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Surrebuttal Testimony and Schedules  
Judy M. Pofert

State of Minnesota  
Before the Office of Administrative Hearings  
For the Minnesota Public Utilities Commission

*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*

OAH Docket No. 12-2500-17260-2  
PUC Docket No. E6472/M-05-1993

**Case Overview**

October 31, 2006

## Table of Contents

I.	Introduction	1
II.	Purpose	1
III.	Assessment	2
	A. Standard for Review	2
	B. Role of Cost and Need	8
	C. Innovative Energy Project Criteria	13
	D. Response to Other Issues	17
	E. Witness Introduction	21
IV.	Conclusion	22

1 **I. INTRODUCTION**

2

3 Q. PLEASE STATE YOUR NAME.

4 A. My name is Judy M. Poferl.

5

6 Q. DID YOU PROVIDE DIRECT TESTIMONY IN THIS CASE?

7 A. Yes. I provided Policy Testimony and an overview of Xcel Energy's case.

8

9

**II. PURPOSE**

10

11 Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

12 A. I provide the Company's overall assessment of the Rebuttal Testimony  
13 presented by Mesaba 1 LLC, highlighting various policy issues and responding  
14 to its characterizations of the Standard for Review in this proceeding. I also  
15 introduce Xcel Energy's witnesses presenting Surrebuttal Testimony.

16

17 Q. HAS MESABA 1 LLC'S REBUTTAL TESTIMONY CHANGED THE COMPANY'S  
18 POSITION IN THIS PROCEEDING?

19 A. No. While certain issues have been clarified and or modified, Mesaba 1 LLC  
20 has not amended its proposal in any material way. Our analysis still indicates  
21 that the Mesaba 1 PPA does not and is not likely to offer a least-cost resource  
22 to our system (costing \$1.5 billion more over the planning period compared  
23 to other alternatives in our Resource Plan). Further, the Mesaba 1 PPA shifts  
24 too much risk to Xcel Energy, risk that would further raise costs for our  
25 customers. Finally, Mesaba 1 LLC's proposal does not satisfy various  
26 statutory criteria, including the five criteria identified in the Innovative Energy  
27 Project Statute. Combined, these facts support a finding that the Mesaba 1

1 PPA's costs do not outweigh its benefits, thus the public interest is not  
2 satisfied. Consequently, we still conclude that Mesaba 1 LLC has not met its  
3 burden of proving that its proposal meets the statutory criteria required for  
4 approval.

5  
6 Q. HOW DO YOU PRESENT YOUR SURREBUTTAL TESTIMONY?

7 A. I present my testimony in the following sections:

- 8 • Standard for Review,
- 9 • Role of Cost and Need,
- 10 • Innovative Energy Project Criteria,
- 11 • Response to Other Issues,
- 12 • Introduction to Xcel Energy's Witnesses, and
- 13 • Conclusion.

14  
15 **III. ASSESSMENT**

16  
17 **A. Standard for Review**

18 Q. MESABA 1 LLC PRESENTS REBUTTAL TESTIMONY REGARDING THE DECISION-  
19 MAKING CRITERIA THAT APPLIES TO THIS CASE. CAN YOU SUMMARIZE ITS  
20 POSITION?

21 I read Mesaba 1 LLC's witnesses to assert that:

- 22 • Minnesota law does not and cannot require its proposal to meet a least-  
23 cost standard, nor does it require reasonable consideration of cost or  
24 need when determining the public interest.
- 25 • The Commission's public interest review is limited to the five criteria  
26 provided in Minn. Stat. § 216B.1694 (the "Innovative Energy Project

1 Statute”), subd. 2 (a)(7), making the size, cost, and timing of Mesaba  
2 Unit 1 irrelevant.

- 3 • It is not only possible but required to evaluate two portions of a single  
4 contract under two different statutory frameworks (both the Innovative  
5 Energy Project Statute and Minn. Stat. § 216B.1693 (the “Clean Energy  
6 Technology Statute”).

7  
8 Q. DO YOU AGREE?

9 A. No. While these arguments are more appropriately addressed in legal briefs, I  
10 find them logically inconsistent. For example, if 153 MWs of the Mesaba 1  
11 PPA is subject to a least-cost standard, all 603 MWs must meet this standard,  
12 as they all stem from the same resource and the same PPA. Thus, Mesaba 1  
13 LLC’s argument that its PPA must be evaluated under different statutory  
14 criteria has little practical meaning, given that it seeks approval of a 603-MW  
15 PPA. Mesaba 1 LLC also appears to argue that Subd. 2(a)(7) of the  
16 Innovative Energy Project Statute entitles it to approval of *any* proposed 450-  
17 MW PPA that meets the five specified criteria -- apparently irrespective of  
18 cost or need -- including a contract that (1) fully recovers the costs of a 603  
19 MW plant over 450 MWs of supply, (2) provides service in advance of  
20 customers’ needs, and (3) provides supply in excess of customers’ needs. Yet,  
21 by arguing that the Commission could clearly modify its proposed 450-MW  
22 PPA to adjust for its desired project size of 603 MWs, Mesaba 1 LLC  
23 implicitly acknowledges broader public interest considerations than provided  
24 by its proposed Standard for Review.

25  
26 In my view, the logical resolution of these inconsistencies is to assess the  
27 proposed 603-MW PPA under the least-cost and public interest standards of

1 the Clean Energy Technology Statute, and consider the five criteria provided  
2 in Subd. 2(a)(7) of the Innovative Energy Project Statute as additional,  
3 relevant factors when weighing the public interest. We articulated this  
4 Standard for Review in our Statement of the Case, and will provide further  
5 support and elaboration in our post-hearing briefs.

6  
7 Q. ARE OTHER FRAMEWORKS FOR THE STANDARD OF REVIEW POSSIBLE?

8 A. Yes. The ALJs have provided another framework for review in their recent  
9 Order Denying Motion For Summary Judgment of the Xcel Industrial  
10 Intervenors group. As I understand it, this framework examines the request  
11 for a 450-MW PPA under the Innovative Energy Project Statute, considering  
12 project cost along with the five specified criteria as part of the overall public  
13 interest determination. I recognize the distinction the ALJs draw between  
14 considering project cost as part of the public interest determination under the  
15 Innovative Energy Project Statute and requiring a finding that a resource is or  
16 is likely to be least cost under the Clean Energy Technology Statute.

17  
18 Q. WOULD APPLICATION OF THIS FRAMEWORK CHANGE YOUR OVERALL  
19 ASSESSMENT OF MESABA 1 LLC'S PROPOSAL?

20 A. No. Generally, public interest determinations attempt to weigh and balance  
21 cost and benefits. Given the Mesaba 1 PPA's substantial incremental cost of  
22 almost \$1.5 billion for our customers, coupled with the inability of Mesaba 1  
23 LLC to establish how its proposal provides any real benefits under the five  
24 considerations specified in the Innovative Energy Project Statute, the Mesaba  
25 1 PPA still is inconsistent with the public interest.

26  
27 Q. DO YOU HAVE ANY OTHER COMMENTS REGARDING THE ALJS' FRAMEWORK?

1 A. Yes. Under this framework, it would be theoretically possible to approve 450  
2 MWs under the Innovative Energy Project Statute while denying the  
3 remaining 153 MWs under the Clean Energy Technology Statute. While the  
4 record in this proceeding does not support this outcome, I note that the  
5 practical effect of such a decision is also uncertain. Mesaba 1 LLC states that  
6 its price for 450 MWs would differ substantially from its price for 603 MWs,  
7 and offered different pricing for illustrative purposes. As such, it is not clear  
8 what practical meaning approval of 450 MWs of its proposed 603-MW PPA  
9 would have, since Mesaba 1 LLC indicates 450 MWs is not available at the  
10 price formula provided by the Mesaba 1 PPA.

11  
12 Q. ON WHAT FACTUAL BASIS DOES MESABA 1 LLC PROPOSE THAT THE  
13 COMMISSION APPROVE ITS PROPOSED PPA?

14 A. It is unclear, as I find a number of inconsistencies in Mesaba 1 LLC's Rebuttal  
15 Testimony.

16  
17 Q. PLEASE ELABORATE.

18 A. Mesaba 1 LLC's witnesses argue many varied and seemingly contradictory  
19 points. For example:

- 20 • Professor Jim Chen argues that the Commission's ability to consider  
21 our customers' need for Mesaba Unit 1's output is very limited, while at  
22 least four Mesaba 1 LLC witnesses (Mr. Thomas Osteraas, Mr. Joseph  
23 Cavicchi, Mr. Andrew Weissman, and Ms. Rene Sass) provide lengthy  
24 testimony criticizing our resource planning process and asserting a  
25 significant customer need for Mesaba Unit 1.
- 26 • Mr. Osteraas and Professor Chen assert Xcel Energy's intent to hinder  
27 non-utility suppliers and new technologies to preserve self-generation,

1 while much of Mesaba 1 LLC's initial Petition and Filing argue that its  
2 project is needed because Xcel Energy has not and will not construct  
3 new base load generation.

4 • Professor Chen argues that the price of Mesaba Unit 1's output is  
5 irrelevant and the Commission's decision-making considerations are  
6 limited to the five criteria of the Innovative Energy Project Statute, yet  
7 I find little to no information and only unsupported, general claims as  
8 to how the proposal meets those five criteria.

9 • Mr. Edward Bodmer goes to significant lengths to create a  
10 hypothetical, lower cost that allows him to conclude that Mesaba Unit  
11 1 offers a least-cost resource to our system, yet a number of other  
12 Mesaba 1 LLC witnesses testify that the Mesaba 1 PPA as proposed is  
13 least-cost.

14 • Mr. Andrew Weissman argues against the use of natural gas on our  
15 system, while the proposed PPA (1) offers no assurance that Mesaba  
16 Unit 1 will operate substantially on coal, (2) would allow the plant to  
17 operate primarily on natural gas, and (3) offers the perverse incentive to  
18 rely on natural gas through bonus payments for higher capacity factors.  
19 The PPA thus places our customers at far more risk than other gas-  
20 fired plants criticized by Mr. Weissman – that is, the risk of paying both  
21 high capacity payments for a base load coal facility and high payments  
22 for round-the-clock, natural-gas-fired energy.

23 • Mr. Robert Evans argues that comparing the environmental  
24 performance of Mesaba Unit I to super-critical pulverized coal plants  
25 with advanced control technology is impractical, stating that the higher  
26 costs of those technologies are only justified in areas with serious air-  
27 quality issues and stringent emissions regulations. On the other hand,

1 Mesaba 1 LLC's Statement of the Case claims that Mesaba Unit 1 will  
2 be the cleanest coal plant in the nation, and that a detailed analysis has  
3 been conducted comparing it to coal facilities that have been subjected  
4 to unusually restrictive emissions requirements. Mesaba 1 LLC makes  
5 no mention that cost was considered in this analysis.

- 6 • Mr. Roger W. Gale contends that the Mesaba 1 PPA poses less risk to  
7 ratepayers than self-generation, while simultaneously testifying that an  
8 IGCC is entitled to greater protection from the risk of EPC cost  
9 increases.
- 10 • Mr. Michael Hamilton testifies that the Mesaba 1 PPA is consistent  
11 with industry norms, while Mr. Gale and Mr. Osteraas testify that an  
12 IGCC PPA should not be expected to be consistent with industry  
13 norms.

14  
15 Q. WILL THE COMPANY ADDRESS EACH OF THE ARGUMENTS MADE BY MESABA 1  
16 LLC IN ITS REBUTTAL TESTIMONY?

17 A. No. To assist the clarity of the record, we limit our testimony to the key,  
18 relevant issues of this proceeding: namely, (1) whether the Mesaba 1 PPA  
19 offers a least-cost resource for our system, (2) is in the public interest, and (3)  
20 otherwise meets the statutory requirements of the Clean Energy Technology  
21 and the Innovative Energy Project Statutes. Our lack of response to other  
22 issues raised by Mesaba 1 LLC witnesses should not be considered agreement  
23 with those issues.

24  
25 Q. CAN YOU PROVIDE AN EXAMPLE OF THE COMPANY'S APPROACH?

26 A. Yes. I will illustrate the appropriate framing of issues using the examples of  
27 carbon sequestration and the transition to hydrogen as a fuel resource. In

1 these examples, the relevant issues for this proceeding are not whether IGCC  
2 technology is generally capable of carbon sequestration or whether a  
3 transition toward hydrogen is an important policy goal -- rather, the relevant  
4 issues are whether Mesaba 1 LLC's proposal will actually sequester carbon or  
5 contribute to a transition toward hydrogen as a fuel resource. Once the  
6 appropriate issue is framed, it is clear that large portions of Mesaba 1 LLC's  
7 evidence is not directly relevant, as they relate to the appropriateness of  
8 various general policies and not the project's specific contributions to  
9 furthering those policies. In contrast, our witnesses do not debate the policy  
10 goals, and instead focus on the merits of Mesaba 1 LLC's specific proposal  
11 and its consequences for our customers. With respect to these examples, the  
12 record demonstrates that Mesaba Unit 1 will not sequester carbon and is not  
13 going to produce hydrogen.

14  
15 Q WHY DID THE COMPANY TAKE THIS APPROACH?

16 A. Mesaba 1 LLC asks the Commission to require Xcel Energy to enter into a  
17 specific PPA for the output of a real power plant with real costs and actual  
18 benefits. This proceeding should focus on the specific plant and PPA  
19 proposed by the Applicant -- not the hypothetical benefits that may be  
20 possible with the IGCC technology, but are not proposed here. Again, when  
21 the proper issue is framed -- as we seek to do in our testimony -- it is clear  
22 that Mesaba 1 LLC has not met its burden of proving that its proposal meets  
23 the requirements of the applicable statutes.

24  
25 **B. Role of Cost and Need**

26 Q. WHAT IS THE APPROPRIATE ROLE OF COST IN THIS PROCEEDING?

1 A. Cost is a critical factor to be considered under either the Clean Energy  
2 Technology or Innovative Energy Project Statutes. The Clean Energy  
3 Technology Statute requires a finding that a proposal is or is likely to be a  
4 least-cost resource, making cost the key consideration. Similarly, the  
5 Innovative Energy Project Statute provides the Commission the authority to  
6 modify or deny any contract that is contrary to the public interest. Dr. Eilon  
7 Amit of the Minnesota Department of Commerce correctly identifies cost as a  
8 major component of the public interest determination, including both direct  
9 costs (the price of the PPA) and indirect costs (including the financial impacts  
10 resulting from the PPA).

11  
12 Q. IS IT THE PLANT'S TECHNOLOGY OR THE PPA THAT MUST BE EVALUATED IN  
13 THIS PROCEEDING?

14 A. The PPA. Since the Mesaba 1 PPA is the vehicle for providing this resource  
15 to Xcel Energy's system, the least-cost and public interest findings must  
16 necessarily be applied to the PPA -- otherwise, it would be possible to charge  
17 *any* price for the output of a specific plant, provided its technology is found  
18 likely to be least cost on a hypothetical basis. Such a result would clearly not  
19 be in the public interest. Consequently, the Mesaba 1 PPA (as opposed to the  
20 IGCC technology) must provide or be likely to provide a least-cost resource  
21 for our system.

22  
23 Further, even if technology were considered when applying the least-cost  
24 standard, neither statute requires a purchase if doing so would be contrary to  
25 the public interest. Thus, the Mesaba 1 PPA -- and its associated cost, terms,  
26 and resulting financial impacts for our customers -- must meet the least-cost  
27 and public interest standards of either Statute.

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Q. HAS MESABA 1 LLC DEMONSTRATED THAT ITS PPA IS LEAST-COST FOR XCEL ENERGY'S SYSTEM?

A. No. Our analysis, sponsored by Ms. Elizabeth Engelking, demonstrates that the Mesaba 1 PPA fails to satisfy the least-cost requirement on our system, costing approximately \$1.5 billion more than alternatives identified in our approved 2004 Resource Plan. Dr. Amit's Direct and Rebuttal Testimonies also confirm that Mesaba 1 LLC's proposal is not least cost. This additional cost over that of other alternatives must be weighed in the public interest determination of either the Clean Energy Technology or Innovative Energy Project Statutes.

Q. WHAT IS THE APPROPRIATE ROLE OF NEED IN THIS PROCEEDING?

A. While need may not be a prerequisite for Mesaba I LLC to build or size an IGCC plant, it is a critical component of any decision to require Xcel Energy to purchase the output from Mesaba Unit 1. As I have noted, the Clean Energy Technology Statute requires a finding that Mesaba 1 PPA provides or is likely to provide a least-cost resource before any purchase obligation applies, and does not require us to purchase a portion of our energy supplies from an innovative energy project if the Commission finds that doing so would be contrary to the public interest.

One reason for concluding that the Mesaba 1 PPA is not a least-cost resource is because it would provide power to Xcel Energy several years before our customers need it. Requiring Xcel Energy's customers to pay for Mesaba Unit 1 when its output is not needed would clearly be contrary to the public interest unless doing so lowered costs for customers. Thus, our customers'

1 need for the output of Mesaba Unit 1 and the timing of that need are  
2 obviously critical components of the analysis required for approval of the  
3 Mesaba 1 PPA.

4  
5 Q. WOULD COST AND NEED BE CONSIDERED UNDER SUBD. 2(A)(7) OF THE  
6 INNOVATIVE ENERGY PROJECT STATUTE?

7 A. Yes, cost and need are still a necessary component of the analysis. Under the  
8 Innovative Energy Project Statute, the Commission may approve, disapprove  
9 or amend a contract when making its public interest determination. Mesaba 1  
10 LLC relies on this provision in its argument that the Commission can accept  
11 its 603-MW PPA as a “modified” PPA under Subd. 2(a)(7) of the Innovative  
12 Energy Project Statute. But the Innovative Energy Project Statute does not  
13 allow Mesaba 1 LLC to determine which terms are available to the  
14 Commission to amend and which are not -- rather, the Commission makes  
15 this determination as it weighs the public interest. Obviously, the effective  
16 date is a key PPA term, and an effective date that precedes need is not in the  
17 public interest unless it lowers customer costs. Thus, the Commission clearly  
18 has the authority under the Innovative Energy Project Statute to either modify  
19 or deny the PPA based on our customers’ need for Mesaba Unit 1’s output.

20  
21 Q. HOW IS A UTILITY’S NEED FOR ADDITIONAL CAPACITY AND ENERGY  
22 DETERMINED?

23 A. The Commission determines a utility’s need for capacity and energy in the  
24 biennial Resource Planning process. Resource Planning focuses on the  
25 incremental actions that must be taken to ensure the most appropriate  
26 incremental resources -- that is, low-cost, reliable, and environmentally sound  
27 resources -- are available to meet our customers’ future needs. It thus seeks

1 to determine the most appropriate incremental resource additions for our  
2 system, given our current system mix, customer demand, and available  
3 alternatives. To this end, a key filing requirement is the utility's proposed  
4 five-year action plan. The Commission's final Order typically delineates the  
5 specific, required actions it finds necessary to ensure appropriate resources  
6 will be available when our customers need them.

7  
8 Q. HAS THE COMMISSION DETERMINED XCEL ENERGY'S NEED FOR BASE LOAD  
9 POWER?

10 A. Yes. In our 2004 Resource Plan proceeding (Docket No. E002/RP-04-1752),  
11 the Commission's Order found a need for 375 MWs of base load capacity and  
12 energy beginning in 2015. The Commission approved specific actions for  
13 meeting our customers' needs, including the requirement that we file by  
14 November 1, 2006 a proposal for meeting this base load need. This  
15 requirement stems from the forecast and load and capability assessment  
16 adopted by the Commission, which forms the basis for the required actions.

17  
18 Mesaba 1 LLC did not appeal the Commission's determination of need and  
19 approved Action Plan; it is a final, binding decision. While the Commission  
20 can change that decision prospectively in a future resource plan or certificate  
21 of need proceeding, such a proceeding is not before it at this time.

22  
23 Q. MR. OSTERAAS DISAGREES THAT THE COMMISSION MADE A DETERMINATION  
24 OF BASE LOAD NEED. WHAT IS YOUR RESPONSE?

25 A. The Commission's Order, which adopted our Resource Plan as modified  
26 during the proceeding, obviously speaks for itself. For example, the Order  
27 states:

1           The Commission concurs with the Company, the Department,  
2           and most commenting stakeholders that the Company should be  
3           authorized to issue a Request for Proposals for 136 megawatts of  
4           peaking capacity, with an online target date of 2011, and move  
5           toward developing 375 megawatts of baseload capacity, with an  
6           online target date of 2015. (*Order at p. 8.*)  
7

8           The Commission went on to “require Xcel to initiate the competitive resource  
9           acquisition process established in the May 31, 2006 Order by filing a  
10          certificate of need application for 375 megawatts of base load capacity on or  
11          before November 1 of this year.” The Commission clearly ordered these  
12          actions to ensure our customers’ needs over the planning period are met.  
13

14          I also note that Mesaba 1 LLC’s questioning of changing need over time  
15          appears to confuse the need identified in our initial Resource Plan filings with  
16          the Commission’s final determination of need made after considering all the  
17          evidence. It should come as no surprise that our customers’ need changes  
18          over time or that the preferred resource varies as costs change and  
19          technologies develop. Such changes are particularly evident in times of  
20          volatile and changing market conditions, as we have recently experienced. In  
21          my opinion, these circumstances illustrate the need for continual planning and  
22          flexibility in the action plan, rather than demonstrating problems that call the  
23          process into question.  
24

### 25          **C. Innovative Energy Project Criteria**

26          Q. PROFESSOR CHEN ARGUES THAT THE PUBLIC INTEREST DETERMINATION IS  
27          LIMITED TO CONSIDERATION OF FIVE FACTORS LISTED IN SUBD. 2 (A)(7) OF  
28          THE INNOVATIVE ENERGY PROJECT STATUTE. DO YOU AGREE?

1 A. No. First, as presented in our Statement of the Case, Xcel Energy does not  
2 agree that this provision of the Innovative Energy Project Statute applies to  
3 the Mesaba 1 PPA as proposed, since Mesaba 1 LLC seeks approval of a 603-  
4 MW PPA and indicates that pricing for 450 MW would be substantially  
5 different. Second, even if it applied, the five factors are to be considered as  
6 part of the Commission's public interest determination -- that is, they act to  
7 expand and supplement -- but not supercede -- the public interest  
8 determination that would otherwise occur. For example, a project that  
9 provides positive, net economic benefits to the state might justify a higher  
10 PPA price than would be considered reasonable in the absence of that  
11 criterion. Finally, excluding cost as a consideration in a public interest  
12 determination radically departs from typical practice. Such a departure would  
13 require very specific statutory direction, which the Innovative Energy Project  
14 Statute does not contain.

15  
16 Q. SETTING ASIDE THE OTHER COMPONENTS OF THE PUBLIC INTEREST  
17 DETERMINATION AND CONSIDERING ONLY THE FIVE FACTORS, HOW DOES  
18 THE MESABA 1 PPA FARE?

19 A. Mesaba 1 LLC has not met its burden of proving that its proposal fulfills the  
20 five criteria:

- 21 • *Economic Development Benefits to the State.* As discussed in Mr.  
22 Timothy Sheesley's Direct and Surrebuttal Testimonies, the Mesaba 1  
23 PPA is unlikely to offer net economic development benefits to  
24 Minnesota, given its high cost. While Mesaba 1 LLC identifies local  
25 benefits stemming from its proposal, the Innovative Energy Project  
26 Statute requires economic development benefits for the state. When  
27 considered from a statewide basis, as the Statute requires, there is no

1 showing that Mesaba 1 LLC's proposal offers net benefits under this  
2 criterion.

- 3 • *Use of Abundant Domestic Fuel Sources.* The Mesaba 1 PPA offers no  
4 assurance that the plant will operate substantially on coal and in fact  
5 could result in the extensive use of natural gas. This concern is  
6 heightened given the absence of long-term coal and transportation  
7 arrangements, as discussed in the Surrebuttal Testimony of Mr.  
8 Thomas C. Canter. Thus, while Mesaba 1 LLC asserts its intent to  
9 further this criterion, its specific proposal does not provide sufficient  
10 guarantees to support a conclusion that this criterion is met.
- 11 • *Stability of Price.* The price offered under the PPA is currently  
12 unknown, and will depend in significant part on the future  
13 Engineering, Procurement, and Construction ("EPC") contract. Even  
14 when the base capacity payment is eventually known, the Mesaba 1  
15 PPA includes a number of pass-through mechanisms, incentive  
16 payments, and escalation factors that do not support the conclusion  
17 that the price will be stable. The fact that Mesaba 1 LLC has no long-  
18 term arrangements for fuel supply is likewise a factor weighing against a  
19 conclusion that the price will be stable. The testimonies of Ms. Hyde,  
20 Mr. Reed, Mr. Canter, and Dr. Amit discuss this issue in detail.
- 21 • *Contribution to the Transition to a Hydrogen Economy.* As discussed in  
22 the Rebuttal Testimony of Mr. Douglas Cortez, Mesaba Unit 1 will not  
23 produce hydrogen. In fact, the plant lacks the equipment necessary to  
24 produce hydrogen (see Exhibit\_\_\_(JMP-2), Schedule 1). Taken  
25 together, there is no basis to conclude that Mesaba 1 LLC's proposal  
26 contributes to the transition to a hydrogen economy.

- *Emissions Reductions Compared to Other Solid Fuel Base Load Technologies.* While IGCC technology clearly offers environmental benefits compared to older coal technologies, it may not offer significant advantages over modern coal technologies. The key environmental advantage of IGCC technology is that it is more amenable to carbon sequestration, which would offer a significant environmental benefit. However, Mesaba Unit 1 will not sequester carbon, and the proposed PPA offers no commitment or timeline for doing so. In the absence of carbon sequestration, Mesaba 1 LLC has not established that the differences in emission levels between an IGCC and a SCPC facility are sufficiently significant to make this consideration meaningful.

As I have noted, the promise of possible future benefits from IGCC technology is not the issue in this case; Mesaba 1 LLC's specific proposal is. While IGCC technology offers possible benefits, the Commission must be assured that those benefits will actually be achieved before it grants meaningful weight to a proposal due to these criteria. Those assurances are not present in Mesaba 1 LLC's proposal.

Q. HOW, THEN, WOULD YOU ASSESS MESABA 1 LLC'S PROPOSAL UNDER THE FULL PUBLIC INTEREST DETERMINATION PROVIDED BY SUBD. 2(A)(7) OF THE INNOVATIVE ENERGY PROJECT STATUTE?

A. Even after applying the five factors specified in the Innovative Energy Project Statute, it is clear that Mesaba 1 LLC has not met its burden of demonstrating that its proposal meets the public interest test. Any benefit offered under those criteria is not sufficiently meaningful and clearly does not offset the

1 additional \$1.5 billion higher cost and substantial risk posed by the Mesaba 1  
2 PPA.

3  
4 **D. Response to Other Issues**

5 Q. MR. OSTERAAS OFFERS SOME MODIFICATIONS TO THE MESABA 1 PPA. DO  
6 THESE CHANGES ADDRESS THE COMPANY'S CONCERNS?

7 A. No. As discussed in the Surrebuttal Testimonies of Ms. Hyde and Mr. Reed,  
8 these modifications do not change the fundamental cost and risk issues posed  
9 by the Mesaba 1 PPA in any meaningful way. Thus, our assessment of the  
10 PPA and its associated financial impacts remain the same as offered in our  
11 Direct Testimony. Mr. George Tyson and Mr. Marvin McDaniel also address  
12 this issue in their Surrebuttal Testimonies.

13  
14 Q. MUCH OF MESABA 1 LLC'S REBUTTAL TESTIMONY COMPARES THE RISKS OF  
15 SELF-BUILD GENERATION WITH THE RISKS ASSOCIATED WITH A PPA. PLEASE  
16 RESPOND.

17 A. This proceeding must assess whether the Mesaba 1 PPA meets the statutory  
18 requirements for approval. As Ms. Hyde and Mr. Reed explain, the Mesaba 1  
19 PPA poses far more substantial and significantly different risks than typical  
20 PPAs; Mr. Tyson and Mr. McDaniel discuss how these risks result in severe  
21 credit-rating and other financial impacts that are not present with other  
22 resource options, including typical PPAs and utility construction. We believe  
23 the Commission must consider these unique risks and impacts when weighing  
24 the public interest.

25  
26 I also note that the regulatory process offers far greater assurances of  
27 ratepayer protection than offered by the Mesaba 1 PPA, and ratepayer

1 protection is clearly a component of the public interest. For example,  
2 regulation of public utilities provides for prudence review of costs with  
3 possible disallowances for excessive, unjustified expenses; on-going audits and  
4 potential adjustments; a regulated rate of return; the potential to be called in  
5 for rate reductions should there be over-earnings. In the recent case of our  
6 Emissions Reduction Proposal (Docket No. E002/M-02-633), the  
7 Commission's March 8, 2004 Order approved a Settlement governing the rate  
8 treatment of the over \$1 billion in capital investment proposed by Xcel  
9 Energy. This rate treatment includes a sliding-scale return, where earnings on  
10 the project will vary depending on how actual costs compare to proposed  
11 costs; audits and prudence reviews; and on-going oversight of budgets and  
12 expenditures. The Commission found that the benefits of the proposed  
13 emissions reduction projects outweighed the costs; this regulatory oversight  
14 of cost recovery was also necessary to ensure the public interest was met.  
15 Similar cost controls and oversight are not present in the Mesaba 1 PPA.  
16 Trade Secret Exhibit\_\_\_(JMP-2), Schedule 2 provides the financial  
17 assessment of Mesaba 1 LLC's proposal, indicating that none of these factors  
18 are present.

19  
20 Finally, I note that the Company is not proposing to meet future base load  
21 needs by building additional coal generation. As required by the Commission  
22 in our approved 2004 Resource Plan, we will be making our base load  
23 proposal in a separate proceeding. Alternative suppliers are encouraged to  
24 participate in that proceeding and offer proposals for consideration alongside  
25 of our proposal. Mesaba 1 LLC is welcome to offer the Mesaba 1 PPA in  
26 that proceeding, where the Commission will employ a competitive process for  
27 resource acquisition.

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Q. PROFESSOR CHEN ASSERTS THAT XCEL ENERGY IS OPPOSED TO PPAs. IS THAT A FAIR CHARACTERIZATION?

A. No. Xcel Energy has used competitive bidding to secure resources for many years, and has entered into numerous PPAs serving the NSP-MN system. S&P, a credit-rating agency, has already taken note of the higher risk that Xcel Energy faces from our dependence on PPAs. Further, through Resource Planning and other regulatory processes, the Commission actively exercises oversight of resource selections and acquisitions to ensure new resources are low cost, reliable, and environmentally sound. To suggest that any other intention is at work is obviously unreasonable in light of this evidence and disregards the Commission’s active oversight of these processes.

Q. MR. MICHAEL HAMILTON TESTIFIES THAT THE MESABA 1 PPA CAN BE MODIFIED TO REMOVE PROBLEMS IDENTIFIED BY MR. MCDANIEL. SHOULD THE MESABA 1 PPA BE REVIEWED BASED ON THE TERMS IT CONTAINS, OR THE TERMS IT COULD CONTAIN?

A. Clearly, the Commission can only act on the proposal before it. Mesaba 1 LLC offers no specific proposal responding to these financial concerns; thus, the Commission does not have a proposal to consider. Mr. McDaniel offers a more specific response to Mr. Hamilton’s testimony.

I note that the proposed PPA could be modified in many different ways to address Parties’ concerns and improve its ability to meet the least-cost and public interest tests -- likewise, Mesaba Unit 1 could be modified to improve its environmental profile with respect to carbon or implement technology to produce hydrogen. However, a contested-case proceeding is not an

1 appropriate forum for exchanging such proposals. If Mesaba 1 LLC wishes  
2 to modify its proposal, it would be appropriate to explore these options  
3 through negotiations, rather than this administrative proceeding.  
4

5 Q. MR. GALE TESTIFIES THAT IF THE COMMISSION GUARANTEES COST  
6 RECOVERY, THE COMPANY SHOULD NOT OBJECT TO THE MESABA 1 PPA.  
7 WOULD A COMMISSION GUARANTEE OF COST RECOVERY RESOLVE THE  
8 COMPANY'S CONCERNS?

9 A. No. I find Mr. Gale's suggestion that a guarantee of cost recovery should  
10 overcome the problems with the Mesaba 1 PPA very troubling. Requiring  
11 Xcel Energy to enter into the Mesaba 1 PPA will greatly affect the rates  
12 charged our customers due to both its direct and indirect financial  
13 implications. We take very seriously our obligations as a public utility to  
14 provide affordable, reliable, and environmentally sound energy to meet our  
15 customers' needs; our interests go well beyond ensuring a return for our  
16 investors.  
17

18 The Commission must carefully weigh the costs and risks posed by Mesaba 1  
19 LLC's proposal before requiring Xcel Energy to enter into the proposed PPA.  
20 Xcel Energy has a responsibility to present information necessary for the  
21 Commission to make accurate and appropriate findings under the applicable  
22 statutes. We offer our assessment and testimony in our effort to meet that  
23 responsibility.  
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25 While Mr. Tyson and Mr. Reed explain why a guarantee of recovery does not  
26 fully resolve the concerns of credit rating agencies, our concerns extend far  
27 beyond our shareholders.

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**E. Witness Introduction**

Q. PLEASE INTRODUCE THE OTHER WITNESSES WHO ARE FILING SURREBUTTAL TESTIMONY ON BEHALF OF XCEL ENERGY.

A. In addition to my testimony, the following witnesses are providing Surrebuttal Testimony:

- *Karen T. Hyde*, who assesses the amended Mesaba 1 PPA offered by Mesaba 1 LLC for its ability to provide a least-cost resource to our system and consistency with the public interest. Her testimony compares the PPA with typical Xcel Energy agreements for its balance in sharing risks and requiring operational performance and other protections for our customers.
- *George E. Tyson II*, who addresses impacts of the amended PPA on Xcel Energy’s capital structure and ability to finance debt and equity needed for utility operations.
- *Marvin E. McDaniel*, who discusses the accounting treatment that would be afforded the amended PPA, given its size and terms.
- *John J. Reed* of Concentric Energy Advisors, who evaluates the amended PPA risks and financial impacts in light of industry norms.
- *Thomas C. Canter* of T. Charles Associates, who evaluates the proposed fuel supply plan for its feasibility and ability to ensure a hedged, predictable price.
- *Roger A. Clarke*, who evaluates the environmental study offered by Mesaba 1 LLC and presents information regarding carbon sequestration.
- *Dean E. Schiro*, who assesses Mesaba 1 LLC’s transmission plan.

- 1 • *Richard Gonzalez* of Excel Engineering, who confirms the results of a  
2 study of the transmission improvements needed to supply Mesaba Unit 1’s  
3 output to Xcel Energy’s system.
- 4 • *Timothy J. Sheesley*, who evaluates the updated economic impact study  
5 offered by Mesaba 1 LLC.
- 6 • *Elizabeth M. Engelking*, who addresses the system impact of the Mesaba 1  
7 PPA with that of our approved Resource Plan.
- 8 • *Mark A. Hervey*, who addresses the rate impact of the PPA, considering all  
9 identified costs.

10  
11 **IV. CONCLUSION**  
12

13 Q. PLEASE SUMMARIZE YOUR SURREBUTTAL TESTIMONY.

14 A. Based on our analysis, Xcel Energy continues to conclude that Mesaba 1 LLC  
15 has provided insufficient information to prove that the Mesaba 1 PPA and  
16 Mesaba Unit 1:

- 17 • Offers a least-cost (or likely to be least-cost) resource for our system,
- 18 • Is consistent with the public interest, and
- 19 • Meets the criteria of either the Innovative Energy Project or Clean  
20 Energy Technology Statutes

21  
22 Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

23 A. Yes, it does.

**Xcel Energy**  
**Information Request No. 11 to Excelsior Energy**

11. Reference: Section I, pages 3-5  
What products other than electricity can be produced from Mesaba Phase One?
- a) Describe Excelsior Energy's current plans to develop those products.
  - b) To the extent that those products are developed in the future, what would be the effect on electricity production from Unit One?
  - c) How does Excelsior Energy propose to allocate costs between electricity and other products produced from Mesaba Phase One?

**Excelsior Energy**  
**Response to Xcel Energy IR No. 11**

Mesaba Phase One will be capable of producing (a) syngas, (b) hydrogen, (c) transportation fuels, (d) synthetic natural gas, and/or (e) chemicals used in a variety of household products. However, the only product contemplated for Mesaba Phase One is electricity that will be sold under the PPA.

- a) Because all of the outputs from Mesaba Phase One are committed to providing electricity under the PPA, Excelsior does not have plans to develop other products from Mesaba Phase One. However, once Phase One is in place, subsequent units could be configured to provide alternative products.
- b) Production of other products from subsequent units of the Mesaba Energy Project will not have any effect on electricity production from Mesaba Phase One.
- c) Because all of the output of Mesaba Phase One is committed to providing electricity under the PPA, there will not be any other products produced from Mesaba Phase One to which costs could be allocated.

**Xcel Energy**  
**Information Request No. 45 to Excelsior Energy**

45. Reference: Section 8.3 of the proposed draft PPA  
Will the By-product Adjustments cover the sale of hydrogen, other liquid fuels, etc.?

**Excelsior Energy**  
**Response to Xcel Energy IR No. 45**

No, because hydrogen, other liquid fuels, etc. are not by-products of Mesaba One, but would be produced by expansion units that are not part of Mesaba One or subject to the terms of the PPA.

**PUBLIC DOCUMENT  
TRADE SECRET DATA EXCISED**

Docket No. E6472/M-05-1993  
Exhibit\_\_\_\_(JMP-2), Schedule 2

Schedule 2 contains trade secret data and has been excised.