

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Beverly Jones Heydinger	Chair
David C. Boyd	Commissioner
Nancy Lange	Commissioner
Dan Lipschultz	Commissioner
Betsy Wergin	Commissioner

In the Matter of the Investigation into  
Environmental and Socioeconomic Costs Under  
Minn. Stat. § 216B.2422, Subd. 3

ISSUE DATE: October 15, 2014

DOCKET NO. E-999/CI-00-1636  
E-999/CI-14-643

In the Matter of the Further Investigation into  
Environmental and Socioeconomic Costs Under  
Minn. Stat. § 216B.2422, Subd. 3

NOTICE AND ORDER FOR HEARING

**PROCEDURAL HISTORY**

On February 10, 2014, the Commission issued an order in Docket No. E-999/CI-00-1636 reopening its investigation into environmental costs of different methods of generating electricity under Minn. Stat. § 216B.2422, subd. 3. Before referring the matter to the Office of Administrative Hearings (OAH), the Commission sought input on the scope of the investigation, whether to retain an expert, and the possible role of an expert, from a stakeholder group led by the Minnesota Department of Commerce (the Department) and the Minnesota Pollution Control Agency.

On June 10, 2014, the Minnesota Department of Commerce, Division of Energy Resources and the Minnesota Pollution Control Agency (the Agencies) filed a report stating that “there was little consensus arising out of the stakeholder meeting or in subsequent written comments.” The Agencies offered their own recommendations concerning the scope and process of the investigation, and the retention of an expert.

On June 16, 2014, the Commission requested comments on the Department’s report and recommendations. The Commission received comments from:

- Fresh Energy, Sierra Club, Izaak Walton League of America – Midwest Office, Will Steger Foundation, Center for Energy and the Environment, and the Minnesota Center for Environmental Advocacy (the Clean Energy Organizations)
- Great River Energy, Minnesota Power, and Otter Tail Power Company (filing jointly)
- The Lignite Energy Council
- Peabody Energy Corporation
- The Minnesota Chamber of Commerce

- The Minnesota Large Industrial Group
- The State of North Dakota
- Xcel Energy

On September 4, 2014, the matter came before the Commission.

## **FINDINGS AND CONCLUSIONS**

### **I. Background**

In 1993, the Legislature enacted Minn. Stat. § 216B.2422, subd. 3,<sup>1</sup> to require the Commission to “quantify and establish a range of environmental costs associated with each method of electricity generation.” The statute requires utilities to use the values in Commission proceedings “in conjunction with other external factors, including socioeconomic costs, when evaluating and selecting resource options . . . .”

The Commission established interim cost values in 1994, and final values in 1997, for Sulfur Dioxide (SO<sub>2</sub>), Carbon Monoxide (CO), Carbon Dioxide (CO<sub>2</sub>), Nitrogen Oxides (NO<sub>x</sub>), Lead (Pb), and particulate matter less than 10 microns in diameter (PM<sub>10</sub>).<sup>2</sup> In 2001, the Commission determined that the values should increase to account for inflation.<sup>3</sup>

#### **A. Reopening the Investigation**

The Clean Energy Organizations filed a petition alleging that environmental cost values “are no longer supported by scientific evidence,” and requesting that the investigation be reopened. After considering arguments for and against the petition, the Commission determined that the scientific evidentiary support for the existing values had been reasonably called into question, and reopened its investigation.<sup>4</sup> The Commission also concluded that the significant and complex issues raised by the investigation would best be resolved in a contested case proceeding conducted by the Office of Administrative Hearings (OAH).

#### **B. The Scope of the Investigation and Possible Use of an Expert**

Prior to submitting the matter to OAH, the Commission sought additional input on the investigation’s scope and on the possible use of an expert retained under Minn. Stat. § 216B.62,

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<sup>1</sup> 1993 Minn. Laws Ch. 356, § 3.

<sup>2</sup> See *In the Matter of Quantification of Environmental Costs Pursuant to Laws of Minnesota 1993, Chapter 356, Section 3*, Docket No. E-999/CI-93-583, Order Establishing Environmental Cost Values (January 3, 1997), and Order Affirming in Part and Modifying In Part Order Establishing Environmental Cost Values (July 2, 1997).

<sup>3</sup> Order Updating Externality Values and Authorizing Comment Periods on CO<sub>2</sub>, PM<sub>2.5</sub>, and Application of Externality Values to Power Purchases (May 3, 2001).

<sup>4</sup> Order Reopening Investigation and Convening Stakeholder Group to Provide Recommendations for Contested Case Proceeding, Docket No. E-999/CI-00-1636 (February 10, 2014).

subd. 8.<sup>5</sup> The Commission requested that the Department of Commerce and the Pollution Control Agency convene a stakeholder group for the purpose of making recommendations on these subjects. Specifically, the Commission asked for recommendations about:

whether the investigation should address other issues—including whether to investigate the costs of methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>)—and the need for and possible role of an expert, if the Commission were to retain one.<sup>6</sup>

### **1. The Stakeholder Group**

The Agencies held a stakeholder meeting, and received written comments. According to the Agencies, stakeholder input was limited, and consensus on the issues scarce. The Agencies stated that the stakeholder group was only able to reach consensus on three issues:

- the criteria that the Agencies developed to assess potential [investigation] processes are appropriate;
- the best and most credible estimates for externality values should be developed; and
- there should be a high degree of transparency in the analyses.

### **2. The Agencies' Recommendations**

Despite the lack of stakeholder consensus on the investigation's scope or use of an expert, the Agencies offered their recommendation in light of the input they received. The Agencies made a number of recommendations, including:

- Adopt the social cost of carbon (SCC) values developed by the federal government as the environmental cost of CO<sub>2</sub>. If the Commission declines to adopt the SCC without further proceedings, then the Commission should approve retention of a consultant to assist the Agencies in evaluating CO<sub>2</sub> externality values.
- Include in the scope of the investigation, Sulfur Dioxide (SO<sub>2</sub>), Nitrogen Oxides (NO<sub>x</sub>), and particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>).<sup>7</sup> Exclude non-CO<sub>2</sub> greenhouse gasses.
- Take a photochemical modeling approach to determine the most credible externality values for Minnesota electric generator emissions of criteria pollutants. If a photochemical modeling approach is too costly or time consuming, then a reduced form modeling approach would be the next best option for estimating criteria pollutant externality values.

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<sup>5</sup> Minn. Stat. § 216B.62, subd. 8, provides that in order to conduct an investigation that requires specialized technical professional investigative services, the Commission may “request the commissioner of commerce to seek authority from the commissioner of management and budget to incur costs reasonably attributable to the specialized services.”

<sup>6</sup> Order Reopening Investigation and Convening Stakeholder Group to Provide Recommendations for Contested Case Proceeding, 5, Docket No. E-999/CI-00-1636 (February 10, 2014).

<sup>7</sup> Together, the Agencies refer to these as “criteria pollutants,” a designation for pollutants regulated by the federal Environmental Protection Agency using health-based and/or environmentally-based criteria.

- Establish a set of required damages (e.g., health, non-health) that parties should include in any CO<sub>2</sub> estimates they propose in the record.
- Specify that any externality values proposed by parties should be damage values, not compliance costs, willingness-to-pay/accept, or other value types.
- Require that proposed CO<sub>2</sub> value estimates offered by parties to be considered in the investigation must account for global damages.
- Request that parties propose ways to update their preferred CO<sub>2</sub> value in the future.

The Commission solicited comments on the Agencies' report and recommendations. The Commission received comments supporting and opposing the Agencies' recommendations—the most contentious issue was the Agencies' recommendation to adopt the federal social cost of carbon without further proceedings.

## **II. Commission Action**

In its February 10 order reopening its investigation into the appropriate cost values for PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub>, the Commission determined that the investigation would be best resolved in the context of a contested case proceeding conducted by the Office of Administrative Hearings. That determination is not revisited here. At issue is the investigation's scope, and the possible role of an expert under Minn. Stat. § 216B.62, subd. 8, if one is retained to aid the investigation.

Having reviewed the Agencies' report and participants' comments on the report, the Commission will refer the matter to the Office of Administrative Hearings, as set forth below.

### **A. Scope of Investigation**

The Commission will investigate the appropriate cost values for PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub>. The Commission will not further investigate at this time the environmental costs of other greenhouse gasses such as methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). Because CO<sub>2</sub> represents 99% of greenhouse gas emissions, an accurate environmental cost value for CO<sub>2</sub> will account for almost all greenhouse gas costs. This will result in a more manageable proceeding and allow the parties to focus their resources.

It would be premature at this stage to adopt the federal SCC values for CO<sub>2</sub> as the Agencies recommend. The Commission still believes that a contested case proceeding is necessary to fully consider the Agencies' proposed CO<sub>2</sub> cost values. The Commission will therefore not act at this time on the Agencies' proposal to adopt the federal SCC values immediately. But, in light of the record so far, the Commission will ask the Administrative Law Judge to determine whether the Federal Social Cost of Carbon is reasonable and the best available measure to determine the environmental cost of CO<sub>2</sub> and, if not, what measure is better supported by the evidence.

The Commission will require parties in the contested case proceeding to evaluate the costs using a damage cost approach, as opposed to (for example), market-based or cost-of-control values. When last faced with the question of the preferred approach to estimate environmental cost values, the Commission stated that, as between estimates based on damage or based on cost-of-control, the damage-cost approach is superior because it appropriately focuses on actual damages from uncontrolled emissions.

Nothing in this proceeding justifies reaching a different conclusion now. Where a damage cost can be reasonably estimated, it represents a superior method of valuing an emission's environmental cost. The Commission is persuaded that a damage-cost approach can be used for the emissions under investigation, and will therefore require it.

### **B. Approval for Consultant**

The Commission will authorize the Department to take the steps necessary to retain a consultant under Minn. Stat. § 216B.62, subd. 8, if it determines such action is necessary. The Commission will play no role in the retention of a consultant and does not intend to communicate with the consultant during the course of the proceeding.

The Commission, having considered the relative merits of damage modeling approaches discussed by the Agencies, prefers reduced-form modeling in this case. While the photochemical modeling approach may offer the greatest precision, its complexity renders it slower and more expensive than reduced-form modeling. As several participants acknowledged, reduced-form modeling will also provide credible results as a next-best alternative to photochemical modeling. The Commission will therefore require, if a consultant is retained, that the consultant use reduced-form modeling to estimate damage costs.

### **C. Referral to the Office of Administrative Hearings**

Consistent with the above discussion, the Commission will refer this matter to the Office of Administrative Hearings for contested case proceedings.

The Commission believes that public comments are a necessary component of this investigation, but leaves to the Administrative Law Judge's discretion whether those comments should be received in the form of public hearing(s) or in written comments, or both.

### **III. Jurisdiction and Referral for Contested Case Proceedings**

The Commission has jurisdiction to quantify and establish a range of environmental costs associated with each method of electricity generation under Minn. Stat. § 216B.2422, subd. 3. Consistent with Minn. Rule 7829.1000, the Commission refers this matter for contested case proceedings.

### **IV. Issues To Be Addressed**

Parties shall specifically and thoroughly address the following issues:

- Whether the Federal Social Cost of Carbon is reasonable and the best available measure to determine the environmental cost of CO<sub>2</sub> under Minn. Stat. §216B.2422 and, if not, what measure is better supported by the evidence.
- The appropriate values for PM 2.5, SO<sub>2</sub>, and NO<sub>x</sub> under Minn. Stat. §216B.2422, subd. 3.

## **V. Procedural Outline**

### **A. Administrative Law Judge**

The Administrative Law Judge assigned to this case is LauraSue Schlatter. Her address and telephone number are as follows: Office of Administrative Hearing, 600 North Robert Street, St. Paul, Minnesota 55101 and (651) 361-7881. Her mailing address is P.O. Box 64620, St. Paul, Minnesota 55164-0620.

### **B. Hearing Procedure**

- *Controlling Statutes and Rules*

Hearings in this matter will be conducted in accordance with the Administrative Procedure Act, Minn. Stat. §§ 14.57 – 14.62; the rules of the Office of Administrative Hearings, Minn. Rules, parts 1400.5100 to 1400.8400; and, to the extent that they are not superseded by those rules, the Commission's Rules of Practice and Procedure, Minn. Rules, parts 7829.0100 to 7829.3200.

Copies of these rules and statutes may be purchased from the Print Communications Division of the Department of Administration, 660 Olive Street, St. Paul, Minnesota 55155; (651) 297-3000. These rules and statutes also appear on the State of Minnesota's website at [www.revisor.mn.gov/pubs](http://www.revisor.mn.gov/pubs).

The Office of Administrative Hearings conducts contested case proceedings in accordance with the Minnesota Rules of Professional Conduct and the Professionalism Aspirations adopted by the Minnesota State Bar Association.

- *Right to Counsel and to Present Evidence*

In these proceedings, parties may be represented by counsel, may appear on their own behalf, or may be represented by another person of their choice, unless otherwise prohibited as the unauthorized practice of law. They have the right to present evidence, conduct cross-examination, and make written and oral argument. Under Minn. Rules, part 1400.7000, they may obtain subpoenas to compel the attendance of witnesses and the production of documents.

Parties should bring to the hearing all documents, records, and witnesses necessary to support their positions.

- *Discovery and Informal Disposition*

Any questions regarding discovery under Minn. Rules, parts 1400.6700 to 1400.6800 or informal disposition under Minn. Rules, part 1400.5900 should be directed to Michelle Rebholz, Economic Analysis Supervisor, Minnesota Public Utilities Commission, 121 7th Place East, Suite 350, St. Paul, Minnesota 55101-2147, (651) 201-2206.

- *Protecting Not-Public Data*

State agencies are required by law to keep some data not public. Parties must advise the Administrative Law Judge if not-public data is offered into the record. They should take note that any not-public data admitted into evidence may become public unless a party objects and requests relief under Minn. Stat. § 14.60, subd. 2.

- *Accommodations for Disabilities; Interpreter Services*

At the request of any individual, this agency will make accommodations to ensure that the hearing in this case is accessible. The agency will appoint a qualified interpreter if necessary. Persons must promptly notify the Administrative Law Judge if an interpreter is needed.

- *Scheduling Issues*

The times, dates, and places of evidentiary hearings in this matter will be set by order of the Administrative Law Judge after consultation with the Commission and intervening parties.

- *Notice of Appearance*

Any party intending to appear at the hearing must file a notice of appearance (Attachment A) with the Administrative Law Judge within 20 days of the date of this Notice and Order for Hearing.

- *Sanctions for Non-compliance*

Failure to appear at a prehearing conference, a settlement conference, or the hearing, or failure to comply with any order of the Administrative Law Judge, may result in facts or issues being resolved against the party who fails to appear or comply.

### **C. Parties and Intervention**

The current parties to this case are the Clean Energy Organizations, Peabody Energy Corporation, and the Department. Other persons wishing to become formal parties shall file petitions to intervene with the Administrative Law Judge. They shall serve copies of such petitions on all current parties and on the Commission. Minn. Rules, part 1400.6200.

### **D. Prehearing Conference**

A prehearing conference will be held on November 25, 2014, at 9:30 a.m. in the Large Hearing Room at the offices of the Public Utilities Commission, 121 Seventh Place East, Suite 350, St. Paul, Minnesota 55101-2147.

Persons participating in the prehearing conference should be prepared to discuss time frames, scheduling, discovery procedures, and similar issues. Potential parties are invited to attend the pre-hearing conference and to file their petitions to intervene as soon as possible.

## **VI. Application of Ethics in Government Act**

The lobbying provisions of the Ethics in Government Act, Minn. Stat. § 10A.01 et seq., apply to cases involving administrative action. Persons appearing in this proceeding may be subject to registration, reporting, and other requirements set forth in that Act. All persons appearing in this case are urged to refer to the Act and to contact the Campaign Finance and Public Disclosure Board, telephone number (651) 296-5148, with any questions.

## **VII. Ex Parte Communications**

Restrictions on *ex parte* communications with Commissioners and reporting requirements regarding such communications with Commission staff apply to this proceeding from the date of

this Order. Those restrictions and reporting requirements are set forth at Minn. Rules, parts 7845.7300 – 7845.7400, which all parties are urged to consult.

## ORDER

1. This investigation shall proceed under Commission Docket No. E-999/CI-14-643.
2. The Commission refers the issue of the appropriate values for CO<sub>2</sub> under Minn. Stat. § 216B.2422 subd. 3, to the Office of Administrative Hearings for contested case proceedings.  
  
The purpose of the proceedings shall be to determine whether the Federal Social Cost of Carbon is reasonable and the best available measure to determine the environmental cost of CO<sub>2</sub> and, if not, what measure is better supported by the evidence.
3. The Commission refers the issues of the appropriate values for PM 2.5, SO<sub>2</sub>, and NO<sub>x</sub> under Minn. Stat. §216B.2422, subd. 3, to the Office of Administrative Hearings for contested case proceedings.
4. Parties participating in the contested case proceedings shall use the damage cost approach to valuing environmental costs.
5. The Department of Commerce may in its discretion work with the Office of Management and Budget to retain a consultant. Any such consultant must use reduced form modeling in the contested case proceedings.
6. The Commission determines that public comments are a necessary component of this investigation. The Commission requests that the Administrative Law Judge, after consultation with the parties and Commission staff, determine whether public comments will be received by written public comment period, by public hearings, or both.
7. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION



Burl W. Haar  
Executive Secretary



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BEFORE THE MINNESOTA OFFICE OF ADMINISTRATIVE HEARINGS  
600 North Robert Street  
St. Paul, Minnesota 55101

FOR THE MINNESOTA PUBLIC UTILITIES COMMISSION  
121 Seventh Place East Suite 350  
St. Paul, Minnesota 55101-2147

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Minn. Stat. § 216B.2422, Subd. 3

MPUC DOCKET NO. E-999/CI-14-643

OAH Docket No.

**NOTICE OF APPEARANCE**

Name, Address and Telephone Number of Administrative Law Judge: LauraSue Schlatter,  
Office of Administrative Hearings, 600 North Robert Street, St. Paul, Minnesota 55101 and  
(612) 801-5840. Her mailing address is P.O. Box 64620, St. Paul, Minnesota 55164-0620.

TO THE ADMINISTRATIVE LAW JUDGE:

You are advised that the party named below will appear at the above hearing.

NAME OF PARTY:

ADDRESS:

TELEPHONE NUMBER AND E-MAIL ADDRESS:

PARTY'S ATTORNEY OR OTHER REPRESENTATIVE:

OFFICE ADDRESS:

TELEPHONE NUMBER:

SIGNATURE OF PARTY OR ATTORNEY: \_\_\_\_\_

DATE: \_\_\_\_\_