

**PUBLIC DOCUMENT
TRADE SECRET DATA EXCISED**

Surrebuttal Testimony and Schedules
Karen T. Hyde

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

Power Purchase Agreement

October 31, 2006

Table of Contents

I.	Introduction	1
II.	Purpose	1
III.	Assessment	2
	A. Structure of the Mesaba 1 PPA	2
	B. Proposed Modifications to the Mesaba 1 PPA	6
	C. Comparison to Other Xcel Energy PPAs	10
	D. Comparison to Other Base Load Options	16
IV.	Conclusion	19

I. INTRODUCTION

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27

Q. PLEASE STATE YOUR NAME.

A. My name is Karen T. Hyde.

Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY IN THIS CASE?

A. Yes. I provided Direct and Rebuttal Testimony regarding the purchased power agreement proposed by Mesaba 1 LLC in this proceeding (the “Mesaba 1 PPA”).

II. PURPOSE

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

A. I respond to the Rebuttal Testimony of Thomas Osteraas, Roger Gale, Edward Bodmer, Steve Sherner, Jim Chen, and Michael Hamilton regarding the Mesaba 1 PPA. I address Mesaba 1 LLC’s claims that the Mesaba 1 PPA appropriately allocates the risks between the project sponsors and Xcel Energy and our customers. In addition, I offer my assessment of the 11 proposed modifications to the Mesaba 1 PPA offered in the Rebuttal Testimony of Mr. Osteraas. Based upon my review of Mesaba 1 LLC’s Rebuttal Testimony, I conclude that the Mesaba 1 PPA, even with the modifications proposed by Mr. Osteraas and the explanations and rationalizations of many other witness, transfers an unacceptable level of risk to Xcel Energy and our customers.

1 **III. ASSESSMENT**

2
3 Q. PLEASE OUTLINE THE ISSUES YOU ADDRESS IN YOUR SURREBUTTAL
4 TESTIMONY.

5 A. In my Surrebuttal Testimony I discuss my concerns regarding:

- 6 • the assertion that my prior testimony was intended to provide a
7 comparison of Mesaba 1 LLC's project risks to a utility self-build base
8 load generation plant;
- 9 • the structure of the Mesaba 1 PPA;
- 10 • the inadequacy of the 11 proposed modifications to the Mesaba 1 PPA;
- 11 • the comparison of the Mesaba 1 PPA to specific Xcel Energy PPAs;
- 12 • the comparison of the Mesaba 1 PPA to other structures; and
- 13 • the unacceptable pricing and risk structure of the Mesaba 1 PPA.

14
15 Q. DID THE MESABA 1 LLC REBUTTAL TESTIMONY RESOLVE THE CONCERNS
16 YOU RAISED IN YOUR DIRECT TESTIMONY?

17 A. No. As I discussed in my Direct Testimony, the Mesaba 1 PPA would
18 impose significant cost and risk factors on Xcel Energy and our ratepayers
19 that go well beyond what we believe to be appropriate levels. These concerns
20 remain. Mesaba 1 LLC's proposed fixes are inadequate to remedy the
21 concerns raised in my direct testimony.

22
23 **A. Structure of the Mesaba 1 PPA**

24 Q. THROUGHOUT MR. OSTERAAS' REBUTTAL TESTIMONY AND THE TESTIMONY
25 OF OTHER EXCELSIOR-SPONSORED WITNESSES, THEY CONCLUDED THAT YOU
26 WERE COMPARING THE RISKS ASSOCIATED WITH THE MESABA 1 PPA TO A
27 UTILITY SELF-BUILD OPTION. WERE YOU DOING THIS?

1 A. No. The basis for my testimony was a comparison of the proposed Mesaba 1
2 PPA to the more than two hundred other PPAs that I have negotiated or
3 administered. My prior testimony was confined to examining the balance of
4 risks presented in the Mesaba 1 PPA compared to the balance of risks
5 presented in other PPAs in reaching my conclusions. I will discuss this issue
6 in more detail in Section (D) of this testimony.

7

8 Q. SEVERAL MESABA 1 LLC WITNESSES ARGUE THAT PPAS INHERENTLY ARE
9 INTENDED TO SHIFT RISK AWAY FROM RATEPAYERS AND PUT THAT RISK ON
10 THE PROJECT OWNERS. DO YOU AGREE?

11 A. Yes. I agree that a properly structured PPA should work to insulate
12 ratepayers from certain risks associated with the construction, ownership, and
13 operation of a power plant. When a PPA is properly structured, has been
14 tested by market forces (for example through bid processes), and is subject to
15 commercial negotiations, a PPA can result in an appropriate allocation of
16 risks and rewards that is in the best interest of ratepayers.

17

18 Q. DOES THE MESABA 1 PPA ACHIEVE THIS?

19 A. No. The capacity price is not fixed or known at this time and there are no
20 controls over the way it gets set. I do not believe it is accurate to suggest that
21 this PPA adequately shifts the risk of construction, ownership or operation
22 from Xcel Energy ratepayers to Mesaba 1 LLC. In addition, because this PPA
23 was not developed through a bid or other competitive process and has not
24 been the subject of negotiations we cannot be assured that the price (which is
25 not fixed or subject to controls) or terms are reasonable.

26

27 Q. DOES XCEL ENERGY UNDERSTAND THE STRUCTURE OF THE MESABA 1 PPA?

**PUBLIC DOCUMENT
TRADE SECRET DATA EXCISED**

1 A. Yes. We understand that the capacity price of the Mesaba 1 PPA will be fixed
2 at the start of construction and we are not confused about how the contract is
3 designed to work. However, that structure transfers significant risk away
4 from the developer and to ratepayers because (i) the content of the EPC
5 contract is not fixed and the level of the Final EPC Contract Cost is not
6 limited in any way and (ii) the actual party taking the construction cost risk
7 after the setting of the Final EPC Contract Cost does not appear to be
8 Mesaba 1 LLC, but rather Fluor, and as Mr. Bodmer confirmed (see Bodmer
9 Rebuttal page 22 lines 1 through 5), Fluor will charge a premium to take this
10 risk and there are no controls on what that premium will be. Therefore we
11 can assume that Mesaba, Fluor, Conoco Phillips, and other members of the
12 consortium will build sufficient premium into the Final EPC Contract Cost to
13 eliminate the transfer of any meaningful risk to those parties and leave the risk
14 in the hands of the Xcel Energy ratepayer.

15
16 Q. MR. OSTERAAS TESTIFIES AT LENGTH ABOUT THE SOFT COSTS THAT ARE NOT
17 PART OF THE FINAL EPC CONTRACT COST. DOES THAT ALLEVIATE YOUR
18 CONCERN?

19 A. No. Mr. Osteraas' testimony has no bearing on the price-setting provisions of
20 the PPA. First, it is hard to believe that there are \$450 million of "soft costs"
21 embedded in the Base Capacity Charge (Osteraas Rebuttal page 19, lines 15-
22 17) that are not included in the Target EPC Contract Cost of **[M1 TRADE**
23 **SECRET BEGINS M1 TRADE SECRET ENDS]**. Note that
24 \$450 million equals almost \$750/kW. This would mean that the total project
25 costs today, before the Front End Engineering and Design ("FEED") Study
26 results are known, are **[M1 TRADE SECRET BEGINS M1**
27 **TRADE SECRET ENDS]**. Second, the PPA does not exclude those soft
28

1 costs or any of the Outside the Battery Limits (“OSBL”) costs, or in anyway
2 exclude any costs whatsoever from ultimately becoming part of the Final EPC
3 Contract Cost. If the Capacity Price were locked in now or the MPUC was
4 able to delay approval of the project until after the Final EPC Contract Cost
5 and the Capacity Price were fixed, that would be a meaningful transference of
6 risk from Xcel Energy’s ratepayers, but the current structure does not transfer
7 any meaningful risk away from ratepayers.

8
9 Q. DOES THE IGCC TECHNOLOGY INVOLVED IN THIS PROPOSAL JUSTIFY THE
10 TYPES OF OPEN-ENDED PRICING MECHANISMS YOU HAVE IDENTIFIED?

11 A. No. Mesaba 1 LLC’s testimony claims the newness of its technology justifies
12 the open-ended risk and pricing structure. As both my direct and Mr. Reed’s
13 direct testimony established, the Mesaba Unit 1 technology scale-up should
14 include allocation of risks to the “consortium” partners, such as Conoco
15 Phillips and Fluor who will gain significantly if the project is successful. The
16 developer, who here appears to be putting large sums of publicly loaned and
17 grant money at risk (as opposed to its own risk capital) also stands to gain
18 significantly from this project and should be expected to accept meaningful
19 risk. See Trade Secret Exhibit____(KTH-2), Schedule 1.

20
21 As Mr. Reed testified, other structures, such as multiple utility purchasers or
22 other ownership structures, can provide a further balancing of risks. I
23 disagree that a new technology justifies allocating almost all of the cost and
24 risk to the ratepayers of a single utility. As I showed in my direct testimony,
25 the Commission did not allow the biomass projects in Minnesota to shed all
26 of that risk.

27

1 Q. WOULDN'T MESABA 1 LLC SIMPLY INCREASE THE PRICE PREMIUM IN ORDER
2 TO SET A FIXED PRICE?

3 A. They might, but then the Commission would get a better picture of what the
4 ultimate costs of the project will be. In the way it is presented today, the risk
5 is not quantified anywhere, it is just assumed to be transferred to Xcel
6 Energy's customers, whatever the quantification turns out to be. I note that
7 the PACE report at page 10 (provided as Schedule 2 to Judy Pofert's
8 Surrebuttal Testimony) contains an estimate of that FEED Study cost, which
9 is relatively small in comparison to the scope of this project. It is unclear to
10 me why the developer and consortium did not complete that FEED Study so
11 that it could define the price and eliminate numerous project uncertainties.
12 See also Trade Secret Exhibit____(KTH-2), Schedule 2. Instead, Mesaba 1
13 LLC seeks for ratepayers to be at risk for the eventual price regardless of what
14 results the FEED Study provides.

15

16 **B. Proposed Modifications to the Mesaba 1 PPA**

17 Q. HAVE YOU REVIEWED THE 11 ITEMS THAT MR. OSTERAAS PROPOSES TO
18 ADDRESS THE CONCERNS EXPRESSED IN YOUR DIRECT TESTIMONY?

19 A. Yes. I reviewed Exhibit____TLO-2 and considered each of proposed changes.
20

21 Q. DO THESE MODIFICATIONS RESOLVE YOUR CONCERNS ABOUT THE PRICING
22 AND RISK STRUCTURE OF THE MESABA 1 PPA?

23 A. No. Of the eleven changes, I would characterize six as appropriate errata of
24 the original filed contract. I would place changes 1, 3, 6, 8, 9, and 11 in this
25 category. Mr. Osteraas is merely correcting errors in the original filed contract
26 and these provide absolutely no change in the balance of risks under the PPA.

27

1 I would characterize change 10 as immaterial because he simply wrote my
2 concern into the exhibit without actually resolving the matter. Change 4 is
3 only a partial correction of confused terms that I identified in my direct
4 testimony. You will notice that these eight changes address areas in my
5 testimony marked as “Apparent Errors” or “Areas of Confusion” in an
6 Exhibit – as such they were things that I wanted the Commission to know
7 had to be fixed, but they did not significantly factor into my conclusions
8 regarding the reasonableness of the PPA. Change 2 is cosmetic only – the
9 only action required to set the capacity price under the proposed PPA is the
10 delivery of the Final EPC Certification – a form letter to be filled out by
11 MEP-I – that action was required under the PPA anyway and the proposed
12 modification does not materially change the obligations under the PPA.

13
14 This leaves two changes that have some bearing on the balance of risk in the
15 PPA: Changes 5 and 7.

16
17 Q. WHAT DOES CHANGE 5 PURPORT TO DO AND DOES IT ACCOMPLISH THE
18 GOAL?

19 A. Change 5 addresses two concerns: (1) it limits the amount of “bonus” that
20 the Seller can receive during the early years of the contract to 10% and (2)
21 attempts to more closely tie the capacity payment to the availability of the
22 facility on solid fuel. I believe that the proposed change accomplishes the
23 first goal. In practice, this term should only impact the first three years of the
24 PPA and therefore, while the change is appropriate and warranted, it does not
25 materially impact an overall assessment of risk or expected costs.

26

1 However, the second substantive change, the changes to the availability on
2 natural gas actually makes the problem worse than in the original proposal.
3 For example, for any month during years 4 through 25 where the facility is
4 fully available for natural gas operation but unavailable for syngas operation,
5 the old CAF formula would result in a CAF of about 36% whereas the new
6 CAF formula would result in a CAF of about 67%. The new formula not
7 only does not address the concern I raised, it would provide Mesaba with
8 about \$8 million per month of additional capacity payment compared to the
9 original language.

10
11 Perhaps this problem was a math error on the part of the drafter, but whether
12 intended or not, this outcome does not alleviate my concerns but rather
13 increases them.

14
15 Q. WHAT IS ERROR YOU ARE REFERRING TO?

16 A. By changing the formula I believe the result is that availability on solid fuel
17 becomes less valuable over time. In the original formula, when the unit was
18 available on natural gas in year 1, the payment was reduced by 25% compared
19 to availability on solid fuel; in other words, the capacity payment was 75% of
20 what it would have been for solid fuel when the facility was available on
21 natural gas. In year two, the value was 60%, year 3 50% and 35% thereafter.
22 Under the revision, the value is turned upside down. The first year it is 25%,
23 the second 40%, the third 50% and for the life of the contract 65%. In the
24 extreme, the change almost doubled the capacity charge for availability on
25 natural gas. I don't believe that the original factors fully capture the value
26 difference between availability on natural gas and solid fuel, but the revision
27 clearly overstates the value of the availability on natural gas.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27

Q. WHAT DOES CHANGE 7 DO?

A. It states that any price adjustment for plant expansion would not raise the price under the original PPA. This change clarifies the point and confirms the only appropriate commercial position that undertaking a plant expansion not be allowed to increase the already high costs of this PPA.

Q. HOW DO YOU SUMMARIZE THE 11 CHANGES?

A. Given the serious problems related to the structure of the Mesaba 1 PPA, these changes provide inadequate fixes and do not materially alter the balance of risks in the PPA.

Q. DO YOU HAVE ANY COMMENT ON THE PROCESS OF PROPOSING REVISIONS TO THE MESABA 1 PPA IN THIS DOCKET?

A. Yes. The inadequacy of the proposed modifications demonstrates that attempting to negotiate contract provisions in the context of litigation is unworkable. As Mr. Osteraas and I both agree, all PPA provisions need to be considered together and the overall contract must be reviewed as a package.

Mesaba 1 LLC's December 2005 Mesaba 1 PPA is not a good PPA for Xcel Energy or ratepayers because of its risk and pricing terms. The Mesaba 1 PPA with the eleven modifications is still not a good PPA for Xcel Energy or its customers. Mesaba 1 LLC did not originally and has not in this proceeding provided a PPA that is consistent with a commercially negotiated, appropriately balanced set of terms and conditions. On the one hand, Mesaba 1 LLC argues that their PPA is consistent with other PPAs. On the other, they argue that it needs to be different to accommodate their

1 technology. The reality is that this contract still fails to provide a good
2 transaction for Xcel Energy or our customers.

3
4 Q. DO YOU BELIEVE THAT THE 11 FIXES INDIVIDUALLY OR IN THE AGGREGATE
5 ARE SUFFICIENT TO MATERIALLY CHANGE THE WAY THAT THE MESABA 1 LLC
6 WILL BE VIEWED BY ACCOUNTING AND FINANCE PROFESSIONALS?

7 A. Mr. Tyson and Mr. McDaniel will testify about the specifics of how the
8 revisions to the Mesaba 1 PPA would be viewed by the investment and
9 accounting communities. I can conclude that the 11 fixes do not materially
10 change the overall allocation of risk and still result in an inappropriate
11 allocation of risk to ratepayers and Xcel Energy.

12
13 Q. ARE THERE OTHER PROVISIONS THAT HAVE NOT BEEN CHANGED THAT
14 CONTINUE TO BE OF CONCERN?

15 A. Yes, many of the concerns I raised in my previous testimony remain
16 unaddressed and unchanged. In my opinion, far too many of those risks
17 remain with Xcel Energy and its customers.

18
19 **C. Comparison to Other Xcel Energy PPAs**

20 Q. IN THE TESTIMONY OF MR. HAMILTON AND MR. SHERNER, THERE IS
21 DISCUSSION OF OTHER XCEL ENERGY PPAs. ARE YOU FAMILIAR WITH THEM?

22 A. Yes. I was involved in the negotiation of both the Invenergy/Cannon Falls
23 and the Calpine/Mankato PPAs.

24
25 Q. ARE THE COMPARISONS ACCURATE?

26 A. No. Mesaba 1 LLC witnesses attempt to characterize these two recent Xcel
27 Energy PPAs as well as our model dispatchable PPA form as relatively similar

1 to the Mesaba 1 PPA. While Mesaba 1 LLC appears to have attempted to
2 follow the format, font, and order of our model dispatchable PPA, that form
3 and the referenced PPAs differ from the Mesaba 1 PPA in several significant
4 ways all of which lead to the conclusion that the Mesaba 1 PPA fails to
5 provide many important protections contained in those other documents.

6
7 Q. WHAT BENEFITS SHOULD RATEPAYERS EXPECT FROM A PPA?

8 A. They should expect that project cost risk is shifted from ratepayer to the
9 developer, at a minimum. In addition, as I testified in my Direct Testimony,
10 the Commission typically ensures that the cost of generation (whether a PPA
11 or self-build) is reasonable if: 1) it is a fixed or quantified price, 2) it is the
12 result of a competitive solicitation, or 3) it is subject to ongoing Commission
13 prudence review. PPAs typically include the first two items. In many of the
14 natural gas PPAs I've worked on, it is typical for the generator to bid a fixed
15 or quantified capacity price. That structure provides relative certainty of the
16 obligations ratepayers are being asked to accept.

17
18 *1. Calpine/Mankato PPA*

19 Q. PLEASE DESCRIBE HOW THE CALPINE/MANKATO PPA IS DISSIMILAR FROM
20 THE MESABA 1 PPA.

21 A. There are many differences, but since the core of Excelsior's rebuttal
22 testimony is that the allocation of risks under the two contracts is similar,
23 Graph 1 below details some of the significant differences between the two
24 PPAs in that area.

**PUBLIC DOCUMENT
TRADE SECRET DATA EXCISED**

1

Graph 1

Risk	Calpine/Mankato PPA	Mesaba 1 PPA
Term	20 years	25 years
Conditions to COD	Facility must be commercially operable and available for dispatch	Allows COD to occur if the facility can not operate because the interconnection is not complete
COD	Date certain	Floats up to 4 years
Cure period for missing COD	Total of [XE TRADE SECRET BEGINS XE TRADE SECRET ENDS] days	Total of 730 days
Basket of remedies for Seller default	Security Fund, Subordinated Mortgage, [XE TRADE SECRET BEGINS XE TRADE SECRET ENDS], delay damages, replacement power cost liability	None of these
Capacity Payment Rate	Set when PPA is executed for Term	Unknown at this time and subject to change outside of buyer's control
Facility availability for full payment	On-peak months [XE TRADE SECRET BEGINS XE TRADE SECRET ENDS] Off-peak months [XE TRADE SECRET BEGINS XE TRADE SECRET ENDS]	Year 1 – 65% Year 2 – 75% Year 3 – 85% Year 4 – 96%
Facility Efficiency	Heat Rate Adjustment	No requirements
Seller Force Majeure	No payment	Payments for 30 days
Material Permits	4 including CON	11 excluding CON

2

3 Q.

MICHAEL J. HAMILTON TESTIFIES THAT HE REVIEWED THE PUBLIC VERSION OF THE CALPINE/MANKATO PPA AND THAT IT WAS NOT CONSOLIDATED ON XCEL ENERGY'S BALANCE SHEET. HE CONCLUDES THAT THE CALPINE/MANKATO AND MESABA 1 PPAs "ARE VERY SIMILAR IN STRUCTURE, BOTH FROM A FINANCIAL AND OPERATIONAL STANDPOINT." DO YOU AGREE WITH THESE POINTS?

8

1 A. I agree that the Calpine/Mankato PPA was not consolidated on Xcel Energy's
2 balance sheet. I will defer to Mr. McDaniel to discuss the details of that
3 accounting treatment. I disagree, however, with the statement that the
4 Calpine/Mankato PPA is "very similar" to the Mesaba 1 PPA. To the
5 contrary, essentially all of the attributes that I testify are missing in the Mesaba
6 1 PPA are included in the Mankato PPA and those terms materially alter the
7 balance of risk between the parties.

8
9 2. *Invenergy/Cannon Falls PPA*

10 Q. MR. SHERNER'S TESTIMONY STATES MPUC "ROUTINELY APPROVES PPAS
11 PRIOR TO TRANSMISSION DEVELOPMENT BEING COMPLETE." PLEASE
12 COMMENT.

13 A. This statement oversimplifies and understates the consideration Xcel Energy
14 gives to transmission development for our resource additions. As part of the
15 process in entering into the Invenergy and other Xcel Energy PPAs, we
16 acquire waivers from developers so that we can communicate with the Xcel
17 Energy transmission planners to review the required transmission, estimates
18 of the costs for that transmission plan, an assessment of the risks associated
19 with completing the required transmission on time, and an assessment of the
20 cost associated with the failure or delay of transmission. When we take on
21 transmission completion risk in a PPA, it is only after careful consideration
22 and an assessment that the risk is low that the transmission will not be
23 completed on time.

24
25 For the Invenergy/Cannon Falls PPA, Xcel Energy and the generator entered
26 into a PPA. That initial contract contained a condition precedent giving Xcel
27 Energy the right to terminate by a date certain if we assessed that the

1 transmission could not be completed in a timely fashion. While the contract
2 was being reviewed by the Commission, the magnitude and complexity of the
3 transmission situation became apparent. As a result Xcel Energy terminated
4 that initial PPA in order to avoid creating a situation in which a generation
5 facility would be on-line without the required transmission upgrades in
6 service.

7
8 The parties then renegotiated a “Replacement” PPA that delayed the
9 proposed in-service date and addressed other issues to clarify the transmission
10 situation. In the meantime, Xcel Energy continued to study the transmission
11 situation and determined that, with the delays agreed to in the Replacement
12 PPA and further work on the transmission plan, the risks associated with
13 transmission were reasonable. In contrast, the Mesaba 1 PPA does not
14 contain any condition precedent that would provide the type of protection
15 Xcel Energy had (and exercised) in that other transaction when it became
16 apparent that the transmission situation could not be resolved as quickly as we
17 originally assessed and the transmission study work does not appear to have
18 advanced to the stage where we can say that such a condition precedent is not
19 needed.

20
21 Q. ISN'T MR. SHERNER CORRECT THAT THE COMMISSION APPROVES WIND-
22 ENERGY AGREEMENTS ON THE BUFFALO RIDGE WITHOUT THE NECESSARY
23 DELIVERY INFRASTRUCTURE IN PLACE?

24 A. Yes, but the situation is very different from the facts here.

25
26 Q. PLEASE EXPLAIN.

1 A. Historically in the United States, a production tax credit (“PTC”) for wind
2 generation has been available for a limited time. Under the program, if a wind
3 generating facility comes on-line by a certain date, it qualifies for a substantial
4 federal subsidy for the next 10 years. The value of the PTC to our customers
5 is about \$1 million per MW of installed capacity. Because the expiration of
6 the tax credit has typically been shorter than the time needed for construction
7 of new transmission capacity, we assess the likelihood and cost of curtailment
8 against the substantial tax benefit and have found that the curtailment
9 expenditure is small in comparison to the benefit of the PTC that our
10 customers receive over the operating life of the project. Based on this
11 analysis, the Commission has approved wind project in-service dates in
12 advance of transmission line in-service dates. Mesaba 1 LLC has not
13 presented compelling reasons for such an exception in this case.

14
15 In addition, the lack of firm transmission for the full output of wind
16 generation does not impact the level of MAPP accreditation that we receive
17 for those plants. We typically plan on receiving accreditation for only 10% of
18 the nameplate capacity of a wind farm and we have always had sufficient firm
19 transmission to allow MAPP to accredit that capacity level even when we
20 haven’t had firm transmission for the full nameplate capacity.

21
22 In the case of Mesaba Unit 1, we anticipate receiving accreditation for the
23 entire 603 MW capacity and without firm transmission at that same level, we
24 will not be able to count the capacity for reliability purposes – in the simplest
25 terms that would mean that we would be making substantial capacity
26 payments for no capacity value.

27

1 Q. MR. BODMER OBJECTS TO THE DEFAULT PROVISIONS DESCRIBED IN DR.
2 EILON AMIT'S TESTIMONY. WHAT COMMENT DO YOU HAVE?

3 A. Dr. Amit has reviewed and commented on a number of our PPAs and his
4 comments in this Docket are consistent with positions the Department has
5 previously taken. Xcel Energy agrees with Dr. Amit that it is important for a
6 PPA to include meaningful default and remedy provisions to mitigate
7 ratepayer risk against poor performance by the project.

8

9 **D. Comparison to Other Base Load Options**

10 Q. HOW DO YOU RESPOND TO THE MESABA 1 LLC REBUTTAL TESTIMONY
11 ATTEMPTING TO COMPARE THE MESABA 1 PPA TO A UTILITY SELF-BUILD
12 PROJECT?

13 A. Xcel Energy has not proposed a self-build project in this Docket and I don't
14 think the comparison is appropriate. The Mesaba 1 PPA should be compared
15 to other PPAs, as was done in Mr. Reed's and my Direct Testimonies. In
16 other words, the focus of this inquiry should be the allocation of the
17 contractual risks between the parties; and not on the technology or
18 comparisons with hypothetical self-build projects that have not been
19 proposed.

20

21 Q. MR. OSTERAAS AND MR. GALE BOTH CLAIM THAT XCEL ENERGY COLORADO
22 AFFILIATE, PUBLIC SERVICE COMPANY OF COLORADO, HAS RECEIVED
23 EXTRAORDINARY RATE TREATMENT FOR CONSTRUCTION OF ITS COMANCHE 3
24 COAL-FIRED STATION THAT IS CURRENTLY UNDER CONSTRUCTION. DO YOU
25 AGREE WITH THIS CHARACTERIZATION?

26 A. No. We did receive supportive rate treatment, but I think Mr. Osteraas
27 overstates the extent of that supportive treatment. Public Service of Colorado

1 did not receive rate rider recovery for Comanche 3 costs nor is the Company
2 completely protected from construction cost risk. In response to an
3 Information Request from Mesaba 1 LLC, I explained the rate treatment
4 related to Comanche 3. Our response to that information request is provided
5 as Exhibit____(KTH-2), Schedule 3.
6

7 Q. DOES MESABA 1 LLC ACKNOWLEDGE COMMISSION OVERSIGHT OF UTILITY
8 CONSTRUCTION?

9 A. No. Mr. Osteraas states that the Commission cannot or will not “enforce
10 prudence standards” on utilities. This claim is not consistent with my
11 experience. State commissions enforce their prudence standards on Xcel
12 Energy, both in the PPA and self-build context.
13

14 Q. MESABA 1 LLC WITNESS CHEN SUGGESTS THAT XCEL ENERGY’S REACTION
15 TO THE MESABA 1 PPA IS A RESULT OF ITS STATUS AS AN INCUMBENT UTILITY
16 THAT INHERENTLY FAVORS UTILITY SHAREHOLDER RETURNS ABOVE
17 EVERYTHING ELSE, INCLUDING INNOVATION. DO YOU AGREE?

18 A No. Xcel Energy has a long track record in purchasing from a significant
19 number of independent power producers, despite receiving no return on
20 those purchases and sometimes not recovering the full capacity payments
21 (prior to a rate case.) My group administers over 200 PPAs. Xcel Energy is
22 the number 1 provider of wind power to our customers in the nation and we
23 purchase 98% of that wind power – almost 1200 MW today. We intend to
24 more than double our wind power on-line by the end of 2007, all through
25 PPAs. In the past few years we entered into PPAs for significant natural gas
26 generation for the NSP system in addition to 22 PPAs for a variety of
27 technologies throughout the three operating companies. Collectively these

1 PPAs represent in excess of 3,300 MWs. While Xcel Energy is clearly in
2 favor of shareholder returns and we have an aggressive plan of investment in
3 our core business, we are not against purchased power and have not taken a
4 position in this docket favoring utility self-build over purchased power – we
5 have simply reflected on the inadequacies of the proposed PPA.

6
7 Q. HOW DO YOU RESPOND TO MR. OSTERAAS' TESTIMONY THAT THE MESABA 1
8 PPA SETS THE RELEVANT PRUDENCY STANDARD IN THIS SITUATION?

9 A. I agree. Because Mesaba 1 LLC is not regulated by the Commission, the
10 Mesaba 1 PPA is the only vehicle available to ensure performance and if the
11 PPA obligations are weak or open-ended then the contractual prudence
12 standard will be comparably weak or unenforceable. I provide two examples
13 of the weak prudency standard found within the Mesaba 1 PPA.

14
15 First, there is nothing in the Mesaba 1 PPA that fixes or even influences the
16 capacity price. Rather, as I mentioned in my prior testimony the only
17 prudency obligation in the PPA is for Mesaba 1 LLC to submit the required
18 fill-in-the-blanks form stating what the capacity price will be and then the
19 price is contractually fixed. There is no mechanism to control or challenge
20 that cost so even if the Commission or Xcel Energy believed that the cost was
21 inflated, Mesaba 1 LLC would have satisfied the required prudency standard
22 and nothing more could be done.

23
24 Second, Section 5.10 puts the entire cost and risk of fuel procurement on
25 Xcel Energy and our customers. There is again nothing in the contract to
26 provide any meaningful prudency review risk on Mesaba 1 LLC. To the
27 contrary, that clause puts this cost to Xcel Energy even if it is found that fuel

1 purchases (by Mesaba 1 LLC) have been disallowed on the grounds of
2 prudence.

3
4 Q. HAVE YOU REVIEWED THE CHART OF COMPARATIVE RISKS CONTAINED IN MR.
5 GALE'S TESTIMONY (GALE REBUTTAL PAGE 20)?

6 A. Yes. I think that his chart is deceptive. First, it appears that all risks are
7 equal, but my assessment is that the three risks that he does attribute to
8 ratepayers under the Mesaba PPA structure – pre-closing construction costs,
9 pre-closing interest rates, and fuel costs – are all totally unbounded and totally
10 under the control of Mesaba 1 LLC without any oversight from the Company
11 or the Commission. Second, for most of the other risks, I agree that the IPP
12 or third parties bear some chance that these risks reduce their return on
13 investment, but the substantial cost risks of delay and replacement power are
14 borne by the utility and its customers.

15
16 **IV. CONCLUSION**

17
18 Q. PLEASE SUMMARIZE YOUR SURREBUTTAL TESTIMONY.

19 A. I believe the Mesaba 1 PPA should be evaluated in its entirety to determine
20 whether it strikes a reasonable balance when allocating risks between Mesaba
21 1 LLC and its consortium and Xcel Energy and our customers. My review of
22 the Mesaba 1 PPA, including the 11 proposed changes offered in Mesaba 1
23 LLC's Rebuttal Testimony, indicates that the terms differ substantially from
24 typical contract terms. Viewed as a whole, the Mesaba 1 PPA transfers an
25 unacceptable level of risk to Xcel Energy and our customers and lacks the
26 necessary operational controls to protect our customers from the possibility
27 of substantial cost increases. Given the pricing mechanisms for capacity, fuel,

1 transportation, and environmental and regulatory costs, the Mesaba 1 PPA
2 does not offer a hedged, predictable price for Xcel Energy and our customers.

3

4 Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

5 A. Yes, it does.

**PUBLIC DOCUMENT
TRADE SECRET DATA EXCISED**

Docket No. E6472/M-05-1993
Exhibit____(KTH-2), Schedule 1

Schedule 1 contains trade secret data and has been excised.

**PUBLIC DOCUMENT
TRADE SECRET DATA EXCISED**

Docket No. E6472/M-05-1993
Exhibit____(KTH-2), Schedule 2

Schedule 2 contains trade secret data and has been excised.

- Non Public Document – Contains Trade Secret Data
 Public Document – Trade Secret Data Excised
 Public Document

Xcel Energy

Docket No.: E6472/M-05-1993

Response To: Excelsior Energy Information Request No. 44

Date Received: September 13, 2006

Question:

With respect to Xcel Energy's new 750 MW coal-fired generating unit currently under construction at its Comanche plant near Pueblo, Colorado ("Comanche Unit 3"), please provide the following information:

- 1) A detailed description of any rate rider that has been authorized by the Colorado Public Service Commission allowing Xcel Energy to collect in rates any amounts related to Comanche unit 3 prior to commercial operation;
- 2) A detailed description of the overall environmental profile of Comanche Unit 3, including, but not limited to, water usage levels, landfill storage requirements, emissions levels for criteria pollutants, mercury, and fine particulate, and anticipated costs to comply with the CAIR, CAMR and EPA fine particulate rules and regulations at Comanche.
- 3) A detailed description of Comanche Unit 3's CO₂ profile and its capability to reduce CO₂ emissions to address future carbon regulation.

Response:

Objection, relevance due to weather, altitude, and site differences, scope of the hearing, seeks information from a person other than Xcel Energy who is not a party to this proceeding (Public Service Company of Colorado). Subject to such objections, Xcel Energy states:

- 1) The Colorado Public Utilities Commission has not authorized any rate rider to recover pre-commercial operation costs of Comanche 3 in rates. The conditions for including Construction Work in Progress in base rates during a rate case prior to when Comanche 3 is placed in commercial operation are outlined in

Attachment 1 to this response. Attachment 1 contains pages 25 through 29 of the Comprehensive Settlement Document dated December 3, 2004.

- 2) The Construction Permit for Comanche 3 is included as Attachment 2 to this response. There are no costs for the unit to comply with CAIR or the EPA fine particulate rules and regulations as these regulations do not apply in Colorado. Note that Colorado has not yet adopted rules to implement CAMR. A new on-site 250-acre ash disposal site was permitted as part of the Comanche 3 project. The Comanche 3 water contract calls for a maximum annual delivery of 6,000 AF of raw water with a minimum take or pay amount of 5,218 AF/year. We anticipate that Comanche 3 water usage will range between these two numbers depending on annual ambient temperatures and load conditions at the plant.
- 3) CO₂ is not a regulated emittent and such analysis was not included in the air permitting or CPCN processes. However, the cost-effectiveness of Comanche 3 was modeled against generic coal plants and against natural gas plants assuming CO₂ costs of \$6/ton and \$12/ton. See Attachment 3 to this response.

Response By: Karen Hyde
Title: Managing Director
Department: Resource Planning and Acquisition
Date: September 27, 2006

- Non Public Document -- Contains Trade Secret Data
 Public Document -- Trade Secret Data Excised
 Public Document

Xcel Energy

Docket No.: E6472/M-05-1993

Response To: Excelsior Energy

Information Request No. 45

Date Received: September 13, 2006

Question:

With respect to Xcel Energy's new 750 MW coal-fired generating unit currently under construction at its Comanche plant near Pueblo, Colorado ("Comanche Unit 3"), please provide the following information:

- 1) A detailed description of the expected regulatory consequences (including any penalties to the utility or reduced pass-through costs to the ratepayers, if any) if (a) the actual costs to complete Comanche Unit 3 exceed the estimated costs provided by Xcel Energy to the Colorado Public Service Commission, including, but not limited to, the expected rate treatment of any costs that exceed those estimated costs, (b) the plant does not achieve the availability or other performance standards projected by the utility, or (c) the plant does not reach commercial operation on the projected in-service date.
- 2) Is Xcel Energy required to file periodic updates of its estimated completion costs for Comanche Unit 3 with the Colorado Public Service Commission? If so, please describe the nature of such updates and provide all unredacted copies thereof.

Response:

Objection, relevance due to weather, altitude, and site differences, scope of the hearing, seeks information from a person other than Xcel Energy who is not a party to this proceeding (Public Service Company of Colorado), seeks information that is subject to confidentiality obligations and a protective order, and seeks information that may be protected by the attorney-client privilege. Subject to such objections, Xcel Energy states:

- 1a) Per the Comprehensive Settlement Agreement, "Public Service shall be limited to placing into utility rate base the actual capital expenditures for the Comanche Project that are equal to or below the Construction Cost Cap." Public Service does not anticipate being able to recover capital costs that exceed the Construction Cost Cap.
- 1b) The Comprehensive Settlement Agreement did not limit the recovery of operating costs of the facility. Public Service would be entitled to recover all prudently incurred operating costs and would be subject to disallowance of any costs that were determined by the Commission to have been imprudently incurred.
- 1c) To the extent that the delay in facility commercial operation increases construction costs above the cap, Public Service does not anticipate recovery of such capital costs. To the extent that any delay results in replacement power costs being incurred, the parties to the settlement reserved their "right to challenge the recovery of replacement power costs that result from material delays in the commercial operation date of Comanche 3 due to imprudence".
- 2) Per the Comprehensive Settlement Agreement, Public Service is required to "file progress reports with the Commission semi-annually, beginning June 1, 2005 and ending with the first report after Comanche 3 reaches commercial operation, regarding the progress of construction and the expected commercial operation date of Comanche 3." Attachment A to this response includes the two progress reports filed to date. Under a protective order issued by the Colorado Public Utilities Commission, certain information in the progress reports is filed under seal and access is limited to the Commissioners, the Commission Staff, the Office of Consumer Counsel and their attorneys, therefore the public versions of the reports are provided in Attachment A.

Response By: Karen Hyde
Title: Managing Director
Department: Resource Planning and Acquisition
Date: September 27, 2006