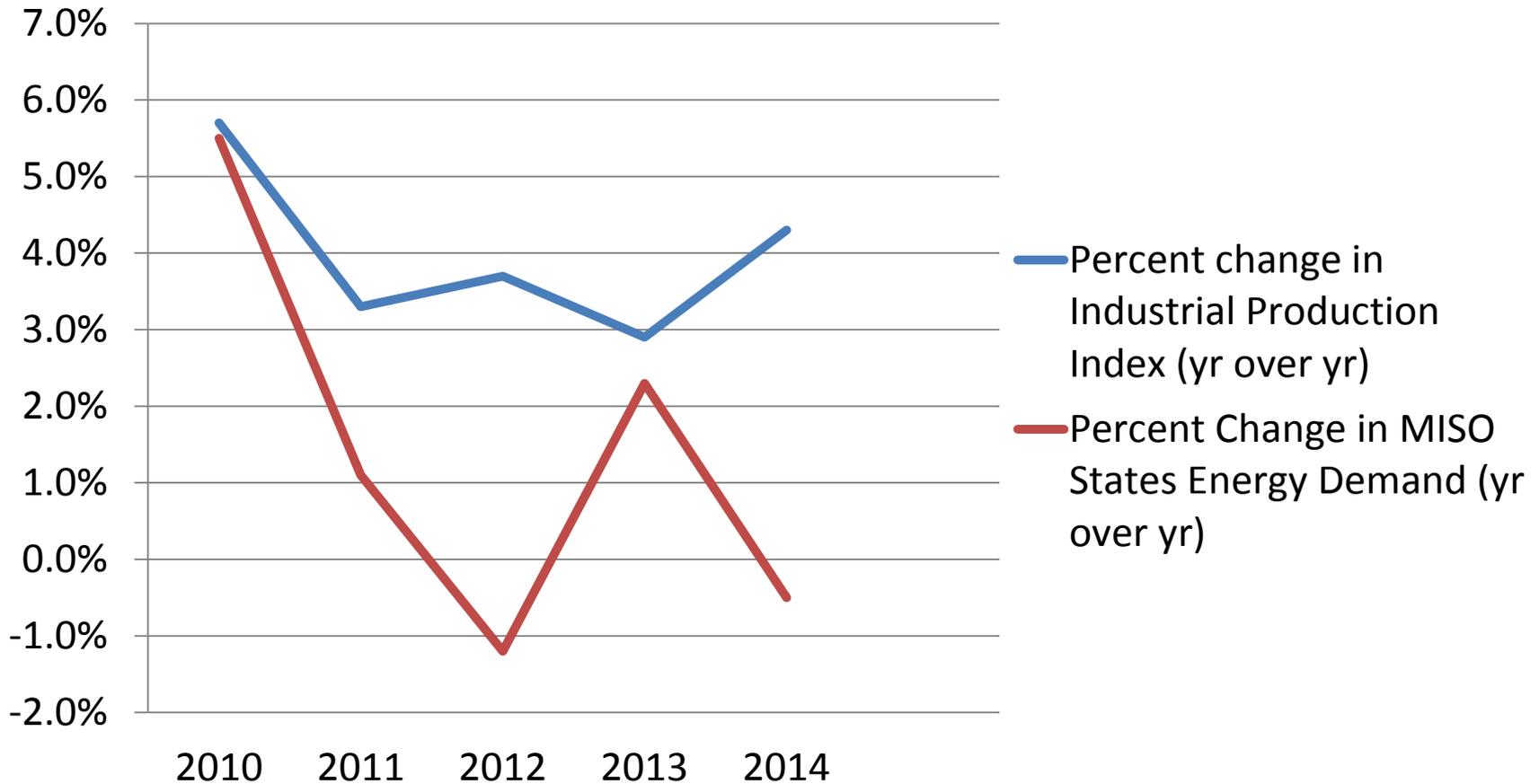
# What We Expect to See: No-Regrets Alternatives Win

- Example: Energy Waste Reduction
  - Lifecycle savings to MI ratepayers due to Energy Optimization Programs equal \$4.2 billion since 2009. (Total fuel cost for the state over that time period was approximately \$24 billion.)
  - It is cheaper to help buy your neighbor's insulation than Wyoming's coal.
  - Michigan schools save \$12.2 million annually – a figure that rises if energy prices rise
  - Michigan colleges and universities save \$6.4 million annually.

# It Does Work

- We do NOT pay our utilities without demonstrated success
- We have shown, with Michigan-specific data and statistical work, that these programs save Michiganders real money.

# Economic Growth No Longer Dictates Energy Demand Growth



Source: MISO Independent Load Forecast, November 2014