

# Minnesota Public Utilities Commission

## Staff Briefing Papers

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Meeting Date: December 19, 2013 ..... \*\* Agenda Item # 10

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**Company:** All Electric Utilities

**Docket No.** E999/CI-00-1636  
In the Matter of the Investigation into Environmental and Socioeconomic Costs Under Minn. Stat. §216B.2422, subd. 3.

**Issues:**

- 1) What is the scope of action requested by the petitioners?
- 2) Should the Commission reopen this matter, either by granting the Clean Energy Organization's Motion or on the Commission's own motion?
- 3) If the matter is reopened, what scope of issues should be examined and what procedures should be used?

**Staff:** Michelle Rebholz ..... 651-201-2206  
Clark Kaml ..... 651-201-2246

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### **Relevant Documents**

Clean Energy Organizations, *Motion* ..... October 9, 2013  
Minnesota Environmental Partnership, *Public Comment* ..... October 10, 2013  
American Lung Association, *Public Comment* ..... October 10, 2013  
City of Minneapolis, *Letter* ..... November 5, 2013  
Clean Up the River Environment, *Comments* ..... November 6, 2013  
Wind on the Wires, *Public Comment* ..... November 6, 2013  
Missouri River Energy Services, *Comments* ..... November 6, 2013  
State of North Dakota, *Comments* ..... November 7, 2013  
Minnkota Power Cooperative, *Comments* ..... November 8, 2013  
Minnesota Power, *Comments* ..... November 8, 2013  
Minnesota Pollution Control Agency, *Comments* ..... November 8, 2013  
Otter Tail Power Company, *Comments* ..... November 8, 2013  
American Coalition for Coal/Lignite Energy Council, *Comments* ..... November 8, 2013  
Minnesota Large Industrial Group, *Comments* ..... November 8, 2013  
Minnesota Chamber of Commerce, *Comments* ..... November 8, 2013  
Great River Energy, *Comments* ..... November 8, 2013  
Clean Energy Organizations, *Reply Comments* ..... November 18, 2013

Xcel Energy, *Reply Comments* ..... November 18, 2013  
Otter Tail Power Company, *Reply Comments* ..... November 18, 2013

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The attached materials are workpapers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless otherwise noted.

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**Issue:**

What action should the Commission take on the petition to reopen the environmental externalities docket?

**Background****Motion**

On October 9, 2013, the Izaak Walton League, Fresh Energy, Sierra Club, Center for Energy and the Environment, Will Steger Foundation, and Minnesota Center for Environmental Advocacy (Clean Energy Organizations, or CEO) filed a petition pursuant to Minn. Stat. §216B.25 to reopen the Commission's environmental externalities docket.

CEO asked the Commission to update three (3) values (SO<sub>2</sub>, NO<sub>x</sub>, and CO<sub>2</sub>) and establish values for a new pollutant (PM<sub>2.5</sub>). In support of the motion, CEO submitted a study by two applied economists from the University of Minnesota.

CEO stated that the pollutants emitted by the generation of electricity from fossil fuels have significant adverse impacts on the environment and human health. At pages 4-7 of the memo in support of its motion, CEO explains the impacts related to each pollutant.

At page 10 of its memo, CEO explains that the science and technical understanding have grown immensely. At page 11, CEO explains why current science confirms that damage costs are much higher than the Commission's values. At the top of page 13, CEO lists the possible new updated values based on the U of M study.

CEO requests that the Commission retain a consultant at the beginning of the docket to provide greater focus for parties and more efficient record development. CEO also requests that the Commission adopt the federal Social Cost of Carbon (SCC), stating that Minnesota-specific modeling is unnecessary to establish damage costs for global carbon pollution impacts.

The petitioners also request that this docket be completed within one year.

**Background: Description of Current Environmental Externalities**

Minnesota Statutes §216B.2422, subd. 3 was passed in 1993. The statute required the Commission to establish a range of "environmental costs" associated with electricity generation to be used, in conjunction with other external factors, when evaluating and selecting resource options in all proceedings before the Commission. The statute does not provide a definition of "environmental costs" nor does it identify which pollutants should have a cost attached to them.

The Commission originally established values for SO<sub>2</sub>, PM<sub>10</sub>, CO, NO<sub>x</sub>, Pb, and CO<sub>2</sub>. The reason given for applying these values to facilities inside or within 200 miles of Minnesota's borders were due to precipitation studies. The Commission noted that carbon dioxide's effect is global

but determined it would not apply the carbon values in the 1993 docket globally for consistency purposes.<sup>1</sup> (SO<sub>2</sub> values were initially established but are now at zero due to a federal cap and trade system.)

In a subsequent order in the docket, the Commission clarified that these values were a planning tool:

The values...will only be considered in conjunction with many other factors, including direct costs, socioeconomic effects, reliability and ratepayer impact....Environmental externalities will help utilities and the Commission compare various alternatives but will not by themselves be determinative.<sup>2</sup>

In 2000, the Commission was asked to update the externality values. The Commission decided to update the values using the Gross National Product Price Deflator Index. Since that Commission decision, the values have been updated annually to reflect inflation.

Attachment I lists the current environmental externalities, updated in 2013.

### **Party Comments**

Because party comments were fairly short and generally either opposed or supported the motion, staff has not repeated them here. Common arguments made in party comments are incorporated into staff comments below. Seven commenters supported the motion and nine opposed it. (Alliant Energy filed a letter but did not express an opinion.)

### **Staff comment**

Staff believes there are five general options the Commission can take:

- 1) The Commission can grant the motion as filed;
- 2) The Commission can reject the motion;
- 3) The Commission can defer a decision on re-opening the docket and receive more information;
- 4) The Commission can grant the motion to reopen but modify the procedural treatment requested;
- 5) The Commission can grant the motion to reopen but modify certain substantive requests in the motion.

There are valid reasons for taking any of the above options. Staff has outlined the most persuasive arguments for each option below. Staff also believes it is important to clarify in which Commission dockets the values are and could be used, and how they are used.

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<sup>1</sup> See ORDER ESTABLISHING ENVIRONMENTAL COST VALUES, Issued January 3, 1997, Docket E999/CI-93-583.

<sup>2</sup> Docket No. E999/CI-03-583, ORDER DENYING RECONSIDERATION, Issued June 21, 1994, page 2.

**Approving the motion as filed:**

- Clean Energy Organizations point out that science and technology have changed since 1996, and, although the Commission previously rejected a request to reopen the docket, the time has come for updating the values.
- The values have increased importance because they may be used as part of the Value of Solar and Community Solar Garden rates.<sup>3</sup> Since the solar rates are locked in for at least a 20 year term, it is important to update values that could be incorporated into these rates.
- Transparency is important in resource acquisition dockets, such as resource plans and certificate of need proceedings. Having up-to-date values will go a long way in enhancing transparency.
- As the Department points out, there are more pollutants which do not have externality values. In addition to updating existing values, it would be fruitful to have a discussion on whether additional values should be established. In the Commission's May 2001 Order in the current docket, the Commission stated it would entertain petitions to set values for other pollutants.
- While new laws and EPA regulations have been passed since the 1993 externality statute, the fact remains that this law remains on the books. The legislature could have repealed the law if it felt this law duplicated the progress made by other laws, but it did not.

**Rejecting the motion:**

- The “real costs of pollution” have been accounted for, in laws that have been passed after the environmental externalities law. RES statutes, mercury reduction statutes, and EPA rules have all been passed with the acknowledgement that resource decisions must be changed in the future. These newer laws go beyond simply estimating the damage caused by pollutants and require resource decisions or emissions reductions.
- Many costs that would have been externality values in 1996 have now been internalized, so there is no guarantee that values would increase if the Commission re-opened the docket. In fact, as some parties note, the values could go down.
- With respect to carbon dioxide, the externality values statute does not mandate that the Commission adopt a carbon value; since the passing of the externalities statute in 1993, the legislature passed a statute in 2007 which mandates the Commission set a carbon value and update it annually. (*Staff note*: a comparison

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<sup>3</sup> See, for example, the initial comments of MNSEIA at page 7, observing that “Annual Avoided Environmental Costs” could be part of a rate paid to solar developers, and their comments at page 10, suggesting that the Commission's current carbon dioxide value should be and likely will be increased.

of the two statutes is provided as Attachment II.) Xcel and others point out that updating a carbon value in the externalities docket would be duplicative and cause confusion as to which range should be applied in resource plans. As the Commission is aware, the Commission has already required its CO<sub>2</sub> value from that 2007 legislation to be used in the base cases of utility resource plans. Thus, the planning tool that the externalities values fulfill is already being done through the carbon value.

- MRES and others observe that there is an SO<sub>2</sub> cap and trade mechanism in place at the federal level, meaning SO<sub>2</sub> costs have been internalized. This mechanism has successfully reduced SO<sub>2</sub> by 70% from 1990 levels. While the price of those allowances is low, that may be simply because so much has been accomplished with respect to SO<sub>2</sub> reduction, or it may mean that the Petitioners should direct their concern at the federal level.
- As OTP and MP point out, the previous environmental externalities proceeding was lengthy, resource intensive, and lasted 2 ½ years. The evidentiary hearings alone lasted one month.<sup>4</sup> The Commission's previous order in this docket noted the intensity of the proceedings as a basis for denying previous requests to update the values. There were 13 petitions for reconsideration of the Commission's Order.<sup>5</sup> Given the other laws now in place that accomplish the same goals, it is difficult to understand why such a large use of the Commission's and stakeholders' resources would be of value.
- While the externality values have not had the benefit of being reviewed under advances in science and technology, the EPA's rules have been. As Xcel points out in its reply comments: *The Clean Air Act requires the EPA to set NAAQS [National Ambient Air Quality Standards] for sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>) and Particulate Matter (PM) at levels that protect human health and the environment, with an adequate margin for safety – regardless of cost. This requires the EPA to incorporate and rely on the current state of science and technical understanding regarding impacts from emissions. As we discussed in our comments, the EPA has done this within the last five years for all of the NAAQS [ ].*
- GRE and others note that it would be premature to update the values now. Instead, the Commission could monitor EPA rulemakings, which will significantly affect coal units in Minnesota, and update its values after those final rules have been issued.

**Defer a decision on the petition and gather additional information:**

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<sup>4</sup> As comparison, the evidentiary hearings for rate cases typically last one week.

<sup>5</sup> Docket E999/CI-93-583, ORDER GRANTING RECONSIDERATION, Issued February 21, 1997.

- The Chamber points out the level of state agency resources that would be required for a proceeding on this scale. These costs will be passed on to utilities through assessments. The Chamber requests that any decision in this docket first include an understanding of the impact to ratepayers.
- The state of North Dakota requests clarification on the application of these values. The Commission's previous decision applied these values only to coal plants within the state of Minnesota or within 200 miles of Minnesota, and for CO<sub>2</sub>, only within the state of Minnesota. In response, CEO states the application of these values should be on electricity "consumed in Minnesota." This appears to be a suggestion to reverse the previous Commission Order on applying the values. However, CEO suggests the scope of the proceeding need not be decided now; rather it is a policy decision that can be decided after the values have been set. North Dakota disagrees, stating that this information should be known at the outset of the proceeding so that it can decide whether to participate.
- Many commenters, including GRE and the PCA, suggest that a transparent, multi-party stakeholder group could be convened to flesh out the scope of such a proceeding prior to a formal referral to the OAH.

**Grant the petition but modify the procedural relief requested:**

CEO's petition requests that the Commission hire a consultant and engage in proceedings to update externality values. There are significant procedural issues to be addressed:

- The Commission does not have the internal funding to retain a consultant. In the past, such as in the Big Stone docket<sup>6</sup>, the Commission funded a consultant under different circumstances. At this time, under Minn. Stat. §216B.62 subd. 8, its only option is to request that the Department of Commerce request that Management and Budget to allow for the funding. However, that statute makes clear that the Department of Commerce is then the agency that carries out the investigation. In the Monticello docket<sup>7</sup>, the only docket to date where this statute has been used, a consultant is being retained but will be serving as the Department's witness. The Commission and Department should clarify what the consultant's role would be in this proceeding. Staff has included a decision option identical to that in the Monticello docket, for illustrative purposes.
- Given the process of interagency approval identified in subdivision 8 and the time needed to retain a consultant, the controversial topic, and the number of other pending dockets, it is highly unlikely that the proceeding could be completed in 12 months.

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<sup>6</sup> E017 et. al/CN-05-619.

<sup>7</sup> E002/CI-13-754.

- A number of parties express discomfort with the Commission retaining a consultant at the beginning of the docket, saying it would be unclear if the consultant's recommendation would become the de facto position of the Commission.<sup>8</sup> Another option is for the Petitioner to retain its own consultant and refer the matter to OAH; then, parties may intervene and choose to retain their own experts.

**Grant the petition but modify the substantive relief requested:**

- Given the 2007 legislation requiring the Commission to set carbon values annually, and the Commission's persistent mandate to utilities to use those values in resource plans, the Commission could grant CEO's petition but remove consideration of a CO<sub>2</sub> value since the Commission sets a carbon under Minn. Stat. §216H.06 (Docket 07-1199, or "carbon values docket"). In addition, because the Commission's carbon values are updated annually under 216H.06, the Commission has more flexibility to change that value to reflect current conditions rather than setting one permanent rate which may be stale in a number of years. While a "damage" cost set by an externality value is at first glance different from the "likely range of costs of future carbon dioxide regulation" standard in §216H.06, staff believes given the federal "social cost of carbon" value out for public comment and the broad language used in §216H.06, damages are being considered at the federal level and the Commission has broad discretion under the statute to set carbon values as it sees fit. Staff also notes that in the carbon value docket, the Commission has already stated that if utilities use the carbon value from §216H.06, they need not use the carbon value from the Commission's externalities docket.<sup>9</sup>
- The Commission could also grant the motion but exclude SO<sub>2</sub> from the proceeding. The Commission's previous order clearly stated it would decrease its externality value to \$0 when a federal cap and trade mechanism is established. That federal mechanism remains in place and the petition's reasoning for desiring to change SO<sub>2</sub> is simply that they feel the price for federal allowances is too low. Complaints about the federal mechanism could be directed at the appropriate federal agency. (In addition, it is somewhat inconsistent to advocate for the Commission to adopt the federally-proposed Social Cost of Carbon but then

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<sup>8</sup> In the Big Stone docket, the proceeding was referred to the OAH, litigated there, and then returned to the Commission, where the Commission determined it needed additional information and retained a consultant.

<sup>9</sup> Order Issued December 21, 2007, Docket No. E999/CI-07-1199, page 4: "While the calculation of externality values under §216B.2422, subd. 3 is not directly comparable to the estimate of regulatory costs under §216H.06, they both reflect steps to account for the burdens that CO<sub>2</sub> emissions impose on third parties. When a utility calculates the cost of emitting another ton of CO<sub>2</sub> in any given year, therefore, it would be inappropriate to use both the CO<sub>2</sub> externality value and the CO<sub>2</sub> regulatory cost estimate."



advocate that the Commission should reject the federal cap and trade mechanism for SO<sub>2</sub>.)

### Staff Recommendations

The decision whether to re-open the docket is a policy decision that must be made by the Commission. Staff reiterates that there are logical reasons to either re-open the petition, modify the petition, defer a decision, or reject it. However, staff has some observations:

#### The scope of the proceeding may benefit from some clarity

Commenters have very different views on the scope of the proceeding. For example:

- 1) Should the issues of whether the values should be applied more broadly be considered in the proceeding? One example would be not limiting the application of most values to within 200 miles of Minnesota. Whether these issues will be considered could be important in some entities' decisions on whether to participate in the proceeding.
- 2) Should the damage cost model again be used or is the model for assessing values reopen for discussion? This is relevant to knowing how long the proceeding may take. In the previous proceeding, the damage cost model was used. This can not only affect the timing of the proceeding but the type of consultant to retain and the scope of his or her work.
- 3) Should the Commission review whether there is consistent application of the values in resource planning and other dockets? Minnesota Power notes that this has been an issue in some dockets and recommends this be addressed. Staff requests that MP provide more detail on its concern.

#### The docket, if re-opened, will likely be as resource intensive and controversial as when it was first initiated

Not only are there proposals to expand the number of pollutants to which values could be applied, but commenters do not even agree on the definition of an externality nor the purpose of assigning costs to them:

*Environmental values...are the total external costs inflicted on society from the emission of pollution.*<sup>10</sup>

Versus

*An environmental externality is the estimate of environmental damages associated with an incremental increase in emissions...[U]nder most circumstances, the state*

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<sup>10</sup> PCA comments, p. 1.

*and federal environmental agencies are authorized to develop and implement programs to protect the public health and welfare so that only a few environmental externalities remain.*<sup>11</sup>

There is a fundamental difference between what parties perceive the Commission's role to be, and the statute does not offer any guidance. In many situations, re-opening a docket to update some issues may be a fairly focused and limited effort which requires a minimal amount of time. In this docket, however, the existence of the pending EPA rulemakings will prompt some parties to suggest that the values be lowered or even eliminated.<sup>12</sup> Advances in science and technology may offer new options for analysis that were not available in 1993. This staff observation should not be seen as a recommendation to reject the petition; reopening the proceeding may be an opportunity to inform the Commission and stakeholders of important issues. However, it should be noted that this will require significant resources, perhaps equal to the original proceeding.

All parties agree that if reopened, the matter should be referred to the Office of Administrative Hearings

While parties are far apart on many issues, all commenters who expressed an opinion agree that if re-opened, the matter should be referred to the OAH.

### **Decision Options**

- A. Approve the petition as filed. (*Clean Energy Organizations, multiple parties*) (*Staff note: this would include referring the matter to the Office of Administrative Hearings with a request to conclude within 12 months.*)
- B. Reject the petition. (*Multiple parties*)
- C. Reject the petition at this time, without prejudice. Find that when final rules on NSPS and the carbon standards on existing power plants as directed by the Obama administration have been issued by the EPA, petitioners may re-file their request. (*GRE, multiple parties*) (*Staff note: these final regulations are anticipated to be issued in June 2015.*)
- D. Defer a decision on re-opening the docket at this time. Instead:
  - 1) Direct all interested stakeholders to convene a stakeholder group to address the scope of a potential proceeding. The stakeholder group should report back to the

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<sup>11</sup> American Coalition for Clean Coal Electricity and the Lignite Energy Council, p. 2.

<sup>12</sup> The EPA rulemakings may prompt commenters to consider whether the Commission should even be considering an externality value for certain pollutants. The debate over the scope of the EPA rulemakings will add to the review time for this docket.

- Commission in four (4) months from the Commission's Order in this docket;  
(*Multiple parties*)
- 2) Direct all utilities to file information on ratepayer impact from the previous 93-583 and 00-1636 dockets, and estimate the ratepayer impact on reopening the docket within 45 days of an Order in this docket. Parties may file reply comments 15 days after the ratepayer impact filings are made. (*Chamber of Commerce*)
  - 3) Direct all interested stakeholders to file comments on whether the scope of the proceeding should include any change to the application of the values (such as whether they should apply to electricity "consumed in Minnesota," as suggested by the petitioners). Direct staff to issue a Notice setting comment deadlines for these additional comments.
- E. Approve the petition, but modify the procedural status of the docket to:
- 1) Find that the Commission shall not retain a consultant; intervenors may present expert witnesses on the topic of externalities. The matter shall be referred to the Office of Administrative Hearings for a contested case. (*Multiple parties*)
  - 2) Approve the proposal for this investigation as described in the briefing papers including the retention of an expert, under Minn. Stat. § 216B.62, subd. 8, to assist the Department in conducting its investigation on the Commission's behalf;
  - 3) Refer the matter to the Office of Administrative Hearings for a contested case, with a request that the proceeding be concluded within:
    - a) 18 months;
    - b) 24 months;
    - c) Some other timeframe.
- F. Approve the petition, but modify the relief granted to:
- 1) Remove CO<sub>2</sub> from the proceeding;
  - 2) Remove SO<sub>2</sub> from the proceeding;
  - 3) Add the following non-carbon dioxide greenhouse gases to the proceeding: methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). (*Department of Commerce*)



*Janet E. Hengaley for*  
Burl Haar, Executive Secretary

STATE OF MINNESOTA PUBLIC UTILITIES COMMISSION

**NOTICE OF UPDATED ENVIRONMENTAL EXTERNALITY VALUES**

*Issued: June 5, 2013*

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

**PUC Docket Number/s: E-999/CI-93-583 and E-999/CI-00-1636**

**Comment Period:** None

**Background:** In its May 3, 2001 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, Docket No. E-999/CI-00-1636, the Commission used the Gross Domestic Product (GDP) Price Deflator Index to update the externality values adopted in its July 3, 1997 Order in Docket No. E-999/CI-93-583, and indicated that the values will continue to be updated as data becomes available from that index.

The environmental externality values have been updated using the 2012 GDP Deflator index values (rebased for a year 2000 base year) published by the United States Department of Commerce on May 30, 2013. A copy of the updated environmental externality values have been attached to this notice and can also be found on the Commission's Website, [www.puc.state.mn.us/PUC/electricity/ReportsandStudies/NoticesofInterest/index.html](http://www.puc.state.mn.us/PUC/electricity/ReportsandStudies/NoticesofInterest/index.html)

**Full Case Record:** All documents filed in this docket are available on the Commission's website at [www.puc.state.mn.us](http://www.puc.state.mn.us), select "Search eDockets," enter the year (00) and the docket number (1636), select "Search."

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**ENVIRONMENTAL EXTERNALITY VALUES  
UPDATED THROUGH 2012<sup>1</sup>**

**URBAN**

	<b>Original (1995\$/ton)</b>		<b>Inflation Adjusted Values GDIPIPD (2012\$/ton)</b>	
	<b>Range of Values</b>		<b>Range of Values</b>	
	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>
SO <sub>2</sub>	112	189	0	0
PM <sub>10</sub>	4462	6423	6291	9056
CO	1.06	2.27	1.49	3.20
NO <sub>x</sub>	371	978	523	1379
Pb	3131	3875	4415	5464
CO <sub>2</sub>	0.3	3.1	0.42	4.37

**METROPOLITAN FRINGE**

	<b>Original (1995\$/ton)</b>		<b>Inflation Adjusted Values GDIPIPD (2012\$/ton)</b>	
	<b>Range of Values</b>		<b>Range of Values</b>	
	<b>Low</b>	<b>High</b>	<b>Low</b>	<b>High</b>
SO <sub>2</sub>	46	110	0	0
PM <sub>10</sub>	1987	2886	2802	4069
CO	0.76	1.34	1.07	1.89
NO <sub>x</sub>	140	266	197	375
Pb	1652	1995	2329	2813
CO <sub>2</sub>	0.3	3.1	0.42	4.37

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Environmental Externality values have been updated using United States Department of Commerce, Bureau of Economic Analysis 2012 Price Indexes for Gross Domestic Product (Table 1.1.9) released May 30, 2013. The index has been rebased with 2000 as the base year.

**RURAL****Original (1995\$/ton)****Inflation Adjusted Values****Range of Values****GDPIPD (2012\$/ton)****Range of Values****Low****High****Low****High**

	Low	High	Low	High
SO2	10.00	25.00	0.00	0.00
PM10	562.00	855.00	792	1206
CO	0.21	0.41	0.30	0.58
NO <sub>x</sub>	18.00	102.00	25	144
Pb	402.00	448.00	567	632
CO <sub>2</sub>	0.30	3.10	0.42	4.37

**WITHIN 200 MILES OF MINNESOTA****Original (1995\$/ton)****Inflation Adjusted Values****Range of Values****GDPIPD (2012\$/ton)****Range of Values****Low****High****Low****High**

	Low	High	Low	High
SO2	10.00	25.00	0.00	0.00
PM10	562.00	855.00	792	1206
CO	0.21	0.41	0.30	0.58
NO <sub>x</sub>	18.00	102.00	25	144
Pb	402.00	448.00	567	632
CO <sub>2</sub>	0.00	0.00	0.00	0.00

**NOTE REGARDING THE USE OF SO2 VALUES:** In the January 3, 1997 Order Establishing Environmental Cost Values the Commission found that SO2 damages would be internalized after 2000 and applying externality costs would be unwarranted.

**NOTE REGARDING THE USE OF CARBON DIOXIDE VALUES:** In its November 2,

**2012 Order Establishing 2012 and 2013 Estimate of Future Carbon Dioxide Regulation Costs, pursuant to Minn. Stat. §216H.06, in Docket No. E-999/CI-07-1199 the Commission established an estimate of the likely range of costs of future carbon dioxide regulation on electricity generation of \$9/ton to \$34/ton for CO2 emitted in 2012 and thereafter. This range of values will be updated annually. A utility need not apply the CO2 externality values in the above tables established pursuant to Minn. Stat. §216B.2422, subd. 3, in any year to which the utility applies the CO2 costs derived pursuant to Minn. Stat. §216H.06.**



**Attachment II, Docket E999/CI-00-1636**

**Carbon Values**

	<b>93-583/00-1636</b>	<b>07-1199</b>
<b>Current Value</b>	\$.42-4.37 per ton	\$9-34 per ton
<b>Applied</b>	<p>By Commission Order, applies only to coal units within Minnesota or within 200 miles of Minnesota.</p> <p>Original order clarified they apply only to planned generation; however, as existing generation has been examined, there appears to be application of the values to existing units.</p>	<p>By Commission order, is to be used in the base cases of all utilities filing resource plans.</p> <p>Applies to all generation used by the utility.</p> <p>Commission clarified in its 12/21/07 Order in this docket that both the CO2 externality value and the carbon value under 216H.06 need not be used, only one or the other.</p>
<b>Statute</b>	216B.2422, subd. 3	216H.06
<b>Statutory Language</b>	“when evaluating and selecting resource options in all proceedings before the commission.”	“must be used in all electricity generation resource acquisition proceedings.”