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# Ensuring MI's Energy Future

Detroit Listening Session  
March 25, 2013

[www.mieibc.org](http://www.mieibc.org)

presented by

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# *About MiEIBC*

The **Michigan Energy Innovation Business Council (MiEIBC)** is a business organization representing companies in Michigan's growing advanced energy sector. MiEIBC's mission is to grow Michigan's advanced energy economy by building an active statewide network of advanced energy companies, fostering opportunities for innovation and business growth and offering a unified voice in creating a business-friendly environment for the advanced energy industry in Michigan.

The **Institute for Energy Innovation** is the not-for-profit sister organization to MiEIBC. Its mission is to promote greater public understanding of advanced energy and its economic potential for Michigan, and to inform the public and policy discussion on Michigan's energy challenges and opportunities.



**The business voice of advanced energy in Michigan.**

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# Full spectrum of advanced energy

## Efficiency

CLEARResult



TOGGLED



## Solar



## Wind

ENERGETX COMPOSITES



## Bioenergy

NOVI ENERGY

Energy Solutions  
for the 21<sup>st</sup> Century



GRANGER

## Transportation



DOW KOKAM



ROCKFORD BERGÉ  
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# Key themes for integrating advanced energy into electricity system



- Balanced approach considering both supply and demand can improve overall system reliability and reduce costs
- Variability of both supply and demand is an issue that can be successfully managed
- Risk considerations need to be integrated into planning process
- Timeline for this process needs to be accelerated



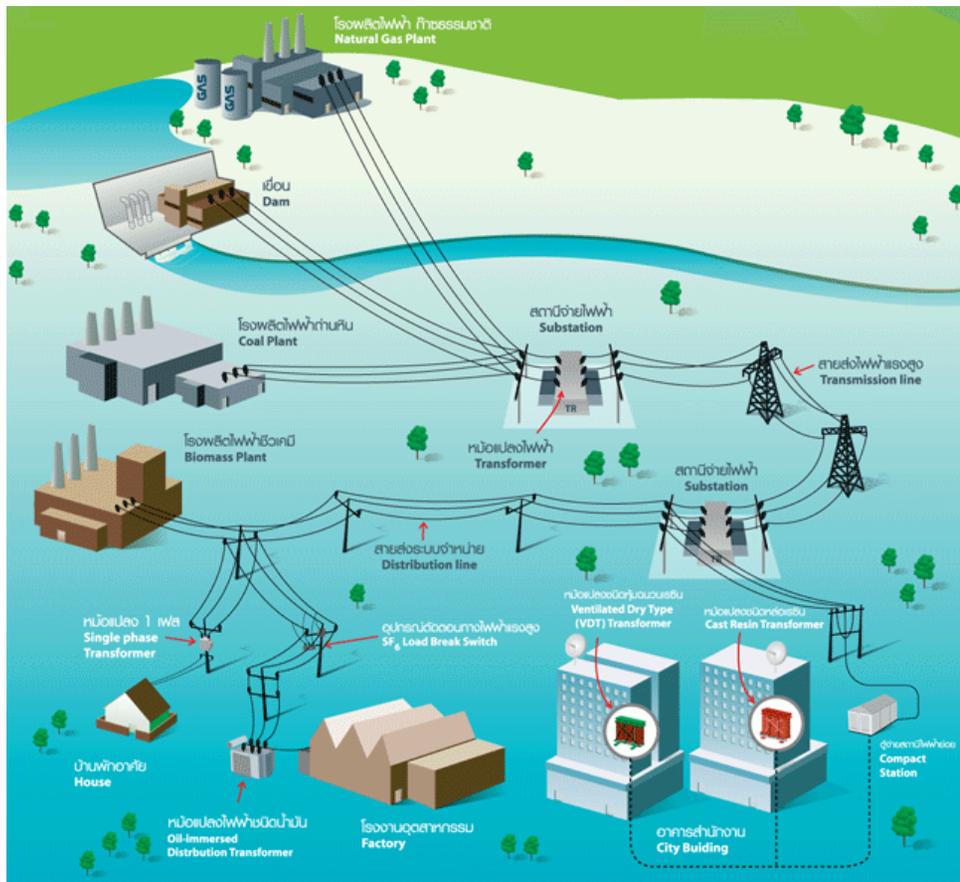
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# Thinking about the whole system



Too often, our perspective on energy is like this one... it includes the end users but is dominated by generation, transmission, and distribution.



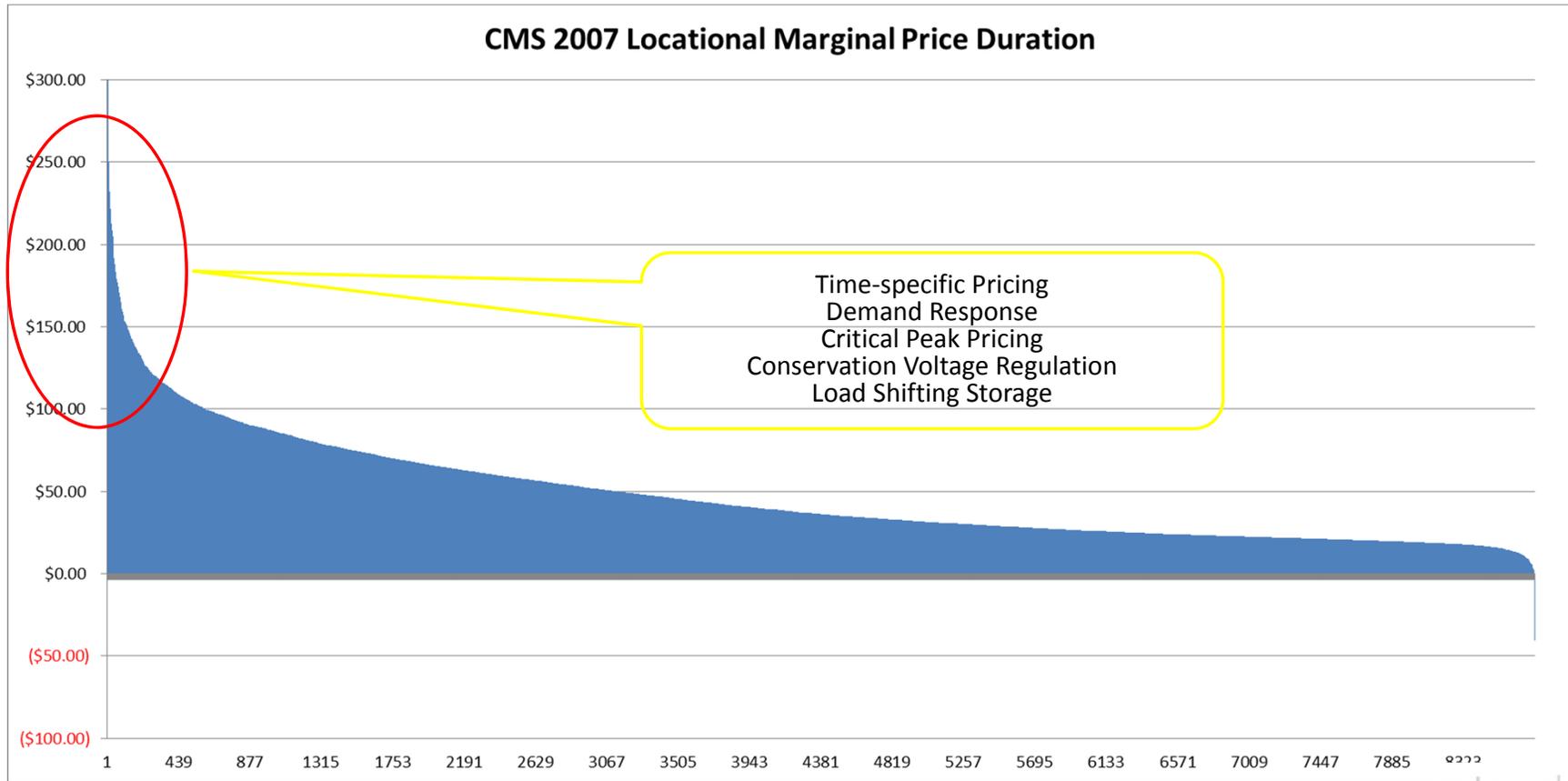
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# Integrating users into the system



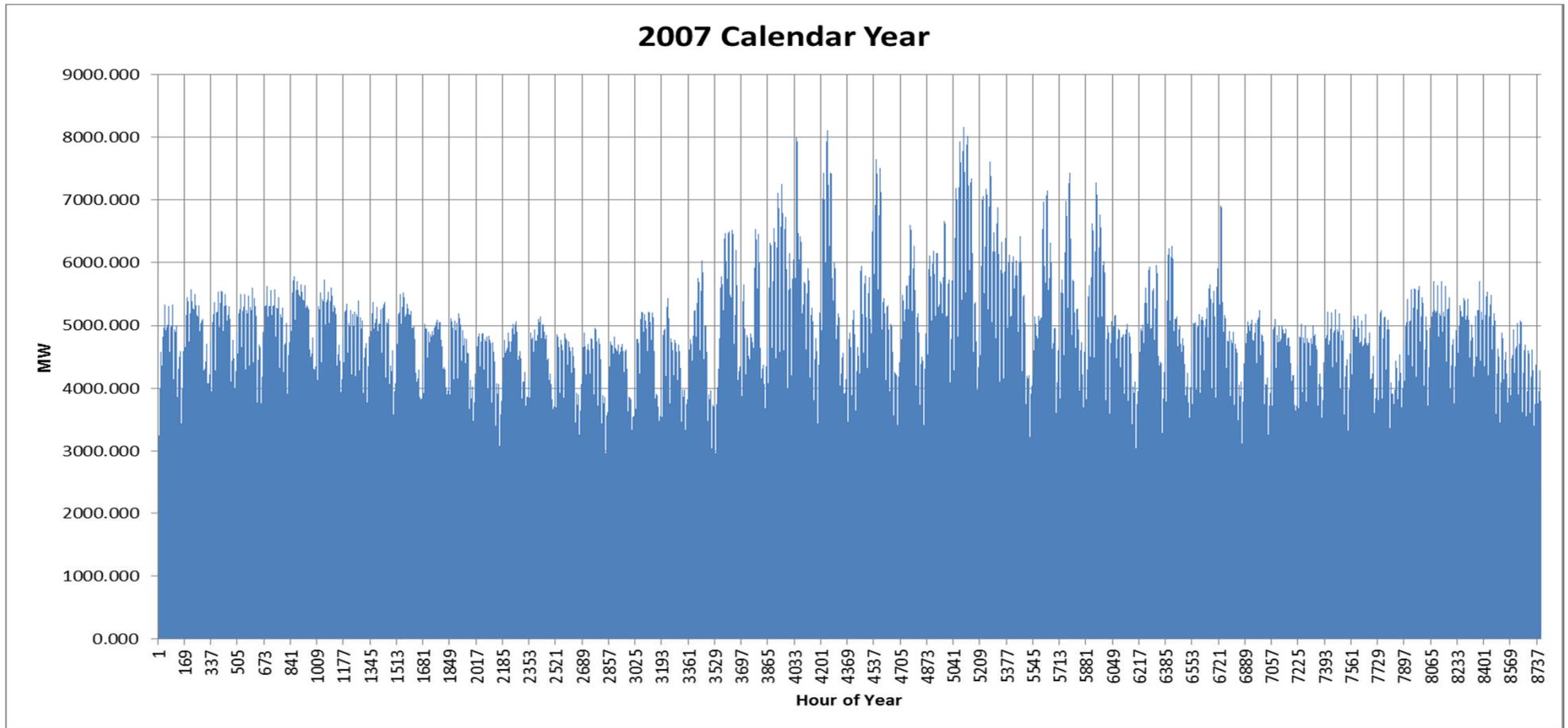
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# Addressing variability concerns



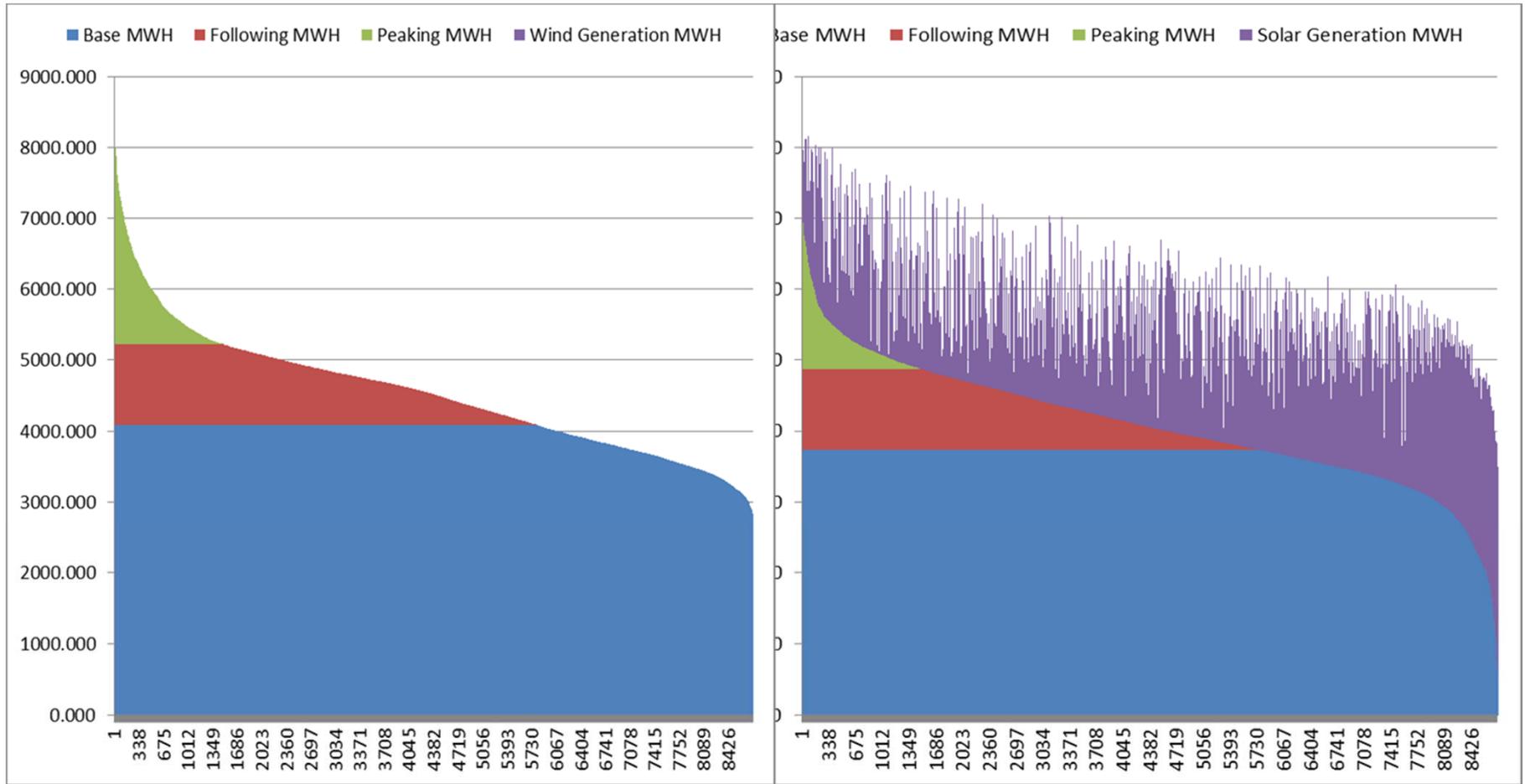
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# Integration of advanced energy



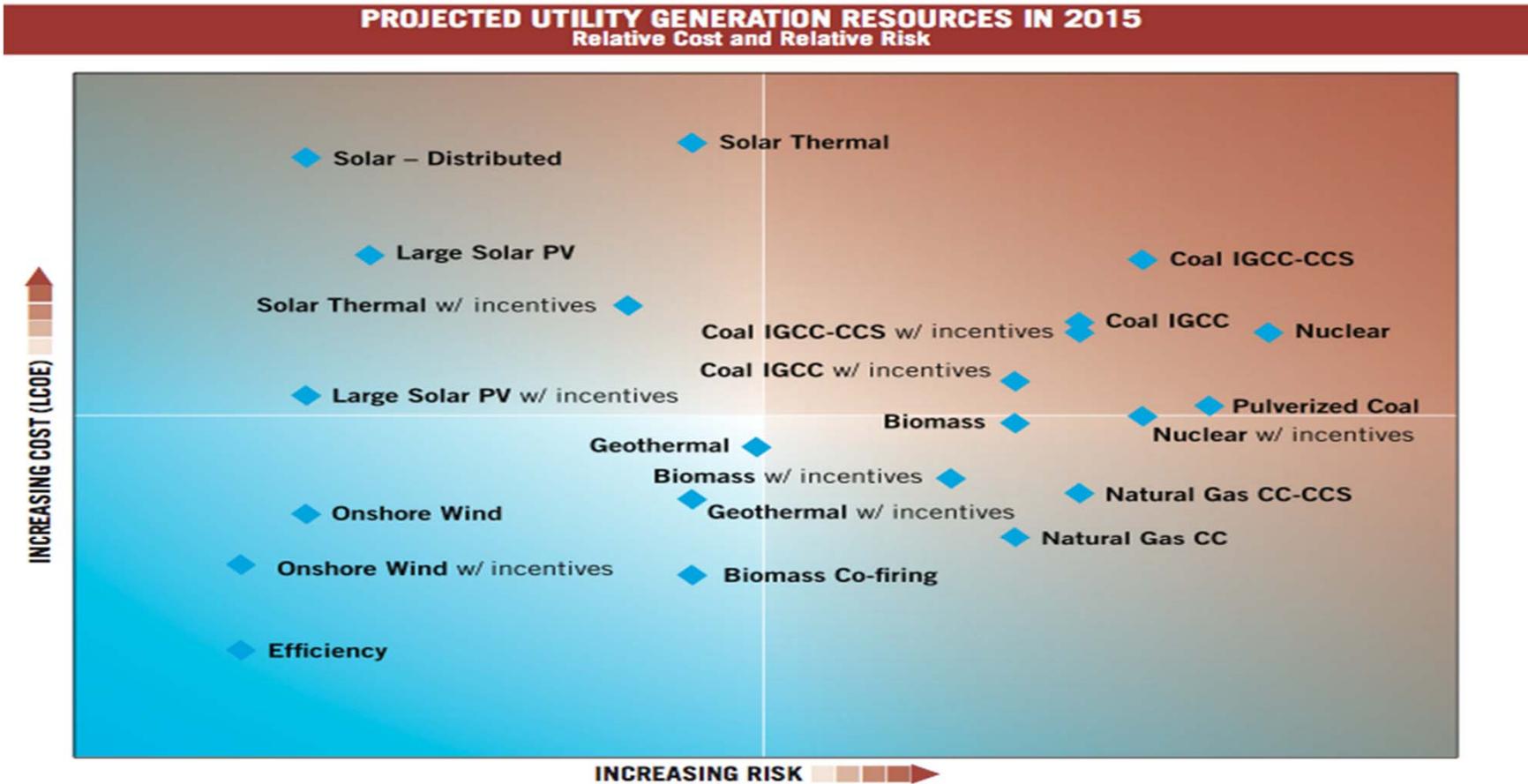
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# Addressing risk in energy decisions



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# Sources of risk when integrating new generation resources

## Cost-related

- Construction cost higher than anticipated
- Fuel costs exceed original estimates, or alternative fuel costs drop
- Investment so large that it threatens a firm
- Resource constraints (e.g. water)

## Time-related

- Construction delays
- Market changes
- Regulatory changes
- Load grows less than expected
- Better supply options materialize
- Other government policy and fiscal changes

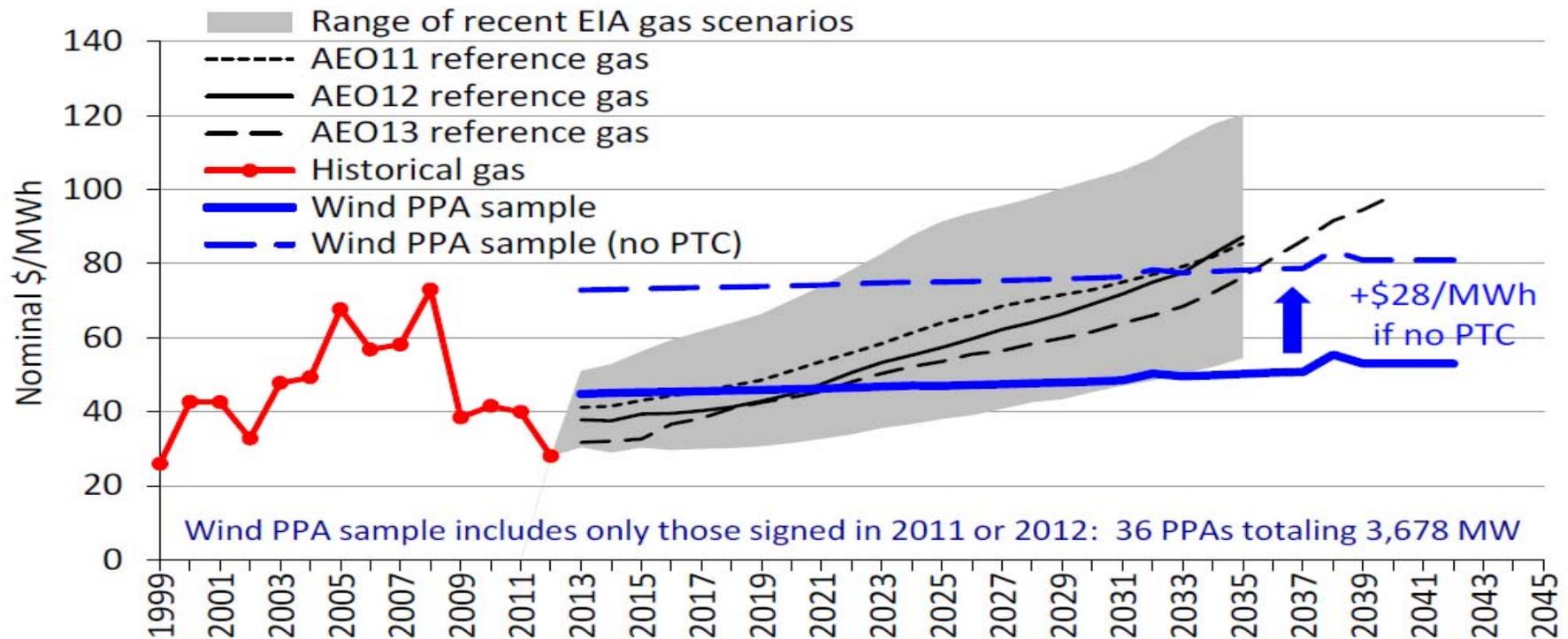


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# Wind can serve as hedge against natural gas price uncertainty



**Figure 9. Comparison of Recent Wind PPA Sub-Sample to Projected Range of Natural Gas Prices**



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# Integrating Michigan with our region

Although Michigan's principal utilities participate in the MISO market, limitations in transmission capacity and the presence of intervening markets leave us with a persistently higher wholesale price of power in Michigan. We pay about 20% more at wholesale on average than do the plains states who benefit from the price suppression effects of wind power.



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# Accelerating decisionmaking timeline



- Absence of guiding policy will cause an unnecessary pause in development, loss in talent and destroy some of Michigan's emerging businesses
- Large investments in regulated central generation made prior to new policy will foreclose options for more use of efficiency, renewables and competitive supply
- Accelerating this process critical for managing risk and ensuring a no-regrets energy policy



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# Additional Policy Challenges

1. Traditional integrated resource planning, levelized cost of energy calculations, and forward-looking required revenue analyses are inadequate for comparing options with differing risks. Current policy shifts most risks onto ratepayers. In a regulated environment, can we shift risks to the decision-making utility or improve the ability of the MPSC to include risk considerations in its decisions?
2. Efficiency is less costly and less risky than any form of generation. How can we incorporate the efficiency resource into utility business models so that efficiency will receive appropriate emphasis?



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# Additional Policy Challenges

3. Reinventing rates so that customers see true marginal costs of the integrated electricity system will encourage cost-effective efficiency, use of electric vehicles, use and proper integration of renewables and storage, and reduced fundamental costs of electricity supply and will discourage utility price discrimination, customer cherry-picking, and cost-shifting in retail competition. Can we reinvent rate design in a regulated utility environment?
4. Can we reform anticompetitive utility and regulatory barriers for renewable and distributed generation without retail choice?



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# Additional Policy Challenges

5. In the foreseeable future, distributed power will be cheaper than grid power. Storage and microgrids will follow soon after. Will we change the electricity business model before the current one breaks? Will we commit additional large investments that will become stranded assets for which we must pay?



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