



IOWA
ASSOCIATION OF MUNICIPAL
UTILITIES

The Iowa Association of Municipal Utilities (IAMU) appreciates the opportunities that EPA has provided for participation in stakeholder meetings and the willingness of EPA Region 7 officials to attend meetings with IAMU members prior to the filing of these proposed rules. IAMU and its members also appreciate the opportunity to work with other stakeholders in the State of Iowa, including the Iowa Utilities Board, the Iowa Department of Natural Resources and the Iowa Economic Development Authority to provide comments and discuss concerns over the proposed rules. IAMU is committed to continuing this ongoing dialogue and to avail itself of all opportunities to advocate on behalf of its members.

Iowa's municipal electric utilities applaud the efforts of the Iowa Utilities Board, Iowa Department of Natural Resources, Iowa Economic Development Authority and Governor Branstad's Office to provide coordinated and thoughtful comments, filed with EPA on November 12, 2014. IAMU supports the "Important Principles" as outlined on page two of those comments.ⁱ

Introduction to Iowa's Municipal Electric Utilities.

IAMU was organized in 1947 and is governed by a member Board of Directors. IAMU is a non-profit entity representing 543 Iowa cities that operate electric, gas, water, stormwater and communications utilities. IAMU's mission is to "support and strengthen" Iowa's municipal utilities. All of Iowa's 136 municipal electric utilities are members of IAMU.

Iowa's municipal electric utilities have served their communities with reliable and affordable electricity for over 120 years. Municipal electric utilities serve over 210,000 customers in 136 communities throughout Iowa. The number of customers served ranges in size from Ames Municipal Electric System with nearly 25,000 customers to the City of Westfield with fewer than 100 customers. 75 percent of Iowa's municipal utilities serve fewer than 1,500 customers.

Power supply arrangements for Iowa's municipal electric utilities vary greatly depending on the unique characteristics of each, including factors such as the size of the utility, access to transmission facilities and ownership of those facilities. Municipal utilities with the largest loads, Ames Municipal Electric System, Muscatine Power & Water, and Cedar Falls Utilities, own most of their power supply resources through local or jointly owned generation and participate in the MISO energy market. On the other hand, many smaller municipal utilities have long-term "all-requirements" power supply contracts and may have only emergency generation or none at all.

Between these extremes there are a wide variety of power supply arrangements.

- 19 municipal utilities are minority owners in MidAmerican base load plants.

- Many others have invested in long-term base load resources through membership in joint action power supply agencies such as:
 - Nine are members of the Municipal Energy Agency of Nebraska,
 - 13 are members of the North Iowa Municipal Electric Cooperative Association (NIMECA),
 - 15 are members of the South Iowa Municipal Electric Cooperative Association, a member of Central Iowa Power Cooperative,
 - 19 are members of Missouri River Energy Services (MRES),
 - Three are members of WPPI Energy,
 - Four are members of the Upper Midwest Municipal Power Agency, a member of Dairyland Power Cooperative in Wisconsin, and
 - Six are members of the Western Iowa Municipal Electric Cooperative Association, a member of the Northwest Iowa Power Cooperative.
- Municipal utilities or their power agencies currently buy and sell a portfolio of energy and capacity resources from the multi-state MISO and SPP markets.
- The Resale Power Group of Iowa makes wholesale purchases of power for its members.
- 59 municipal utilities receive a portion of their power supply from low-cost, carbon-free Western Area Power Administration hydro resources.

Many municipal utilities own local generation including diesel engines, wind, hydro and solar resources.

In addition, the municipal utilities served over NIPCO, Corn Belt and WAPA transmission facilities may become part of the Southwest Power Pool, with the implication that Iowa will be split between two different Regional Transmission Organizations. This increases the complexity of any arrangements involving carbon credit trading administered through an RTO market mechanism.

IAMU supports the separate comments submitted by our members, including Ames Municipal Electric System, Muscatine Power and Water and Cedar Falls Utilities and the comments submitted by IAMU's affiliated joint action agencies, North Iowa Municipal Electric Cooperative Association and Missouri River Energy Services. The issues that affect IAMU's members and their Joint Action Agencies are varied and complex. Not all municipal electric utilities in Iowa are impacted in the same way by the proposed rules.

As a threshold issue, it is unclear whether two units listed as affected units and owned by IAMU members should be included as affected units. These units are Streeter Station Unit 7 owned by Cedar Falls Utilities and Muscatine Unit 7 owned by Muscatine Power and Water. The Cedar Falls Utilities Unit 7 unit has not produced more than 219,000 MWh for sale since 1978. The Muscatine Unit 7 produces steam for sale to an industrial customer and not for electrical generation. IAMU joins with those utilities in seeking clarification on this issue.

Legal Basis for Rule

IAMU has concerns with the legal basis upon which this rule has been promulgated. The regulation of carbon emissions in this manner should be a matter of Congressional action rather than Executive action. Legal analysis of EPA's authority to regulate carbon emissions as proposed in this rule goes

beyond what is permissible under the Clean Air Act. IAMU supports the comments of our national organization the American Public Power Association and the comments of the Utility Air Regulatory Group on this issue.

Local Control of Municipal Utilities and State Jurisdiction

Generally, Iowa's municipal electric utilities are governed by either their local Boards of Trustees or City Councils. Local Boards of Trustees and City Councils are educated in the operation of their respective municipal electric utilities and are in the best position to make decisions regarding municipal utilities generating resources. They are also in the best position to understand the impact those decisions will have on the ratepayer-citizens in the communities in which they serve.

Municipal electric utilities are regulated by the Iowa Utilities Board for safety, customer protections and reliability. Municipal utilities with affected units are regulated by the EPA through the Iowa Department of Natural Resources for air quality related enforcements. IAMU asserts that any proposed mandates that impact municipal electric utilities such as the addition of renewable energy portfolio requirements or changes to Iowa's energy efficiency programs must be implemented through state legislation.

Credit for Early Action

Many utilities do not get full credit for early actions they undertook to reduce emissions prior to the date on which this rule was filed. States should have the flexibility to allow earlier action by utilities to count toward meeting the reduction goals.

Unrealistic Timelines

Given that EPA still anticipates issuing the Final Rule in June 2015, IAMU is concerned that the vast numbers of comments that will be submitted to EPA in response to the proposed rule cannot possibly be digested in a meaningful manner. The State Plans are due within 13 months thereafter, unless the state is granted an extension or unless the state participates in a regional plan.

The proposed rule is unprecedented in its scope and complexity and as such will require significant time for implementation. One year, with a possible one year extension, is insufficient for the development of a state plan. IAMU supports the State of Iowa's comments recommending allowing two years, until June 30, 2017 for the development of a state plan. With the extension of the plan development period by one year, the compliance period should be delayed by one year from 2020-2029 to 2021-2030 for the interim goal.

Overly Aggressive Interim Goals

The interim goals proposed by the plan are too aggressive. The current proposed interim goal for Iowa of 1341 lb/MWh is only slightly higher than the final goal of 1301 lb/MWh. The interim goals assume that Building Blocks 1 and 2 can be implemented immediately after the rule is implemented, but prior to 2020. This is unrealistic. As discussed below, IAMU asserts that the assumptions made for Building Blocks 1 and 2 are unrealistic for Iowa's municipal utilities. It is not possible or economic for Iowa's municipal utilities to retrofit their existing coal power plants to achieve a 6% heat rate improvement. Any economic heat rate improvements have likely already been made. Iowa's municipal utilities do not own any NGCC facilities, and cannot shift generation from their coal power plants to NGCC plants.

Therefore municipal utilities will be relying on Building Blocks 3 and 4 or other measures such as converting existing coal plants to natural gas, to achieve carbon dioxide reductions. These measures cannot be implemented immediately. Furthermore, the rapid implementation required to meet the proposed implementation goal, is likely to be uneconomic.

IAMU supports the State of Iowa's recommendation to eliminate the interim goal or delay it until 2025. This will allow utilities time to make investment decisions that do not adversely affect electricity affordability or reliability.

Stranded Costs

EPA's reduction requirements for some states are effectively unachievable without the forced, premature retirement of some existing coal and natural gas-fired units that still have remaining useful life. This would result in stranded costs that would be borne by consumers through higher electric bills, as well as potential negative impacts on local reliability. It is unclear how this scenario would affect those members of IAMU who own minority shares in generating plants.

Reliability

IAMU supports the North American Electric Reliability Corporation (NERC) comments in its Initial Reliability Review, dated November 2014. Those comments point out areas of concern in regard to the assumptions EPA has made about compliance with the 4 Building Blocks. If the Building Blocks are based upon conclusions that are not accurate, then additional renewable energy generation and reductions through energy efficiency efforts in building blocks 3 and 4 will be required. Developing suitable replacement generation will take time. Compliance with the overall reduction goals could require additional shut-down of fossil-fuel generating plants leaving an absence of electric generating facilities and the ability to meet demand, most especially to meet reserve margin requirements. This could have a huge economic impact.

Building Block 1

Municipal electric utilities that are subject to building block 1, do not think it is possible to achieve a 6% heat rate reduction. The basis upon which this mandate would apply to municipal utilities in Iowa is flawed because EPA used models that were designed for 600MW plants. The ability to make a significant heat rate reduction decreases with the municipal's smaller plants. In addition, Iowa's municipal electric utility plants have already undergone extensive improvements. If the improvement was cost-effective, it has likely already been implemented. As identified in NERC comments, "site-specific engineering analyses" would be required to actually determine if there are any remaining heat rate improvements to be made on the plant.

The 19 minority owners of affected units do not have a say in how the units comply with EPA regulations.

If heat rate improvements are available at municipal utilities' affected units, the interaction of the various building blocks may make the improvements uneconomical. Implementing Building Blocks 2, 3, and 4 will all have the effect of reducing the run time of affected coal power plants. It will be difficult to

justify making heat rate improvements to a unit that will run less in the future, and financing the improvements may be challenging.

Building Block 2

IAMU is concerned with the practicability, timing and expense of this Building Block. EPA has failed to take into account the lack of necessary infrastructure that must be in place in order to have an adequate natural gas supply and fails to account for the lack of adequate storage. If a 70% capacity factor is required to meet building block 2, it will be necessary for a natural gas operator to be able to have storage to provide the flexibility for necessary operations.

In offering an explanation as to why the EPA believes sufficient infrastructure is in place to support a 70 percent average capacity factor, EPA states, "First, the natural gas pipeline system is already supporting national average NGCC utilization rates of 60 percent or higher during peak hours, which are the hours when constraints on pipelines or electricity transmission networks are most likely to arise." In Iowa, peak electricity demand typically occurs in the summer when there is a large air-conditioning load, but the peak natural gas consumption occurs in the winter when there is a large building heating load. EPA has not provided evidence that extended periods of high capacity factor operation of NGCC generation can occur under periods of peak natural gas demand in the winter.

Iowa will prove a good test case for the building of a natural gas pipeline as the necessary franchise requirements are negotiated through the IUB during the next few months. During the 2014 legislative session, much discussion was had and attempts made to limit the use of eminent domain for transmission lines. It is expected that the same issues will arise during the next legislative session in regard to the proposed crude oil pipeline. Potential legislation limiting or impeding the process could prevent or substantially hamper the building of necessary natural gas pipeline infrastructure.

IAMU thinks that if a utility chooses to retrofit a coal plant to burn natural gas, the associated reduction in CO₂ emissions should count towards meeting the EPA's proposed regulations. For example the City of Ames Electric Service is converting its 109 MW coal fired power plant to burn natural gas to comply with other EPA regulations, including the Mercury and Air Toxics Standards rule. As acknowledged by the EPA, the cost of this conversion is considerable. If the City of Ames does not receive credit for the associated reduction in CO₂ emissions, the utility would be forced to seek additional carbon reductions elsewhere, thus making the existing plant a stranded asset. This would place a significant burden on the utility's rate payers. Cedar Falls Utilities' Streeter Station Unit 7 has been a dual fuel, natural gas and coal, generator. However, in early 2014 Cedar Falls Utilities declared the unit a natural gas unit to comply with the EPA's Mercury and Air Toxics Standards rule.

Building Block 3

While many municipal utilities are committed to investing in renewable electricity generation resources, they have experienced challenges because of their small size and tax exempt status. Municipal utilities do not receive the production tax credit for wind energy or the investment tax credit for solar energy.

Another barrier to investing in renewable energy for municipal utilities is their relatively small size. Most developers are building wind farms on a scale much larger than what is needed by a single municipal utility.

Municipal utilities will need additional time to procure renewable energy resources to meet the levels outlined under Building Block three. The state plan should have enough flexibility to allow municipal utilities to procure renewable generation in an economical manner. If municipal utilities are not provided enough time to procure economical renewable generation, the costs may adversely impact Iowa families and businesses. The costs of procuring renewable resources must be spread over a longer period of time.

EPA rules should clarify that the utility that makes the investment in the renewable energy resource receives the benefit of the renewable resource, regardless of the location of the resource and the utility. For example the wind farm that Muscatine Power and Water (MPW) is receiving output from is located in Minnesota. Muscatine is receiving 100% of the output from this 12 MW wind farm. The wind farm would not have been built if Muscatine had not purchased the output. Muscatine should receive the benefit of the wind resource for meeting its emissions reductions under the State of Iowa plan, despite the wind farm being located in Minnesota. If Minnesota and Iowa elect to establish separate state plans, MPW and its customers must receive all the carbon reduction benefit from this wind generation. The State of Minnesota should not be able to claim the carbon reduction benefits of this wind generation for a Minnesota State plan simply because the resource is located in Minnesota. To determine otherwise would give rise to Constitutional takings issues.

Similarly Missouri River Energy Services (MRES), a joint action agency supplying power to municipal utilities in Iowa, Minnesota, North Dakota, and South Dakota, is a joint owner of an affected unit in Wyoming, but is building a new hydroelectric generating station in Iowa. MRES must be able to use the new hydroelectric facility in Iowa for compliance of its affected unit in Wyoming.

Greater guidance is needed from EPA on biomass. Biomass, specifically annual biomass should be considered carbon neutral and specifically included as renewable energy for purposes of building block 3 compliance. However, utilities will need sufficient time to develop this alternative and to retrofit an existing plant or build biomass facilities. IAMU supports the comments of the State of Iowa on this issue.

Ames Municipal Electric System generates electricity through the burning of municipal solid waste. In fact, there is not a landfill located within Story County. The definition of renewable energy should be expanded to include the use of municipal solid waste to generate electricity. Ames should get credit for the avoided methane emissions that would occur if the solid waste that is burned through the electric utility were landfilled.

Building Block 4

IAMU affirms the important role that energy efficiency has in the national energy policy and the resource portfolio of Iowa's municipal utilities. IAMU's members have been engaged in providing

energy efficiency services to their customers since the 1970s. In 2009, following a statewide assessment of energy efficiency potential, Iowa's municipal utilities greatly expanded their energy efficiency programs and are actively assisting customers to capture cost-effective energy efficiency opportunities. However, IAMU believes EPA's determination of an annual incremental savings of 1.5% as the BSER is unachievable.

Pursuant to current Iowa law, municipal electric utilities are required to file energy efficiency plans with the IUB. Iowa Code section 476.6 (16)(c)(1) requires municipal electric utilities to assess maximum potential energy and capacity savings available from actual and projected customer usage through cost-effective energy efficiency measures and programs. Consideration is to be given to the utility's historic energy load, projected demand, customer base, and other relevant factors. Each utility was to establish an energy efficiency goal based on this assessment and establish cost-effective programs designed to meet the goal.

Several important factors limit the energy efficiency potential in some of Iowa's municipal utilities. Many of Iowa's municipal electric utilities serve small rural communities with little or no growth. These communities also typically have a limited industrial and commercial base. New construction and commercial/industrial energy efficiency programs are typically some of the most cost-effective energy efficiency programs a utility can offer. Municipal utilities that do not have significant new construction or commercial/industrial customers will have their energy efficiency programs limited largely to existing residential customers.

An additional factor that may limit the energy savings that can be achieved through utility programs is the ever increasing stringency of building energy efficiency codes and Federal efficiency standards for appliances and equipment. Utility energy efficiency programs typically can only count energy savings above and beyond those achieved through energy codes and appliance standards. For example, in March 2014, the State of Iowa adopted the 2012 International Energy Conservation Code as the statewide building energy code, replacing the less stringent IECC 2009. This, combined with the fact that municipal utility programs have already captured much of the most cost effective energy efficiency measures, or "low hanging fruit", over their 30 year history, limits the additional efficiency gains that can be made by utility programs.

For the three years from 2010 through 2012, Iowa's 136 municipal electric utilities achieved an average incremental savings of 0.6%. In a recent study, MRES indicates that their energy efficiency potential studies most closely based on their member communities and not generic to the region, demonstrate that the achievable potential is 0.7%. Therefore if the choice is between 1% and 1.5%, IAMU sees the 1% performance level in Option 2 proposed by EPA as the BSER as the better choice – although we are concerned about the cost that will be incurred to try to meet the 1% level. It is particularly difficult with energy efficiency measures to ensure compliance because the utility cannot control what the customer chooses to do.

IAMU is concerned about the extent of evaluation, monitoring and verification (EM&V) that would be required for utility energy efficiency programs to offset carbon dioxide emissions from affected units

under the proposed rule. Iowa's municipal utilities have long been offering cost-effective energy efficiency programs to customers; however they have relied on simple and low cost EM&V solutions. Imposing burdensome EM&V requirements on municipal utilities will raise the cost of the efficiency programs, and ultimately reduce the amount of energy efficiency the utilities can achieve. In 2013 the U.S. Department of Energy's National Renewable Energy Laboratory published a set of protocols for determining savings from energy efficiency programs through the Uniform Methods Project.ⁱⁱ In the section under EM&V, the report acknowledges that the EM&V protocols outlined in the report may be impractical for small utilities, and recommends that small utilities rely on technical reference manuals developed by regional or state entities or on evaluations of similar programs performed by larger utilities. All of Iowa's municipal electric utilities are small and should be allowed to use simplified EM&V methods for complying with the final rule.

Other opportunities to reduce carbon emissions

The state should be given flexibility to determine whether action in addition to the building blocks could be taken within the State to reduce carbon emissions and should be allowed to allocate credit accordingly. For instance, planting of native prairie as a method of natural carbon sequestration, state actions incenting energy efficiency improvements in rental properties, expansion of methane extraction from sanitary landfills, and additional renewable energy such as biomass and solid waste burning

Growth

EPA's state requirements do not account for future increases in demand for electricity resulting from a state's increased population, the future electrification of vehicles, or the addition of energy-intensive manufacturing. Flexibility should be allowed for the adjustment of state plans in the event of significant growth, such as economic development or significant technology expansion such as electric vehicles.

IAMU is committed on behalf of its members to working with all entities to draft a state plan that works for all impacted entities in the state.

Respectfully Submitted,

Troy DeJoode
Executive Director,
Iowa Association of Municipal Utilities
1735 NE 70th Avenue
Ankeny, IA 50021
tdejoode@iamu.org



IOWA
ASSOCIATION OF MUNICIPAL
UTILITIES

ⁱ [Letter to the Honorable Gina McCarthy](#), November 12, 2014, at page 2.

Important Principles

Iowa encourages EPA to consider the following important principles when finalizing the 111(d) regulations.

- It is critically important that EPA consider the impacts of the rules on the reliability of the electric system and the cost to consumers. EPA's goal with the final regulations should be to reduce carbon dioxide (CO₂) emissions while maintaining a reliable, affordable electric system that can be sustained over the long term.
- States and utilities should be given sufficient time to carefully plan and implement the changes that will be required.
- EPA should give states appropriate credit for all actions that have been taken or will be taken to reduce CO₂ emissions or reduce the carbon intensity of the state's electric generation.
- EPA should reward early action and should not discourage state or utility implementation plans from counting greenhouse gas reductions from ongoing programs which occur any time after the baseline date.
- If utilities have taken actions to comply with any other environmental requirement, and the actions have had the effect of reducing CO₂ emissions, the utilities and states should receive appropriate 111(d) credit.
- EPA's rules should provide flexibility for states and utilities, and to the extent possible, should minimize the administrative burden on the states.
- State plans must be allowed the flexibility to count renewable energy that is generated in one state and consumed in another, as long as the generation is not double-counted.
- States must be allowed the flexibility to include new natural gas units in their 111(d) implementation plans if they choose to do so.
- States should have the flexibility to join a multi-state plan or opt out of a multi-state plan if they so choose. Multi-state plans should have the same flexibility in demonstrating compliance as state plans do.
- EPA's rules must respect the existing regulatory authority of the Federal Energy Regulatory Commission (FERC) and state public utility commissions.

ⁱⁱ *The Uniform Methods Project: Methods for Determining Energy Efficiency Savings for Specific Measures:*
http://energy.gov/sites/prod/files/2013/07/f2/53827_complete.pdf