

MIDWESTERN ENERGY INFRASTRUCTURE ACCORD

2009





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We commit to developing a robust energy infrastructure *to position the Midwest as America's leader in fostering energy security, reducing greenhouse gas emissions, and spurring jobs and investment in low-carbon energy development and technology manufacturing, and we have the following priority areas for infrastructure development:*

- *Expansion of electric transmission capacity in support of renewable energy development and distributed generation;*
- *Adoption of smart grid technologies and capabilities;*
- *Commercial build-out of carbon capture and storage (CCS); and*
- *Deployment of refueling systems for biofuels and other advanced low-carbon transportation fuels.*

Electric Transmission Capacity Expansion

WHEREAS, electric transmission expansion is essential for the Midwest to meet the Midwestern Governors Association (MGA) regional renewable electricity targets of 10 percent by 2015, 20 percent by 2020 and 30 percent by 2030; and

WHEREAS, the Regional Generator Outlet Study (RGOS) Phase I and II are currently being undertaken by the Midwest Independent System Operator (Midwest ISO) in collaboration with the MGA, the Southwest Power Pool (SPP) and other stakeholders to show what upgrades and expansions of the region's transmission system are necessary to meet those MGA targets; and the Eastern Interconnection Planning Collaborative Transmission Study is being done in conjunction with PJM Interconnection, the Midwest ISO and other eastern regional transmission operators to outline transmission needed for the eastern planning region; and

WHEREAS, the RGOS Phase I and II work groups, in collaboration with MGA states, are identifying high-capacity Renewable Energy Zones (REZ) in each MGA state for renewable energy development; and

WHEREAS, the five-state Upper Midwest Transmission Development Initiative, the Organization of Midwest ISO States' Cost Allocation and Regional Planning (CARP) work group and the Midwest ISO's Regional Expansion Criteria and Benefits (RECB) III cost-allocation task force are working with the MGA to develop a broadly supported proposal for equitable apportionment of the costs of regional transmission improvements, and recommendations from these three groups are forthcoming;

NOW, THEREFORE, BE IT:

RESOLVED, that we appreciate the ongoing cooperation between the MGA, Midwest ISO and SPP in undertaking regional transmission analyses, and the Eastern Interconnection Transmission Planning Collaborative done in conjunction with PJM, Midwest ISO, and others. We support the current Phase I and Phase II of the Midwest ISO's RGOS study that will outline transmission investments needed to meet the MGA goal of obtaining 10 percent of electricity consumed in the region from renewable sources by 2015, as well as providing indicative results for transmission expansion needed to meet the MGA's renewable electricity targets of 20 percent by 2020 and 30 percent by 2030; and be it further

RESOLVED, that we recognize that the designation of high-capacity Renewable Energy Zones in each state through the Midwest ISO's RGOS Phase I and II studies will help reach the above renewable electricity goals; and be it further

RESOLVED, that we support ongoing efforts by the MGA, Midwest ISO, SPP, utility regulators, utilities, transmission owners and operators, and other stakeholders to develop a cost-allocation formula that fairly apportions the costs of new transmission investments among generators, transmission owners and operators, and utility customers throughout our region; and be it further

RESOLVED, that we urge the above-mentioned parties to propose a cost-allocation formula by December 2009 for Midwest ISO RECB III task force consideration and that, upon Midwest ISO review, and in consultation with the SPP, the MGA can see a final decision by January 2011.

Adoption of Smart Grid Technologies and Capabilities

WHEREAS, “smart grid” technologies have the potential to enhance reliability, customer service, and grid integration of renewable energy; reduce peak load and consumers’ energy costs; and enable efficient use of existing transmission and distribution through improved distributed energy storage and adoption of plug-in hybrid electric vehicle technologies; and

WHEREAS, greater understanding is needed of the effects that smart grid technologies will have on reducing consumers’ energy use and on rates for lower-income consumers; and

WHEREAS, the federal government has announced smart grid initiatives and funding opportunities, smart grid pilot programs are ongoing in several Midwestern states, and the region can benefit by accelerating adoption of effective smart grid technologies by investor-owned, municipal and cooperative utilities;

NOW, THEREFORE, BE IT:

RESOLVED, that we will establish by December 2009 a regional collaborative through the MGA involving relevant state officials, utility, and other stakeholders to:

- Develop a standard, Midwest-wide understanding of a smart grid;
- Determine, based on studies and the results of new and existing Midwestern pilot projects, the effect of smart grid technologies on emissions reductions and consumers’ energy consumption;
- Recommend effective means to prepare for the integration of electric vehicle technologies into the smart grid, including appropriate rate designs and the means to enable customer-owned electric vehicles to store and supply power to the grid;
- Recommend options to address the specific needs of lower-income consumers;

- Define regional protocols for measurement and verification of smart grid pilot projects;
- Recommend how to maximize energy efficiency and emissions reductions from smart grid programs; and
- Convene a Midwestern smart grid event that would present results of the above studies and final recommendations from the collaborative; and be it further

RESOLVED, that the smart grid collaborative will report to the MGA with final recommendations by December 2010.

Commercial Build-Out of Carbon Capture and Storage

WHEREAS, carbon capture and storage (CCS) represents a key component of the broader portfolio of options for reducing greenhouse gas emissions, and the Midwest has extensive oil and gas and deep saline formations with significant potential for geologic storage of CO₂; and

WHEREAS, some U.S. states have existing authorities and a track record of successfully managing the transport, injection and underground storage of CO₂ and other gases, and further state and provincial leadership will help inform the development of an effective CCS regulatory framework at the federal level; and

WHEREAS, the MGA has established regional goals for commercial deployment of key advanced coal technologies with CCS between 2012 and 2015 and for incorporation of CCS into all new coal-based energy facilities by 2020; and

WHEREAS, enhanced oil recovery (EOR) using CO₂ captured from coal gasification, natural-gas processing, and ethanol and fertilizer plants has been proven to be a fully commercial, safe and effective process in the Midwest and around the world for extending the production of oil and gas fields and for enabling long-term geologic storage of CO₂; and

WHEREAS, commercial-scale storage of CO₂ in deep saline formations has been demonstrated successfully in the North Sea, and promising smaller-scale storage tests are underway in the Midwest; and

WHEREAS, analysis undertaken for the MGA suggests the potential to use 530 million metric tons of captured CO₂ to produce 2.2 billion barrels of otherwise unrecoverable domestic oil in the Midwest, while achieving a significant net CO₂ reduction over imported oil; and

WHEREAS, CO₂ EOR can provide a near-term revenue stream for CO₂ capture and transport, thus helping finance the build-out of a pipeline infrastructure needed for future long-term storage of CO₂ in higher-capacity deep saline formations;

NOW, THEREFORE, BE IT:

RESOLVED, that we will strive to secure the siting and permitting of at least one multi-jurisdictional CO₂ pipeline by 2012, commercial scale CO₂ capture at key demonstration projects between 2012 and 2015, and incorporation of CCS into all new coal-based energy facilities by 2020; and be it further

RESOLVED, that we applaud the important progress made by several MGA jurisdictions toward meeting the critical near-term MGA goal of achieving by 2010 a consistent state/provincial statutory and regulatory framework across the Midwest for CO₂ transport, injection, storage, liability and long-term site stewardship; and be it further

RESOLVED, that we recognize the need for a phased commercial CCS-deployment strategy:

- Through 2020, focused primarily on CO₂ EOR and assessment of potential future CO₂ storage in saline formations, and including:
 - o A CO₂ trunk pipeline from the Midwest to the Gulf Coast serving a cluster of commercial capture projects in Illinois, Indiana and Ohio; and
 - o Individual commercial capture projects and associated pipeline infrastructure in Kansas, Michigan, Missouri and North Dakota;
- After 2020, expanding to storage in deep saline formations and linking all MGA jurisdictions into a common CO₂ pipeline network that provides commercial facilities in Iowa, Minnesota and Wisconsin access to storage opportunities not available within their state boundaries; and be it further

RESOLVED, that we will appoint through the MGA, by December 2009, a regional CCS task force consisting of officials from relevant agencies, with participation and input from stakeholders, and tasked with the following responsibilities:

- Review emerging CCS legislation in MGA jurisdictions and the MGA “Legal and Regulatory Inventory for Carbon Capture and Storage & Analogues” and the MGA “Toolkit for Carbon Capture and Storage: Statutory and Regulatory Issues” and implement immediate steps needed to accomplish the development and harmonization of state/provincial CCS statutory and regulatory policies by 2010;
- Review and inform the development of legislation and regulations emerging from the federal level, ensuring that federal programs do not preempt states that choose to develop comprehensive CCS regulatory programs;
- Review and implement, as appropriate, recommended actions from the MGA Renewable Electricity, Advanced Coal and CCS Advisory Group, including:

- o State incentives for CCS deployment to complement existing and proposed federal incentives;
- o Establishment of publicly regulated state and/or geologic basin-wide CO₂ sequestration utilities to provide commercial energy and other facilities with a comprehensive and predictable CO₂ storage solution; and
- o Preliminary siting of Gulf Coast and other CO₂ trunk lines to plan the build-out of a regional pipeline network; and be it further

RESOLVED, that the task force present final recommendations to the MGA by June 2010, with legislative recommendations regarding establishment of a CCS regulatory framework to be finalized sooner as necessary.

Deployment of Refueling Systems for Biofuels and Other Advanced Low-Carbon Transportation Fuels

WHEREAS, the Midwest has the greatest potential of any region in America for both the production of biofuels and the production of renewable and low-carbon electricity and hydrogen to power the future fleet of plug-in hybrid and fuel-cell electric vehicles; and

WHEREAS, the MGA has established regional goals that biofuel blends and other low-carbon advanced transportation fuels be available at 15 percent of retail fueling stations by 2015, 20 percent by 2020 and 33 percent by 2025, and that at least 50 percent of transportation energy consumed in the region will be supplied by regionally produced biofuels and other low-carbon advanced transportation fuels by 2025; and

WHEREAS, widespread availability of the retail and fleet refueling infrastructure provides a necessary complement to federal and state incentives for the production of biofuels and other advanced low-carbon transportation fuels;

NOW, THEREFORE, BE IT:

RESOLVED, that we will jointly launch a regional initiative to accelerate the development of a refueling infrastructure for E85, biodiesel, other advanced biofuels, blender pumps, hydrogen refueling, and electric vehicle recharging; and be it further

RESOLVED, that the MGA will convene an inter-agency working group consisting of officials from relevant agencies, together with participation and input from stakeholders, including refiners, distributors and marketers of fuels, to consider and implement, as appropriate, recommended actions from the MGA Bioeconomy and Transportation Advisory Group, including:

- Creation of a “clean-fuel retailers program” that includes mechanisms to expand retail distribution of biofuels and advanced low-carbon fuels throughout the region, such as:
 - o Financial incentives for infrastructure development and deployment;
 - o Public recognition and incentive payments for retail and wholesale outlets for attainment of fuel sales benchmarks; and
 - o Public education efforts that include providing clear definitions of what constitutes qualifying fuels and vehicles, mapping of qualifying refueling stations in the Midwest, and publicly sponsored branding with a “Clean Fuel” logo for qualifying retailers and vehicles; and
- Incentives and other policies to increase the quantity of biofuels and other advanced low-carbon transportation fuels used in state/provincial fleet vehicles; and be it further

RESOLVED, that the working group be convened by January 2010 and report back to the MGA with final recommendations by December 2010.

Coordination and Implementation

WHEREAS, successful longer-term implementation of the above-mentioned initiatives and related MGA policy recommendations will require sustained attention from, and coordination among, relevant state and provincial officials with ongoing responsibility for overall policy and program implementation;

NOW, THEREFORE, BE IT:

RESOLVED, that we invite regional associations representing utility regulatory commissions, energy offices, departments of agriculture, environmental regulatory agencies, other executive branch agencies as appropriate, and legislative assemblies to work with the MGA to organize a regional meeting of state and provincial officials and leaders in 2010 to identify ways to encourage inter-jurisdictional and inter-agency cooperation and help coordinate the implementation of the above recommendations and initiatives, together with recommendations in the MGA’s *Platform for Creating and Retaining Midwestern Jobs in the New Energy Economy* and the MGA’s *Energy Security and Climate Stewardship Roadmap: Advisory Group Recommendations*.

DONE, this 7th day of October, 2009, in Detroit, Michigan.