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Clean Energy and Climate Change Policy in the Midwest

by David Farnsworth, Edith Pike-Biegunska and Liz Baldwin

Introduction

As the U.S. Congress debates a climate policy for the nation, there is a common misconception that states from the Northeast and the West have embraced clean energy policies while states from the Midwest neither recognize such policies nor rely significantly upon renewable resources and energy efficiency to meet electricity needs.¹ This is a mistaken view that ignores the numerous forward-looking regional initiatives such as the Midwestern Greenhouse Gas Reduction Accord, the Midwestern Energy Infrastructure Accord, and the Midwestern Energy Security and Climate Stewardship Roadmap. (See Appendix.) This view is further contradicted by the significant activity in individual Midwestern states to deploy energy efficiency and renewable resources, and to support more productive and sustainable energy use.

Today, these policies are more important than ever. The National Association of Regulatory Utility Commissioners' Task Force on Climate Policy has recognized that state "clean energy" policies, i.e., those that promote energy efficiency and renewable energy, can be relied upon to do much of the heavy lifting required to reduce carbon emissions in the electric sector, and to mitigate price impacts of a national carbon policy. (See "Clean Energy Policies" text box.) Indeed, clean energy policies are not just complementary relative to a cap-and-trade program; they are the key to lower cost reductions in the energy sector. States that are aggressively promoting such policies can be expected to enjoy a lower cost of carbon compliance and environmental improvement, and a greater ability to defer costly investments in energy infrastructure, i.e., generation, transmission and distribution facilities.

This document reviews activity in six Midwestern states: Illinois, Iowa, Kansas, Michigan, Minnesota and Wisconsin. We endeavor to provide examples of the efforts that these states have undertaken to confront the challenge of climate change and to formulate policies that will develop cleaner and more sustainable energy sectors. The discussion below is organized by state and focuses primarily on legislation, climate action plans, and administrative activity related to the deployment of energy efficiency and renewable energy.

All six states are engaged in climate action planning in response to challenges posed by global warming and related opportunities for the development of cleaner energy and more robust economies. These states are improving their energy efficiency programs, for instance, by articulating more aggressive and measurable targets, adopting improved building codes, and exploring new business models and methods of financing to encourage utility participation. Each state is pursuing the development of large- and small- scale renewable resources through such policies as renewable portfolio standards (RPS) and net metering. These policies are explained in more detail in the state narratives. In brief, we conclude that in the last several years, each of these Midwestern states has developed policies and refined mechanisms to promote cleaner and more sustainable energy sectors.

Clean Energy Policies are "Climate Policies"

In July 2009 the National Association of Regulatory Utility Commissioners (NARUC) issued its fourth *Climate Issues Brief* in which it emphasized the fundamental role that clean energy policies play in addressing climate change. According to NARUC:

For decades, the goals of State clean energy investment have been consistent with initiatives that only now are being explicitly described as "carbon policies." Recent experience demonstrates that such policies as programmatic end-use energy efficiency and renewable portfolio standards are not merely "complementary" to the price signal established by a carbon policy, but could constitute the primary means for reducing CO2 emissions in the energy sector.

The central challenge of a national climate policy, explains NARUC, is to achieve deep emissions cuts while minimizing economic disruption. The price signal sent by cap-and-trade regulation only gets us partway there and, on a cost-per-ton-of-abatement basis, will be far more expensive than necessary. Recognition of the valuable role to be played by clean energy programs in achieving these goals is critical:

Instead of relying solely on price to drive emissions reductions, policymakers can facilitate significant reductions through expansion of a wide range of State-level clean energy programs and support for demonstration projects in new technologies. Carbon programs that allocate allowances for consumer benefit and invest allowance values in clean energy programs have the potential to provide the greatest benefit to energy consumers. Strategic investment of auction allowance values through expanded State clean energy programs will enable low-cost reductions in CO2 emissions and will keep allowance prices and end-user electric rates significantly lower than would occur from a price signal alone.

NARUC Task Force on Climate Policy, Climate Issue Brief #4, "State Clean Energy Policies: The Foundation for an Electric Sector Cap-and-Trade Program," July 2009. Available at http://www.naruc.org/committees.cfm?c=58.

Illinois

Illinois is addressing climate change in a number of ways, including participating in the Climate Registry and Midwestern Greenhouse Gas Reduction Accord, and setting statewide reduction targets for greenhouse gas (GHG) emissions. (Briefly, the Climate Registry is a voluntary GHG emissions reporting system, covered more fully in the appendix to this report.) Recent legislation promotes clean energy by setting energy efficiency targets in the natural gas and electricity sectors and introducing an RPS for electric utilities.

In 2007, Illinois' Climate Change Advisory Group issued a report calling for specific measures to mitigate GHG emissions in the power/energy sector. These goals include bringing GHG emissions to 1990 levels by 2020 and further reducing emissions to 60 percent below 1990 levels by 2050.²

The 2007 Illinois Power Agency Act (Act) promotes clean energy in a number of ways, including by setting specific targets for efficiency and renewable resources. The Act integrates these targets into a new competitive procurement process for electric utilities, overseen by a not-for-profit state entity, the Illinois Power Agency (Power Agency), which is charged with overseeing the procurement planning process.³ Plans are developed annually to cover a five-year period and must strive "to ensure adequate, reliable, affordable, efficient, and environmentally sustainable electric service at the lowest total cost over time..."⁴

Recent amendments to the Illinois Public Utilities Act (Utilities Act) have introduced a mandatory energy efficiency resource standard (EERS), coupled with specific demand response goals.⁵ An EERS is a tool that promotes energy efficiency by requiring utilities to meet a quantified energy efficiency goal. The goal can be applied to electricity, natural gas consumption or both. The Illinois EERS sets a savings target of 0.2 percent of energy delivered in 2008-2009, rising incrementally to 2 percent of energy delivered in 2015 and annually thereafter. ⁶ The Act further requires Illinois electric utilities to implement demandresponse measures to reduce peak demand by 0.1 percent over the prior year, beginning in 2008 and continuing for 10 years.

Electric utilities are charged with "overseeing the design, development and filing of energy efficiency and demand-response plans with the Commission."⁷ They are responsible for implementing 100 percent of the demandresponse measures in the plan, and 75 percent of the energy efficiency measures approved by the Commission. The remaining 25 percent of energy efficiency measures are to be implemented by the Department of Commerce and Economic Opportunity (DCEO) and must be designed in cooperation with utilities.⁸ Program responsibilities are divided to promote a collaborative relationship between DCEO and each utility.

Recent amendments to the Utilities Act have also introduced efficiency targets for natural gas. These savings targets begin at 0.2 percent of gas delivered to retail customers in 2012, and rise incrementally to 1.5 percent of gas delivered to retail customers in 2019 and annually thereafter.⁹

Building standards represent another focal point of Illinois' energy efficiency policy. Illinois has worked to bring its building standards in line with nationally accepted "model codes" for residential and commercial buildings. The national residential model code is known as the International Energy Conservation Code (IECC) and was most recently updated in 2009.¹⁰ The commercial code is set by the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE), with the most recent update set forth in ASHRAE 90.1-2007.¹¹ The Illinois General Assembly recently passed a bill (H.B. 3987), requiring the Illinois Capital Development Board to adopt the most recent IECC standards and ASHRAE 90.1-2007 statewide.

The Act also establishes an RPS, a policy that promotes the development of renewable energy by requiring utilities to meet some amount of their total energy supply from renewable sources. An RPS can mandate compliance either through the acquisition of capacity (megawatts, MW) or energy (megawatt-hours, MWh). An RPS that sets compliance targets as a percentage of energy supplied provides a company with the additional flexibility to meet its requirements not only through the purchase of energy, but by adding typically lower-cost energy efficiency to the mix.

Under Illinois' RPS, electric utilities must procure renewable energy sources to meet 2 percent of their annual sales by July 2008, increasing to 25 percent by 2025.¹² Of this supply, 75 must come from wind generation, and starting in 2015, 6 percent must come from solar resources. The Act further prioritizes procurement of in-state renewable generation where "cost-effective." Illinois utilities may meet the RPS requirements through purchase and retirement of renewable energy credits (RECs). RECs represent the renewable and environmental attributes from one MWh of electricity generation from a renewable energy generating unit.¹³

Amendments to the Act passed in July 2009 extend the RPS to alternative retail electric suppliers and electric utilities operating outside their service territories (alternative suppliers). Alternative suppliers must meet the same RPS as other electric utilities; however, the method of compliance is different. At least half of the RPS must be met through alternative compliance payments. The Commission sets rates for these payments, based on formulas set forth in the legislation.¹⁴ Any portion of the RPS not met through alternative compliance payments may be met with RECs, and must be met with a mix that includes 60 percent wind generation and, starting in 2015, 6 percent solar generation.¹⁵

Alternative compliance payments are deposited in the Illinois Power Agency Renewable Energy Resources Fund. The fund was created in August 2009 to purchase and retire RECs.¹⁶

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Iowa has taken a number of steps to address climate change. It is a member of the Climate Registry and Midwestern Greenhouse Gas Reduction Accord. Several state agencies, including the Climate Change Advisory Council, Office of Energy Independence, and Iowa Utilities Board (Board), are addressing climate change on a state level. Iowa further requires all investor-owned electric and gas utilities to prepare energy efficiency plans and to periodically report on plan implementation. Since enacting an RPS in 1983, Iowa has also encouraged renewable energy production, particularly wind generation.

In 2007, Iowa established a Climate Change Advisory Council (Council), charged with identifying multiple scenarios for reducing GHG emissions in the state.¹⁷ The Council issued its final report in 2008, proposing 56 strategies for reducing GHG emissions, nearly half of which relate to energy efficiency, conservation, and clean and renewable energy policy.¹⁸ Also in 2007, the Iowa legislature created a new Office of Energy Independence (Office) and directed it to identify measures for "reducing the state's consumption of energy, dependence on foreign sources of energy, use of fossil fuels, and greenhouse gas emissions."19 The Office is required to submit annual energy independence plans to the legislature that identify cost-effective options and strategies to promote clean energy. For example, the last plan called for the development of, among other things, an EERS.

Following the passage of the American

Clean Energy and Security Act (Waxman-Markey bill) by the House of Representatives, the Board opened an investigation into the implications of federal climate legislation in Iowa. Between August and October 2009, the Board conducted workshops and meetings, providing an opportunity for stakeholders, including various state agencies, utilities, and organizations, to express their views. The Board is currently reviewing the information gathered through its workshops.

Iowa has also taken steps to promote energy efficiency in the state. While Iowa does not have an EERS, electric and gas utilities, in cooperation with the Board, are required to establish energy efficiency plans that include targets. Meeting these goals is optional; however, utilities must report annually on their progress. Plans are developed through a threestep process, beginning with the utilities' assessment of the potential energy and capacity savings available from energy efficiency. The Board reviews these assessments and develops energy and capacity performance standards for each utility. Finally, each utility develops an energy efficiency plan which must incorporate "economically achievable programs" designed to meet the standards set by the Board.²⁰ The Board is further required to report to the General Assembly on the status of utility energy efficiency and load management programs.21

In 2008 the Board issued an order requiring Interstate Power and Light Company, MidAmerican Energy, and Aquila, Inc. to re-file their energy efficiency plans. The order set forth several specific requests, including extending the analysis of each utility's annual energy efficiency goals to include higher performance targets and a cost scenario that incorporates the impact of national carbon regulation in their analysis of "future supply options and costs."²² The three utilities' revised energy efficiency plans were approved by the board in January 2010.²³

Legislation adopted in 2008 created a Commission on Energy Efficiency Standards and Practices, which is charged with reviewing the state's energy standards for new and existing residential, commercial and industrial buildings. The Commission's final report is due in 2011. ²⁴ Iowa has also adopted mandatory statewide building codes, including the 2006 IECC for residential buildings, and ASHRAE 90.1-2004 for commercial buildings. Plans are underway to upgrade to the 2009 IECC in 2010.

Iowa was one of the first states to introduce an RPS with its Alternative Energy Production Law, passed in 1983. The law required Iowa's two investor-owned electric utilities, Interstate Power and Light, and MidAmerican, to purchase a combined total of 105 MW of power from renewable sources of energy.²⁵ This target intiated significant development of renewable energy in the state, and has long since been surpassed.²⁶

A number of incentives have contributed to the most recent expansion of wind energy in Iowa, including favorable tax treatment, an alternative energy revolving loan program, and direct support for wind manufacturing by the Iowa Department of Economic Development.²⁷ Utilities have also taken advantage of expedited procedures for approving new wind projects and including costs in rates.²⁸

The Board has recently issued three favorable rulings recognizing the benefits of wind resources. It has expansively interpreted a provision of the Iowa Code to waive, for certain wind projects, the requirement that the utility obtain a certificate of public convenience, use, and necessity before commencing construction of new wind generation.²⁹

Kansas

Kansas has made significant progress towards understanding and addressing climate change challenges in-state through the creation of the Kansas Energy and Environmental Planning Advisory Group (KEEP), as well as more broadly through its participation in the Climate Registry and the Midwestern Greenhouse Gas Reduction Accord.³⁰ The Kansas Corporation Commission is also aggressively investigating issues related to the expanded deployment of energy efficiency, and recent legislation introduces an RPS and net metering standards for distributed generation.

KEEP was established by Executive Order in 2008.³¹ It is charged with identifying opportunities for Kansas to respond to the challenge of climate change with a focus on economic growth, energy efficiency, and energy independence. An interim report issued in January 2009 establishes a preliminary GHG inventory for Kansas, covering 1990-2025 and identifying a number of priority policy options for the energy supply sector. ³²

Over the past few years the Kansas Corporation Commission (Commission) has actively pursued a broader role for energy efficiency in the electric sector. Since 2006, the Commission has opened three dockets to investigate energy efficiency programs. In September 2006, the Commission opened its inquiry with a general investigation regarding efficiency in Kansas, where it found that it has the authority to approve energy efficiency programs, to provide incentives for utilities to promote energy efficiency, and to establish cost-recovery methods for efficiency programs (Docket No. 07-GIMX-247-GIV).³³

Subsequently, the Commission opened an investigation addressing cost recovery and incentives for energy efficiency (Docket No. 08-GIMX-441-GIV), and another regarding benefit-cost analysis and program evaluation for energy efficiency programs (Docket No. 08-GIMX-442-GIV). In its final order in Docket No. 08-GIMX-441-GIV, the Commission asserted its authority not only to approve, but to require energy efficiency measures from utilities in rate proceedings initiated by the Commission. The Commission also said that it would weigh energy efficiency in equal, if not preferential, terms in relation to other potential energy resources; would consider proposals for riders for cost recovery for energy efficiency programs; and will consider decoupling proposals from utilities, voicing a preference for full decoupling as the best way to address the throughput incentive.³⁴ In the second investigation, Docket No. 08-GIMX-442-GIV, the Commission provided guidance on efficiency program benefit-cost analysis, and evaluation, measurement and verification.

Kansas has also promoted energy efficiency through adoption of the 2006 IECC for commercial buildings throughout the state.

In May 2009 Kansas enacted H.B. 2369, the Renewable Energy Standards Act and Net Metering Easy Connection Act. Utilities must provide 10 percent of their peak demand from 2000-2015 with renewable resources. The standard rises to 15 percent of peak demand, 2016 to 2019, and 20 percent of peak demand for each calendar year from 2020 on.

Net metering is a policy that allows individual electric consumers to generate their own electricity on-site, and to sell back the excess production to their retail power company. Kansas' net metering standards apply to residential generation up to 25 kW and to other on-site generation (i.e., commercial, industrial, government, agricultural, and institutional) up to 200 kW.The Commission has initiated a stakeholder dialogue in preparation for a rulemaking under H.B. 2369. ³⁵

Michigan

Michigan has taken a number of steps to study climate change and climate policy through its creation of the Climate Action (Council), as well as its participation in the Climate Registry and the Midwestern Greenhouse Gas Reduction Accord. Michigan has also promoted clean energy policy through the Public Service Commission's "21st Century Energy Plan" (Plan) and the recent adoption of legislation creating an EERS and RPS.

Michigan established the Council in 2007. Its charge was to inventory statewide GHG emissions, recommend policy options, and develop a comprehensive climate action plan. The Council released an interim report in April 2008 and delivered more than 50 policy recommendations in March 2009. ³⁶ Building upon Council recommendations, in July 2009 the Governor issued Executive Directive No. 2009-4, which sets a goal to reduce the state's GHG emissions to 20 percent below 2005 levels by 2025, and 80 percent below 2005 levels by 2050.

In 2007, and in response to Executive Directive No. 2006-02, the Michigan Public Service Commission (Commission) released its Plan. The Plan was designed to boost Michigan's energy self-reliance by deploying the cleanest available utility-built generation, energy efficiency and renewable sources of energy.³⁷

In late 2008, Michigan adopted several bills that promote energy efficiency and renewable resources. S.B. 213 establishes an EERS for the state's electric and natural gas utilities. Under this statute, by 2011, electricity providers must save an amount equal to .75 percent of prior-year sales. In the same time frame, natural gas utilities must save .5 percent of prioryear sales. After 2011, the EERS increases to 1 percent for electric utilities, and .75 percent for gas utilities.

Michigan is further promoting energy

efficiency through a mandatory statewide building code, and has adopted a uniform residential energy code based on the 2003 International Residential Code with 2004 IECC supplements, and ASHRAE 90.1-1999 for commercial buildings.

S.B. 213 also established a "renewable energy capacity portfolio" standard for Michigan of 10 percent by 2015. 38 Compliance is allowed through actual generation, the surrender of RECs, and through energy optimization schemes. The definition of renewable resources for purposes of the RPS includes biomass, both solar photovoltaic and solar thermal energy, wind energy, hydroelectric power, and geothermal energy. A maximum of 10 percent of the RPS can be met with clean energy technologies that reduce fossil fuel emissions by 85 percent relative to average coal power plant emissions or with integrated gasification combined-cycle facilities that reduce emissions by 70 percent.

S.B. 213 also contains a provision that directs the Commission to establish a statewide net metering program. In March 2009, the Commission issued an order approving new net metering rules and revised interconnection rules.³⁹ In May 2009, the Commission formally adopted net metering rules.

The Commission has approved two pilot decoupling mechanisms in the state. In November 2009, the Commission approved a pilot decoupling mechanism for Consumer Power, effective December 1, 2009, and in January 2010, the Commission approved a pilot decoupling mechanism for the Detroit Edison Company. ⁴⁰ The Commission's November 2009 order is currently subject to a motion for reconsideration submitted by Consumer Energy.

Minnesota

Minnesota has taken numerous steps in developing climate policy, including the establishment of its own Climate Change Advisory Group and participation in the Climate Registry and Midwestern Greenhouse Gas Reduction Accord. Recent Minnesota legislation has established an EERS for utilities, and an RPS that applies to investor-owned utilities, cooperatives and municipal utilities.

In 2007, the Minnesota Legislature passed the Next Generation Energy Act (NGEA), which sets statewide GHG reduction targets.⁴¹ The NGEA requires the development of a climate change action plan to identify policies that will help achieve the GHG emissions reduction goals, including a study of the feasibility of a cap-and-trade system. Mandatory policies include a partial moratorium on new coal generation projects and new energy efficiency goals.⁴² Also in 2007, Minnesota passed legislation enhancing the state's RPS.⁴³

The NGEA calls for the development of a comprehensive plan to reduce Minnesota's emissions of greenhouse gases. Minnesota convened the Climate Change Advisory Group (Advisory Group) to prepare a Climate Mitigation Action Plan for presentation to the governor and the legislature in February 2008. Beginning in April 2007, this 56-member group, representing a range of public-/private-sector organizations and citizen interests, developed recommendations for reducing or sequestering GHG emissions, and identified opportunities to promote energy-efficient technologies and clean, renewable energy resources. The Advisory Group produced a report in April 2008.44

Certain utilities are required to file integrated resource plans with the Commission.⁴⁵ The plans identify the potential resources that the utilities intend to use to meet consumer needs in future years, including significant energy efficiency and conservation savings. Under the NGEA, GHG emissions must be considered in utility resource planning, with the Commission establishing and annually updating a likely range of costs of future carbon regulation.

Minnesota has also adopted a residential energy code based on another recognized standard, the 2006 IRC, and a commercial code based on ASHRAE 90.1 – 2004.⁴⁶

Prior to passage of the NGEA, Minnesota utilities delivered energy efficiency programs through the Conservation Improvement Program, or "CIP."The establishment of savings goals in the NGEA represents a shift from a program design based on budgets to programs based on expected savings levels. The energysaving goals are set as a percentage of annual retail sales – 1.5 percent of sales for a utility furnishing electric service and 0.5 percent for a utility furnishing gas service.⁴⁷ These energysaving goals apply to investor-owned utilities as well as cooperative associations and municipalities.⁴⁸ Utilities are allowed to request a lower target, but not below 1 percent per year.

The NGEA authorizes the Minnesota Commission to adopt decoupling rules and implement a pilot decoupling program to assess the merits of a rate-decoupling strategy to promote energy efficiency and conservation.⁴⁹ The Commission submitted a report to the legislature in January 2009 describing its progress in establishing rules.⁵⁰ On June 19, 2009, the Commission adopted criteria and standards for decoupling.⁵¹ On January 11, 2010 the Commission approved CenterPoint Energy's request for, among other things, a pilot decoupling program.⁵²

The NGEA expands upon Minnesota's existing RPS. It requires that, by 2025, 25 percent of total retail electric sales in the state come from renewable sources.⁵³ This is a significant increase in scope from the preexisting RPS, and includes Minnesota's investor-owned electric utilities, generation and transmission cooperatives, and municipal power agencies. Since October 2007, Minnesota utilities have been required to participate in the Midwest Renewable Energy Tracking System (M-RETS), a multi-state tracking and trading system for renewable energy credits.⁵⁴

Wisconsin

Wisconsin has taken significant steps in developing climate policy and deployment of energy efficiency and renewable energy. Wisconsin's Task Force on Global Warming has developed clean energy policy recommendations. Wisconsin is also a member of the Climate Registry and the Midwestern Greenhouse Gas Reduction Accord. The Wisconsin Public Service Commission (Commission) is also investigating the establishment of an EERS that would be based upon quantified (MWh) reduction levels rather than percentage of revenue levels. In addition, Wisconsin is implementing an RPS with both interim and ultimate targets.

Wisconsin's Task Force on Global Warming was created in 2007. It was directed to create an inventory of the state's GHG emissions and developing policy recommendations for reducing emissions. Task Force work groups have developed policy proposals, including a cap-and-trade mechanism designed to reduce emissions to 1990 levels by 2020, with continued reductions until emissions are 70 percent below 1990 levels.⁵⁵

An interim report, released in February 2008, recommends several policies designed to enhance energy efficiency and wind energy in the state, as well as the investigation of the feasibility of geologic sequestration of carbon.⁵⁶ Additional Task Force recommendations include enhancing existing energy efficiency programs by adopting new efficiency goals that are based on savings rather than funding levels, and which will reduce electricity load growth by 2 percent (demand for natural gas by 1 percent) annually by 2015.⁵⁷

Under Act 141, enacted in 2005, Wisconsin's investor-owned electric and gas utilities must "collectively establish and fund" statewide energy efficiency and renewable energy programs. Funding levels for energy efficiency are set at 1.2 percent of revenues, derived by using a three-year rolling average.⁵⁸ Utilities have formed the Statewide Energy Efficiency and Renewable Administration, known as SEERA, to manage utility funds and contract with program administrators. SEERA has contracted with the Wisconsin Energy Conservation Corporation to administer the energy efficiency and renewable energy programs.59 Programs are marketed under the aegis of "Focus on Energy," an initiative designed to help residential and commercial customers of electric and natural gas utilities reduce energy use and install renewable energy projects.⁶⁰

The Commission has regulatory oversight of programs, including (i) review and approval of program administrator(s); (ii) contracting for annual program performance evaluation and financial audits; and (iii) ensuring that each utility complies with mandated expenditure levels. Furthermore, at least every four years the Commission is required to evaluate utility energy efficiency and renewable resource programs, and to revisit program "goals, priorities, and measurable targets."61 During 2008 and 2009, in Docket 5-UI-115, the Commission looked primarily at broad policy issues, including the merits of expressing energy efficiency goals as "a percentage reduction in future energy use and demand." On October 22, 2009, the Wisconsin Commission opened a related docket to investigate "more detailed programmatic issues," including levels of goals, measurable targets, and funding levels.⁶²

Wisconsin has also adopted a state residential building code that incorporates the 2006 IECC with amendments. The 2006 IECC is binding on commercial buildings statewide.

Under Act 141, Wisconsin adopted an RPS that requires utilities to increase use of renewable energy to 10 percent of total annual electric energy by 2015, with interim targets.⁶³ Sources of energy that count toward the standard include solar, wind, water power, biomass, geothermal technology, tidal or wave action, and fuel cell technology that uses qualified renewable fuels. Compliance is based on the use of a "Renewable Resource Credit" tracking and trading program administered by M-RETS. ⁶⁴

It is also worth noting that the Wisconsin Public Service Commission has opened a significant number of investigations in the last year devoted to looking at clean energy practices, and based on the recommendations from the Task Force on Global Warming. In April 2008, the Commission opened five investigations to:

(5-UI-116) Investigate and adopt innovative rate designs that provide more accurate price signals to customers to incent reductions of GHG emissions associated with their energy consumption;

(5-EI-144) Assess the "technical and economic potential for developing wind energy on the Great Lakes;"

(5-EI-145) Investigate the economic, legal, geologic, and engineering implications of geologic carbon sequestration, and other related issues;

(5-UI-114) Consider "innovative utility rate making approaches that promote conservation and efficiency programs," and "examine existing ratemaking policies that may discourage utilities from implementing their own programs or supporting statewide programs, and ... provide in their place incentives for utilities to aggressively pursue conservation and efficiency opportunities; and"

(5-UI-115) Investigate the "adoption and achievement of increased conservation and energy efficiency goals...," including goals to be adopted, appropriate funding levels, portfolio approaches, and broadening of the existing energy efficiency study.

Conclusion

As this overview and the chart on the right demonstrate, the impression that energy policies in the Midwest neither recognize nor rely significantly upon renewable resources and energy efficiency to meet electricity needs is mistaken. In fact, the six states surveyed here – Illinois, Iowa, Kansas, Michigan, Minnesota, and Wisconsin – have all developed policies to support energy efficiency and renewable energy. They are setting more vigorous targets for energy efficiency, adopting improved building codes, and exploring new incentive models to encourage utility participation in the deployment of energy efficiency. States are also promoting the development of renewable energy through various means including portfolio standards and net metering requirements.

The chart on page 11 describes in more detail the clean energy and climate change policies underway in these states. As NARUC has noted, "expanded State clean energy programs will enable low-cost reductions in CO2 emissions and will keep allowance prices and end-user electric rates significantly lower than would occur from a [carbon] price signal alone."The drive toward clean energy in the Midwest can be expected to better position these states to reduce their carbon emissions and stimulate their economies and mitigate local price impacts of a potential federal carbon policy. In sum, these policies represent significant steps towards achieving cost-effective emissions reductions, environmental improvement, and a sustainable and affordable energy mix.

States/ Policies	Illinois	lowa	Kansas	Michigan	Minnesota	Wisconsin
State Action Plans	Climate Change Advisory Group (2007)	Climate Change Advisory Council (2007)	Climate Kansas Energy and Environmental Planning Advisory Group (2008)	Climate Action Council (2007)	Climate Change Advisory Group	Task Force on Global Warming
Climate Registry	Yes	Yes	Yes	Yes	Yes	Yes
Midwest GHG Accord	Yes	Yes	Yes	Yes	Yes	Yes
			Energy Efficiency			
Commission Investigations		Iowa Board, Docket No. 199 IAC 35.4(1), January 14, 2008; EEP-08-1, EEP-08-2; and EEP-08-3	Docket Nos. 07-GIMX-247- GIV; 08-GIMX-441-GIV; and 08-GIMX-442-GIV			Docket Nos. 5-UI-116 - rate designs to incent emissions reductions; 5-E1-144 - tech. and econ. potential for wind; 5-E1-145 - carbon sequestration; 5-U1-114 - ratemaking to incent energy conservation; 5-U1-115 - efficiency goals, funding, and portfolio approaches
EERS (electricity)	Illinois Power Agency Act (2007) 0.2% of sales in 2008-2009, rising to 2% of sales in 2015 and annually thereafter	No statutory EERS ⁶⁵		S.B. 213 .75% prior-year sales by 2011; 1% after 2011	Minn. Stat. 216B.241 1.5% of sales. Applies to 1OUs, Coops, Munis	Act 141 1.2% of revenues adjusted on a three-year rolling average
EERS (natural gas)	Public Act 096-0033 0.2% of retail sales in 2012, rising to 1.5% in 2019 and annually thereafter	No statutory EERS ⁶⁶		.5% of prior-year sales by 2011; .75% after 2011	Minn. Stat. 216B.241 0.5% of sales. Applies to IOUs, Coops, Munis	Act 141 1.2% of revenues adjusted on a three-year rolling average
Decoupling (natural gas)	Cases 07-0241; 07-0242; 09-0166; 09-0167; Peoples Gas & Coke, North Shore Gas – pilots approved; Sep 2008 – Ameren Illinois Utilities' decoupling proposal	Docket No. NOI-06-01, Dec 18, 2006 – rejected need for decoupling	KCC Docket 08-GIMX- 441-GIV, Nov 14, 2008 – KCC will consider decoupling requests		Docket No. G-008 / GR-08- 1075, Nov 2, 2009, ALJ approved decoupling	Docket Nos 6690-UR-116 6690-UR-119 Dec 30, 2008
Decoupling (electric)				PSC Report issued Oct 2008; Docket U-15244, Dec 23, 2008 – authorizes Detroit Edison to file decoupling in next rate case		Docket Nos 6690-UR-116 6690-UR-119 Dec 30, 2008
Building Codes and Standards	ASHRAE 90.1-2007; 2009 IECC	ASHRAE 90.1-2004; 2006 IECC	2006 IECC	ASHRAE 90.1-1999; 2003 IRC with 2004 IECC supplement	ASHRAE 90.1-2004 2006 IRC	2006 IECC residential and commercial buildings
200	750% of annual calae hv 2025	Canavity-hasad	Kenewable Kesources	10% of canacity by 2015	350% of total matail alantnin	Act 1/1
c .	20% Yu aninuai saics by 2020	Capacity-based requirements (1983)	10% 01 peak deniation (2000-2015) (2016-2019) 20% after 2019	10% 01 capacity 0% 2013	2.7% Of total retail rectific sales by 2025	10% of total annual electric energy by 2015
Net Metering	220 ILCS 5/16-107.5; 83 III. Adm. Code, Part 465	Iowa Code § 476.41 et seq.; IAC § 199-15.11(5)	HB 2369	S.B. 213; PSC Order, Docket U-15787	Minn. Stat. § 216B.164; Minn. R. 7835.3300	Commission Order, Docket No. 05-EP-6

Appendix

Multi-state Climate Initiatives

1. The Midwestern Greenhouse Gas Reduction Accord⁶⁷

In November 2007, six Midwestern states and one Canadian province – Iowa, Illinois, Kansas, Michigan, Minnesota, Wisconsin, and Manitoba – agreed to develop a regional cap-and-trade system for GHG emissions, the Midwestern Greenhouse Gas Accord (Accord). The Accord established a workgroup process in which representatives from the public, private, and non-profit sectors work together to develop the basic program elements.

In June 2009, the Accord released its Advisory Group's draft final recommendations. In October 2009, the Accord's Model Rule Subgroup issued draft Model Rules for review by the advisory group. The Midwestern governors and Manitoba's premier have expressed a preference for a federal cap-and-trade system, but they have called for the creation of a regional program as a backstop if a federal program is not enacted, or proves insufficient.

Capped sectors include electricity generation in the region and imports from outside the region, industrial combustion and process source emissions for which there are adequate monitoring methodologies, transportation fuels, and residential, commercial, and industrial fuels not otherwise covered—resulting in coverage of 85 percent of the region's GHG emissions.

The program would cover six greenhouse gases: carbon dioxide (excluding emissions from the combustion of biomass or biofuels), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Only sources and fuel providers responsible for the emission of more than 25,000 metric tons of carbon dioxide-equivalent gases will be covered (with exemptions for eligible biomass and other generators under 25 MW), though the program will operate on a "oncein, always-in" basis such that coverage will continue for sources that eventually fall below the 25,000 metric tons threshold.

The Advisory Group recommended emission reduction targets of 20 percent below 2005 levels by 2020 (or 18 percent if certain cost containment mechanisms come into full effect), and 80 percent below 2005 levels by 2050.

2. The Midwestern Energy Infrastructure Accord⁶⁸

In October 2009, the Midwestern Governors Association (MGA) proposed a regional cooperative framework for the development of energy infrastructure. The MGA proposes transforming the region "into a hub for clean energy development through rapid deployment of 'smart grid' and carbon capture and storage ... technologies."The "Midwestern Energy Infrastructure Accord" includes a framework for reaching a regional goal of getting 10 percent of electricity from renewable sources by 2015 and 30 percent by 2030.

The group indicated its intent to develop a "standard, Midwest-wide understanding of smart grid" that includes recommendations for preparing the grid to accommodate a future fleet of plug-in electric vehicles. The governors also agreed to a goal of siting and permitting by 2012 a "multijurisdictional carbon dioxide pipeline that can ferry global warming pollution captured from coal-fired power plants to sites for permanent geologic storage."

3. The Midwestern Energy Security and Climate Stewardship Roadmap⁶⁹

In 2009, the MGA issued the Midwestern Energy Security and Climate Stewardship Roadmap (Roadmap). The Roadmap contains extensive policy recommendations related to energy efficiency, renewable energy, advanced coal with carbon capture and storage, transportation, and the development of biofuels. Some policies are currently being implemented by states, and others represent consensus positions on federal policies. The Roadmap recognizes that "the region's economic growth and energy security now depend on rapidly accelerating the deployment of cost-effective ways to use the current energy supply more efficiently, diversify energy sources, and lower the carbon intensity of the region's traditional fossil energy supply."

According to the Roadmap, achieving these objectives will require a strategy that "changes incentives for both energy supply and demand in multiple sectors," namely electric generation, transportation, and industrial energy use. The Roadmap concludes that the transition to "a fundamentally new, lower-carbon energy economy in the region" calls for a commitment to the following actions:

• Immediate adoption of policies capitalizing on existing low-cost, low-carbon opportunities such as energy efficiency measures in multiple sectors;

• Modifications of the existing regulatory framework for energy supply to remove disincentives for reduced energy use;

• Establishment of a stable regulatory environment for development of renewable energy, the regional transmission infrastructure needed to bring it to market, and advanced technologies such as carbon capture and storage;

• Adoption of additional market policies to expedite research, development and commercialization of existing and advanced renewable and fossil energy technologies; and • Large-scale investment in the human capital necessary for an advanced energy economy to thrive, including consumer education, workforce and regulator training, and technical assistance for business interests and entrepreneurs.

4. The Climate Registry⁷⁰

The Climate Registry is a GHG emissions reporting system formed as a partnership between 39 states and several Canadian provinces, Mexican states and tribes, and businesses. Incorporated in March 2007, it was founded based on discussions among states exploring the development of state or regional GHG registries, and intended to help organizations manage and reduce their GHG emissions.

Participation in the Climate Registry prepares states for potential regulation and trading. It helps them to better understand their emissions sources—through documenting emissions baselines and early actions, and by discovering weaknesses in data—and how sources may be affected by climate policies. Furthermore, participation can demonstrate environmental leadership, identify waste, inefficiencies, cost-effective reductions, and help reduce risk and exposure to potential costs of a carbon policy.

David Farnsworth, Senior Associate, RAP Edith Pike-Biegunska, Energy and Environment Fellow, RAP Liz Baldwin, Indiana University Public Affairs Master's Candidate

Footnotes:

1 See e.g., "Geography Is Dividing Democrats Over Energy," John M. Broder, New York Times, Jan. 26, 2009. http://www.nytimes. com/2009/01/27/science/earth/27coal.html; see also," The Climate Dividing Lines," Ronald Brownstein, National Journal Online, June 27, 2009. http://www.nationaljournal.com/njonline/ no_20090627_4694.php.

2 Report of the Illinois Climate Change Advisory Group, Executive Summary, p. 1. The Advisory Groups final recommendations and other documents are available at http://www.epa.state.il.us/air/climatechange/documents/final-recommendations.html.

3 20 ILCS 3855/1-5.

4 20 ILCS 3855/1-20.

5 220 ILCS 5/8-103.

6 Both Illinois' RPS and EERS are subject to a rate cap. *See* 220 ILCS 5/8-103 (for EERS) and S.B. 1592, Section 1-75(c) (for RPS).

7 220 ILCS 5/8-103(e).

8 Id.

9 Public Act 096-0033, amending 220 ILCS 5 §8-104 (c). These amendments introduce an on-bill financing provision for energy efficiency in the gas and electricity sectors (220 ILCS 5/16-111.7). They also introduce a clean coal portfolio standard that requires each electric utility to enter into one or more sourcing agreements with a clean coal facility to meet 5% of supply to serve the load of eligible retail customers in 2015. By 2025, 25% of the electricity used in the state is to be generated by clean coal facilities. Under this law, any newly constructed coal plant is subject to a carbon emissions portfolio standard, under which it must sequester up to 90 percent of the total carbon emissions that it would otherwise emit.

10 International Code Council. April 15, 2009, http://www.iccsafe. org/news/nr/2009/0128_2009IECC.html.

11 American Society of Heating, Refrigerating, and Air Conditioning Engineers, April 15, 2009, http://www.ashrae.org/.

12 20 ILCS 3855/ 1-75(c).

13 Regional tracking systems issue, register and track RECs to protect against multiple-counting and selling and to verify compliance with RPS and green power claims.

14 See Illinois Commerce Commission, Docket 09-0342, Final Order, July 29, 2009.

15 220 ILCS 5/16-115D(a).

16 Renewable energy credits are "retired" to prevent double-counting for compliance purposes.

17 Iowa Code, Chapter 455B.851.

18 The Council's report is available at http://www.iaclimatechange.us/.

19 Iowa Code, Chapter 469.4.

20 lowa Code, Chapter 476.6. The Board is further required to periodically conduct a contested case proceeding to evaluate the implementation of approved energy efficiency plans. Municipal utilities and cooperatives must also prepare five-year plans every other year; however, review of their plans is beyond the Board's jurisdiction.

21 The Board's latest report to the General Assembly is available at: http://www.iowa.gov/iub/board_activity/ga_reports.html.

22 Iowa Board, Docket No. 199 IAC 35.4(1), January 14, 2008.

23 See EEP-08-1, EEP-08-2; and EEP-08-3.

24 SF 2386 amending Iowa Code Chapter 103A.27. Iowa also recently revived its Energy Bank program to finance energy efficiency retrofits, SF 517. See http://eetd.lbl.gov/ea/emp/reports/53554. pdf and http://www.ucsusa.org/assets/documents/clean_energy/ iowa-1.pdf.

25 See IAC 199-15.11(1).

26 At the end of the fourth quarter 2009, Iowa had an installed wind capacity of approximately 3,670 MW. See http://awea.org/publications/reports/4Q09.pdf at 3.

27 While wind is by far the most developed renewable power resource in lowa, the state has incentives in place for development of other renewable energy sources as well. One noteworthy mechanism is the lowa Power Fund, established by 2007 legislation (H.F. 918). The fund is a resource for development of renewable energy, energy efficiency, and reduction in GHG emissions. It has funded a number of RD&D projects. For more information, *see* http://www. energy.iowa.gov/Power_Fund/about_IPF.html. Tax incentives supporting wind include favorable property taxes (lowa Code 427B.26, 441-21), sales tax (lowa Code 423.3 §54), and a state production tax credit (lowa Code, Chapter 476(B), (C). Iowa Code Chapter 476.46 establishes the revolving loan program.

28 See lowa Board Docket Nos. RPU-2009-0003, RPU-08-2, and RPU-08-4.

29 See Iowa Board Docket Nos. DRU-03-2, 03-3, and WRU-2009-0016-4099.

30 Kansas is also an observer of the Western Climate Initiative, a collaborative effort to find ways to reduce greenhouse gases in the region being undertaken by several western states and four Canadian provinces: Arizona, British Columbia, California, Manitoba, Montana, New Mexico, Ontario, Oregon, Quebec, Utah, and Washington. *See* http://www.westernclimateinitiative.org/.

31 Executive Order No. 08-03, March 21, 2008.

32 See http://www.ksclimatechange.us/ewebeditpro/items/ O1F17394.pdf.

33 Docket No. 07-GIMX-247-GIV, Final Order, October 10, 2007.

34 Docket No. 08-GIMX-441-GIV, Final Order, Nov. 14, 2009. Under traditional regulation, higher utility sales increase utility revenue and profit, creating what is commonly referred to as a "throughput incentive." Decoupling is an approach that states have taken to address this barrier. It removes the link between utility sales and revenues so that the utility is indifferent to (rather than financially harmed by) energy efficiency on the customer side of the meter. Decoupling also addresses utility disincentives to facilitate distributed generation and demand response. Decoupling can also provide positive financial incentives to utilities to pursue cost-effective energy efficiency. Some states have adopted policies to combine decoupling for utilities with third-party administration of energy efficiency programs. For more information, see Regulatory Assistance Project, Revenue Decoupling Standards and Criteria: A Report to the Minnesota Public Utilities Commission, June 2008, available at http:// www.raponline.org/Pubs/MN-RAP_Decoupling_Rpt_6-2008.pdf, and National Action Plan for Energy Efficiency, Aligning Utility Incentives With Investment in Energy Efficiency, November 2007, available at http://www.epa.gov/cleanenergy/energyprograms/napee/ resources/guides.html.

35 More information on this process is available at http://www.kcc. state.ks.us/electric/net_metering_comments.htm. 36 The Interim Report is available at http://www.miclimatechange. us/stakeholder.cfm. The Council noted that the Climate Action Plan's goals of a 20 percent reduction of GHG emissions below 2005 levels by 2020 and an 80 percent reduction below 2005 levels by 2050 are consistent with goals being considered by the Midwestern Governors Regional Greenhouse Gas Reduction Accord process.

37 The Plan is available at http://www.cis.state.mi.us/mpsc/electric/ capacity/energyplan/index.htm.

38 SB 213, Section 27.

39 Case No. U-15787, Order of March 18, 2009.

40 MPSC No. U-15645, Order of November 2, 2009, and Case No. U-15768, Opinion and Order of January 11, 2010.

41 The Next Generation Energy Act of 2007 (SF 145). The statute also addresses provisions not described above, including a study of the cost-effectiveness of a new nuclear plant, the available potential for distributed generation, and improvements in transmission.

42 The NGEA also contains a partial moratorium on the construction of new large energy projects, the importation of electricity from such projects, and new purchased power agreements that would increase total statewide power sector GHG emissions. Id. at 44.12-46.2. There are some exceptions to the prohibition, including natural gas plants and projects under consideration by the PUC when the legislation was passed. See Docket Nos. E-6472/M-05-1993, ET-10, ET-6444, E-017, ET-9/CN-05-619 (Mesaba), and Docket Nos. ET-6131, ET-2, ET-6130 (Big Stone II).

43 S.F. 4. An act relating to energy; establishing renewable energy standard; amending Minnesota Statutes 2006 §216B.1691; repealing Minnesota Statutes 2006 § 216B.169.

44 See Minnesota Climate Change Advisory Group Final Report: A Report to the Minnesota Legislature, April 2008. http://www.mnclimatechange.us/MCCAG.cfm.

45 Minnesota Statutes 2008 §216B.2422, Subdivisions 1 and 2. Utilities with a generation capacity of 10,000 kW or more, or who serve 10,000 retail customers or more, are required to file integrated resource plans.

46 The International Residential Code establishes minimum regulations for one- and two-family dwellings of three stories or less.

47 These goals can include savings from energy conservation programs, rate design, energy codes, appliance standards, market transformation programs, programs to change human behavior, improvements to utility infrastructure (e.g., transmission and distribution improvements), and waste heat recovery. *See* Minnesota Utility-Sector Policies, ACEEE, http://www.aceee.org/energy/state/minnesota/mn_utility.htm.

48 Minnesota Statutes 2008 §216B.241, Subdivision 1a and 1b.

49 Minnesota Statutes 2008 §216B.2412, Subdivision 2.

50 See http://www.puc.state.mn.us/portal/groups/public/documents/puc_pdf_rap/000824.pdf.

51 See Order Establishing Criteria and Standards ("Decoupling Order") at 7, PUC Docket No. E,G-999/CI-08-132 (June 19, 2009); see generally, Report to the Legislature on Decoupling and Decoupling Pilot Programs Under Minnesota Statutes §216B.2412, submitted by the Minnesota Public Utilities Commission, January 2009.

52 Docket No. G-008/GR-08-1075, Order of January 11, 2010.

53 The law provides that utilities owning nuclear generation are required to meet 30 percent of retail sales with renewable resources by 2025.

54 By the end of 2008, the Commission had issued several orders further providing for procedures for acquiring and retiring RECs. Docket No. E-999/CI-04-1616, http://www.puc.state.mn.us/PUC/ electricity/012064.

55 See "A Wisconsin Strategy for Global Warming," the Interim Report released by the Governor's Task Force on Global Warming. The report is available at http://dnr.wi.gov/environmentprotect/gtfgw/ documents/interim_report.pdf; see also, "Wisconsin's Strategy for Reducing Global Warming: Final Report of the Governor's Task Force on Global Warming," July 2008.

56 See also "Midwest Energy Infrastructure Accord" text box.

57 See Interim Report at 15.

58 See Wisconsin Stat. 196.374(3)(b). Act 141 allows for energy efficiency and renewable energy programs additional to those required by this provision. See Wisconsin Stat. 196.374(2)(b) and (c).

59 SEERA has also contracted with the Energy Center of Wisconsin to administer research and development.

60 Focus on Energy was originally established by the Wisconsin Department of Administration in 2001 to deliver utility-funded energy efficiency programs to ratepayers under Act 9, enacted in 1999. Because significant funds were reallocated to the state's general fund, Act141 shifted primary responsibility for funding and administering programs from the Department directly to utilities.

61 Wis. Stat. §196.374(3)(b)1.

62 Docket 5-GF-191 – Quadrennial Planning Process (proposed notice of investigation and request for comments).

63 Wisconsin Stat. 196.378. Wisconsin has a preexisting renewable resources requirement calling for certain utilities to purchase capacity from several renewable resource projects totaling 50 MW. *See* Act 204 (1997). Utility purchase used to meet this requirement can be used to meet part of the newer portfolio standard's targets.

64 The RRC program is detailed in the Wisconsin Administrative Code at PSC 118.

65 lowa does, however, require electric and gas utilities to file energy efficiency plans with targets, and to report annually on their progress in meeting these goals. Iowa Code, Chapter 476.6.

66 Id. fn. 75.

67 See http://www.midwesterngovernors.org/resolutions/GH-GAccord.pdf (Midwestern Greenhouse Gas Accord), http://www. midwesternaccord.org/GHG%20Draft%20Advisory%20Group%20 Recommendations.pdf (Recommendations) and http://www.mid westernaccord.org/ (Model Rule).

68 See http://www.midwesterngovernors.org/Publications/ InfrastructureAccord.pdf.

69 The Roadmap was developed by the MGA's advisory group. See http://www.midwesterngovernors.org/Publications/Roadmap.pdf.

70 See http://www.theclimateregistry.org/. See also "The Climate Registry, GHG Reporting and Related Updates, "Ann McCabe, GHG Symposium, Champaign IL, October 28, 2009. http://www.istc.illinois.edu/info/govs_awards_docs/2009-GSA-1015-McCabe.pdf.

The Regulatory Assistance Project 50 State Street, Suite 3 Montpelier, VT 05602

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The Regulatory Assistance Project

VERMONT 50 State Street, Suite 3 Montpelier, Vermont 05602 Tel (802)233-8199 Fax (802)223-8172

MAINE PO Box 507, 110B Water Street

Hallowell, Maine 04347 Tel (207)623-8393 Fax (207)623-8369

NEW MEXICO

27 Penny Lane Cedar Crest, New Mexico 87008 Tel (505)286-4486 Fax (773)347-1512

OREGON 429 North NE Nebergall Loop Albany, Oregon 97321 Tel (541)967-3077 Fax (541)791-9210 ILLINOIS

455 Washington Boulevard #1 Oak Park, Illinois 60302 Tel (708)848-1632

CALIFORNIA PO Box 210, 21496 National Street Volcano, California 95689 Tel (209)296-4979 Fax (716)299-4979

DIRECTORS David Moskovitz, Richard Cowart, Frederick Weston, Wayne Shirley, Richard Sedano, Bob Lieberman, Meg Gottstein

SENIOR ADVISORS Peter Bradford, Jim Lazar, Cheryl Harrington

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