

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

LeRoy Koppendrayner  
David C. Boyd  
Marshall Johnson  
Thomas Pugh  
Phyllis A. Reha

Chair  
Commissioner  
Commissioner  
Commissioner  
Commissioner

In the Matter of Establishing an Estimate of the  
Costs of Future Carbon Dioxide Regulation on  
Electricity Generation Under Minnesota  
Statutes § 216H.06

ISSUE DATE: December 21, 2007

DOCKET NO. E-999/CI-07-1199

ORDER ESTABLISHING ESTIMATE OF  
FUTURE CARBON DIOXIDE REGULATION  
COSTS

**PROCEDURAL HISTORY**

On August 1, 2007, the Next Generation Energy Act became effective.<sup>1</sup> Among other things, this Act provides for the Commission to estimate how the future regulation of carbon dioxide (CO<sub>2</sub>) emissions will affect the cost of generating electricity. The Act directs the Commission to establish a range of these estimates by January 1, 2008, to revise this estimate annually, and to use these estimates “in all electricity generation resource acquisition proceedings.” Minn. Stat. § 216H.06.

On September 11, 2007, the Department, following informal consultations with certain utilities and non-governmental organizations, recommended 1) establishing an interim CO<sub>2</sub> cost estimate of \$9/ton and 2) starting a more rigorous process to refine this cost estimate.

By October 9, 2007, the Commission had received comments on the Department’s proposal from the following entities:

- Basin Electric Power Cooperative (Basin Electric),
- the Center for Energy and Economic Development (CEED),
- Central Minnesota Municipal Power Agency, Heartland Consumers Power District and Missouri River Energy Services (collectively, the Municipal Group),
- Dairyland Power Cooperative (Dairyland),
- Fresh Energy, the Isaak Walton League of America – Midwest Office, Minnesota Center for Environmental Advocacy, and the Union of Concerned Scientists (collectively, the Environmental Intervenors).

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<sup>1</sup> See Minnesota Laws 2007, Ch. 136, Art. 5.

- the Industrial Commission of North Dakota (ICND),
- Interstate Power and Light Company (IPL),
- the Lignite Energy Council (Lignite),
- Minnesota Power,
- Northern States Power Company d/b/a Xcel Energy (Xcel), and
- Otter Tail Power Company (Otter Tail).

By October 16, 2007, the Commission had received reply comments from the Department, the Environmental Intervenors, Excelsior Energy and Otter Tail.

On November 27, 2007, the Environmental Intervenors filed an excerpt from Xcel's November 15, 2007 resource plan filing in another state.

The matter came before the Commission on December 8, 2007. At the hearing the Department recommended adopting an estimate of CO<sub>2</sub> regulation costs of between \$9/ton and \$30/ton, and the Environmental Intervenors distributed a graph depicting various estimates of future CO<sub>2</sub> regulation costs.

## **FINDINGS AND CONCLUSIONS**

### **I. BACKGROUND**

Utilities use a variety of forecasts and models to inform their decisions. Electric utilities forecast changes in the population of their service areas, the usage patterns of that population, the costs of capital to build new plants, the cost of fuel to power new plants, and other matters.

To cope with the uncertainty that forecasts entail, utilities consider a range of possible outcomes for many variables. In determining the need for a new large electric generating facility or transmission line, for example, an electric utility considers how the need for the facility would change under a range of assumptions about the growth in demand for electricity. Minn. Rules, part 7849.0300. This information permits utilities, the Commission and other parties to identify alternatives that can be expected to produce relatively good outcomes under a variety of circumstances.

In recent years electric utilities have begun to forecast the risk of bearing costs for future CO<sub>2</sub> regulation as part of their resource planning process.<sup>2</sup> The newly enacted Minnesota Statutes § 216H.06 formalizes this process:

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<sup>2</sup> See, for example, *In the Matter of Northern States Power Company d/b/a Xcel Energy's Application for Approval of its 2005-2019 Resource Plan*, Docket No. E-002/RP-04-1752, ORDER APPROVING RESOURCE PLAN AS MODIFIED, FINDING COMPLIANCE WITH RENEWABLE ENERGY OBJECTIVES STATUTE, AND SETTING FILING REQUIREMENTS (July 28, 2006).

By January 1, 2008, the Public Utilities Commission shall establish an estimate of the likely range of costs of future carbon dioxide regulation on electricity generation. The estimate, which may be made in a commission order, must be used in all electricity generation resource acquisition proceedings. The estimates, and annual updates, must be made following informal proceedings conducted by the commissioners of commerce and pollution control that allow interested parties to submit comments.

This docket is designed to fulfill the statutory mandate to establish the initial range of CO<sub>2</sub> regulation cost estimates and to establish procedures for revising those estimates.

It is important to note what Minnesota Statutes § 216H.06 does and does not require. The statute reflects the Legislature's conclusions that eventually laws will govern the emission of CO<sub>2</sub> and that utilities and their ratepayers will need to bear these costs. The statute's chief requirement is to compel utilities to plan accordingly. A utility's failure to correctly forecast the magnitude of CO<sub>2</sub> regulation costs may result in utility making choices that prove to be costly in retrospect, the same as any other forecasting error. But the forecasts themselves will neither increase nor decrease any utilities wholesale costs or retail rates for electricity. They are simply planning tools, little different than any other forecast a utility makes.

## **II. RELATIONSHIP BETWEEN ESTIMATE AND CO<sub>2</sub> EXTERNALITY VALUES**

The Next Generation Energy Act is not the first legislation to require utilities to consider previously unquantified costs when selecting among resource options. The Legislature has already directed the Commission --

to the extent practicable [to] quantify and establish a range of environmental costs associated with each method of electricity generation. A utility shall use the values established by the commission in conjunction with other external factors, including socioeconomic costs, when evaluating and selecting resource options in all proceedings before the commission....<sup>3</sup>

In the Environmental Externalities dockets arising from this statute the Commission estimated the cost of damage done by various emissions, and established an annual mechanism to adjust these costs for inflation.<sup>4</sup> The Commission currently estimates the damage of CO<sub>2</sub> emissions at

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<sup>3</sup> Minn. Stat. § 216B.2422, subd. 3.

<sup>4</sup> *In the Matter of the 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), ORDER AFFIRMING IN PART AND MODIFYING IN PART ORDER ESTABLISHING ENVIRONMENTAL COST VALUES (July 2, 1997), *aff'd* 578 N.W2d 794 (Minn. App. 1998); *In the Matter of the Investigation into Environmental and Socioeconomic Costs Under Minn.*

\$ 0.38/ton to \$ 3.91/ton.<sup>5</sup>

CEED, the Department, the Environmental Intervenors and the Municipal Group asked the Commission to clarify that whatever estimates of CO<sub>2</sub> regulation costs the Commission may adopt in this docket would not apply *in addition to* the existing estimates of CO<sub>2</sub> externality costs.

The Commission finds merit in this clarification. While the calculation of externality values under § 216B.2422 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. But utilities should continue to apply the Commission's CO<sub>2</sub> externality values otherwise.

### III. QUANTIFYING THE ESTIMATE OF FUTURE CO<sub>2</sub> REGULATION COSTS

As noted above, the Commission already directs utilities to make resource acquisition plans assuming that CO<sub>2</sub> emissions incur an environmental harm of up to \$3.91/ton. But parties estimate a much broader range of CO<sub>2</sub> regulatory costs.

A number of parties support an estimate of \$9/ton; at least on an interim basis, noting that Xcel had already proposed using that figure in its resource planning docket.<sup>6</sup>

The Municipal Intervenors and Otter Tail support using \$9/ton as the upper bound of the range of cost estimates. Minnesota Power supports a range of cost estimates from \$7/ton - \$9/ton. The Department supports a range from \$9/ton to \$30/ton. Xcel supports using \$9/ton as a lower bound, and acknowledges that it plans to analyze future resource options assuming regulation costs of up to \$40/ton.

The Environmental Intervenors cite studies supporting a range of anticipated costs from \$7/ton to more than \$50/ton, including a 2006 study from Synapse Energy Economics (Synapse study).

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*Stat. §216B.2422, Subd. 3, Docket No. E-999/CI-00-1636, 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) (Collectively, Environmental Externalities dockets).*

<sup>5</sup> Docket No. E-999/CI-00-1636, *supra*, Notice of Updated Environmental Externality Values (July 12, 2007).

<sup>6</sup> *In the Matter of Northern States Power Company d/b/a Xcel Energy's Application for Approval of its 2005-2019 Resource Plan*, Docket No. E-002/RP-04-1752, Xcel proposal (November 1, 2006).

Ultimately the Environmental Intervenors recommend that the Commission adopt a range from \$9/ton to nearly \$31/ton. On the other hand, Excelsior argued that even an upper estimate of \$31/ton would be insufficient to motivate utilities to change their choice of electric supply and urges the Commission to adopt a higher number.

Finally, Basin Electric and NDIC ask the Commission to refrain from establishing future CO<sub>2</sub> regulatory cost estimates at this time, arguing that the matter is too speculative to rule on.

The Commission acknowledges that all forecasts entail a degree of doubt. This fact, however, is only tangentially relevant to the Commission's decision. The future is uncertain. The need to plan for the future is not. The degree of uncertainty regarding future CO<sub>2</sub> regulation and future technology makes the task of estimating regulatory costs more difficult; it does not make the task any less necessary. And it certainly does not lead the Commission to conclude that the most likely estimate of CO<sub>2</sub> costs is effectively \$0.

The degree of uncertainty in this matter, however, is relevant to the Commission's analysis in one respect: it prompts the Commission to err on the side of adopting a broader rather than a narrower range of estimates. For a lower bound, the Commission will estimate the cost of future CO<sub>2</sub> regulation at \$4/ton. This is approximately the same level of costs that utilities incorporate into their planning today as the environmental externality value of CO<sub>2</sub>. This number is also roughly consistent with the lowest estimate of CO<sub>2</sub> costs in the Synapse study effective for 2012, the earliest date that CO<sub>2</sub> regulation is likely to be effective (discussed below).

For an upper bound, the Commission will accept the \$30/ton figure recommended by the Department. This figure nearly coincides with the recommendation of the Environmental Intervenors, and is well within the range employed by Xcel. The Commission acknowledges Excelsior's concern that this figure will prove insufficient to prompt utilities to modify their resource plans. But the Legislature has not directed the Commission to estimate the cost at which utilities would modify their resource plans. The statute's purpose is to cause utilities to plan for coping with the likely cost of CO<sub>2</sub> regulations; this purpose may be fulfilled even if utilities ultimately conclude that their optimal strategy is to continue emitting CO<sub>2</sub> and simply bear the resulting costs.

In sum, the Commission estimates that the likely range of costs of future carbon dioxide regulation on electricity generation lies within the range of \$4/ton to \$30/ton. Electric utilities will be required consider this range in all electricity generation resource acquisition proceedings.

#### **IV. APPLICATION OF ESTIMATE: GEOGRAPHIC LIMITS**

Whatever cost estimates the Commission adopts, CEED, ICND and Lignite argue that the Commission should refrain from applying those estimates to CO<sub>2</sub> emitted by electric generators beyond Minnesota's borders. They argue that such a policy would be consistent with the

Commission's policy in the Environmental Externalities dockets.<sup>7</sup> ICND argues that the Commission would be justified in refraining from applying its cost estimates to CO<sub>2</sub> generated in North Dakota in particular, given North Dakota's CO<sub>2</sub> sequestration efforts and geography that lends itself to sequestration. And CEED and Lignite argue that the Commission is constrained by a North Dakota statute that bars the application of externality values in that state, or even by the Commerce Clause of the U.S. Constitution.

In contrast, the Department, the Environmental Intervenors and Excelsior favor applying the CO<sub>2</sub> regulatory cost estimates to all potential sources of electricity serving Minnesota customers without discriminating on the basis of the state in which the electricity is generated. The Commission agrees.

#### **A. The Environmental Externality Value for CO<sub>2</sub>**

In the Environmental Externalities docket the Commission found that it had authority to direct utilities subject to its jurisdiction, when choosing between sources of electricity, to apply environmental externality values to facilities operating within and beyond Minnesota's borders.<sup>8</sup> Since the Commission initially adopted externality values in 1995, utilities have applied externality values to a generator's emissions of carbon monoxide, particulate matter, lead, nitrogen oxides and (until 2000) sulfur dioxide, without regard to a generator's state of operation.<sup>9</sup> While Lignite and the State of North Dakota challenged aspects of the Commission's decision,<sup>10</sup> no party challenged the Commission's authority to apply its environmental externalities values in this manner.

Nevertheless, in its June 2, 1997 Environmental Externalities Order<sup>11</sup> the Commission elected not to exercise its authority to require utilities to impute an externality value to CO<sub>2</sub> emitted by utilities beyond Minnesota's borders. Three factors influenced the Commission's decision in that

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<sup>7</sup> *In the Matter of the Quantification of Environmental Costs Pursuant to Laws of Minnesota 1993, Chapter 356, Section 3*, ORDER AFFIRMING IN PART AND MODIFYING IN PART ORDER ESTABLISHING ENVIRONMENTAL COST VALUES (July 2, 1997) at 5.

<sup>8</sup> Environmental Externalities dockets, *supra*.

<sup>9</sup> Note that environmental externality factors only apply to electricity generated within Minnesota or within 200 miles of the Minnesota border. *Id.* The Commission retired its externality value for sulfur dioxide (SO<sub>2</sub>) when Congress implemented a nation-wide cap-and-trade system for SO<sub>2</sub> emissions.

<sup>10</sup> *In the Matter of the Quantification of Environmental Costs Pursuant to Laws of Minnesota 1993, Chapter 356, Section 3*, 578 N.W2d 794 (Minn. App. 1998).

<sup>11</sup> Docket No. E-999/CI-93-583, ORDER AFFIRMING IN PART AND MODIFYING IN PART ORDER ESTABLISHING ENVIRONMENTAL COST VALUES (July 2, 1997).

case. First, because the statute directs the Commission to apply the environmental externalities calculations "to the extent practicable," the Commission found that it could exercise discretion about whether to apply the CO<sub>2</sub> externality cost value to foreign generators. Second, the Commission concluded that applying the value would be administratively burdensome. Third, the Commission concluded that the magnitude of the lower end of the externality range -- \$0.30/ton -- was "so close to zero, it is unlikely to alter [a utility's choice of generation resources in] a resource plan."<sup>12</sup>

The present docket differs in a variety of ways from the Environmental Externalities dockets. First, rather than directing the Commission to act "to the extent practicable," the Legislature now directs utilities to apply the CO<sub>2</sub> regulatory cost factors to "all electricity generation resource acquisition...." Similar language appears throughout Minnesota Statutes chapter 216H:

- "'Statewide greenhouse gas emissions' includes emissions of carbon dioxide ... emitted by anthropogenic sources within the state and from the generation of electricity imported from outside the state and consumed in Minnesota." Minn. Stat. § 216H.01, subd. 2.
- "'[S]tatewide power sector carbon dioxide emissions' means the total annual emissions of carbon dioxide from the generation of electricity within the state and all emissions of carbon dioxide from the generation of electricity imported from outside the state and consumed in Minnesota." Minn. Stat. § 216H.03, subd. 2.
- Subject to various exceptions, "after August 1, 2009, no person shall: (1) construct within the state a new large energy facility that would contribute to statewide power sector carbon dioxide emissions; (2) import or commit to import from outside the state power from a new large energy facility that would contribute to statewide power sector carbon dioxide emissions; or (3) enter into a new long-term power purchase agreement that would increase statewide power sector carbon dioxide emissions...." Minn. Stat. § 216H.03, subd. 3(2).

In sum, Minnesota Statutes Chapter 216H unambiguously applies to electricity consumed in Minnesota, including electricity imported from outside the state, leaving the Commission with no discretion on this point.

Second, whatever challenges parties may have anticipated in applying externality values to resource alternatives in 1997, parties have now gained a decade of experience in using these values. No party has alleged that it lacks the administrative capacity to consider CO<sub>2</sub> regulatory costs when analyzing sources of generation.

Third, while the low end of the range of environmental externalities values for CO<sub>2</sub> was \$0.30/ton, the low end of the range of CO<sub>2</sub> regulation costs is \$4/ton. This number is sufficiently distinct from \$0 to warrant analysis. In sum, the analysis that led the Commission to refrain

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<sup>12</sup> *Id.*



from applying the CO<sub>2</sub> externality values to electricity generated beyond the borders of Minnesota does not support an analogous result in the current docket.

### **B. North Dakota's Sequestration of CO<sub>2</sub>**

The Commission notes with interest North Dakota's CO<sub>2</sub> sequestration efforts. Chapter 216H provides for CO<sub>2</sub> sequestration as follows:

Carbon dioxide that is injected into geological formations to prevent its release to the atmosphere in compliance with applicable laws, [is] not counted as contributing to statewide greenhouse gas emissions.<sup>13</sup>

That said, the current docket mainly addresses the establishment of the CO<sub>2</sub> regulatory cost estimates; the Commission will address the issue of how to apply those estimates to a generator that sequesters its CO<sub>2</sub> if and when that issue becomes ripe for consideration. For purposes of the current docket, concerns about how estimates of CO<sub>2</sub> regulatory costs may be applied in this context do not constitute a basis to refrain from establishing those estimates.

### **C. Statutory and Constitutional Challenges**

North Dakota's statutory prohibition on the use of externality values is codified in North Dakota Century Code at 49-02-23:

**Consideration of environmental externality values prohibited.** The [North Dakota Public Service Commission] may not use, require the use of, or allow electric utilities to use environmental externality values in the planning, selection, or acquisition of electric resources or the setting of rates for providing electric service. Environmental externality values are numerical costs or quantified values that are assigned to represent either:

1. Environmental costs that are not internalized in the cost of production or the market price of electricity from a particular electric resource; or
2. The alleged costs of complying with future environmental laws or regulations that have not yet been enacted.

This Commission finds no conflict in the operation of this statute and Minnesota Statute § 216H.06. The Minnesota Commission respects the independence of the State of North Dakota and the autonomy of the North Dakota Public Service Commission, including the choice not to use externality values in North Dakota proceedings. The State of Minnesota and this Commission enjoy similar autonomy, including the autonomy to employ externality and regulatory cost values. Those values apply solely to analyses that utilities submit in Minnesota for energy that Minnesota customers consume in Minnesota. The statute does not control any other jurisdiction, but neither can it be controlled by any other jurisdiction.

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<sup>13</sup> Minn. Stat. § 216H.01, subd. 2.



Finally, both CEED and Lignite state without elaboration that they reassert the constitutional objections they raised in the Environmental Externalities dockets. As noted above, the Commission concluded that it had the authority to adopt and apply externality values in those proceedings. Nothing in the current record causes the Commission to reconsider this position.

In conclusion, the Commission finds neither statutory nor Constitutional prohibitions to utilities applying the CO<sub>2</sub> regulatory cost estimates to all their sources of electricity, including sources beyond the borders of Minnesota.

## **V. APPLICATION OF ESTIMATE: TEMPORAL LIMITS**

### **A. When to start applying the estimates of CO<sub>2</sub> regulatory costs**

CEED, the Environmental Intervenors and OTP state that they do not expect any CO<sub>2</sub> regulations to begin affecting electricity costs within the next five years. They reason, consequently, that whatever estimate the Commission adopts should not apply to CO<sub>2</sub> projected to be emitted within the next five years. No party advanced a contrary argument.

The Commission finds merit in these parties' argument. Again, the Legislature directs the Commission to estimate how future regulation of CO<sub>2</sub> emissions will affect the cost of generating electricity. Given the legislative standard, it would be inappropriate to apply the proposed cost estimates to CO<sub>2</sub> that would be emitted before the regulations could be expected to affect electricity costs.

Precisely when any new CO<sub>2</sub> regulation would affect electricity costs is a matter of doubt, however. The current version of the most active federal bill addressing CO<sub>2</sub> emissions -- the America's Climate Security Act of 2007, S. 2191 (Lieberman-Warner) -- would begin implementing a cap-and-trade system of regulation in 2012. On this basis, the Commission will direct utilities to apply the cost estimates to CO<sub>2</sub> projected to be emitted in 2012 and thereafter.

### **B. When to stop applying the estimates of CO<sub>2</sub> regulatory costs**

CEED argues that any estimate of CO<sub>2</sub> regulation cost should include an automatic "sunset" mechanism to be triggered upon the implementation of appropriate federal regulation of CO<sub>2</sub>. CEED seeks to avoid imputing the cost of CO<sub>2</sub> regulation twice -- once in implementing the regulation and again when imputing the costs as part of a resource selection process.

The Commission shares CEED's concern and is mindful of the need to avoid double-counting. In adopting the Next Generation Energy Act, the Legislature directed the Commission to estimate how future regulation of CO<sub>2</sub> emissions will affect the cost of generating electricity, and directed utilities to incorporate these costs into their resource selection processes. Overstating the cost of CO<sub>2</sub> regulation could distort utility decision-making, potentially to the detriment of ratepayers, just as understating the cost could.

That said, at this time the record does not indicate what mechanism the Commission could adopt to determine when the "costs of future carbon dioxide regulation on electricity generation" have been fully incorporated into the cost of electricity. Minn. Stat. § 216H.06. Parties may well dispute the extent to which any given law displaces the need for incorporating estimates of future CO<sub>2</sub> regulation costs into the resource selection process. Consequently the Commission will decline to implement any automatic sunset provision in this Order but, as discussed below, will solicit comments for how to implement such a mechanism in the future.

## **VI. REVISION OF ESTIMATE**

Minnesota Statutes § 216H.06 provides for the Commission to update its estimate of the range of likely CO<sub>2</sub> regulation costs annually. The Department and the Environmental Intervenors recommend that the Commission initiate a notice and comment process exploring how to refine the Commission's estimate of CO<sub>2</sub> regulation costs in 2008. IPL also supports a notice and comment procedure, although IPL would not oppose a rulemaking procedure either.

CEED and Minnesota Power oppose these proposals. They question the benefit of refining the regulatory cost estimates when the most basic facts about how CO<sub>2</sub> will be regulated remain unresolved. Instead, Minnesota Power proposes that the Commission simply adopt some automatic adjustment mechanism for modifying the CO<sub>2</sub> regulation cost estimates, similar to the mechanism that adjusts the Commission's externality cost estimates, and focus on generating a new analysis in 2009 or thereafter.

The Commission acknowledges uncertainty regarding how CO<sub>2</sub> will be regulated, when those regulations will take effect, and how much those regulations will cost to implement. Precisely because of this uncertainty, however, the Commission is persuaded of the need to revisit its new cost estimates and potentially to revise those estimates. Consequently the Commission will initiate a notice and comment procedure for updating the CO<sub>2</sub> regulation costs estimates for 2009.

This proceeding should provide an opportunity to address a number of topics. First and foremost, the Commission will solicit comments on pending and proposed state and federal legislation on CO<sub>2</sub> regulation. In particular, the Commission plans to invite estimates of the likely costs per ton of CO<sub>2</sub> that may result from any piece of legislation as well as the likely effective date of the relevant provisions.

In addition, the Commission plans to solicit comments on developments beyond the legislative arena. Last November the Midwestern Governors Association -- a nonprofit forum for Midwestern states to coordinate activities on issues of regional interest -- issued its Midwest Greenhouse Gas Accord, seeking to reduce the emissions of greenhouse gases such as CO<sub>2</sub>.<sup>14</sup>

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<sup>14</sup> See <http://www.midwesterngovernors.org/govenergynov.htm>

And the Department is preparing a "climate change action plan" to promote the reduction of CO<sub>2</sub> emissions. Minn. Stat. § 216H.02. All parties will want to review these initiatives, and any resulting developments, in preparing to review the CO<sub>2</sub> regulation costs estimates.

As noted above, CEED asked the Commission to establish a date or trigger mechanism for declaring when the cost of CO<sub>2</sub> regulation has been fully internalized, thereby eliminating the need to incorporate estimates of those costs into the analysis of resource options. While the Commission found that it is premature to take up that matter in this time, the notice and comment proceeding will provide an opportunity for all parties to address this question.

Finally, the Commission plans to invite recommendations for the procedures and scope of annual updates for the CO<sub>2</sub> regulation costs estimates to be adopted in 2010 and thereafter.

In acknowledgment of the concern that it is premature to initiate this process now, the Commission will authorize its Executive Secretary to determine the appropriate time to start these new proceedings. He will be empowered to establish and amend the time frames, establish procedures -- including coordination with the Minnesota Department of Commerce and the Minnesota Pollution Control Agency -- and issue notices necessary to conduct the proceeding.

### **ORDER**

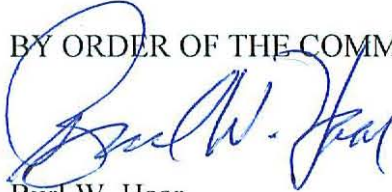
1. The Commission estimates that CO<sub>2</sub> regulation of electricity generation will cost between \$4/ton and \$30/ton for CO<sub>2</sub> emitted in 2012 and thereafter.
2. Electric utilities shall apply these estimates in all proceedings to acquire electricity generation resources to serve needs in Minnesota.
3. In estimating costs associated with CO<sub>2</sub> emissions for the purpose of analyzing electricity generation resources, a utility need not apply CO<sub>2</sub> externality costs derived pursuant to § 216B.2422, subdivision 3, to CO<sub>2</sub> emitted in any year to which the utility applies the CO<sub>2</sub> regulation costs derived pursuant to Minnesota Statutes § 216H.06.
4. The Commission will initiate a notice and comment proceeding for updating the cost estimates for 2009. At a minimum, this proceeding shall address the following matters:
  - A. Pending and proposed state and federal legislation on CO<sub>2</sub> regulation, with particular attention to estimates of the likely costs per ton of CO<sub>2</sub> that may result from such legislation and the likely effective dates of the relevant provisions of the legislation.
  - B. The Minnesota Climate Change Action Plan required by Minnesota Statutes § 216H.02 and the Midwest Governors Association's Midwest Greenhouse Gas Accord, and any subsequent activities arising from them.

- C. A mechanism for determining when CO<sub>2</sub> regulatory costs are internalized such that the cost estimates are no longer needed.
- D. Procedures and scope of annual updates for 2010 and thereafter.

The Executive Secretary is authorized to establish and amend the time frames, establish procedures -- including coordination with the Minnesota Department of Commerce and the Minnesota Pollution Control Agency -- and issue notices necessary to conduct the proceeding.

- 5. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION

  
Burl W. Haar  
Executive Secretary

(SEAL)

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STATE OF MINNESOTA)  
COUNTY OF RAMSEY )SS

AFFIDAVIT OF SERVICE

I, Margie DeLaHunt, being first duly sworn, deposes and says:

That on the 21st day of December, 2007 she served the attached

ORDER ESTABLISHING ESTIMATE OF FUTURE CARBON DIOXIDE REGULATION COSTS.

MNPUC Docket Number: E-999/CI-07-1199

XX By depositing in the United States Mail at the City of St. Paul, a true and correct copy thereof, properly enveloped with postage prepaid

XX By personal service

XX By inter-office mail

to all persons at the addresses indicated below or on the attached list:

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Margie DeLaHunt

Subscribed and sworn to before me,

a notary public, this 21<sup>st</sup> day of

December, 2007

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