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Direct Testimony and Schedules
Judy M. Poferl

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
Docket No. E6472/M-05-1993

Case Overview

September 5, 2006

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1 I. INTRODUCTION AND QUALIFICATIONS

2
3 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

4 A. My name is Judy M. Poferl.

5
6 Q. BY WHOM ARE YOU EMPLOYED AND WHAT IS YOUR POSITION?

7 A. I am the Director of Regulatory Administration for Xcel Energy Services Inc.

8
9 Q. FOR WHOM ARE YOU TESTIFYING?

10 A. I provide testimony on behalf of Northern States Power Company d/b/a
11 Xcel Energy ("Xcel Energy" or the "Company").

12
13 Q. PLEASE SUMMARIZE YOUR QUALIFICATIONS AND EXPERIENCE.

14 A. I have been involved in the regulation of energy utilities for the past 21 years.
15 From 1985 to 1995, I was employed by the Minnesota Department of Public
16 Service (now the Department of Commerce), working as a rate analyst and
17 later managing the gas and electric advocacy staffs. In that capacity, I testified
18 in a number of rate cases and other regulatory proceedings, and oversaw the
19 development of regulatory cases before the Minnesota Public Utilities
20 Commission ("MPUC" or the "Commission"). From 1995 to 1998, I worked
21 for Minnegasco (now CenterPoint Energy) doing both state and federal
22 regulatory work, including overseeing a certificate of need proceeding before
23 the MPUC. Since 1998, I have been employed by Northern States Power
24 Company ("NSP") and subsequently Xcel Energy Services Inc., directing the
25 development and presentation of cases to the MPUC. My resume is included
26 as Exhibit___(JMP-1), Schedule 1.

1 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

2 A. I present Xcel Energy's position regarding the Power Purchase Agreement
3 ("Mesaba 1 PPA") proposed for approval by Excelsior Energy Inc. and MEP-
4 I LLC (referred to jointly as "Mesaba 1 LLC") in this proceeding. I first
5 summarize the framework of our case and the issues addressed by Xcel
6 Energy witnesses in this proceeding. I then provide an overview of Xcel
7 Energy's direct testimony regarding the Petition, based on the available
8 information and assessment provided by Company witnesses. Third, I
9 respond to several issues raised by Mesaba 1 LLC's Petition and the testimony
10 of Mr. Thomas L. Osteraas. Finally, I introduce the Company's witnesses in
11 this proceeding.

12 13 II. CASE FRAMEWORK

14
15 Q. PLEASE SUMMARIZE MESABA 1 LLC'S REQUEST IN THIS PROCEEDING.

16 A. Mesaba 1 LLC seeks Commission approval of a proposed 603-MW PPA to
17 be supplied by its planned Mesaba Unit 1 integrated gasification combined-
18 cycle ("IGCC") power plant ("Mesaba Unit 1"). It requests that the
19 Commission grant approval pursuant to two Minnesota statutes, namely
20 Minn. Stat. § 216B.1694 regarding innovative energy projects and Minn. Stat.
21 § 216B.1693 governing clean energy technology. Mesaba 1 LLC also requests
22 approval of a PPA for a second IGCC plant, which is scheduled for a
23 subsequent proceeding. Overall, the Petitioners seek to supply approximately
24 1200 MWs of capacity to our system by 2013; in comparison, Xcel Energy's
25 current available owned and contracted capacity is approximately 9000 MWs.

26
27 Q. WHAT IS XCEL ENERGY'S INTEREST IN THIS PROCEEDING?

1 A. Xcel Energy is interested in clean-coal technologies and the potential they
2 offer to provide base load capacity and energy in an environmentally sound
3 manner. We have initiated efforts to investigate development of IGCC plants
4 on our systems. We support the development of such technologies when
5 they benefit our customers, communities, and environment. As such, we
6 have a general interest in any initiative to promote and develop clean-coal
7 technologies and welcome the opportunity to further explore IGCC
8 proposals.

9
10 Specific to this proceeding, Mesaba 1 LLC proposes that the Commission
11 require Xcel Energy to enter into the Mesaba 1 PPA. Regardless of our
12 interest in IGCC and other clean-coal technologies, we must ensure that the
13 proposal meets the interests of stakeholders and the requirements of law.

14
15 Here, the PPA would supply capacity and energy both earlier than and in
16 excess of that determined to be needed in our recent Resource Plan (Docket
17 No. E002/RP-04-1752). Although we cannot determine the actual PPA costs
18 due to the contract terms and limited information provided by Mesaba 1 LLC,
19 our assessment indicates that – even under the assumptions made by Mesaba
20 1 LLC – the Agreement would significantly affect our ratepayers through the
21 rates they pay and risks they bear. In addition, as Mesaba 1 LLC proposes to
22 meet all of our customers’ capacity and energy requirements over the planning
23 horizon, we must ensure that the project is viable and capable of reliably
24 meeting our customers’ needs. Finally, a PPA of this size, magnitude, and
25 proposed terms would significantly impact our capital structure, risk profile,
26 and costs and ability to issue securities, including debt and equity.

1 Given these significant issues, we have a keen interest in the outcome of this
2 proceeding. We provide our Direct Testimony to assist in record
3 development and provide a sound basis for the decision in this matter.
4

5 Q. WHO WOULD BE THE PARTIES TO THE AGREEMENT?

6 A. The Mesaba 1 PPA would be between MEP-I LLC, a wholly owned
7 subsidiary of Excelsior Energy Inc., and Northern States Power Company
8 d/b/a Xcel Energy. While Excelsior is developing the Mesaba Unit 1
9 project, it will not own the plant and is not proposed to be a party to the
10 PPA. Exhibit___(JMP-1), Schedule 2 contains excerpts from Mesaba 1
11 LLC's response to Information Request No. 4 and provides further
12 information on the project's structure. Consistent with this arrangement and
13 because Excelsior and MEP-LLC are Joint Petitioners in this proceeding, Xcel
14 Energy witnesses will refer to the Petitioners as "Mesaba 1 LLC" throughout
15 our testimony.
16

17 Q. BY WHAT CRITERIA SHOULD THE COMMISSION DECIDE THIS MATTER?

18 A. Because Mesaba 1 LLC seeks approval of a 603-MW PPA, the key issues
19 posed in this proceeding are whether Mesaba 1 LLC has met its burden of
20 proving that:

- 21 • Approving the Mesaba 1 PPA will result in (or is likely to result in) a
22 least-cost resource for the Xcel Energy system, and
- 23 • Requiring supply from the Mesaba 1 PPA is in the public interest.

24 In addition, Mesaba 1 LLC must demonstrate that it is an "innovative energy
25 project" and that the Mesaba 1 PPA provides generation services from a
26 qualifying "clean energy technology." Xcel Energy's Statement of the Case,

1 filed on August 14, 2006, provides an overview of the applicable statutes and
2 standards governing this case.

3
4 Q. HAS THE COMMISSION USED THESE CRITERIA IN OTHER RESOURCE
5 ACQUISITION DECISIONS?

6 A. The Commission frequently determines whether a resource is least-cost and in
7 the public interest when considering energy resource proposals. For example,
8 the Commission routinely employs these standards when considering Xcel
9 Energy and other utility's certificate of need filings or resource plans. But this
10 is the first proceeding to consider whether a proposal meets the definition of
11 an innovative energy project or clean energy technology, as provided for
12 under Minn. Stat. § 216B.1693 and Minn. Stat. § 216B.1694.

13
14 Q. HOW HAS THE COMMISSION GENERALLY CONSIDERED PROPOSALS FOR LARGE
15 ENERGY FACILITIES UNDER THESE LEAST-COST AND PUBLIC-INTEREST
16 CRITERIA?

17 A. The Commission generally considers:

- 18 • *The timing of the need* for the system for which it is proposed.
- 19 • *The size of the need*, based on a forecast of customer energy and
20 demand requirements compared to the amount and type of generating
21 resources available to the system.
- 22 • *The nature of the need*, such as peaking, intermediate, base load, or a
23 renewable resource needed to comply with Minnesota's Renewable
24 Energy Objective.
- 25 • *The cost, reliability, and environmental impact* of the resource relative to
26 other alternatives for meeting the identified need.

1 Q. DO THESE SAME CONSIDERATIONS APPLY TO MESABA 1 LLC'S PROPOSAL?

2 A. Yes, they do. The Commission must assess the reasonableness of the PPA
3 when deciding this case because it is the vehicle by which Xcel Energy will
4 receive the resource onto our system. These considerations provide a
5 reasonable approach for determining whether Mesaba 1 LLC's proposed PPA
6 offers a least-cost resource for the Xcel Energy system (including the costs of
7 transmission and ancillary services) and for weighing the public interest.

8
9 Q. HOW DOES THIS FRAMEWORK COMPARE TO THAT OFFERED BY MESABA 1
10 LLC?

11 A. It differs significantly. I respond to issues raised by Mesaba 1 LLC in a later
12 section of my testimony.

13
14 **III. OVERVIEW OF CONCLUSIONS**
15

16 Q. GIVEN THE FRAMEWORK OUTLINED IN YOUR TESTIMONY AND DETAILED IN
17 THE COMPANY'S STATEMENT OF THE CASE, WHAT STEPS DID XCEL ENERGY
18 TAKE TO ASSESS MESABA 1'S PROPOSAL?

19 A. First, we reviewed the filing, testimony, proposed PPA, and Statement of the
20 Case submitted by Mesaba 1 LLC in this proceeding. Second, we asked
21 discovery to obtain additional, needed information to assess the case under
22 the relevant statute and criteria. Third, as appropriate, we engaged technical
23 consultants to assist our evaluation of the information. Our Direct
24 Testimony provides the results of this overall effort.

25
26 Q. CONSIDERING THIS INFORMATION, DOES XCEL ENERGY BELIEVE THAT
27 MESABA 1 LLC MET ITS BURDEN OF PROVING THAT ITS PROPOSED PPA

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1 OFFERS A LEAST-COST RESOURCE TO XCEL ENERGY'S SYSTEM AND IS
2 CONSISTENT WITH THE PUBLIC INTEREST?

3 A. No. In my opinion and based on my experience, the information provided by
4 Mesaba 1 LLC to date is insufficient to make the findings required for
5 approval.

6
7 Q. WHY?

8 A. There are five primary reasons:

- 9
- 10 • *The PPA does not offer a least-cost energy resource to Xcel Energy's system.*
11 As discussed in the testimony of Ms. Karen T. Hyde and Mr. John J. Reed,
12 Mesaba 1 LLC's proposed PPA contains numerous provisions that shift
13 costs and risk to ratepayers in a manner beyond the terms of typical,
14 commercial purchased power agreements; the Mesaba 1 PPA also contains
15 only weak linkage of payment and operational performance. For example,
16 the Mesaba 1 PPA contains no certainty as to ratepayer exposure because
17 of [TRADE SECRET BEGINS

18
19 TRADE SECRET ENDS]. Likewise, the Mesaba 1 PPA
20 fails to require performance standards that ensure Xcel Energy and our
21 customers receive what we are paying for: reliable, base load, coal-fired
22 generation. Given these cost and risk transfers, Xcel Energy concludes
23 that the Mesaba 1 PPA will not offer a least-cost resource for our system.

- 24
- 25 • *The impact of the PPA is inconsistent with the public interest.* In addition to
26 the costs and risks posed to ratepayers, the magnitude and terms of the
27 PPA substantially impacts Xcel Energy's capital structure and balance

1 sheet, significantly affecting our ability to issue securities necessary to
2 provide utility service to our customers. Mr. George E. Tyson and Mr.
3 Marvin E. McDaniel sponsor testimony regarding these impacts. A
4 purchased power agreement that poses these significant impacts and added
5 costs of providing service cannot be found to offer a least-cost resource to
6 our system and would be contrary to the public interest.

- 7
- 8 • *The costs of transmission and ancillary services have not been identified.*
9 Mesaba 1 LLC has not identified or committed to a plan for addressing
10 the transmission upgrades required to deliver Mesaba Unit 1's output to
11 Xcel Energy's system. Further, Mesaba 1 LLC has not identified the costs
12 associated with ancillary services required to deliver the capacity and
13 energy to our load. Without this information, the Commission cannot
14 find that Mesaba 1 LLC has proven that the PPA offers a least-cost
15 resource, as the statute requires consideration of the costs of transmission
16 and ancillary services when making that determination. Mr. Dean E.
17 Schiro and Mr. Richard Gonzalez sponsor testimony regarding this
18 concern.

- 19
- 20 • *Mesaba 1 LLC has not demonstrated that Mesaba Unit 1 meets the definition*
21 *of an Innovative Energy Project or Clean Energy Technology.* Despite the
22 environmental benefits and potential offered by IGCC technology, our
23 assessment questions whether the environmental impacts of Mesaba Unit
24 1 meet the statutory criterion of offering significantly reduced emissions
25 compared to traditional technologies. Mr. Roger A. Clarke assesses the
26 environmental study offered by Mesaba 1 LLC to determine whether it
27 provides a sound basis for the findings required for approval. In addition,

1 given the terms of the proposed PPA, we cannot conclude that the project
2 offers a long-term supply contract at a hedged, predicable cost. Ms. Hyde,
3 Mr. Reed, and Mr. Patrick J. Panzarino offer testimony supporting this
4 conclusion.

- 5
- 6 • *The size, type and timing of the proposed PPA and Mesaba Unit 1 does not*
7 *match the need found by the Commission in our approved Resource Plan and*
8 *thus cannot be found to be least-cost.* The Commission recently determined
9 our resource needs in our 2004 Resource Plan. Mesaba 1 LLC, however,
10 proposes to provide capacity and energy of a different size (603 MWs
11 compared to 511 MWs), type (all base load compared to a mix of peaking
12 and base load), and timing (2011 compared to 2015 for base load) than our
13 identified need. The only reason to add resources either in excess of or
14 earlier than an identified need would be to lower costs for customers; it
15 would be contrary to the goals of resource planning to raise rates for
16 customers by developing generation resources in excess or earlier than
17 customer needs. Our analysis indicates that the proposed PPA would raise
18 bills for the average residential customer by approximately \$5.00 to \$7.50
19 per month, over and above the cost increases already anticipated by our
20 Resource Plan. Ms. Elizabeth M. Engelking and Mr. Mark A. Hervey
21 sponsor testimony presenting this analysis.

22

23 Our case focuses on these key issues, presenting our assessment and analysis
24 for consideration. Based on this review and the information provided to date,
25 Xcel Energy concludes that Mesaba 1 LLC has not met its burden of proving
26 that its proposed PPA satisfies the requirements of Minn. Stat. § 216B.1693;
27 thus, the Commission may not make the findings necessary to approve the

1 Mesaba 1 PPA. While there remain a number of other issues that would need
2 to be addressed before the PPA could be approved, our testimony does not
3 provide significant detail on these points, given that the key issues have not
4 been sufficiently addressed.

5
6 Q. DOES THE COMPANY PROVIDE ANY ADDITIONAL ANALYSIS IN THIS
7 PROCEEDING?

8 A. Yes. We sought to evaluate the technical viability of the proposed Mesaba
9 Unit 1 plant, as an IGCC of this size has not previously been commercially
10 developed. While we support pursuit of new technologies – particularly those
11 that offer potential environmental benefits – it is critical that such resources
12 are capable of reliably meeting our customers' needs and will deliver the
13 benefits promised prior to development. Further, the Commission cannot
14 conclude that a proposal meets the least-cost criterion or is consistent with
15 the public interest if it poses unreasonably high reliability risks for our system
16 or is unlikely to operate in the manner proposed.

17
18 To address these issues, we retained Worley Parsons, an engineering
19 consulting firm with expertise in IGCC technology, to provide us a technical
20 assessment of Mesaba 1 LLC's proposal. Mr. Frank Miao offers testimony
21 discussing the technical aspects of the project, finding that while it does pose
22 scale-up risk due to its size and that specific issues required for development
23 have not been fully planned or finalized, the project at this stage appears
24 reasonably designed.

25
26 Q. WHAT OTHER FACTORS SHOULD BE CONSIDERED WHEN MAKING A PUBLIC
27 INTEREST DETERMINATION IN THIS CASE?

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1 A. In addition to the key issues of the case, the Commission may consider a
2 number of factors when weighing the public interest. In particular, the
3 Commission may choose to consider the five considerations offered in Minn.
4 Stat. 216B.1694, subd. 2(a)(7).

5
6 To that end, we offer the following assessment:

- 7 • *Economic development benefits to the state.* While the project offers
8 local benefits in northern Minnesota, Mesaba 1 LLC has not
9 demonstrated that the PPA will create net economic development
10 benefits for the state. Mr. Timothy Sheesley sponsors testimony
11 regarding Mesaba 1 LLC's study of economic impact and finds that it
12 failed to consider the benefits of an alternative resource and the
13 negative economic impacts of the rate increase caused by the PPA.

- 14 • *Use of abundant domestic fuel sources.* While Mesaba 1 LLC indicates
15 its intent to gasify coal at Mesaba Unit 1, the PPA fails to require
16 [TRADE SECRET BEGINS

17
18 TRADE

19 SECRET ENDS]. Ms. Hyde addresses this issue.

- 20 • *Stability of the price of the output from the project.* As proposed, the
21 capacity and energy payments proposed by the PPA are neither stable,
22 predictable, [TRADE SECRET BEGINS TRADE
23 SECRET ENDS]. Ms. Hyde, Mr. Panzarino, and Mr. Reed address
24 the uncertainty in payments and unusual contract terms that shift
25 significant risk to Xcel Energy and our customers.

- 1 • *Potential to contribute to a transition to hydrogen as a fuel source.* The
2 Petition did demonstrate how Mesaba Unit 1 addresses this factor or
3 provides a basis for making a finding in this regard.
- 4 • *Emissions reductions achieved compared to other solid fuel base load*
5 *technologies.* Mr. Clarke provides testimony on this factor, providing
6 information that while Mesaba Unit 1 offers emissions benefits,
7 Mesaba 1 LLC's study only considered one solid fuel base load
8 technology and failed to consider another that offers lower emissions
9 of some pollutants.

10
11 Thus, consideration of these factors does not provide meaningful weight in
12 favor of Mesaba 1 LLC's proposed PPA when determining the public
13 interest.

14
15 Q. BASED ON XCEL ENERGY'S ASSESSMENT, DO YOU SEE ANY ALTERNATIVES
16 THAT COULD ADDRESS THE CONCERNS RAISED BY THE PPA?

17 A. It is possible that other ownership structures or partnerships could help
18 address the issues raised by Mr. Tyson and Mr. McDaniel. Similarly, the PPA
19 could be redrafted to achieve a more reasonable balance of risks. While such
20 improvements are possible, Mesaba 1 LLC has not offered them for
21 consideration in this proceeding. Further, litigation does not offer an
22 appropriate forum for pursuing such alternatives. Therefore, we believe
23 exploration of any such significant changes to Mesaba 1 LLC's proposal
24 would be more constructively pursued outside of this proceeding.

25
26 Q. I UNDERSTAND THAT PUBLIC SERVICE COMPANY OF COLORADO, AN
27 AFFILIATE OF XCEL ENERGY, IS EVALUATING THE DEVELOPMENT OF AN

1 IGCC PLANT FOR ITS SYSTEM. DO YOU SEE ANY INCONSISTENCIES BETWEEN
2 THAT EFFORT AND THE COMPANY'S POSITION IN THIS PROCEEDING?

3 A. No. As I noted, Xcel Energy supports the development of clean-coal
4 technologies. Our Colorado effort differs significantly from Mesaba 1 LLC's
5 proposal in that:

- 6 • The statutory terms governing the initiatives are substantially different.
- 7 • The Colorado project would develop a comparatively small project,
8 appropriately sized for the needs of that system.
- 9 • It would be utility-owned and -financed, thus avoiding the imputed
10 debt and other financial issues raised by Mr. Tyson and Mr. McDaniel.
- 11 • It seeks to advance development of carbon-capture technology.

12 Our position regarding Mesaba 1 LLC's proposal stems from our significant
13 concerns regarding the appropriateness and impact of the Mesaba 1 PPA,
14 rather than concerns about IGCC technology. I see no inconsistency between
15 the positions.

16 17 **IV. ASSESSMENT OF MESABA 1 LLC'S REQUESTED FINDINGS**

18
19 Q. YOU INDICATED THAT MESABA 1 LLC'S FRAMEWORK FOR DECIDING THIS
20 CASE DIFFERS SUBSTANTIALLY FROM THAT OF XCEL ENERGY. PLEASE
21 EXPLAIN THE KEY DIFFERENCES.

22 A. First, Mesaba 1 LLC's Petition and testimony, such as that sponsored by Mr.
23 Osteraas, states that the Legislature has already determined that the public
24 interest supports construction of Mesaba Unit 1. In contrast, we see that the
25 Legislature clearly deferred to the expertise of the Commission in making
26 energy resource decisions by requiring that it determine whether a clean
27 energy technology offers a least-cost resource to a utility's system.

1
2 Second, Mesaba 1 LLC's case provides volumes of information on issues not
3 directly relevant to a key issue of the proceeding – that is, the ability of its
4 proposed PPA to provide a least-cost resource for our system. In contrast,
5 this case must focus on the terms and impact of the Mesaba 1 PPA, as it is the
6 vehicle by which Mesaba 1 LLC would provide capacity and energy to our
7 system.

8
9 Finally, Mesaba 1 LLC asks the Commission to subdivide its determinations
10 under the statutes and layer its consideration of the 603-MW PPA into two
11 parts: (1) 450 MWs to be decided under Minn. Stat. § 216B. 1694, subd. 2
12 (a)(7)(regarding innovative energy projects); and (2) a determination that the
13 remaining 153 MWs is or is likely to be a least-cost resource under Minn. Stat.
14 § 216B.1693 (regarding clean energy technology projects). However, because
15 Mesaba 1 LLC has not proposed a 450-MW plant and offers no PPA or price
16 for a 450-MW project, Xcel Energy does not believe that Minn. Stat. § 216B.
17 1694, subd. 2 (a)(7) applies, and there would be additional legal issues to
18 address if this statute applies. I know of no other instance where such
19 subdividing of statutes has been employed by the Commission – for example,
20 our wind and biomass obligations follow closely from the capacity levels
21 required by statute.

22
23 Q ASSUMING MESABA 1 LLC'S FRAMEWORK WERE CORRECT, HAS IT
24 DEMONSTRATED THAT IT MEETS THE REQUIREMENTS OF THE INNOVATIVE
25 ENERGY PROJECT STATUTE?

26 A. No, not as presented. Although some of the statutory criteria for innovative
27 energy projects may be easily satisfied (for example, the project may be

1 located on up to three sites), all require affirmative evidence before this
2 finding can be made. The criteria require discussion and factual support that I
3 did not find in the testimony or exhibits. Instead, Mesaba 1 LLC appears to
4 rely on Mr. Osteraas' assertions, such as "... there can be no good faith
5 dispute that the Mesaba Project is 'an innovative energy project.'"

6
7 However, as detailed by several of our witnesses, the Mesaba 1 PPA does not
8 ensure these definitions will be met. For example, Mesaba 1 LLC will not be
9 entering into long-term arrangements for fuel and fuel delivery. Given that
10 fuel supply plan, coupled with the PPA's pricing provisions, I do not see how
11 Mesaba 1 LLC can reasonably certify that the project will offer a hedged,
12 predictable price. Without contractual commitments regarding the fuel plan
13 and fuel use, I also do not see how the project can satisfy the statutory
14 requirements of using coal as a primary fuel source or providing a hedge to
15 our overall system costs.

16
17 Q. DID XCEL ENERGY SEEK TO CONFIRM THAT MESABA 1 LLC'S PROPOSAL
18 MEETS THE EACH OF THE REQUIREMENTS OF THE INNOVATIVE ENERGY
19 PROJECT STATUTE?

20 A. No. As detailed in our Statement of the Case, we believe the Clean Energy
21 Technology statute, which simply refers to the definition of an Innovative
22 Energy Project, governs this proceeding. Therefore we provide information
23 regarding Mesaba 1 LLC's ability to meet that definition and the public
24 interest considerations identified in Subdivision 2 (7); we did not pursue
25 Mesaba 1 LLC's showings for each of the other provisions of the Innovative
26 Energy Project statute.

27

1 Q. HAS THE COMMISSION PREVIOUSLY ADDRESSED WHETHER MEP-I LLC IS AN
2 INNOVATIVE ENERGY PROJECT?

3 A. No. The details behind the Mesaba 1 LLC corporate structure were not at
4 issue when the Commission awarded a \$10 million renewable development
5 fund grant to Excelsior. The Order also required on-going compliance with
6 the law. Were the Commission to accept Mesaba 1 LLC's framework and
7 decide the case primarily under the Innovative Energy Project statute, Mesaba
8 1 LLC still must show that its project and project structure meets the
9 requirements of that statute.
10

11 Q. LET'S TURN TO THE SECOND PART OF MESABA 1 LLC'S CASE FRAMEWORK.
12 WHAT IS A CLEAN ENERGY TECHNOLOGY?

13 A. It is a technology that: (1) uses coal as its primary fuel, (2) in a highly efficient
14 combined-cycle configuration, and (3) significantly reduces sulfur dioxide,
15 nitrogen oxide, particulate and mercury emissions from those of traditional
16 technologies. Mr. Osteraas' testimony claims that the legislature already
17 determined IGCC to be a clean energy technology, but the statute provides a
18 definition with three elements that must be satisfied. As I already noted, Xcel
19 Energy witnesses provide information regarding the project's ability to ensure
20 that it will use coal as a primary fuel and its ability to significantly reduce
21 emissions compared to traditional technologies.
22

23 Q. WHAT ARE TRADITIONAL TECHNOLOGIES?

24 A. The statute does not define this term. Generally speaking, I consider
25 traditional technologies to include supercritical pulverized coal, circulating
26 fluidized bed coal, hydroelectric, nuclear, gas plants, and gas-wind
27 combinations. Of these, coal and nuclear would be solid-fuel technologies.

1 Non-traditional technologies are less proven or not-yet-cost-effective
2 technologies, including biomass, solar, ultra supercritical pulverized coal and
3 some distributed generation applications.
4

5 Q. WITH RESPECT TO REDUCED EMISSIONS, WILL THE PROJECT ADDRESS
6 CARBON?

7 A. No. The project does not sequester carbon, but will leave space at the facility
8 for the possibility of future sequestration; the Mesaba 1 PPA provides no
9 obligation for Mesaba 1 LLC to advance the sequestration of carbon. I
10 believe this fact should be considered when weighing the public interest
11 because – without carbon sequestration – it is not clear that IGCC provides
12 environmental benefits sufficient to outweigh its costs.
13

14 Q. FINALLY, IS MESABA 1 LLC PURSUING A PPA WITH ANY OTHER UTILITIES?

15 A. Not to my knowledge. Mesaba 1 LLC could offer Mesaba Unit 1 as an
16 alternative to Big Stone II; to my knowledge, it has not done so. I do know
17 that Excelsior has filed comments and appearances in other proceedings, such
18 as the Certificate of Need related to Big Stone II (Docket No. ET-9/CN-05-
19 619).
20

21 Q. COULD MESABA 1 LLC PURSUE A PPA WITH ANOTHER UTILITY?

22 A. Yes. The Legislature allows for Clean Energy Technologies and Innovative
23 Energy Projects with any utility, although it specified certain requirements that
24 apply to Xcel Energy if specific findings are made. In fact, given the
25 mismatch of Mesaba Unit 1's size and our identified needs, that may offer a
26 better approach. For example, the proposed Big Stone II plant and Mesaba
27 Unit 1 are similarly sized, which would offer a better, head-to-head

1 comparison of pulverized coal and IGCC technologies. At least part of our
2 identified economic impact of the Mesaba 1 PPA is due to it providing
3 resources in excess of and in advance of our system's resource needs.
4

5 V. INTRODUCTION OF WITNESSES

6

7 Q. PLEASE REVIEW THE WITNESSES THE COMPANY IS SPONSORING IN THIS
8 PROCEEDING.

9 A. In addition to my Direct Testimony, the Company sponsors the following
10 witnesses:

- 11 • *Karen T. Hyde*, who assesses the Mesaba 1 PPA for its ability to provide a
12 least-cost resource to our system. Her testimony compares the PPA with
13 typical Xcel Energy agreements for its balance in sharing risks and
14 requiring operational performance and other protections for our
15 customers.
- 16 • *George E. Tyson II*, who presents impacts of the PPA on Xcel Energy's
17 capital structure and ability to finance debt and equity needed for utility
18 operations.
- 19 • *Marvin E. McDaniel*, who discusses the accounting treatment that would
20 be afforded the PPA, given its size and terms.
- 21 • *John J. Reed* of Concentric Energy Advisors, who evaluates the PPA and
22 its impact in light of industry norms.
- 23 • *Patrick J. Panzarino*, who evaluates the proposed fuel supply plan for its
24 feasibility and ability to ensure a hedged, predictable price.
- 25 • *Roger A. Clarke*, who evaluates the environmental study offered by Mesaba
26 1 LLC and presents information regarding carbon sequestration.
- 27 • *Dean E. Schiro*, who assesses Mesaba 1 LLC's transmission plan.

- 1 • *Richard Gonzalez* of Excel Engineering, who presents the results of a study
- 2 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 economic impact study offered by
- 5 Mesaba 1 LLC.
- 6 • *Frank Miao* of Worley Parsons Group, who presents information
- 7 regarding the IGCC technology.
- 8 • *Elizabeth M. Engelking*, who compared the system impact of the Mesaba 1
- 9 PPA with that of our approved Resource Plan.
- 10 • *Mark A. Hervey*, who sponsors the rate impact of the PPA, considering all
- 11 identified costs.

12 VI. SUMMARY AND CONCLUSION

13 Q. PLEASE SUMMARIZE YOUR TESTIMONY FOR THE COMMISSION TO CONSIDER.

14 A. Based on our analysis, Xcel Energy concludes that Mesaba 1 LLC has

15 provided insufficient information to prove that its proposed PPA and Mesaba

16 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 definition of an Innovative Energy Project or Clean Energy
- 20 Technology.

21 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

22 A. Yes, it does.

Judy M. Pofert
Director, Regulatory Administration
Xcel Energy
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EDUCATION

Master of Arts, Hubert H. Humphrey Institute of Public Affairs
University of Minnesota, 1984

Bachelor of Arts, Government
College of St. Benedict, 1982

CURRENT RESPONSIBILITIES

I direct the development and execution of regulatory case filings made on behalf of Northern States Power Company d/b/a Xcel Energy.

PREVIOUS RATE CASE TESTIMONY

<u>Company</u>	<u>Docket Number</u>	<u>Topic</u>
Xcel Energy	E002/GR-05-1428	Merger Synergies Demand-Side Management
Xcel Energy	G002/GR-04-1511	Merger Synergies Partial Decoupling

Filed on behalf of the Minnesota Department of Public Service (n/k/a Department of Commerce):

Northern States Power	E002/CN-91-19	Policy
Northern States Power	E002/GR-89-865	Conservation Financial Incentives Load Management
Minnesota Power	E015/GR-87-223	Contract Issues
Interstate Power	E001/GR-86-384	Rate Design
Northern States Power	G002/GR-86-160,165	Rate Design
Interstate Power	G001/GR-85-189	Cost of Service Conservation
Northern States Power	E002/GR-85-558	Cost of Service
Western Gas	G012/GR-85-795	Rate Design

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TRADE SECRET DATA EXCISED

EXCELSIOR ENERGY INC.

Excerpt Begins:

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Docket No E6472/M-05-1993
Exhibit ____ (JMP-1), Schedule 2
Page 2 of 2

EXCELSIOR ENERGY INC.

TRADE SECRET ENDS]

Excerpt Ends.