Minnesota Public Utilities Commission

Staff Briefing Papers

**Meeting Date:	September 4, 2014	**Agenda Item # 3			
Company:	All Electric Utilities				
Docket No.	E999/CI-00-1636, E999/CI-14-643				
	In the Matter of the Investigation into Environmental and Socioeconomic Costs Under Minn. Stat. §216B.2422, Subd. 3 In the Matter of the Further Investigation into Environmental and Socioeconomic Costs Under Minn. Stat. §216B.2422, Subd. 3				
Issue:	What further determination should the Commission make with respect to its referral of the docket to the Office of Administrative Hearings?				
Staff:	Michelle Rebholz				
Relevant Docum	nents				
	der Establishing Environmental Cost Values (Dock der Affirming in Part and Modifying in Part Order				
	ost Values (Docket 93-583)				
	mission, <i>Order</i> February 10, 20				
	Documents filed in eDockets during Stakeholde	er Process			
Department, Othe	er (Potential Scenarios—seeking Comments)	April 17, 2014			
State of North Dakota, Comments					
	Minnesota Power, Comments				
	Industrials Group, Comments				
-	ity of Minneapolis, <i>Letter</i>				
	lean Energy Organizations, Comments				
	cel Energy, Comments May 9, 2				
	Comments				
Minnesota Depar	tment of Health, Comments	May 16, 2014			

Documents Making Recommendations to Commission

Department and PCA, Report	June 10, 2014
State of North Dakota, Comments.	June 25, 2014
GRE, OTP, MP, Comments	June 26, 2014
Clean Energy Intervenors, Comments	June 26, 2014
Lignite Energy Council, Comments	June 26, 2014
Peabody Energy Corporation, Comments	June 26, 2014
Minnesota Chamber of Commerce, Comments	June 26, 2014
Minnesota Large Industrials Group, Comments	June 26, 2014
Xcel Energy, Comments	June 26, 2014
Clean Energy Organizations, Letter	
GRE, OTP, MP, Letter	August 20, 2014

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 noted otherwise.

This document can be made available in alternative formats (i.e., large print or audio) by calling (651) 296-0406 (voice). Persons with hearing loss or speech disabilities may call us through their preferred Telecommunications Relay Service.

Statement of the issue

What further determinations should the Commission make with respect to its referral of the docket to the Office of Administrative Hearings?

Background

In its February 10, 2014 Order, the Commission decided to re-open the current docket, commonly known as the "environmental externalities docket." The Commission further decided to refer the matter to the Office of Administrative Hearings (OAH) for a contested case proceeding. The Commission did not make further decisions on the scope of the docket, except to reaffirm its finding that the geographical limitations that the application of carbon dioxide (CO₂) values would be maintained. Instead, the Commission granted the Department of Commerce (Department) and Pollution Control Agency (PCA) four (4) months to convene a stakeholder group to address the scope of the investigation and whether to retain an expert under Minn. Stat. §216B.62, should an expert be retained.

On April 17, 2014, the Department issued a Notice in eDockets explaining the background of the docket and requesting written comments on specific issues by May 9, 2014.

Minnesota Power, the Minnesota Large Industrial Group (MLIG), The City of Minneapolis, Clean Energy Organizations, Xcel Energy, Otter Tail Power, and Minnesota Department of Health filed comments.

The Department and Pollution Control Agency (PCA) (collectively, the Agencies) filed their report on June 10, 2014.

Following the stakeholder process, staff then issued a Notice seeking comments on the Agencies' report. In response to the Commission's Notice, eight (8) parties filed comments: the State of North Dakota, Great River Energy/Minnesota Power/Otter Tail Power (as one set of comments), the Clean Energy Intervenors, Xcel Energy, Lignite Energy Council, Peabody Energy Corporation, the Minnesota Chamber of Commerce, and MLIG.

658 pages of public comments were also filed in eDockets during this timeframe. The public comments generally appear to be one page letters expressing support for updating the externality values.

Agencies' June 10, 2014 Report and Comments in Response

On June 10, 2014, the Agencies filed their report. The report was very well organized and staff has not repeated all of the details here; instead, the highlights are provided below with the major party comments and staff comments to each point.

The Agencies proposed seven criteria to hold in mind:

- 1) Cost (total cost to complete the analysis relative to other options)
- 2) Time to completion (estimated time to complete the analysis)
- 3) Complexity (relative complexity of the analytical methods involved in the scenario)
- 4) Credibility (relative degree to which analytical models represent the complexity of the systems being modeled and thus the relative confidence in the accuracy of the estimates they produce)
- 5) Specificity to Minnesota (degree to which specific conditions of Minnesota are incorporated into the modeling)
- 6) Need for outside contractor (likely need for an outside contractor(s) to conduct the analysis)
- 7) Update ability (relative ease with which externality value estimates could be updated in the future)

The Agencies report that there was little consensus arising out of the stakeholder meeting or in subsequent written comments. The only issues that did receive consensus were:

- 1) The criteria that the Agencies developed to assess potential processes are appropriate;
- 2) The best and most credible estimates for externality values should be developed, and;
- 3) There should be a high degree of transparency in the analysis.

Therefore, the remaining recommendations in the report appear to be the Agencies' recommendations, not recommendations achieved through consensus of all the parties. They are:

- 1) Inclusion of other greenhouse gases(GHGs),
- 2) Geographic accounting of damages,
- 3) Consideration of non-human health impacts;
- 4) The process used to estimate externalities;
- 5) Adopting the Social Cost of Carbon (SCC) for CO₂;
- 6) Retaining a consultant under Minn. Stat. §216B.62, subd. 8.

Each of these six recommendations and the parties' responses are discussed below, organized by topic.

Inclusion of other GHGs in Contested Case Proceeding

Prior to the Commission's February 10, 2014 order reopening the environmental externalities docket, the Department recommended that the Commission consider including in the investigation's scope several non- CO_2 greenhouse gases: methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). The Clean Energy Organizations and the PCA supported this suggestion.¹

¹ Commission Order at p. 4.

The Commission's order did not take any action on non-CO₂ GHGs. Instead, the order requested the stakeholder group provide recommendations about whether the scope of the investigation into updating externality values should include non-CO₂ GHGs.

Agencies

At page 4 of the Agencies' report, the Agencies recommend that other GHGs should not be included in determining environmental and socioeconomic costs of emissions. The Agencies point out that according to U.S. Environmental Protection Agency (EPA) data, CO₂ represents over 99 percent of all greenhouse gas emissions; other GHGs account for less than 1 percent.

Parties

Xcel, OTP, and MLIG agreed that other GHGs should not be included in the proceeding. No party specifically filed comments disagreeing with the Agencies' recommendation.

Staff Comment

The Commission's February 10, 2014 Order stated, "The Commission will reopen its investigation as requested by the Clean Energy Organizations and will investigate the appropriate range of externality values for PM_{2.5}, SO₂, NO_x, and CO₂." Parties generally agreed that the non-CO₂ GHGs (methane, nitrous oxide, hydrofluorocarbons, and perfluorocarbons, and sulfur hexafluoride) should not be included in the scope of this investigation. Staff believes that there is enough consensus at this time to only refer the four pollutants to the OAH.

Geographic Accounting of Damages

Agencies

Noting that the Commission stated that the geographic scope of the application of the CO₂ value would not be reevaluated at this time, the Agencies stated that separate geographical-scope issue arose out of stakeholder discussions. That issue is whether estimates of environmental impacts from CO₂ emissions within Minnesota (and within 200 miles of Minnesota's borders for non-CO₂ emissions) should be limited to damages within Minnesota or whether all damages should be considered. The Agencies recommended that since CO₂ emissions are globally-mixed, in that CO₂ emissions in Minnesota have impacts throughout the world and vice versa, the geographical scope of CO₂ damages should likewise be global. According to the Agencies, this is consistent with the Commission's original assignment of an externality value to CO₂.

The remaining three pollutants at issue in this proceeding $-PM_{2.5}$, SO_2 , and NO_X – have local and regional effects, with most impact occurring in Minnesota. However, there are some

² In earlier comments, Clean Energy Organizations advocated for these additional elements to be included. However, in their June 26th comments, they did not indicate disagreement with the Agencies' recommendation to exclude them.

impacts in neighboring states, just as emissions in other states that border us will have impacts within Minnesota. This was the initial reason the Commission originally established that externality values would be applied to criteria pollutants emitted from electric generators located not just within Minnesota but within 200 miles of the state's borders. Given this reasoning, the Agencies recommend that in estimating externality costs for criteria pollutant emissions from Minnesota electric generators, all damages should be considered, not just those within Minnesota.

Parties Comments

Xcel agreed that climate change is a global issue but the Commission should not preclude discussion of CO₂ damages specific to Minnesota or the upper Midwest. However, Xcel agreed that the other 3 pollutants should be limited to the state of Minnesota and within 200 miles of Minnesota's borders, as was used in the original proceeding. Peabody Energy stated that the Commission must adopt values that reflect the benefits of CO₂.

Staff Comment

If the lack of opposition in comments means the parties are now in agreement with the Agencies' recommendation to consider all damages, not just those within Minnesota when estimating externality costs, then it may be helpful for purposes of the contested case to adopt this recommendation. However, staff interprets Peabody's comments as disagreeing with the Agencies' recommendation.

Geographic Application of Values

The Lignite Energy Council filed a letter asking the Commission to reaffirm the geographic limits on applying the values. The State of North Dakota stated that North Dakota facilities should not be affected.

Staff Comment

The geographic limits the Lignite Energy Council is referring to are the use of the values, as opposed to how to calculate the values. In its original 1993 proceeding, the Commission limited the application of the values to electric generating units within Minnesota in the case of CO_2 and to units within Minnesota and within 200 miles of Minnesota's borders in the case of $PM_{2.5}$, SO_2 , and NO_x .

The scope of this proceeding is not to determine exactly how the externality values will be used in future resource decisions, such as IRP. Staff believes the Commission was clear in its February 10, 2014 Order when it stated at pages 3 and 5 that it would not reexamine the geographic limitations of the environmental cost value for CO₂. If the Lignite Council and other parties agree, the Commission could, however, reaffirm the geographic application of the values

for $PM_{2.5}$, SO_2 , and NOx. Staff has included a decision option to this effect but does not have a specific recommendation on this issue.

Staff also notes that in the Commission's pending Basin and Dairyland O-IRP dockets, there have been comments filed alleging that externalities must be used in O-IRPs. While not exactly the same issue as the geographic application of values, it is worth noting that there continues to be debate about the general application of these values. Staff will bring the O-IRP dockets to an agenda meeting as soon as possible.

Consideration of Non-Human Health Impacts

Agencies

The Agencies state that the impacts of CO₂ generally includes all impacts to human welfare; most work being done to assess damages of criteria pollutants consider only human health impacts. There are other human welfare impacts, including but not limited to building materials damage and crop damage. The Agencies will not make a specific recommendation on whether non-health impacts should be taken into consideration since they know of no reliable and accurate methods to assess these impacts in dollars per ton of emissions.

Parties

Many parties did not specifically comment on this issue, although Peabody's comments stated that the Commission must account for the social benefits of CO₂. Peabody's expert has determined that a 10% increase in electricity prices will result in a 1% decrease in GDP.³

Staff Comment

Staff has included a decision option on this issue; to the extent parties retain experts, they can choose to discuss this issue at their option.

Process Used to Estimate Externalities

Agencies

At pages 5-9, the Agencies discuss process recommendations for criteria pollutants externality values. The Agencies state that according to economic literature and experts consulted by the Agencies, the best approach to estimating the external costs of criteria pollutant emissions is a *marginal damage cost approach*. The marginal damage cost of pollution emissions is the social cost (in terms of health and environmental damages) of emitting one more increment of the

.

³ Peabody comments, page 16.

pollutant given the current conditions. There are a variety of modeling tools, but there are essentially three steps to the process for making the estimate:

- 1) Link emission to air quality change: model the resulting change in air quality resulting from the incremental emission of a pollutant spatially across the entire area where that emission has an impact;
- 2) Link air quality change to impacts: model the resulting change in health impacts (and potentially non-human impacts as well) spatially across the entire area where there is an air quality change;
- 3) Estimate monetary value of impacts: translate these changes in health impacts (and potentially non-human health impacts) into monetary values. The sum of these values will be the marginal damage cost of the incremental emission.

The Agencies identified three process scenarios to estimate marginal damage costs for the criteria pollutants in question: 1) photochemical modeling; 2) reduced form modeling; or 3) application of existing marginal damage cost estimates. There was not agreement among stakeholders as to which of these scenarios (if any) should be pursued. At pages 7-8 of the report, the Agencies evaluated the photochemical modeling approach and found it to be the best to generate the most credible estimates but acknowledged that they could not estimate the cost or timeframe at this time.

Parties

Xcel stated that a range of values should be established to acknowledge uncertainty in externalities but agreed that a marginal damage cost approach is appropriate. OTP, MP, and GRE, filing one set of joint comments, noted that the statute does not specify that a damage-based approach should be used. RGGI prices, for example, would be another possibility. These three utilities asked that the Commission not endorse a particular type of modeling. The Clean Energy Organizations, too, asked that the Commission not endorse one specific type of modeling yet. At page 10 of their comments, CEO explains some issues with the photochemical modeling approach. CEO stated that modeling could be left to the expert retained. Peabody Energy Corporation filed comments raising concerns about the unnamed third parties consulted as part of this stakeholder process.

Staff Comment

Parties on both sides of the debate appear to prefer that the Commission not endorse a type of modeling.

As to the damage cost approach, there are several parties in favor of endorsing the approach and several parties against it. The intent of the stakeholder group was to reach consensus, which did not happen. One option is for the Commission to simply refer the issue to OAH where a record can be developed on the most reasonable approach. Another option is because the damage cost approach seems to be an accepted methodology and was used in the original 1993 docket, the

Commission could note that it was used in the past and any party supporting an alternative approach should clearly explain why their approach is in the public interest.

Adopting the Social Cost of Carbon

Agencies

At pages 10-15 of their Report, the Agencies recommend that the Commission adopt the SCC now, noting that the values were developed by a federal interagency working group and are used in federal rulemakings to estimate climate benefits of carbon emission reduction efforts. If the Commission declines to determine at this time whether the SCC is appropriate to adopt, then the Agencies recommend the retention of a consultant to assist the Agencies in evaluating CO₂ externality values.

Parties

Opinions were strongly divided on this topic. Many parties, including MLIG, Peabody, and utilities, questioned the process used to arrive at the SCC or pointed out what they believed were substantive flaws. Others, such as the Chamber, pointed out that the Commission already decided CO₂ was going to be reexamined in this docket and very clearly stated four pollutants, including CO₂, were to be referred to the OAH. Peabody stated that while the Commission agreed there was a basis to consider updating values, the Commission did not prejudge the outcome of its decision. Some commenters stated that the purpose of the SCC is different from resource acquisition proceedings; in their view, the SCC was developed to be used in macro level proceedings (federal rulemakings), rather than the resource-specific analysis used in Commission dockets. Others pointed to the Value of Solar Docket and the representations there regarding the SCC being a marginal cost analysis versus the current externality values being an average cost analysis.

Staff Comment

Staff agrees with those commenters that the charge of the stakeholder group over the four months was to report the stakeholder group's recommendations rather than the Agencies' own recommendations. Further, the Commission's February 10, 2014 Order did clearly refer all four pollutants to the OAH:

The Commission will therefore open its investigation as requested by the Clean Energy Organizations. The Commission will investigate the appropriate range of externality values for PM_{2.5}, SO₂, NOx, and CO₂....the Commission also concurs

⁴ Peabody, page 16.

⁵ MLIG, page 4.

that the significant and complex issues raised by this investigation would be best resolved in the context of a contested case proceeding.⁶

The scope issues to be examined by the stakeholder group were whether other pollutants in addition to the four already identified should also be part of the investigation, whether the Commission should retain a consultant and other scoping issues:

Prior to formally referring the matter to OAH, however, the Commission will seek additional input concerning the scope and conduct of the investigation, and whether to retain an expert. The Commission will ask the Department and the PCA to convene a stakeholder group, and will ask them to provide the stakeholder group's recommendations about whether the investigation should address other issues—including whether to investigate the costs of methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆)—and the need for and possible role of an expert, if the Commission were to retain one.⁷

However, there is no active contested case at OAH yet on this topic and if the Commission believes that the SCC should be adopted now, the Commission can do so under Minn. Stat. §216B.25 given the additional information provided in the record by the Agencies. Staff believes if the Commission adopted the SCC at this time, it may still need to take comments on how the SCC would be updated at the state level and its application to resource planning dockets prior to the externalities docket concluding.

Staff believes it may be useful to have a dialogue with the Department at the agenda meeting about how the SCC was viewed in the Value of Solar (VOS) docket. Staff has copied the Department's Table 1 from its March 11, 2014 comments in that docket. As listed below, the Department did not specifically indicate that the SCC was used for resource planning (which is where externalities are used)

-

⁶ February Order in the current docket, page 5.

⁷ Id.

Department Table 1, VOS Docket: Carbon Cost and Values Comparison

Set of Carbon Costs	Type of Cost	Application
Social Cost of Carbon	Marginal Damage Costs	Small changes in CO ₂ emissions
	, D	
Commission Externality Costs	Average Damage Costs	Utility's generation mix in
(Docket No. E-999/CI-93-583,		resource planning
Docket No. E.999/CI-00-		
1636)		
Commission Carbon	Average Utility Compliance	Utility's generation mix in
Regulatory Planning Costs	Costs (apply to resource	resource planning
(Docket No. E999/CI-13-796,	planning as of 2017)	
Docket No. E999/CI-07-1199)		

Further, the Commission's VOS Order stated:

The Commission would ordinarily prefer values that underwent a local vetting process.⁸

Staff's understanding is that the Commission adopted the SCC in the VOS docket due to the specifics of the VOS statute—namely, that the VOS methodology was the Department's, there was a statutory deadline for adoption of the methodology, and that the Commission was not prejudging the outcome of values to be adopted in other proceedings such as this one.

If the Commission were to adopt the SCC now, it may wish to explain what specifically it is adopting: the values or the underlying methodology. Adoption of the SCC now could be interpreted by some parties as an endorsement of a different methodology, such as a move to marginal damage costs from average damage costs. This may prompt debate in the contested case what the Commission intended for the methodology for the other three criteria pollutants. For example, the Commission could adopt the SCC based upon the fact that it would be duplicative based upon the federal process used to arrive at the SCC, and clarify that the modeling and approaches for the remaining pollutants in the contested case are yet to be decided.

Additionally, the SCC itself is not a single number, but a broad range of values varying largely as a result of different discount rates, i.e. the willingness to pay now to reduce the costs of projected carbon-related damages in the future. The table below, from EPA's SCC website, shows the four discount rates SCC employs, 5%, 3%, 2.5 percent, and the 95th percentile SCC estimate across all three climate models at a 3 percent discount rate.

⁸ Order Approving Distributed Solar Value Methodology, Docket No. E999/M-14-65, Issued April 1, 2014, page 11.

	Discount Rate and Statistic						
Year 50	% Average	3% Average	2.5% Average	3% 95 th percentile			
2015	\$12	\$39	\$61	\$116			
2020	\$13	\$46	\$68	\$137			
2025	\$15	\$50	\$74	\$153			
2030	\$17	\$55	\$80	\$170			
2035	\$20	\$60	\$85	\$187			
2040	\$22	\$65	\$92	\$204			
2045	\$26	\$70	\$98	\$220			
2050	\$28	\$76	\$104	\$235			

The Agencies recommend that the Commission adopt the 3% discount factor values as the Commission's CO₂ externality value. The Agencies' rationale is explained on pages 12 and 13 of their Report. Among other reasons, the Agencies believe the 3% discount rate is reasonable because this rate is "consistent with estimates provided in the economics literature and federal Office of Management and Budget's Circular A-4 guidance for the consumption rate of interest."

Considering discount rates for climate change is complicated, in part, because of its global application, but also because of the judgment regarding how much weight present investments should give to damages caused by climate change in the future. Thus, if the SCC is to be considered, the Commission could explicitly state whether the 3% recommendation from the Agencies is adopted as well.

If the Commission is not ready to adopt the SCC, it has several alternatives to adopting the SCC now. An alternative is to not adopt the SCC now but direct all utilities filing IRPs to model the SCC value with the Agencies' recommended 3% discount rate. This may give the Commission and parties some experience with the SCC, as a number of resource plans would be decided by the Commission before the externalities docket.⁹

The Agencies also suggested some alternatives to adopting the SCC, which would provide guidance to the ALJ and parties. First, the Commission could establish a set of required damages (e.g., health, non-health) that parties should include in any CO₂ estimates they propose in the record. The Agencies recommend that the scope of damages include the damages assessed by the integrated assessment models used to develop the SCC.

The Agencies' second alternative is to specify that any externality values proposed by parties should be damage values, not compliance costs, willingness to pay/accept, or other value types. Staff notes that while most of the values set in the 1993 docket were damage values, it is

_

⁹ This could be accomplished by staff sending out IRs in each resource plan.

debatable whether the SO₂ value was a damage value.¹⁰ A possible modification to this Agency recommendation is simply to note that a damage approach was endorsed by the Commission in the original proceeding for CO₂, PM_{2.5}, and NO_X. This would indicate that the Commission has a preference for the damage approach but would not preclude other approaches being explored. It may also be appropriate to state in this order that there is a separate statute and Commission proceeding regarding carbon regulatory planning costs (216H.06) and that the ALJ may exclude any testimony or evidence that uses an analysis more appropriate for that docket.

The Agencies' third alternative is for the Commission to require CO₂ value estimates offered by parties to account for global damages, which aligns with the Commission's decision in the original 1993 proceeding. Because the term "global damages" is very vaguely defined, the Commission may wish to add specificity to narrow the language. The definition could be expanded to explain that the source of "global damages" in this case is specific to downstream CO₂ emissions from electric power plants inside and outside Minnesota's boundaries. Or, the Commission could include language in its Order to clarify that the scope of the proceeding will take comment on the definition of "global damages."

Fourth, the Agencies suggest that parties propose ways to update their preferred CO₂ value in the future. Staff agrees that this is a helpful step.

Retaining a Consultant under Minn. Stat. §216B.62, subd. 8

Agencies

Based upon all of the Agencies' recommendations, the Agencies request that the Commission authorize the retention of an expert under Minn. Stat. §216B.62, subd. 8 to conduct the analysis of criteria pollutant externality values as well as to provide testimony in the contested case proceeding.

Parties

In the most recent set of comments responding to the Agencies' report, there was little opinion expressed regarding a Commission-retained expert. However, in the set of May 2014 comments to the Agencies, parties such as MLIG opposed a Commission-endorsed expert and preferred that parties be allowed to retain their own experts.

¹⁰ The SO₂ value was set at zero once the federal cap and trade mechanism was in effect. The ALJ report discussing SO₂ seems to focus on the difficulty of applying a value to specific generating units. ALJ Report paragraph 78, Issued March 22, 1996, Docket E999/CI-93-583.

Staff Comment

Staff's reading of the Agencies' report is that a consultant under Minn. Stat. §216B.62, subd. 8 is necessary if the Commission does not adopt the SCC, which would result in CO₂ being referred to the contested case. The Commission should keep this in mind when reviewing decision options.

Minn. Stat. §216B.62 subd. 8 is a relatively new statute and has only been used once before, in the Commission's docket regarding costs at the Monticello nuclear plant. In that docket, there was a clear need to retain a consultant because impartial expertise was needed on specific utility operations (engineering and cost issues at nuclear facilities), expertise neither the Department nor Commission had. Further, there were not other intervenors offering to retain experts and the issues were much more technical and discrete (possible cost overruns at one nuclear generating plant) as opposed to high level policy issues.

The current proceeding is different. It is an update from an original proceeding where, in 1993, Xcel, the Department, the PCA, and environmental organizations all retained their own experts to build a record on issues that, in the words of the ALJ, "involve[d] the consideration of scientific evidence that generally does not provide definitive answers." (Para 32 of ALJ Report). In some cases, those parties used in-house experts to testify in that proceeding. The Commission did not retain an expert then and there appears to be no conclusion in that record that a Commission-retained expert was needed.

Clean Energy Organization's earlier set of comments states that a Commission-authorized expert would be a more expeditious use of resources. From the Commission's perspective, the contested case proceeding will be a significant use of resources whether the Commission retains an expert or parties do. Given the subject matter, staff believes both the OAH and the Commission may prefer to hear from a number of experts in order to hear and weigh different views on the topic.

If the parties further comment on this issue at the agenda meeting and the Commission decides to authorize an expert, staff suggests that the Commission play no role in the selection of the expert and the expert exclusively communicate with the Department during the length of the proceeding. This is different from what happened in the Monticello docket but is consistent with the statute, which requires the Department to carry out the investigation:

If the commission, in a proceeding upon its own motion, on complaint, or upon an application to it, determines that it is necessary, in order to carry out its duties imposed under this chapter or chapter 216, 216A, 216E, 216F, or 216G, to conduct an investigation or audit of any public utility operations, practices, or policies requiring specialized technical professional investigative services for the inquiry, the commission may request the commissioner of commerce to seek authority from the commissioner of management and budget to incur costs

_

¹¹ E002/CI-13-754.

reasonably attributable to the specialized services. If the investigation or audit is approved by the commissioner of management and budget, the commissioner of commerce shall carry out the investigation in the manner directed by the commission...

Other Scope Issues

Timing of OAH proceeding

MLIG suggests that because this investigation comes at a time where there is significant workload for the Commission and Department, the Commission temporarily stay the analysis of the externality value for CO₂. ¹² In addition, MLIG states that the delay would allow a review of the SCC debate and EPA's proposed CO₂ regulations to develop further, which could streamline future discussions and analysis. In addition, parties to the proceeding could focus exclusively on the other pollutants, which would help limit the required investment for parties to participate in this proceeding. The Commission could still consider CO₂ values in the resource planning process. MLIG suggests July 1, 2015 as one option.

Staff Comment

Staff emphasizes that in the briefing papers for the December 19, 2013 agenda in this proceeding, staff believed that this proceeding would take a very significant amount of resources and time. This was the reason for the stakeholder group, to attempt to limit the scope of the proceeding. However, as the Agencies' report acknowledges, there was very little agreement on scope.

Staff does not take an opinion on whether to delay the CO₂ value determination; however, staff notes that the Commission and other parties have an unusually heavy workload, including rate cases, generic dockets, resource plans, and other proceedings. While the CEO have previously requested this docket proceed on a specific timeline, staff requests that an appropriate amount of time be taken to build a sufficient record. Staff has included a decision option providing guidance to the OAH on timing.

Public Input

No party commented on whether public hearings should be held or other types of public input should be sought. In the original proceeding, there were five (5) in person public hearings around the state and a three-city video conference. Commission staff who attended those original public hearings recalls that the in-person hearings were well attended; the Minneapolis and Duluth hearings drew large crowds despite heavy snowstorms.

.

¹² MLIG comments, page 10.

There are at least three factors to consider in determining whether to mandate public hearings this time. First, public hearings will add time to the proceeding but may reinforce the importance of public input.¹³ Second, the ALJ Report indicates that some of the public input last time was related to which pollutants to assign values to rather than what the values should be. This time, the pollutants will have been chosen by the Commission and members of the public may or may not be able to comment on what range of values the Commission should adopt. Thus, the public input may be anecdotal (individual health effects from emissions) or on more general topics (climate change in general). Third, the attendance at these hearings could be substantial. While the Commission is familiar with well-attended public hearings, this proceeding is different. In rate cases and facilities dockets, there is a petitioner who has initiated the proceeding and is therefore responsible for issuing notices to the public and scheduling and paying for meeting venues. In this docket, there is no such responsible petitioner, so the Commission may be responsible for logistics if public meetings are held.¹⁴

Another option which was not available in the original proceeding is the electronic public comment process. The Commission could issue a notice specifically tailored to public commenters, since the Commission's website was recently updated to accommodate public comments more easily. The Commission could adopt this as an alternative to public hearings, or in addition to public hearings.

Staff does not have a recommendation on whether to hold public hearings; however, if the Commission chooses to do so, staff recommends that the Commission delegate authority to the Executive Secretary to approve notices on the public hearings. It will be especially important to accurately communicate to the public what issues are being explored in the contested case.

Application of Values

MLIG requests that the Commission address the impact of a decision in this docket on the "Regulatory Cost of Carbon Dioxide" docket (07-1199). MLIG states,

MLIG emphasizes that the Regulatory CO₂ Cost Docket, if ignored while the SCC is adopted, could have significant and far reaching impacts on resource planning. If the Agencies' recommended approaches in this docket and the Regulatory CO₂ Cost Docket are combined, the price/ton for CO₂ emissions by 2019 could be in excess of \$75/ton. MLIG does not believe it would be prudent

¹³ In the original proceeding, the public hearings were conducted over 10 days, in the month preceding the evidentiary hearings.

¹⁴ Staff is not even certain how public notices would be provided to all impacted electric customers, since some of the utilities involved are wholesale generation and transmission providers, not the distribution utilities that serve retail customers.

or fair to accept such a high value without further discussion and analysis in a contested case proceeding. 15

Staff Comment

Staff disagrees that this should be part of the contested case proceeding, based upon the Commission's original decision in the externalities docket. Instead, staff believes the Commission was clear in the original proceeding that the analysis MLIG seeks is to be done separately. The first step is simply to determine the range of values; the second step is to determine how and when they are to be applied:

The Commission does not, at this juncture, find this concern sufficiently compelling to justify departure from the two-stage process set forth in the statute, which clearly contemplates the Commission establishing environmental cost values independent from its consideration of the consequences of applying those values. 16

As to MLIG's concern that both values will be combined, staff notes that the Commission has already stated either one value or the other can be used, but not both:

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 CO₂ emissions impose on third parties. When a utility calculates the cost of emitting another ton of CO₂ in any given year, therefore, it would be inappropriate to use both the CO₂ externality value and the CO₂ regulatory cost estimate. 17

Staff notes one last administrative detail. When the Commission previously re-opened the original 1993 proceeding, it opened a new docket number (E999/CI-00-1636). Staff believes it would be consistent practice to assign a new docket number for purposes of managing the record and has opened Docket No. E999/CI-14-643. Staff has contacted the Department about this administrative detail and the Department is in agreement that a new docket number be assigned. A decision option has been drafted and staff recommends that it be adopted.

¹⁵ MLIG comments, page 9.

¹⁶ ORDER MODIFYING ADMINISTRATIVE LAW JUDGE'S PREHEARING ORDER ON THE CONSIDERATION OF SOCIOECONOMIC FACTORS, October 28, 1994, Docket E999/CI-93-583 (Emphasis added).

¹⁷ Order Issued December 21, 2007, Docket No. E000/CI-07-1199, page 4.

Decision Options

Because the Commission's February 10, 2014 order referred the matter to the OAH, staff has not included that decision option here. However, the Commission may choose to repeat that decision option.

Pollutants to Be Referred to OAH

- 1. Refer the issues of the appropriate values for PM _{2.5}, SO₂, NO_X and CO₂ under Minn. Stat. §216B.2422 subd. 3 to the Office of Administrative Hearings for contested case proceedings. (*Staff note*: this decision option would be adopted if the Commission does not adopt the SCC.)
- 2. Refer the issues of the appropriate values for PM _{2.5}, SO₂, and NO_x under Minn. Stat. §216B.2422, subd. 3 to the Office of Administrative Hearings for contested case proceedings.
- 3. Refer the issues of the appropriate values for methane (CH₄), nitrous oxide (N₂0), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆) under Minn. Stat. §216B.2422, subd. 3 to the Office of Administrative Hearings. (Staff note: staff presumes Decision Option 3 would only be adopted in conjunction with Decision Option 1 or 2.)

Social Cost of Carbon (SCC)

- 4. Adopt the Social Cost of Carbon with a 3% discount rate and take additional comments on methods to update CO₂ values in the future. (Staff note: staff would issue a separate Notice regarding the additional comments.) (*Agencies' recommendation*)
- 5. Adopt the Social Cost of Carbon, but take further comments on the discount rate to apply as well as methods to update CO₂ values in the future.
- 6. Establish a set of required damages that parties should include in any CO₂ estimates they propose in the record. (*Agencies' alternative recommendation*)
- 7. Require parties offering testimony in the contested case on CO₂ values to account for global damages (consistent with the Commission's 1993 proceeding). (*Agencies' alternative recommendation*)
- 8. Adopt decision option #7 with the request that parties define "global damages."

Modeling

- 9. Direct photochemical modeling to be used in the contested case proceeding; OR
- 10. Allow parties to propose their preferred modeling approach in the contested case proceeding.

Approach

- 11. Direct parties participating in the contested case proceeding to use the damage cost approach; or
- 12. Do not mandate an approach, but acknowledge that the Commission adopted the damage cost approach in its 1993 proceeding. Direct any party using an approach other than the damage cost approach to specifically explain why their position is in the public interest.

Non-Human Health Impacts

- 13. Exclude non-human health impacts from the contested case proceeding.
- 14. Make no finding on non-human health impacts.

Geographic Accounting of Damages

15. In estimating externality costs for criteria pollutant emissions from Minnesota electric generators, all damages should be considered, not just those within Minnesota. (*Agencies' recommendation*)

Geographic Limits on Values (ND, Lignite)

- 16. Find that externality values for PM _{2.5}, SO₂ and NO_x shall be used only on electric generating facilities located within Minnesota or 200 miles of Minnesota. (Lignite Council recommendation) OR;
- 17. Make no finding.

Consultant

- 18. Determine pursuant to Minnesota Statutes §216B.62, subd. 8 that it is necessary to conduct an investigation as outlined in the current Order and request the Department of Commerce to seek authority from the Office of Management and Budget to retain a consultant.
- 19. Further clarify that the Commission shall play no role in the retention of a consultant and does not intend to communicate with the consultant during the course of the proceeding. (*Staff note*: this decision option could be adopted in addition to Decision Option 18.)
- 20. Do not authorize a consultant under Minnesota Statutes §216B.62, subd. 8.

Public Input

21. Find that public hearings shall be held in this case at locations throughout the state; those locations shall be set by the Administrative Law Judge after consultation with the parties and Commission staff. Delegate authority to the Executive Secretary to approve customer notices for the duration of the proceeding.

22. Do not require public hearings. Delegate authority to the Executive Secretary to issue special notice seeking written public comments as needed for the duration of the proceeding.

Timeline of contested case proceeding

23. Grant discretion to the Administrative Law Judge to set a timeline given the workload of the parties and the need to build a robust record.

Docket number

24. Find that Docket E999/CI-14-643 shall be used going forward for this proceeding. (*Staff note:* the Department is in agreement with this decision option. Staff recommends approval.)

Staff Recommendation

Staff has no recommendations other than to adopt Decision Option 24. The staff comments throughout the briefing papers are for the purpose of narrowing and focusing the discussion at the agenda meeting, to ensure the Commission makes a conscious and informed decision.