BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

LeRoy Koppendrayer	Chair
David C. Boyd	Commissioner
Marshall Johnson	Commissioner
Thomas Pugh	Commissioner
Phyllis A. Reha	Commissioner

In the Matter of a Petition by Excelsior Energy Inc. for Approval of a Power Purchase Agreement Under Minn. Stat. § 216B.1694, Determination of Least Cost Technology, and Establishment of a Clean Energy Technology Minimum Under Minn. Stat. § 216B.1693	ISSUE DATE: August 30, 2007 DOCKET NO. E-6472/M-05-1993 ORDER RESOLVING PROCEDURAL ISSUES, DISAPPROVING POWER PURCHASE AGREEMENT, REQUIRING FURTHER NEGOTIATIONS, AND RESOLVING TO EXPLORE THE POTENTIAL FOR A STATEWIDE MARKET FOR PROJECT POWER UNDER MINN. STAT. § 216B.1694, SUBD. 5

PROCEDURAL HISTORY

I. Statutory Background

In 2003, the Minnesota Legislature enacted comprehensive energy policy legislation which, among other things, included two statutes designed to create the conditions necessary for the construction of a state-of-the-art, clean-coal power plant on the Iron Range.

These statutes did not require or guarantee the plant's construction. Instead, they attempted to clear regulatory barriers and provide regulatory incentives to ensure that the plant could be built, if its public-interest value proved to be as significant as it appeared. One of these incentives was the creation of a market for the plant's output, in the form of a conditional entitlement to a long-term, 450-megawatt purchased power contract with the state's largest electric utility, Xcel Energy. The plant's right to this contract was conditioned on the Commission finding that the contract's terms and conditions were in the public interest.

[1] Minn. Stat. §§ 1693 and 1694.

[2] In the legislation, Xcel is characterized as "a public utility that owns a nuclear generation facility in the state." Minn. Stat. § 216B.1694, subd. 7. Xcel is the state's only utility with a nuclear plant in Minnesota.

[3] Minn. Stat. §216B.1694, subd. 2 (a) (7).

The legislation's other regulatory incentives and exemptions are summarized below:

(1) Both the plant and its transmission infrastructure were exempted from the certificate of need requirements that would normally apply.

(2) Once constructed, the plant was permitted to increase the capacity of its associated transmission facilities upon notice to the Commission.

(3) The owner of the plant was granted the power of eminent domain.

(4) The plant was classified as "clean energy technology" under Minn. Stat. § 216B.1693, entitling it to supply at least 2% of Xcel's Minnesota retail load – or more, at the Commission's discretion – if the Commission found that it was or was likely to be a least-cost resource.

(5) Any utility seeking to construct, expand, or enter into a long-term purchased-power contract with a fossil-fuel-fired facility, was required to affirmatively consider the plant as an alternative supplier; the Commission was required to ensure such consideration in all future resource acquisition and certificate of need proceedings.

(6) The plant was required to attempt to secure funding from the United States Departments of Energy and Agriculture to conduct a demonstration project on geologic or terrestrial carbon sequestration.

(7) The plant was declared eligible for a five-year, $10,000,000 grant for engineering and development costs from the Renewable Development Fund, which is funded by Xcel's ratepayers.

To qualify for these regulatory incentives and exemptions, the plant was required to meet the statutory definition of an "innovative energy project," set forth below:

> Definition. For the purposes of this section, the term "innovative energy project" means a proposed energy-generation facility or group of facilities which may be located on up to three sites:
>
> (1) that makes use of an innovative generation technology utilizing coal as a primary fuel in a highly efficient combined-cycle configuration with significantly reduced sulfur dioxide, nitrogen oxide, particulate, and mercury emissions from those of traditional technologies;
>
> (2) that the project developer or owner certifies is a project capable of offering a long-term supply contract at a hedged, predictable cost; and

[4] These incentives and exemptions are set forth at Minn. Stat. § 216B.1694, subd. 2 (a).

(3) that is designated by the commissioner of the Iron Range Resources and Rehabilitation Board as a project that is located in the taconite tax relief area on a site that has substantial real property with adequate infrastructure to support new or expanded development and that has received prior financial and other support from the board.

Minn. Stat. § 216B.1694, subd. 1.

II. The Mesaba Project and IGCC Technology

It is undisputed that the generation project the 2003 legislation was designed to advance is an Integrated Gasification Combined Cycle (IGCC) generation facility, the Mesaba Project, which is being developed by Excelsior Energy for siting on the Iron Range.

A. IGCC Technology

IGCC is a new, "clean coal" technology designed to produce lower emissions than standard coal-fired generation by transforming coal to a gas before combustion. The technology is being widely examined, not just for its environmental effects, but for its potential to reduce dependence on expensive and diminishing foreign petroleum supplies, by tapping abundant domestic coal supplies.

One of the main products of the technology's coal-gasification process is hydrogen, which could potentially be used in fuel cells or other newly developed hydrogen applications. While fuel cell technology is still in its infancy, both the state and federal governments have identified hydrogen as a probable key to a cleaner, more efficient, and more secure energy future. In fact, the Minnesota Public Utilities Act states, "It is a goal of this state that Minnesota move to hydrogen as an increasing source of energy for its electrical power, heating, and transportation needs."

Further, IGCC technology is at this point the generation technology best equipped to successfully incorporate "carbon capture and sequestration" technology. As concern about the environmental impact of carbon emissions mounts, it becomes increasingly critical to develop effective means both to prevent carbon emissions and to capture carbon emissions that cannot be prevented before they enter the atmosphere. Carbon capture and sequestration is the most promising technology currently available, and for that reason, the 2003 legislation required the "innovative energy project" to apply for federal funding to conduct a demonstration project of this technology.

Finally, IGCC technology is on the cusp between the developmental stage and the early commercial stage. There are only two IGCC plants currently operating in the United States. Both are smaller than the Mesaba Project proposed by Excelsior, both are demonstration projects, and both were constructed with partial funding from the United States Department of Energy. If the Mesaba plant is built, it will be one of the first commercial-scale IGCC plants in the nation.

[5] Minn. Stat. § 216B.8109.

B. The Mesaba Project

Excelsior proposes to build a 603-megawatt IGCC plant on the Iron Range in northern Minnesota. There is controversy regarding its site selection; siting issues would be addressed in a future proceeding on its siting permit application.

The plant would be designed to operate on subbituminous coal from Wyoming's Powder River Basin and would operate most efficiently when using that fuel source. It would also operate on petroleum coke, available from Minnesota refineries, and in fact, project developers expect it to use a blend of the two solid fuels under normal operating conditions. The plant would also be capable of operating on natural gas during outages, planned or unplanned, and would be expected to rely fairly heavily on natural gas during its first three years of operation, while the Company faced and resolved the challenges and glitches that always accompany new technologies and new baseload power plants.

The project is expected to produce economic development in the Arrowhead area of the state; it would create approximately 1,555 construction jobs over the four-year construction period, 107 full-time, part-time, and temporary jobs at the plant once operations begin, and 143 full-time and part-time jobs elsewhere in the region as a result of the economic activity generated by the plant. Excelsior also hopes for further job creation as the project expands and as new commercial and industrial applications are devised for the hydrogen and synthesis gas produced at the plant.

The project has been selected from a field of competitors for a grant of $36,000,000 from the United States Department of Energy under its Clean Coal Power Initiative. It has been awarded $9,500,000 in loans from the Minnesota Iron Range Resources and Rehabilitation Board. It has been awarded a five-year, $10,000,000 development grant from Xcel's Renewable Development Fund, by order of this Commission. It has received some $800 million in federal loan guarantees. In short, state and federal policymakers clearly consider IGCC technology – and this project – sufficiently promising to justify the significant public expenditures required to fully explore its potential.

III. This Proceeding

A. The Original Filing and Referral for Contested Case Proceedings

On December 27, 2005, Excelsior Energy Inc. filed a petition stating that lengthy negotiations with Xcel had failed to produce a mutually agreeable power purchase agreement and asked the Commission to approve, amend, or modify the agreement it proposed. The petition also asked the Commission to find that the Mesaba Project it proposed to build was a "least cost resource" under Minn. Stat. § 216B.1693 and that Xcel should be required to buy 13% of its retail load from the Project, under the Clean Energy Technology provisions of Minn. Stat. § 216B.1693.
The Commission referred the case to the Office of Administrative Hearings, listing three issues to

[6] *In the Matter of the Request of Northern States Power Company d/b/a Xcel Energy for Approval of Selected Projects for the Second Funding Cycle of the Renewable Development Fund*, Docket No. E-002/M-03-1883, Order Approving And Directing Fund Expenditures, Giving Guidance on the Treatment of Innovative Energy Project, Requiring Consultative Process, and Requiring Compliance Filings (February 23, 2005).

be addressed:

(1) whether the Commission should approve, disapprove, amend, or modify the proposed power purchase agreement submitted by Excelsior;

(2) whether the Commission should determine that the Mesaba Project would be, or was likely to be, a least cost resource under Minn. Stat. § 216B.1693, obligating Xcel to use the plant's generation to supply at least two percent of its retail sales; and

(3) should the Mesaba Project be determined to be a least cost resource, whether the appropriate purchase obligation for Xcel was 13% of retail sales, as Excelsior maintained.

The Commission emphasized the importance of determining with as much precision as possible the probable cost to Xcel ratepayers of the power produced by the Mesaba Project:

> Further, the Commission encourages the Administrative Law Judge and the parties to develop as much contract price information as possible, using different scenarios and assumptions. Price is a critical issue in this case, and it is one of the most difficult to develop, since no one has had extensive commercial experience with the coal gasification technology Excelsior proposes to use in the power plant under development.
>
> The resolution of these issues [the ones referred, set forth above] turns on numerous sub-issues; two of the most important are what contract prices are likely to be under different scenarios and whether those prices are reasonable.
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> Notice and Order for Hearing and Order Granting Intervention Petition, this docket, (April 25, 2006), p. 4.

B. Contested Case Proceedings

The Office of Administrative Hearings assigned Administrative Law Judges Steve M. Mihalchick and Bruce H. Johnson to hear the case.

The following parties appeared in the case:

> Excelsior Energy Inc. (Excelsior), represented by Byron E. Starns, Leonard, Street and Deinard, 150 South Fifth Street, Suite 2300, Minneapolis, Minnesota 55402 and Thomas Osteraas, Excelsior Energy, 11100 Wayzata Boulevard, Suite 350, Minnetonka, Minnesota 55305.
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> Northern States Power Company d/b/a Xcel Energy, represented by Christopher B. Clark, Assistant General Counsel, 414 Nicollet Mall, Suite 2900, Minneapolis, Minnesota 55401 and Michael Krikava, Briggs and Morgan, P.A., 2200 IDS Center, 80 South 8th Street, Minneapolis, Minnesota 55402.
> The Minnesota Department of Commerce (the Department), represented by

Valerie Smith, Assistant Attorney General, 445 Minnesota Street, Suite 1400, St. Paul, Minnesota 55101.

Minnesota Power, represented by David R. Moeller, 30 West Superior Street, Duluth, Minnesota 55802.

Minncoalgasplant.com (MCGP), represented by Carol Overland, Overland Law Office, P.O. Box 176, Red Wing, Minnesota 55066.

Minnesota Center for Environmental Advocacy, Izaak Walton League of America – Midwest Office and Fresh Energy, formerly Minnesotans for an Energy Efficient Economy (the Environmental Organizations), represented jointly by Kevin Reuther, Attorney at Law, Minnesota Center for Environmental Advocacy, 26 East Exchange Street, Suite 206, St. Paul, Minnesota 55101.

Xcel Industrial Intervenors, represented by Robert S. Lee and Andrew P. Moratzka, Mackall, Crounse & Moore, PLC, 1400 AT&T Tower, 901 Marquette Avenue, Minneapolis, Minnesota 55402.

Big Stone Unit II Co-Owners, represented by Todd J. Guerrero and David Sasseville, Lindquist & Vennum, 4200 IDS Center, 80 South 8th Street, Minneapolis, Minnesota 55402 -2274.

The Minnesota Chamber of Commerce, represented by Richard J. Savelkoul, Felhaber, Larson, Fenlon & Vogt, 444 Cedar Street, Suite 2100, St. Paul, Minnesota 55101.

Manitoba Hydro, represented by Eric F. Swanson and David M. Aafedt, Winthrop & Weinstine, P.A., 225 South Sixth Street, Suite 3500, Minneapolis, Minnesota 55402.

Great Northern Power Development, LLP, represented by John E. Drawz, Fredrikson & Byron, P.A., 200 South Sixth Street, Suite 4000, Minneapolis, Minnesota 55402-1425.

The parties to the case stipulated to the admission of pre-filed testimony and waived cross-examination; therefore, no formal evidentiary hearings were held. The parties submitted sworn testimony from 47 witnesses and hundreds of pages of exhibits. The Administrative Law Judges conducted three public hearings, which were held in Hoyt Lakes, Taconite, and St. Paul. The parties submitted initial and reply briefs to the Administrative Law Judges.

On April 12, 2007, the Administrative Law Judges (ALJs) filed their Findings of Fact, Conclusions, and Recommendations, together with a Memorandum (the ALJs' Report). They found, among other things, that the prices that would result from the power purchase agreement proposed by Excelsior were not reasonable, that the Mesaba Project was not a least cost resource under Minn. Stat. § 216B.1693, and that it was unlikely that Excelsior could agree to any power purchase agreement with reasonable prices, given the Project's actual costs.

They also found that the Mesaba Project did not meet the statutory definition of "innovative energy project" set forth in Minn. Stat. § 216B.1694 and was therefore ineligible for the long-term purchased power contract it sought.

C. Post-Contested Case Proceedings

The parties filed exceptions and replies to exceptions to the ALJs' Report.

On May 11, 2007, MCGP filed a motion to strike from the record certain material filed by Excelsior in conjunction with its exceptions.

On July 27, 2007, MCGP filed a motion to strike from the record a July 27, 2007 letter submitted by the Department of Commerce.

On July 30, 2007, MCGP filed a complaint and request for sanctions under Minn. Stat. § 216A.037 and Minnesota Rules 7845.0200, alleging that Excelsior had solicited prohibited *ex parte* communications in an e-mail sent on July 26, 2007. That complaint has been referred to the Office of Administrative Hearings, as required under Minn. Stat. § 216A.037, subd. 4 (e), under Commission docket number E-6472/M-05-1993, OAH docket number 2500-17260-2.

On August 2, 2007, MCGP filed a request that Commissioner Reha recuse herself from the case, claiming that her participation in educational programs sponsored by the Great Plains Institute created the appearance of impropriety. Commissioner Reha made a statement on the record declining the request and explaining her reasons for doing so.

The parties presented oral argument to the Commission on July 31 and August 2, 2007. On August 2, 2007, the record closed under Minn. Stat. § 14.61.

Having heard the arguments of the parties and having conducted its own careful review of the record, the Commission makes the following findings, conclusions, and Order.

FINDINGS AND CONCLUSIONS

I. Summary of Commission Action

The Commission will deny the motions of MCGP to strike from the record the Department's July 27, 2007 letter and the exception materials submitted by Excelsior.

The Commission respectfully declines to adopt the Administrative Law Judges' findings and conclusions that the Mesaba Project is not an "innovative energy project" under Minn. Stat. § 216B.1694, finding that the Project does meet the statutory definition.

The Commission finds that the terms and conditions of the power purchase agreement submitted by Excelsior are not in the public interest, primarily because the pricing provisions are likely to impose unreasonable and excessive costs on Xcel's ratepayers. At the same time, the Commission respectfully declines to adopt the ALJs' finding that it is not possible to amend the contract to make it reasonable (ALJ Finding 188). The Commission asks Excelsior, Xcel, and the Department to renew their negotiations and to continue exploring all possible means of arriving at a contract that is in the public interest.

The Commission finds that the public interest requires it to explore the potential for a statewide market for power produced by the Mesaba Project, pursuant to the provisions of Minn. Stat. § 216B.1694, subd. 2 (a) (5).

Since the Commission finds that the terms and conditions of the power purchase agreement at issue do not meet the public interest standard of Minn. Stat. § 216B.1694 subd. 2 (a) (5) for reasons of price, it is impossible to find the Mesaba Project a least cost resource under Minn. Stat. § 216B.1693 and unnecessary to make further determinations under that statute.

These actions will be explained below.

II. MCGP's Motions

A. Motion Challenging Excelsior's Exception Filing

MCGP filed a motion to strike from Excelsior's exception filing a narrative describing the Mesaba Project, the Project's history, and cost evidence that Excelsior submitted that was not addressed in detail in the ALJs' Report. MCGP claimed that these documents were gratuitous and not properly part of an exception filing. The Commission disagrees.

Excelsior's filing was advocacy, not evidence, and it was therefore an appropriate response to the Report of the ALJs. The filing did not attempt to introduce new factual material; it reproduced factual material already in the record and used it to illustrate the Company's objections to the findings, conclusions, and recommendations of the ALJs. Further, the filing was timely, and all parties had adequate opportunity to respond to it.

For all these reasons, the Commission will deny the motion to strike.

B. Motion Challenging the Letter of the Department

MCGP filed a motion to strike a July 27, 2007 letter from Edward Garvey, Deputy Commissioner of the Minnesota Department of Commerce, which

- stated that the Department and the Governor supported the Mesaba Project in principle;
- outlined events the Department viewed as milestones in the development of the Project;
- reported that lengthy and extensive negotiations between the Department and Mesaba had failed to yield a power purchase agreement that the Department could support;
- reiterated the Department's position that the Project met statutory requirements entitling it to a power purchase agreement with Xcel, subject to a Commission finding that its terms and conditions were in the public interest; and
- reiterated the Department's position that the power purchase agreement submitted by Excelsior did not meet the public interest test and should not be approved.

MCPG argued that the letter was unauthorized under Commission rules and should be stricken on procedural grounds. Minnesota Power, although it did not join in MCGP's motion, filed a letter expressing concern that the Department's action in sending the letter suggested that it was confused about the connections between its roles as a policymaker, an impartial analyst, and a legal advocate.

While the Department's letter was not part of any established comment process, its submission was not prohibited under the Commission's rules of practice and procedure and was consistent with normal Commission practice. It was served on all parties, did not contain any facts or arguments not already in the record, and did not recommend any action not already recommended on the record by the Department or other parties. No party was prejudiced by the submission of the letter.

Further, in the course of the two days of oral argument and deliberations conducted in this case, other parties submitted copies of extracts from the record and summaries of exhibits to clarify their own oral presentations. Such submissions are proper. In complex administrative proceedings -- in which the goal is to determine the public interest and not to resolve disputes between private litigants -- procedural rigidity is inappropriate.

What is important is that Commission procedures maintain the flexibility, transparency, and predictability required to preserve all parties' due process rights and to advance their ability to develop and present their cases as comprehensively and persuasively as possible. For all these reasons, the motion will be denied.

III. The Mesaba Project is an Innovative Energy Project under Minn. Stat. § 216B.1694

To qualify for the long-term purchased power contract with Xcel described in Minn. Stat. § 216B.1694, subd.2 (a) (7), the Mesaba Project must meet the statutory definition of "innovative energy project" set forth earlier in the statute, at § 216B.1694, subd. 1. That definition is set forth below:

> Subdivision 1. **Definition.** For the purposes of this section, the term "innovative energy project" means a proposed energy-generation facility or group of facilities which may be located on up to three sites:
>
> > (1) that makes use of an innovative generation technology utilizing coal as a primary fuel in a highly efficient combined-cycle configuration with significantly reduced sulfur dioxide, nitrogen oxide, particulate, and mercury emissions from those of traditional technologies;
> >
> > (2) that the project developer or owner certifies is a project capable of offering a long-term supply contract at a hedged, predictable cost; and
> >
> > (3) that is designated by the commissioner of the Iron Range Resources and Rehabilitation Board as a project that is located in the taconite tax relief area on a site that has substantial real property with adequate infrastructure to support new or expanded development and that has received prior financial and other support from the board.

[7] This action is consistent with the ALJs' treatment of a similar letter introduced at the briefing stage of contested case proceedings. While the ALJs did not admit the letter as part of the evidentiary record, they admitted it as an addendum to the Department's initial brief. See ALJs' Order of January 17, 2007.

The Commission did not specifically refer the definitional issue for hearing, since the Commission had previously found that the Mesaba Project was an innovative energy project. Still, the project's design and location were in a state of flux, and the ALJs acted properly in examining its continuing compliance with all statutory requirements.

The ALJs found that the Project met all definitional requirements but two: (1) the requirement that the Project use coal as a primary fuel; and (2) the requirement that the facility significantly reduce emissions of sulfur dioxide, nitrogen oxide, particulate, and mercury, as compared with traditional technologies.

The Commission respectfully disagrees with the ALJs' findings as to these two definitional requirements, for the reasons set forth below. The Commission concurs with the ALJs' findings as to the remaining definitional requirements, for the reasons set forth in their Report. The Commission finds that the Project meets the statutory definition of an innovative energy project.

A. The Record Demonstrates that the Project Will Use Coal as a Primary Fuel

The ALJs found that the Mesaba Project failed to meet the statutory requirement that it utilize coal as a primary fuel, for two reasons.

First, the record demonstrated that the plant could run on solid fuel blends containing significant amounts of petroleum coke as well as coal, and the ALJs concluded that using fuel blends containing 50% or more petroleum coke would render the plant out of compliance with the "coal as a primary fuel" requirement. Second, the record demonstrated that the plant could run on natural gas, and the ALJs found that the record offered no guarantee that the plant would not run on natural gas at least 50% of the time.

The Commission respectfully disagrees with these conclusions. First, the Commission cannot concur in the conclusion that coal cannot be "a primary fuel" unless coal consistently constitutes more than 50% of the fuel used by the plant. The phrase "*a* primary fuel" must necessarily have a different meaning than the more common phrase "*the* primary fuel." The most reasonable and commonsense explanation for the construction "*a* primary fuel" is that the Legislature was using the word "primary" in one of its less frequently employed meanings: "serving as or being an essential component, as of a system; basic."

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[8] In February 2005, the Commission issued an Order requiring the Renewable Development Fund Board to award the Project the five-year, $10,000,000 engineering and development grant for which it was eligible under Minn. Stat. § 216B.1694, subd. 2 (a) (8), finding "[t]here is little doubt that the Mesaba project meets the statutory definition of an innovative energy project." *In the Matter of the Request of Northern States Power Company d/b/a Xcel Energy for Approval of Selected Projects for the Second Funding Cycle of the Renewable Development Fund*, Docket No. E-002/M-03-1883, Order Approving And Directing Fund Expenditures, Giving Guidance on the Treatment of Innovative Energy Project, Requiring Consultative Process, and Requiring Compliance Filings (February 23, 2005).

[9] *The American Heritage College Dictionary*, Fourth Edition.

Further, the record does not support the fear that coal will constitute anything less than a very substantial portion of the solid fuel used by the plant. As Excelsior points out in its exceptions, the plant's design specifications require that its solid fuel feedstock consist of at least 50% coal. At no point, then, when running in solid-fuel mode, would the plant be using less than 50% coal, clearly making coal "*a* primary fuel."

Neither does the record support the fear that the plant will rely predominantly on natural gas for its fuel. The proposed power purchase agreement sets financial penalties for natural gas use that ratchet upward as the plant ages, making it financially impossible for the plant to use natural gas as a primary fuel after the ramp-up period. Further, after the ramp-up period, the plant is not permitted to run on natural gas for more than four continuous hours without Xcel's consent (Section 6.1 of the proposed power purchase agreement).

Finally, not only is the plant designed to run on coal as a primary fuel, but independent analysis by state and federal officials has consistently concluded that the Project is indeed the clean-coal project it claims to be. On the basis of this analysis, the Project has been selected from a field of competitors for a grant of $36,000,000 from the United States Department of Energy under its Clean Coal Power Initiative. It has been awarded $9,500,000 in loans from the Minnesota Iron Range Resources and Rehabilitation Board. It has been awarded a five-year, $10,000,000 development grant from Xcel's Renewable Development Fund, by order of this Commission. And it has received some $800 million in federal loan guarantees.

For all these reasons, the Commission concludes that the Mesaba Project meets the statutory definitional requirement that it use coal as a primary fuel.

B. The Record Demonstrates that the Project Will Produce Significantly Reduced Sulfur Dioxide, Nitrogen Oxide, Particulate, and Mercury Emissions, Compared with Traditional Technologies

The ALJs found that the Mesaba Project failed to meet the statutory requirement that it generate electricity with "significantly reduced sulfur dioxide, nitrogen oxide, particulate, and mercury emissions from those of traditional technologies."

They found that the Project reduced sulfur dioxide and particulates so effectively that "on *an overall basis*, it significantly reduces the [four] listed emissions compared to traditional plants" (ALJ Finding 75, emphasis added). As to nitrogen oxides and mercury, however, they found that the Project would significantly reduce emissions only in comparison with "older existing coal-fueled plants, but not in comparison with newer, but still 'traditional,' SCPC [supercritical pulverized coal] coal plants with state-of-the-art controls" (ALJ Finding 74). Since they found that "the statute appears to require all the listed emissions to be reduced," (ALJ Finding 75), they concluded that the Project did not meet the statutory definition.

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[10] See Excelsior Exhibit 1020 at 110.

[11] *In the Matter of the Request of Northern States Power Company d/b/a Xcel Energy for Approval of Selected Projects for the Second Funding Cycle of the Renewable Development Fund*, Docket No. E-002/M-03-1883, Order Approving And Directing Fund Expenditures, Giving Guidance on the Treatment of Innovative Energy Project, Requiring Consultative Process, and Requiring Compliance Filings (February 23, 2005).

The Commission respectfully disagrees, for two reasons.

First, the comparison group of "traditional technologies" used by the ALJs was not representative of traditional technologies, but consisted only of coal plants equipped with state-of-the-art emission controls, coal plants still under development, and "generic" coal plants of the future, which exist on drawing boards but are not even proposed for construction.

While it may be questionable to include most of these facilities in the comparison group of plants using "traditional technologies," it is clearly inappropriate to exclude nearly every other operating coal plant from the comparison group. Currently operating coal plants are clearly using "traditional technologies," and their emissions must be factored in when conducting any comparison between the emissions of plants using "traditional technologies" and the emissions of the Mesaba Project.

Second, the methodology the ALJs used to determine whether the Mesaba Project would significantly reduce emissions of the four pollutants compared to traditional technologies was unreasonably narrow; in fact, no coal plant in existence or on the drawing board could conceivably meet it.

The ALJs found that the statute required an innovative energy project to demonstrate that it would outperform every example of every operating, prototype, or planned coal-generation facility as to each of the four listed emissions. No facility could meet this standard, since no facility in existence or on the drawing board significantly outperforms every other facility in every one of the four emission categories.

It is not reasonable to conclude that the Legislature enacted the Innovative Energy Project statute with no intention of ever granting innovative energy project status to any project.

A more reasonable reading of the statute is that an innovative energy project must significantly reduce emissions in each of the four categories as compared with all traditional coal-fired technologies, considered as a whole, including the older plants that make up the majority of the nation's and this state's coal fleet. Being matched or minutely surpassed as to one of the four emissions by a state-of-the-art, cutting-edge, or prototype facility – especially while outperforming that facility as to other emissions -- cannot reasonably be interpreted as a failure to reduce the four emissions in comparison with traditional technologies.

Another reasonable reading of the statute is that the four listed emissions are to be considered in the aggregate. The ALJs rejected this reading on the basis of a statement in the Revisor's Manual that a descriptive phrase appearing after the last item in a series applies only to the last item. They found it a "necessary corollary" that a descriptive phrase appearing before the first item in a series applies to every item in the series.

This is not self-evident to the Commission. In fact, it seems unlikely that a general guideline on item-specific descriptive phrases at the end of a list resolves the issue of whether a descriptive

[12] See Excelsior Exhibit 1020 at 110.

[13] ALJs' Report, page 63.

phrase at the beginning of a list applies to each item individually or to all items collectively. Furthermore, even if the guideline had a necessary corollary, it would not demonstrate that was what the Legislature intended, or that the courts would agree. As the Revisor's Manual notes in connection with the rule:

> A court, however, is as likely to ignore the rule as to use it. (See *State v. Turchick*, 436 N.W. 2d 108 (Minn. App. 1989)), in which the court interpreted the phrase "headphones and earphones which are worn on both ears" without any reference to the rule.) REVISOR OF STATUTES, MINNESOTA REVISOR'S MANUAL (2002) at § 10.13 (b).

If the four listed emissions are considered in the aggregate, the Mesaba Project again clearly meets the statutory requirement. For all these reasons, the Commission finds that the Project meets the statutory definitional requirement that it significantly reduce the four listed emissions when compared to traditional technologies.

IV. The Terms and Conditions of the Proposed Power Purchase Agreement Submitted by Excelsior Are Not In the Public Interest

A. The Statutory Standard

Under Minn. Stat. § 216B.1694, subd. 2 (a) (7), the innovative energy project is entitled to enter into a long-term, 450-megawatt, power purchase agreement with Xcel, subject to the Commission approving the agreement's terms and conditions as consistent with the public interest. The statute authorizes the Commission to approve, disapprove, amend, or modify any proposed agreement and requires that the Commission's public interest determination consider the following five factors:

(1) the project's economic development benefits to the state;

(2) the use of abundant domestic fuel sources;

(3) the stability of the price of the output from the project;

(4) the project's potential to contribute to a transition to hydrogen as a fuel resource; and

(5) the emission reductions achieved compared to other solid fuel baseload technologies

B. The Decision-making Framework

The Commission concurs with the decisional framework used by the ALJs to examine the terms and conditions of the proposed contract.

Clearly, the Commission is bound by its normal statutory obligations. These include the duty to ensure that retail consumers receive adequate and reliable service at reasonable rates, consistent with the financial requirements of public utilities and their need to build generating facilities or

otherwise secure the energy supplies necessary to provide adequate and reliable service. Minn. Stat. § 216B.01. These obligations also include the duty to set rates to encourage energy conservation and renewable energy use and the duty to resolve any doubt as to the reasonableness of any rate in favor of the consumer. MInn. Stat. § 217B.03.

These are the principles that guide the public interest determination the Commission routinely makes when it examines the terms and conditions of any power purchase agreement. In this case the Commission is also required to consider the five factors set forth above, due to the unique characteristics and potential advantages of IGCC technology.

C. The Findings and Conclusions of the Administrative Law Judges

The Administrative Law Judges examined the terms and conditions of the proposed contract under traditional public interest criteria, grouping the host of relevant factors into four categories: (1) ratepayer protection from the operational risks of the Project; (2) ratepayer protection from the financial risks of the Project, (3) the impact of the terms and conditions of the contract on Xcel's financial health, and (4) the reasonableness of the contract price, especially in relation to other baseload options realistically available to Xcel.

The Administrative Law Judges also considered the five statutory factors applicable to a contract with an innovative energy project, made findings on the public benefits related to IGCC technology to which they pointed, and weighed the contribution of these benefits to the total public-interest value of the contract's terms and conditions.

In brief, the Administrative Law Judges found that the pricing terms of the contract were so uncertain and, to the extent that they were certain, were so negative in their effects on Xcel's ratepayers, that none of the additional benefits from the five IGCC-specific factors could render the contract's terms and conditions consistent with the public interest.

D. Summary of Commission Action

The overriding reason that the Commission cannot find the terms and conditions of the proposed contract to be in the public interest is that the terms and conditions as to price impose excessive risks, and are likely to impose excessive costs, on Xcel and its ratepayers.

This determination turns mainly on traditional public-interest considerations, not on the five IGCC-specific considerations the statute requires the Commission to take into account. While the Commission has taken these five considerations into account – and has considered them very carefully – the contract's pricing terms and conditions carry so many serious risks that the advantages of IGCC technology are not enough to counterbalance them, let alone to tip the scales in favor of contract approval.

The Commission concurs with the Administrative Law Judges' findings on the risks that are inherent in the pricing terms and conditions of the contract and on the costs that are likely to result. The Commission will accept their findings on these issues unless otherwise indicated, as explained below.

While the Commission also concurs with the Administrative Law Judges that the five IGCC-specific considerations do not contribute enough value at this point to offset the risks and costs of the pricing terms and conditions, the Commission will not make findings as detailed as those in the Administrative Law Judges' Report. First, it is unnecessary to determine the precise value of the five specific IGCC benefits cited in the statute, once it is clear that they do not offset the costs and risks of the contract's pricing provisions.

And second, the precise value of these benefits will change over time, as technology advances and the factual landscape changes. It will not be helpful in subsequent proceedings involving this Project and this technology to have outdated, over-precise findings on these five statutory factors – even if they are accurate today – and the Commission will therefore not adopt all the findings of the ALJs on these issues.

While the Commission might assign a different weight to the statutory factors than the ALJs did, its conclusion is the same: those factors do not, on the current record, offset either the contract's noncompetitive pricing terms and conditions or the very real risk of excessive ratepayer costs that those pricing terms and conditions create.

V. The Terms and Conditions of the Proposed Contract Result in Unreasonably High Prices, which Translate into Unreasonably High Rates

The proposed contract does not set a price for the power Xcel would be required to buy from Mesaba, nor does it set any ceiling on that price. Instead, Mesaba's power prices would depend upon the costs to construct and operate the plant and would fluctuate over time with inflation, fuel costs, and operation and maintenance expenses. Power prices would also depend upon whether Excelsior eventually installs carbon capture and sequestration equipment, which is projected to cost over a billion dollars and to reduce the plant's efficiency by approximately 10% (ALJ Findings 185-187).

Excelsior and the Department both filed comprehensive testimony and analysis comparing the estimated cost and price of Mesaba's power – assuming no carbon capture and sequestration equipment and no serious operational or financial setbacks as the project moves forward – with the estimated cost and price of power from the most realistic baseload alternative: a new, supercritical, pulverized-coal plant. Both parties used Excelsior's estimates for Mesaba's cost and price, but used different estimates for the costs and prices of baseload alternatives.

Excelsior used estimates prepared by the same consulting company that is coordinating its Mesaba Project, Fluor Enterprises, Inc. Fluor's cost/price comparison figures are based on its estimates of the cost of constructing and operating a hypothetical, utility-owned, supercritical pulverized-coal plant sited in Minnesota. The Department's cost/price comparison figures are based on Minnesota utilities' estimates of the cost of constructing and operating three specifically identified,

supercritical, pulverized-coal plants that they are constructing, proposing for construction, or considering for construction.

The Administrative Law Judges gave more weight to the Department's cost comparison figures than Excelsior's and used the Department's figures in reaching their determination that Mesaba's power would cost approximately 30% more than power from comparable facilities over the life of the contract (ALJ Finding 183). Excelsior took exception to the ALJs' reliance on the Department's figures, objecting that the ALJs did not explain in detail their reasons for granting the Department's cost comparison figures more credence than Excelsior's.

The Commission has conducted its own careful examination of the cost and price information in the record and concurs with the Administrative Law Judges that it is more reasonable to base comparative rate determinations on the Department's cost/price comparisons than Excelsior's.

First, the Department's cost figures have a broader factual foundation than Fluor's. Fluor's cost comparisons are based on a single, hypothetical supercritical plant, while the Department's cost comparisons are based on three actual supercritical plants in different stages of construction or design by Minnesota utilities. Second, the Department's cost figures reflect a broader range and greater depth of expertise than Excelsior's. While Fluor's expertise as a construction company and consulting firm is significant and probative, the combined expertise of the six Minnesota utilities engaged in the design and construction of supercritical plants is more probative.

Further, Excelsior has the burden of proof on the issue of comparative cost and price, and any doubt as to the reasonableness of a proposed rate must be resolved in favor of the consumer (Minn. Stat. § 216B.03). Here, the rate is totally dependent upon costs that are not yet known and that will be incurred to design and install a developing technology that is still commercially untested and has no long-term track record upon which the Commission can rely. Under the terms and conditions of the contract, costs and rates are subject to no upper limit. Under these circumstances, credible evidence that rates will be 30% higher than rates for a comparable product carries a great deal of weight. The Commission joins the ALJs in accepting the Department's cost/price comparison data over Excelsior's.

Another factor that cannot be ignored is that Xcel's projections of its future power needs have shifted downward since the IGCC statutes were enacted. The Company's most recent resource plan indicates a need for 375 megawatts of baseload capacity in 2015, which means the terms and conditions of the initially proposed contract would force it to buy unneeded baseload power from Mesaba from 2011 through 2014. (On the day the case was heard, Excelsior proposed to amend the terms and conditions of the contract to establish a June 1, 2013 start date, reducing the period during which Xcel would be forced to buy unneeded power.)

[14] Xcel's Comanche 3 Plant, under construction in Colorado.

[15] Big Stone II, proposed to be built in South Dakota by a consortium of seven utilities, including five with headquarters in Minnesota: Central Minnesota Municipal Power Agency, Great River Energy, Otter Tail Power Company, Southern Minnesota Municipal Power Agency, and Western Minnesota Power Agency.

[16] Xcel's Sherco 4 Plant, which would be added to Xcel's facility in Becker County, Minnesota.

Buying this unneeded baseload capacity would force the Company to forgo the less expensive supplies it proposes to secure in its resource plan, at an estimated additional cost of $30.80 per megawatt hour during that three-year period (ALJ Finding 175). These additional costs would translate into unnecessary rate increases of $5.00 to $7.00 per month for residential customers and $2,700 to $3,900 per month for commercial and industrial customers during the first year of the contract as initially proposed, with declining rate impacts thereafter (ALJ Finding 115).

Unnecessary rate increases of this magnitude are unreasonable on their face. The one potential mitigating factor is the need to consider the five statutory benefits of IGCC generation, which could theoretically justify the near-certainty of significantly higher rates. As will be discussed in more detail below, however, the Commission concurs with the ALJs that the record does not demonstrate that these benefits are substantial enough and certain enough to justify those higher rates.

For all these reasons, the Commission accepts the ALJs' findings that the terms and conditions of the proposed contract are not consistent with the public interest because they would result in unreasonably high prices for Xcel and unreasonably high rates for Xcel's ratepayers. The Commission accepts ALJ Findings 179-188, with the exception of the final two sentences in Finding 188, which state that it is not possible to amend the contract to make it reasonable.

While the contract cannot be so amended on this record, the Commission does not rule out the possibility that further negotiations between Excelsior and Xcel, and aggressive exploration of the potential for a statewide market for IGCC power, will produce a contract with terms and conditions that are reasonable and consistent with the public interest.

VI. The Terms and Conditions of the Proposed Contract Expose Xcel and its Ratepayers to Unreasonable Operational Risks

Another issue the Commission examines in acting on proposed power purchase contracts is the degree to which the contract protects the utility and its ratepayers against the operational risks of the generating facility. Operational risks relate mainly to breakdowns, shutdowns, persistent under-performance, and substantial increases in operational and maintenance costs.

Breakdowns and shutdowns are probably the most significant operational risks, since they create an emergency need for replacement power, both for purposes of dispatch and to meet reserve requirements. Replacement power is often extremely expensive, depending upon the time of year and market conditions. The terms and conditions of the contract as initially proposed limited Excelsior's liability for replacement power to $75,375,000, approximately one year's additional expense for replacement power over the 25-year life of the contract.

On the day the case was heard, Excelsior offered to amend the terms and conditions of the contract to establish a replacement-power security fund at significant additional cost to Xcel and its ratepayers. The Commission concurs with the Department that shifting nearly all the risk (or cost, in the form of the ratepayer-funded security fund) of breakdown and shutdown from Excelsior to Xcel and its ratepayers is unreasonable and not in the public interest.
Another significant risk shifted from Excelsior to Xcel and its ratepayers is the cost of fuel. Under the terms and conditions of the proposed contract, all fuel costs are passed through to Xcel, which essentially means that all risks of imprudent fuel purchasing practices are assumed by ratepayers. While the Commission could theoretically disallow rate recovery of imprudent fuel costs incurred by Excelsior, it is difficult to envision circumstances under which it would be appropriate to force

Xcel to absorb those losses, after forcing the Company to accept a contract imposing them. The Commission concurs with the ALJs that shifting *all* risks associated with fuel costs to Xcel and its ratepayers is unreasonable and inconsistent with the public interest.

This is especially true of natural gas costs, which are high and volatile. The terms and conditions of the proposed contract contain generous provisions increasing capacity payments to account for Mesaba's anticipated heavy reliance on natural gas during the three-year "ramp-up" period. These provisions permit Mesaba to consume unusually high amounts of natural gas for a baseload facility, on the theory that higher fuel costs during the shakedown period will facilitate major cost savings later, when the facility will run on low-cost solid fuel.

Once the ramp-up period has ended, however, even with the contract's financial penalties for burning natural gas, Xcel would still pay roughly double the normal capacity cost of natural-gas-fired generation when Mesaba ran on natural gas (ALJ Finding 156). The Commission concurs with the ALJs that these contract terms and conditions allocate to ratepayers more than their fair share of the risks that accompany the deployment of new technology.

Finally, the terms and conditions of the proposed contract authorize automatic rate changes to pass through increases in operation and maintenance costs, limited only by the rate of inflation as represented by the implicit price deflator tied to the gross domestic product. This automatic adjustment essentially shifts the risk of cost increases from Excelsior to Xcel's ratepayers and eliminates Excelsior's incentive to hold costs below the rate of inflation.

This shifting of risk is likely to work to the detriment of ratepayers because not all operating and maintenance costs rise in lockstep with inflation. Potential operating efficiencies will present themselves as the plant settles in, but Excelsior will have no meaningful incentive to capture them.

This cost pass-through strips ratepayers of both the protection of the free market, in which competition keeps costs and prices low, and the protection of rate-of-return regulation, in which regulators keep costs and prices low by reviewing them for necessity, reasonableness, and prudence.

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[17] On the day the case was heard, Excelsior submitted an outline proposing additional procedural steps in fuel purchasing that would require more intensive involvement by Xcel and the Commission. It is not clear how these procedures would interact with other contract provisions, including dispute resolution provisions. It appears unlikely that the procedures would shift responsibility for imprudently incurred fuel costs to Excelsior, at least not without lengthy litigation-type proceedings.

[18] On the day the case was heard, Excelsior submitted a list of decision options it considered acceptable, which appeared to include limiting rate increases under this provision to actual inflation or indexing operation and maintenance expenses (and price increases tied to inflation) at 2.5% per year. The proposal was not very clear or highly developed, and did not receive a great deal of attention at oral argument due to the large number of issues requiring attention. The proposal can be developed and examined in greater detail in the course of renewed negotiations between Excelsior and Xcel.

For all these reasons, the Commission concurs with the Administrative Law Judges that the terms and conditions of the proposed power purchase agreement shift to Xcel and its ratepayers operational risks more properly allocated to Excelsior. The Commission accepts ALJ Findings 153-165.

VII. The Terms and Conditions of the Proposed Contract Expose Xcel and its Ratepayers to Unreasonable Financial Risks

Another issue the Commission examines in acting on proposed power purchase contracts is the degree to which the contract protects the utility and its ratepayers against the financial risks faced by the vendor. Financial risks relate mainly to the possibility that the vendor will become financially unable to complete the project or to continue operating it, but they include the related risks of cost overruns and unforeseen spikes in capital costs.

Normally, independent power producers like Excelsior offer power purchase contracts under which they assume the risks of plant design and construction. Here, the terms and conditions of the proposed contract shift nearly all those risks to Xcel and its ratepayers, by requiring payment of the full costs associated with engineering, procurement, and plant construction, subject to after-the-fact, broad-brush review by the Commission.

While the costs of designing and installing new technology are difficult to estimate, and do complicate the task of setting a firm power price, shifting all the risks of engineering and installing new technology to Xcel and its ratepayers is unreasonable. Further, while a fixed price is the gold standard of purchased power contracts, the proposed contract does not even provide second-best protections, such as price ceilings, competitive bidding, or regularly scheduled prudence-review conferences.

Similarly, the proposed contract shifts nearly the full risk of interest increases to ratepayers, adding to the final capacity price any increase in the cost of capital since third-quarter 2005. It is neither reasonable nor consistent with industry norms to place the bulk of the risks of financing this project on ratepayers.

Finally, power purchase agreements normally include provisions to protect ratepayers if the project owner becomes insolvent, such as a security fund, a subordinated lien on the facility, or step-in rights, which permit the utility to "step in" to the vendor's position and operate the plant. The absence of such provisions here poses inappropriate financial risks to Xcel ratepayers.
For all these reasons, the Commission concurs with the Administrative Law Judges that the terms and conditions of the proposed power purchase agreement shift to Xcel and its ratepayers financial risks more properly allocated to Excelsior. The Commission accepts ALJ Findings 166-172.

[19] On the day the case was heard, Excelsior submitted a list of new decision options, which appeared to include limiting rate increases under the two provisions discussed above to 20% of the "total levelized nominal costs of capacity and energy under the PPA [purchased power agreement]." The proposal was not very clear or highly developed, and did not receive a great deal of attention at oral argument, due to the large number of issues requiring attention. The proposal can be developed and examined in greater detail in the course of renewed negotiations between Excelsior and Xcel.

VIII. The Terms and Conditions of the Proposed Contract Could Have Collateral Negative Consequences for Xcel's Financial Health

Another issue raised by Xcel was the possibility that the proposed power purchase agreement would adversely affect its overall financial health and strength. This concern was rooted in the possibility that some credit rating agencies would treat long-term purchased power contracts as analogous to long-term debt.

If treated as analogous to long-term debt, the 25-year, $1.9 billion contract Excelsior asks the Commission to impose on Xcel would double Xcel's long-term credit obligations. This additional debt would carry the potential to negatively affect Xcel's credit rating, which would likely raise its cost of long-term debt, its cost of common equity, and its overall cost of capital. These risks would be magnified by the proposed contract's 30%-above-market price.

Since the Commission has already determined that the terms and conditions of the proposed contract do not meet the public interest standard of Minn. Stat. § 216B.1694, subd. 2 (a) (5) – for reasons of price and the unreasonable shifting of financial and operational risks to Xcel and its ratepayers – it is unnecessary to address this issue, and the Commission declines to do so.

IX. The Potential Benefits of IGCC Technology Reflected in the Considerations Set Forth in Minn. Stat. § 216B.1694, Subd. 2 (a) (7) Do Not Offset the High Price and Significant Ratepayer Risks of the Proposed Contract's Terms and Conditions

The Innovative Energy Project statute requires the Commission to consider five IGCC-specific benefits in determining whether the terms and conditions of the proposed power purchase contract should be approved (Minn. Stat. 216B.1694, subd. 2 (a) (7)). The parties submitted testimony on these five factors, and the Administrative Law Judges examined and made findings on them.

The Commission concurs with the ALJs that these five considerations do not demonstrate public-interest benefits sufficient to tip the scales in favor of approving the terms and conditions of the proposed power purchase contract. These five considerations are examined below.

A. The Project's Economic Development Benefits to the State

The ALJs accepted Excelsior's evidence that the Mesaba Project was likely to create approximately 1,555 construction jobs over the four-year construction period, 107 full-time, part-time, and temporary jobs at the plant once operations begin, and 143 full-time and part-time jobs elsewhere in the region as a result of the economic activity generated by the plant. The ALJs concluded that, although the economic impact of higher rates for Xcel residential and business ratepayers had not been quantified, "[o]verall, the economic development benefits weigh in favor of the Project. But they do not justify an unreasonable price for its electric capacity and energy" (ALJ Finding 130).

The Commission accepts the ALJs' general findings on the economic development impact of the Project, Findings 110-129, and concurs with their conclusion that the economic development benefits of the plant do not justify the high price the terms and conditions of the proposed contract would charge for its power. It is unnecessary, therefore, to make a determination on whether, overall, the economic development benefits weigh in favor of the Project.

That is a difficult issue, and one whose parameters will change over time. Further, the economic development effects of charging higher residential rates and commercial/industrial rates to over half the state's population have not been quantified. The Commission is reluctant to make findings on economic impacts without this information. As the Commission noted in another case involving difficult trade-offs between affordable rates and other important public policies:

> For low income households, rate increases can cause serious hardship. . . . Higher rates increase the number of households facing disconnection crises. They also harm low income and fixed income households generally, by reducing the funds available to meet non-utility needs. For that matter, households of every income level feel the effect of rate increases to some degree.
>
> Similarly, the price of electricity affects industrial and commercial siting decisions, and all forms of economic development. In recent sessions the legislature has recognized this by requiring the Commission to experiment with economic development rates (Minn. Stat. § 216B.161) and to allow electric utilities to offer flexible rates to large customers with the ability to bypass their local electric utility (Minn. Stat. § 216B.162). To allow rates to increase to avoid building this storage facility would conflict directly with these public policy goals.
>
> Because rate levels have serious effects on individuals, businesses, and the general economy, the Commission considers the rate issue critical. The rate increases that would result from denying this application would clearly harm many Minnesota households and businesses. They would inhibit economic growth and development to some degree. The Commission believes these negative consequences can be responsibly avoided by granting a limited certificate of need.

The Commission will therefore not reach the issue of whether the overall economic development effects of the project favor the project, its resolution being unnecessary to the issues decided today.

B. The Use of Abundant Domestic Fuel Sources

The ALJs did not make an explicit finding on the weight of this factor, noting their earlier concern, expressed in the context of the IGCC-definitional issue, that the project might rely

[20] *In the Matter of an Application for a Certificate of Need for Construction of an Independent Spent Fuel Storage Installation*, E-002/CN-91-19, Order Granting Limited Certificate of Need (August 10, 1992) at p. 29.

heavily on natural gas and petroleum coke supplies originating outside this country. They did find that the plant had the potential to make extensive use of domestic coal, the factor to which the statute was clearly pointing.

As discussed above in the context of the definitional issue, the Commission is convinced that the Mesaba Project will ultimately rely on domestic coal for at least 50% of its solid fuel feedstock, as its design specifications require, and the Project appears to have the ability to burn more coal if necessary or advantageous. The Commission therefore grants this consideration more weight than the ALJs, but does not believe that this factor, by itself or in conjunction with the others, adds enough benefit to make the terms and conditions of the proposed contract reasonable and in the public interest.

C. The Stability of the Price of the Output from the Project

The ALJs essentially found that, while the price of Mesaba's output was not likely to be markedly unstable, it was also not likely to be marked by the level of stability that would give it a decided advantage over other generating facilities. ALJ Findings 136 and 77-92. Price stability would be undermined, in their view, by increasing demand for coal and for coal transportation. This resulted in their finding that this statutory factor did not offset the unfavorable pricing terms and conditions in the proposed power purchase contract.

The Commission concurs that the price stability factor does not tip the scales in favor of approving the project, recognizing that the facts this consideration brings into play will change over time.

D. The Project's Potential to Contribute to a Transition to Hydrogen as a Fuel Source

The ALJs found that the Project did have the potential to contribute to a transition to using hydrogen as a fuel source, but that that potential would only be consistent with state goals if its carbon dioxide emissions were reduced (ALJ Finding 142).

The Commission concurs with the ALJs that the Project does have significant potential to contribute to the transition to hydrogen fuels, which has been adopted as policy goal by the Minnesota Legislature. The Commission also concurs that it is clearly state policy to take aggressive action to reduce carbon emissions. While the statutes do not parse out exactly how much weight to give each of these two policy goals, it is clear that, at present, the Project's hydrogen potential does not move it to the tipping point at which the terms and conditions of the proposed power purchase contract become consistent with the public interest.

E. The Emission Reductions Achieved Compared to Other Solid Fuel Baseload Technologies

This statutory consideration is very different from the emissions factor considered in determining whether the Mesaba Project met the statutory definition of an Innovative Energy Project (Minn.

[21] Minn. Stat. § 216B.8109.

[22] Minn. Stat. §§ 216H.01-216H.06.

Stat. § 216B.1694, subd. 1). In the earlier case, carbon dioxide, a major pollutant, was excluded from the list of emissions to be considered. Here, carbon dioxide is included, changing the plant's emissions profile considerably, unless and until it deploys carbon capture/sequestration technology or otherwise manages to dramatically reduce its carbon emissions.

The ALJs found that including carbon dioxide in the emissions considered required a finding that the plant had "little or no quantifiable advantage at this time over other coal burning plants and no advantage over baseload generators operating on renewables" (ALJ Finding 152). The Commission concurs that the plant has little advantage over the solid fuel baseload technologies likely to be deployed today.

The Commission therefore concludes that the Mesaba Project's emission reductions do not provide sufficient public-interest benefits to justify the high power prices required under the terms and conditions of the proposed power purchase contract.

X. Excelsior, Xcel, and the Department Should Continue Negotiations

While there are legitimate barriers to Excelsior and Xcel reaching agreement on the terms and conditions of a power purchase agreement, the statute anticipates an agreement, and the Commission remains committed to exploring every avenue that may lead to one. The Commission will therefore require Excelsior and Xcel to resume their negotiations, with the assistance of the Department.

The conclusion of the contested case proceeding should help move negotiations forward. While a contested case was necessary to develop a complete, coherent, and reliable factual record, a contested case is by nature adversarial and may well have hardened positions and exacerbated differences. With the contested case behind them, and with the benefit of the Commission's thinking on critical issues, the parties should be able to make a fresh start at reviewing where their interests converge and how they might be able to reach a mutually beneficial agreement.

XI. The Public Interest Requires Exploration of the Potential for a Statewide Market for Power from the Innovative Energy Project Under Minn. Stat. § 216B.1694, Subd. 2 (a) (5)

Finally, the Commission is convinced that the public interest requires it to explore the potential for a statewide market for the power produced by the Mesaba Project, as anticipated under Minn. Stat. § 216B.1694, subd. 2 (a) (5).

That statutory provision requires the Commission to ensure that Mesaba is seriously considered as an alternative supply option in all cases involving requests to build or expand fossil-fuel-fired generation facilities or involving requests to enter into power purchase agreements with those facilities for terms longer than five years. The statute directs the Commission both to ensure consideration of Mesaba as a supply alternative in those cases and to take any action on the merits of those requests that it finds to be in the best interest of ratepayers.

Resource plan filings are imminent from Xcel, Minnesota Power, and Great River Energy, three of the state's largest generators of electricity and purchasers of wholesale power. These resource plan proceedings should provide a good starting point for examining how Mesaba might contribute to

meeting the state's intermediate and long-term power needs and how that contribution would affect rates, reliability, and other public-interest concerns. Another promising resource for this purpose will be the Reliability Administrator's assessment of Minnesota's power needs through 2025, required under the Next Generation Energy Act (Laws 2007, c. 136, art. 4, § 16).

Spreading the challenges presented by the Innovative Energy Project Act – especially the challenges of cost, pricing, and rates – among more than one set of ratepayers may well make those challenges more manageable and the Act's benefits more achievable. The Commission will explore that possibility in the months ahead.

ORDER

1. The Commission denies the two motions to strike submitted by mncoalgasplant.com.

2. The Commission finds that the Mesaba Project is an "innovative energy project" under Minn. Stat. § 216B.1694, subd. 1.

3. The Commission disapproves the terms and conditions of the proposed power purchase agreement submitted by Excelsior.

4. Excelsior and Xcel shall resume their negotiations toward a final power purchase agreement, with the assistance of the Department of Commerce and in light of the guidance provided by the Commission in this case.

5. The Commission will explore the potential for a statewide market for the innovative energy project's power under the provisions of Minn. Stat. § 216B.1604, subd. 2 (a) (5), both in the context of upcoming resource plan proceedings and in other cases in which the Commission reviews (a) requests to build or expand fossil-fuel-fired generation facilities or (b) requests to enter into power purchase agreements with those facilities for terms longer than five years.

6. This Order shall become effective immediately.

BY ORDER OF THE COMMISSION

Burl W. Haar
Executive Secretary

(S E A L)