

DRAFT SUMMARY

Notes from Increasing Midwestern Energy Production & Achieving Low Cost Energy Meeting

June 28-29, Columbus, OH

Attendees: Kate Tomford (IL Department of Commerce & Economic Opportunity), Kevin Gresham (E.ON Climate & Renewables North America LLC), Chris Riley (Archer Daniels Midland), Micah Vincent (Office of Governor Daniels), Darlene Phillips (MISO), Edward Garvey (MISO), Doug Hoelscher (State of Iowa), Paritosh Kasotia (Iowa Economic Development Authority), Mack Thompson (Iowa Utilities Board), Valerie Brader (Office of Governor Snyder), Francie Brown (ITC Holdings), Janet Streff (MN Department of Commerce) Mark Ourada (American Coalition for Clean Coal Electricity), Llona Weiss (MO Department of Natural Resources), Craig Butler (Office of Governor Kasich), Ben Kanzeg (Office of Governor Kasich), Kristy Monk (American Electric Power), Lauri Sheridan White (American Electric Power), Clif Morehead (GE), Chris Schoenherr (WI Department of Administration), Wendy Riemann (Office of Governor Walker), Bill Jordahl (Alliant Energy), Tammy Embrey (National Rural Electric Cooperative Association), Brad Viator (Edison Electric Institute)

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The Midwestern Governors Association (MGA) helps its member states identify and pursue common goals in the areas of energy, agriculture and economic development. As one prong of Iowa Governor Terry Branstad's agenda as the 2012 Chair, the MGA is focusing on supporting efforts to increase domestic/Midwestern energy production across all types of energy to help maintain or achieve low-cost energy. Affordable energy is a key component of long-term economic competitiveness in a global economy.

In order to determine key areas that would benefit from regional collaboration, staff from various public offices and agencies were interviewed and surveyed. Through interviews and surveys, states were asked to identify energy related priorities and areas that would benefit the most from cross-state collaboration where working together can shorten the learning curve or otherwise improve cost-effective positive outcomes throughout the region.

After receiving input from states, staff distilled and summarized information gathered and presented the top priorities identified by the states for regional collaboration. These results are available in the *Midwestern Energy Opportunities Report: Low-Cost Energy in the Midwest – 2012*. They were also presented and discussed at this in-person meeting of state officials and MGA partner organizations. Attendees discussed possible collaborative work for each priority area. This document contains a summary of input received at the June meeting for the following five key areas:

- 1) Impacts of Rapidly Changing Electricity Mix
- 2) Energy Efficiency
- 3) Distributed Generation

- 4) Diversifying the Transportation Fuel Mix and Building the Needed Infrastructure
- 5) Natural Gas Development

The meeting agenda and presentation are available online [here](#).

Notes from Midwestern Energy Priorities Panel - Discussion about each state's energy Opportunities and Challenges.

- There are a lot of synergy's to strengthen the different energy development areas – such as matching up natural gas development with biofuels
- Big issue in Wisconsin is to reverse the nuke moratorium
- Best practices-discussion around transportation, helpful to think more broadly about best practices for siting lines across states. The requirements vary by state. Don't want to tread on individual state authorities, but might be helpful to have some best practices
 - Need input from those who are working to build the transmission lines
 - Gas transmission best practices would also be helpful
 - Pipeline networks
- Coal plant retirements and the topography of transmission requirements
- Illinois-investment in smart grid
 - Big roll out of augmented manufacturing
- Timing of EPA regs
 - Forcing us into reliability crisis
 - Midwest has more coal generation than other regions
 - Not enough time for fuel switching
 - AEP-quickest they have done a retrofit for a plant is 49 months (regulatory condition approval, installation, testing, EPA approval)
 - IN agrees on the timing issue around the EPA rules
- Transmission and pipeline infrastructure issues are not the same
 - Anything we can do to speed up transmission siting would be very helpful
- Private sector, research institutions and government need to work together and talk about priorities
 - Create a framework to gather those interests together and communicate as one
- How do we talk about strengths that can resonate with the MGA branding group, especially on a more positive Midwestern narrative?
- Biofuels-not a consistent message across the industry
 - RFS-Congress might be trying to get rid of the RFS next year
 - Might be time to develop a consistent message for the region and the industry-most of it is here .
- WER/cogeneration
 - Ohio gravitated to this topic through state discussions but also the work DOE is doing. Ohio has significant amount of potential in this area.
 - These are technical projects, several hurdles
 - MW Clean Energy Application Center is reaching out to boiler MACT facilities, free service offered through DOE

- Until the price structure changes, these types of projects will be behind the meter and used as an internal power source
- Difference in how each state defines renewable energy creates a challenge
 - An idea of aspiration to get the definition to be consistent
 - Changing the definition within a state can create uncertainty
 - OH recently had some experience in this area when trying to change RPS policy to recognize CHP and WER
 - IN does not have a mandatory RPS so in a bit of a different situation
- Multiple rules when transporting things across states lines
 - When rules are harmonized it makes it a bit easier to do business
 - Compare and develop best practices
- Debate between MISO and PJM to exchange capacity between the regions
 - The other issue is interconnection and smoothing
 - Need to get rules changed so there will not be a reliability issue, need to explain to EPA why timeline is going to cause these problems
 - MISO is a lot more impacted by EPA rules
 - Issue being debated in other forums

Notes of Group Discussions:

Impacts of Rapidly Changing Electricity Mix

The implementation of recent and proposed rules from the U.S. Environmental Protection Agency (EPA), an aging coal generation fleet, low natural gas prices and falling prices for some forms of renewable energy, are all expected to result in significant changes to the region's electric generation portfolio. Reflecting this reality, every state cited these likely changes in the future electric generation mix as a source of both challenge and potential opportunity for the Midwestern region.

1. Use MGA's (governors') convening power to bring together all the right people together to:

- a) Foster coordination and communication among generators, environmental advocates, consumer voices, regulators, transmission owners, etc. in order to better understand how decisions and impacts in any one state may affect the entire region. This effort would help advise MISO. (shorter-term focus)
- b) Develop a shared vision of what states want from a future electric system. E.g., how do we foster a robust manufacturing base?¹ (longer-term focus)

Specific issues for states to discuss further:

¹ Concern was expressed about spending time on larger aspirational efforts at the expense of identifying some specific things states can do together to make a difference in the near-term.

- i. More discussion of what the specific concerns are regarding EPA regulations and how utilities/states are planning for them.
- ii. Impact of 316b (water cooling). Could simply applaud the approach already being taken. Getting more flexibility on this requirement would provide more breathing room to focus on the other emerging regulations.
- iii. A bipartisan letter from MGA governors that explains the need for a realistic timeframe for responding to EPA regulations (based on reliability and cost concerns). There are bills already moving in the Senate that could provide an opportunity. Could lay out that states may differ on the wisdom of the regulations, but regardless see the need for a responsible timeline for compliance. Requires a legislative fix since timeline is in the Clean Air Act.
- iv. Financing: Availability of tax incentives and timelines within which they are available (e.g., expiration of the PTC is a major concern, but since utilities are already making large investments, unless Governors think they can quickly do something to shape the PTC decision, that particular financing option may be moot).
- v. Regional analysis on:
 - a. Which existing units will retire and where will new generation be built?
 - Map which coal plant closures will impact multiple states (may be hard to get this information from individual utilities, but could get aggregate info. from MISO). MISO most worried about multiple plants closing simultaneously. Would be beneficial for states to know which are “must run” plants so they can coordinate which plants go down when.
 - b. What transmission and pipeline investments are necessary to accommodate those changes?
 - c. How are the states planning to replace the power now generated by soon-to-be closing coal plants? Put another way, what strategies are states using to build a diversified energy portfolio?
 - What role can energy efficiency, distributed generation, CHP, and other resources play?
 - What state policy levers are available to help smooth this transition?

Energy Efficiency

Energy efficiency was highlighted by most of the MGA states as an important opportunity across the industrial, commercial and residential sectors. Member states all identify public buildings as a common priority.

Most of the MGA states also identified industrial energy efficiency (IEE), including combined heat and power (CHP) and waste energy recovery (WER), as strategically important for a range of reasons. The Midwest has strong manufacturing, significant energy production potential and a skilled workforce. Improved energy efficiency can help insulate domestic manufactures from future energy price spikes by reducing fuel input requirements. The Midwest can communicate these strengths and better coordinate to promote the region (instead of competing within) to attract capital and create more jobs.

Specific interests in IEE vary, but all are rooted in the common goals of increasing energy productivity and improving manufacturing competitiveness. IEE rose to the top for many states because of the importance of a strong manufacturing sector to the regional economy, IEE's potential as a compliance strategy for new air quality regulations, and because CHP and WER are potential sources for new base load energy generation (in the context of a changing electric generation mix, and one that is likely to have more variable renewable energy on it).

Public Building Efficiency

1. Information sharing

- a) Could be useful to conduct a benchmarking exercise among the member states. This would catalogue what other states are achieving and the cost-effectiveness of their strategies (including different metrics for different types of facilities). This could include local government buildings and state buildings.

2. Highlighting and recognizing successes

- a) Publish and share success stories in a way that is accessible to all member states.

3. Develop shared regional goals

Industrial Energy Efficiency

1. Highlighting successes

- a) Case studies and events

2. Share information

- a) Compare best practices, policies, and other tools for advancing IEE.
- b) Information sharing on how states are using software and IT solutions to advance energy efficiency programs.
- c) Share examples of model programs to advance combined heat and power
- d) Information sharing on creative approaches for energy efficiency financing.

3. **Research and analysis**

- a) Review state laws and regulatory enforcement strategies
- b) Identify model utility programs and policies
- c) Assess scale of manufacturing and economic development opportunity. Economic supply chain analysis (who manufactures EE products and delivers those services?)
- d) Assessing cost-effectiveness of existing programs
 - *NGA might be planning work in this area*

4. **Develop a regional partnership with DOE** and other public and private technical assistance providers to help manufacturers achieve compliance with environmental regulations (modeled on Ohio PUCO partnership).

5. **Develop consensus best practices or policies.** (Could be useful from an information-sharing standpoint)

Convene diverse stakeholder dialogue to explore new approaches to incentivize IEE investment:

- a) Innovative utility business models
- b) Policy tools and programs that attract private financing.
- c) Enforce environmental laws in ways that reward EE, as an emissions control mechanism or as a tool to help reduce compliance costs

6. **(Re)evaluating programs.** Relative cost effectiveness of EE programs is question. What is the return of other programs in other states? How do you judge relative performance?

Distributed Generation

Renewable energy development was an issue identified at some level by all MGA states. For example, many states see opportunities to improve the supply chain for renewable energy manufacturing. The issue of distributed generation (DG), defined as small-scale electricity generation that is connected to the distributed system, rose to the top among states as an area ripe for cross-state collaboration.

1. **Information sharing on developing and implementing distributed generation policy:**

- a) What are the lessons learned or best practices related to interconnection standards, net metering and permitting projects?
- b) Share lessons from state stakeholder process to examine changes to existing DG policies.
- c) Model legislation for project permitting, try to stem cost over-runs for excessive permitting

- d) Consistent technical standards
- e) Size and ownership are major issues, third party leasing
- f) Rate impacts from DG deployment

2. Explore opportunities to collaboratively increase renewable energy manufacturing and build renewable energy and advanced technology supply chains. A number of states have been researching and supporting the build out of robust renewable energy supply chains. Many states have strength in solar, wind, advanced battery, and other renewable energy businesses.

Diversifying the Transportation Fuel Mix and Building the Needed Infrastructure

Transportation is an important issue for all Midwestern states, but areas of interest and specific strategies to address future transportation challenges vary from state-to-state. The current transportation issues identified by MGA states fall under electric vehicles (EVs), renewable fuel development and natural gas vehicles. Each of these transportation areas requires some level of additional infrastructure to deploy the alternative vehicle technology.

1. Coordinated infrastructure deployment for alternative fuels to ensure a coherent refueling infrastructure across each fuel type.

- a) Data collection and mapping of alternative transportation corridors, clusters and future plans.
- b) Identify and collect information on pilot projects in different states/cities in order to develop a coherent infrastructure across fuel types and to share lessons learned.
- c) Conduct a “gap analysis” on where states are putting alternative fuel infrastructure (EV, NG and Biofuels). Where are they today, where should they strategically go so that companies can plan accurately.

Electric Vehicles

1. Information sharing

- a) What infrastructure are states planning to install so that neighboring states can build infrastructure that creates a coherent system?
- b) Procedures for how charging stations are permitted, sited, regulated, etc. There is a working group under the NGA working on this—mostly utility commissioners—but bringing together other relevant stakeholders could be very valuable. NGA put together a best practices chart that MGA could obtain and build upon for the Midwest.
- c) How are states handling technology standards for charging stations (e.g., if they are public they need to have two-way communication so that users would know when a

station is in use). Would be great to develop common requirements for communications.

2. ***Certification of installers for EV charging stations.*** Are there other models for how to do this? IL in the midst of a rule-making on this (unclear about which side of the meter this is needed, or both). Does it raise Commerce Clause issues?
3. ***How to handle EV charging stations as a “benefit” to public employees***—when there are rules about providing the same benefits to all employees, do EVs constitute a new benefit that must be provided equally to all employees? How are other states handling this (e.g., IL charges a fee to get around this; a third-party vendor operates the station).
4. ***Offer third-party opportunity to install and manage EV charging stations as a standard part of every parking facility remodel/repavement project***
5. ***Agree on common signage*** (MI has adopted signage); or at a minimum collate all the signs being used. Look at what other Governors’ Associations are doing on this topic.

Natural Gas

1. ***Convene relevant stakeholder to develop a shared strategy (and certainty) on where states are putting stations.***
 - a) Main station developers (e.g., KwikTrip) to understand their plans for alternative fueling infrastructure and what barriers they face and what partnership opportunities they see.
 - b) Likely users of NG refueling infrastructure; could split the conversation between long-haul vehicles and short-haul. This could include companies like FedEx and UPS. 13 states have already developed an MOU on state fleet use of NG (OH is one of them).
 - c) Convene national associations to assist with alt. fuel deployment (e.g., the American Lung Association helped on E85) to see if there are ways they might play a similar facilitator/educator role with natural gas or EV infrastructure.
2. ***Share information*** on the quality of biogas required for transportation use.
3. ***Tie this transportation infrastructure development effort*** with the other prong of Governor Branstad’s Chair’s agenda—MGA’s Branding the Midwest effort (e.g., Midwest as a transportation hub and manufacturing hub).

Renewable Fuels

1. ***Support federal renewable fuel policy***
 - a) Renewable Fuels Standard (RFS2) as a jobs and economic development benefit for the region, both direct and indirect jobs.

- b) Support renewal of the federal biodiesel credit (expired last year).

2. Share best practices and address barriers to biofuels development:

- a) Infrastructure for E15 (e.g., accelerate deployment of blender pumps).
- b) Encourage MGA member states to identify barriers in their own states, remove barriers and align standards
 - i. Work together to identify state-specific rules and regulations that need to be changed or modified to increase biofuel blending capabilities. Learn from steps taken by other states in the region such as Iowa or Kansas.

Natural Gas Development

Midwestern states are involved in different aspects of natural gas development, transport and storage. The recent increase in the domestic natural gas resource potential brings both economic opportunity and potential challenges to the region.

1. Information sharing:

- a) Local impacts (e.g., sand mining). MGA states can learn from each other about how states are working with local communities. Sharing information on how other states are handling sand mining permitting.
- b) Natural gas may result in more volatility in the fuel adjustment clause that consumers see. Is there anything that governors can do to help manage this volatility? Not sure, but may be a fruitful conversation among states.

Miscellaneous Issues Identified as Potentially Fruitful Opportunities for Cross-State Collaboration

- a) Evaluating each state's regulations governing water withdrawals to ensure compliance with the Great Lakes Compact.
- b) Share information on state water use plans and provide educational information on water use required for energy production.
- c) Copper theft and water use are the two biggest issues facing utilities. It would be great to have consistent laws on these two issues across the MGA member states (copper theft and water use).