

STATE OF IOWA
DEPARTMENT OF COMMERCE
UTILITIES BOARD

IN RE: UTILITY COAL PLANT PLANNING	DOCKET NO. NOI-2011-0003
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**ORDER OPENING INQUIRY ON UTILITY
COAL PLANT PLANNING AND SOLICITING COMMENTS**

(Issued September 2, 2011)

I. INTRODUCTION

Iowa Code § 476.53, which deals with advance ratemaking principles for generating plants, states:

1. It is the intent of the general assembly to attract the development of electric power generating and transmission facilities within the state in sufficient quantity to ensure reliable electric service to Iowa consumers and provide economic benefits to the state.
2. The general assembly's intent with regard to the development of electric power generating and transmission facilities, as provided in subsection 1, shall be implemented in a manner that is cost-effective and compatible with the environmental policies of the state, as expressed in Title XI.

In addition, Iowa Code § 476.4 requires rate-regulated utilities to have rates that are reasonable. Utilities must also comply with applicable federal laws, including environmental statutes and regulations. In setting utility rates, the Utilities Board (Board) must address a number of competing concerns; while rates must be reasonable, rates must also be at a sufficient level to ensure that there is sufficient

investment in utility infrastructure, such as generation and transmission, to ensure reliable service and compliance with applicable environmental standards. The Board notes that legislation considered during the last General Assembly session would have required the Board to conduct a study to identify the potential impact on customer electric rates resulting from recent federal regulations adopted by the United States Environmental Protection Agency (EPA); the legislation passed the Iowa House and might be introduced in the same or similar form during the next session of the General Assembly.

The EPA has proposed or adopted various regulations that address such diverse subjects as discharges into water, coal fly ash, and air regulations concerning ozone (O₃), sulfur oxides (SO_x), nitrogen oxides (NO_x), mercury (HG), and carbon dioxide (CO₂) and other greenhouse gasses (GHG). While there may be uncertainty concerning the implementation schedule or even the initial adoption of particular regulations, it appears that the anticipated regulations, when viewed as a whole, are likely to require significant investment in or retirement of existing coal generating plants, depending upon the cost of new equipment.

It seems likely that additional investments will be made in newer coal-fired plants to allow them to continue to operate but older, less efficient plants may be retired. Some coal plants may be converted to natural gas. Also, increased energy efficiency programs and demand response measures may serve as a replacement

for some of the retired generation. The extent to which each of these options will be used is not clear.

The Board believes that its inquiry will help assess the possible impact of these regulations on Iowa utilities, help ensure a thorough consideration of the various alternatives by the utilities and the affected parties, and provide the parties and the Board the background information necessary for expeditious and informed consideration of proposals to implement strategies responding to the new rules.

II. INITIATING INQUIRY

Because of the potential wide-ranging impact of the EPA's regulations, the Board believes that it is important to assemble and discuss information that examines the range of potential impacts on Iowa utilities and their ratepayers. Other states, such as Colorado, have conducted or will conduct similar proceedings to gather information.¹ While rate-regulated utilities must file multiyear plans and budgets for regulated emissions (Iowa Code § 476.6(22)), an inquiry allows participation by non-rate-regulated utilities and other stakeholders and allows for discussion and comment on various possible scenarios regarding EPA regulations and alternative compliance strategies.

In preparation for this inquiry, the Board has undertaken an abbreviated review of existing studies by the North American Electric Reliability Corporation (NERC), the

¹ For example, in a December 9, 2010, decision in Docket No. 10M-245E, the Colorado Public Utilities Commission approved the retirement of five plant units, additional emissions controls for three units, and the conversion of two units from coal to natural gas.

EPA, and others concerning the impact of the new EPA regulations on coal plants and ratepayers. For a variety of reasons, the studies reviewed do not provide all of the information the Board is seeking. The NERC study (2010 Special Reliability Scenario Assessment: Resource Adequacy Impacts of Potential U.S. Environmental Regulations, October 2010), for example, generally assesses the impact of the new regulations on reliability, but does not address potential rate impacts in the detail required by the Board and Iowa ratepayers. In addition, the reference case for the 2010 NERC study was based on NERC's 2009 Long-Term Reliability Assessment rather than the more recent 2010 Long-Term Reliability Assessment that projected larger future reserve margins for Iowa's NERC region.

The EPA has also prepared a number of studies in recent years addressing various aspects of the impact of the new regulations, such as the "Benefits and Costs of the Clean Air Act: 1990-2020" (August 2010) and the "EPA Analysis of the Lieberman-Warner Climate Security Act of 2008" (March 14, 2008). But these studies also do not assess rate impact in the requisite detail and are confined to specific new regulations and not EPA's new regulations as a whole. In addition, the EPA's analysis of the Lieberman-Warner bill does not reflect the political and regulatory developments that have occurred since that study was released. Finally, the Midwest Independent Transmission System Operator, Inc. (MISO), is conducting a study of the impact of EPA's new regulations, but that study also is not likely to reveal utility specific, much less plant specific, results and also is not likely to assess

potential rate impact in the requisite detail. The MISO study is expected to be released later this year.

The Board is therefore initiating this inquiry to gather information regarding the impact on Iowa of planned EPA regulations. This inquiry is designed to gather information, along with comments of other stakeholders, to provide policy makers with specific details and compliance scenarios to assist them in making any necessary decisions regarding coal-fired (and other) generation that serves Iowa consumers. The inquiry is not intended to take the place of or supplement the emissions plan and budget process outlined in Iowa Code § 476.6(22). The initial questions and requests for information are for Interstate Power and Light Company (IPL), MidAmerican Energy Company (MidAmerican), and other generation owners. In addition to providing the requested information, generation owners may provide any additional information they believe relevant to the inquiry. After this initial information is filed, other interested stakeholders will have an opportunity to file comments addressing the information provided or commenting on other issues or questions they believe are important to this transmission inquiry. Comments may include policy recommendations to the Board.

The Board invites other state agencies with an interest in these issues to participate in this inquiry. In addition to the Consumer Advocate Division of the Department of Justice (Consumer Advocate), the Board specifically requests the participation of the Iowa Department of Natural Resources (IDNR). The Board also

asks the municipal utilities and electric cooperatives to participate, either individually or through their respective associations; the Board is particularly interested in participation by those that own coal generation in Iowa or own coal generation elsewhere, if a portion of the plant's output is used to serve Iowa consumers. Investor-owned utilities are required to participate.

Following receipt of the initial information and stakeholder comments, the Board will determine what additional steps, if any, are necessary to conclude this inquiry. The Board may, for example, ask for additional comments, schedule a workshop, or conclude the inquiry after receipt of the initial information and comments.

Participants must submit their responses electronically through the Board's Electronic Filing System (EFS). Instructions for making an electronic filing can be found on the Board's EFS Web site at <https://efs.iowa.gov>.

The Board is appointing Stan Wolf, the Manager of the Board's Policy section, as the Inquiry Manager for this docket. Questions regarding this docket should be addressed to Mr. Wolf, (515) 725-7363, or via e-mail at stan.wolf@iub.iowa.gov.

III. INQUIRY QUESTIONS

MidAmerican Energy Company (MidAmerican) and Interstate Power and Light Company (IPL), the two rate-regulated investor-owned electric utilities operating in

Iowa, each own significant coal generation used to provide power to Iowa ratepayers.

MidAmerican and IPL will be required to provide the following information:²

1. A list of the utility's existing coal plants, including the existing technology of each such plant, and its emissions. Describe individual units, if the technology varies by unit.
2. The EPA Rules, and their expected implementation schedule, that could affect the utility's decisions.
3. A list of up to ten possible strategies to address the EPA rules. This list should include the following two strategies:
 - a. A business as usual strategy; and
 - b. Upgrade all coal units to meet the new rules.

Examples of other possible strategies include:

- c. Replace all coal units with gas;
 - d. Replace selected units with gas or other alternatives and upgrade other units with new pollution prevention technology; or
 - e. Replace some or all coal units with nuclear units.
4. The costs and timing of capital investments for each strategy (e.g., x pollution control equipment in year y, gas pipeline or electric transmission upgrades in year z, etc.) should be described and quantified where possible.
 5. Along with the strategies, the utility is to provide a list of possible scenarios that address possible levels of key variables such as gas price, coal price, carbon emissions prices, economic growth, construction cost changes, interest rate, speed of EPA rule implementation, economic efficiency implementation, and the use of demand response. The source of the various variable values should be described – e.g., low, medium, and high gas prices from EIA's 2011 Annual Energy Outlook.

² The Board is looking for information and documentation from IPL and MidAmerican similar to that contained in Public Service Company of Colorado's August 13, 2010, filing in Colorado PUC Docket No. 10M-245E.

6. The projected results in each of the ten years (2012-2021) for each of the scenarios for each of the strategies. The results should include electricity demand by residential, commercial and industrial classes, including use per customer and number of customers data; sales for resale by customer and/or market; supply mix by MW and MWh (with projected prices); NO_x, SO_x, CO₂, and mercury emissions; capital cost recovery and O&M expenditures; total rate impact and impact per kW and kWh on each customer class; impact on existing company work force, new construction work force and new operation workforce; decommissioning and waste disposal and/or storage costs, as applicable, for nuclear facilities; and capital and operating expenditures to meet the various new EPA regulations. Net present values of the ten-year stream of payments projected to be paid by the utility's customers for each strategy under each of the scenarios considered are to also be calculated.

7. Generally, discuss how the alternative strategies would meet the current and future emission reduction requirements of the federal Clean Air Act and other federal environmental legislation and of the applicable Iowa environmental statutes.

8. The impact of possible coal plant retirements on transmission reliability and system operations, the transmission constraints that currently exist and that could develop on the utility's system, how the utility currently manages them, and how it proposes to manage them.

9. Details of the utility's transmission, production cost, and general cost model(s) so that the assumptions are supported and transparent, and the operation of the model to derive the various numerical outputs is easily understood.

10. In connection with any natural gas repowering or new gas generation alternatives, the utility's consideration of long-term gas supply contracts.

11. Any advanced ratemaking principles or special rate recovery mechanisms contemplated, such as construction work in progress, allowance for funds utilized during construction, and accelerated depreciation, which the company proposes, or the advanced rate making principles described in recent proposed legislation.

In addition, if they choose, IPL and MidAmerican are invited to provide their own description of the proposed EPA regulations and what strategies each intends to use to respond to those regulations.

There are many possible permutations of the scenarios, and it is not clear at this point which ones will ultimately provide the most reasonable routes to compliance. MidAmerican and IPL are to construct or modify their models in such a way that new variable values may be substituted quickly in new scenario runs.

Any new EPA rules will also impact generation owned by cooperative and municipal utilities. Cooperatives and municipals that own generation in Iowa are invited to provide information similar to that required of MidAmerican and IPL; the cooperatives and municipals that are joint owners with MidAmerican or IPL of some generation are invited to comment on MidAmerican's and IPL's filings with respect to the joint-owner units. All utilities who file information are encouraged to collaborate with each other to make their submissions as consistent with each other as possible, particularly concerning sales and transfers among the utilities.

The Board also hopes for participation from a variety of stakeholders, including Consumer Advocate and IDNR. In addition to filing any responsive comments to the utilities' information, stakeholders are invited to comment on what future action, if any, the Board should take in response to the information filed.

IV. ORDERING CLAUSES

IT IS THEREFORE ORDERED:

1. A notice of inquiry is opened to address the potential impacts of U.S. Environmental Protection Agency regulations on coal-fired generation in Iowa. The inquiry is identified as Docket No. NOI-2011-0003. Interstate Power and Light Company and MidAmerican Energy Company shall provide the information identified in the body of this order on or before November 3, 2011. Other owners of coal-fired generation in Iowa are invited to provide this information identified on or before November 3, 2011. Other interested participants are invited to provide comments on the information provided on or before December 15, 2011, and also comment on what future action, if any, they believe the Board should take.

2. All filings in this docket shall be made using the Board's electronic filing system. The rules for filing are in 199 IAC 14.

UTILITIES BOARD

/s/ Elizabeth S. Jacobs

/s/ Darrell Hanson

ATTEST:

/s/ Joan Conrad
Executive Secretary

/s/ Robert B. Berntsen

Dated at Des Moines, Iowa, this 2nd day of September 2011.