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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

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1 **I. INTRODUCTION**

2  
3 Q. PLEASE STATE YOUR NAME.

4 A. My name is Karen T. Hyde.

5  
6 Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY IN THIS CASE?

7 A. Yes. I provided Direct and Rebuttal Testimony regarding the purchased  
8 power agreement proposed by Mesaba 1 LLC in this proceeding (the “Mesaba  
9 1 PPA”).

10  
11 **II. PURPOSE**

12  
13 Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY IN THIS  
14 PROCEEDING?

15 A. I respond to the Rebuttal Testimony of Thomas Osteraas, Roger Gale,  
16 Edward Bodmer, Steve Sherner, Jim Chen, and Michael Hamilton regarding  
17 the Mesaba 1 PPA. I address Mesaba 1 LLC’s claims that the Mesaba 1 PPA  
18 appropriately allocates the risks between the project sponsors and Xcel  
19 Energy and our customers. In addition, I offer my assessment of the 11  
20 proposed modifications to the Mesaba 1 PPA offered in the Rebuttal  
21 Testimony of Mr. Osteraas. Based upon my review of Mesaba 1 LLC’s  
22 Rebuttal Testimony, I conclude that the Mesaba 1 PPA, even with the  
23 modifications proposed by Mr. Osteraas and the explanations and  
24 rationalizations of many other witness, transfers an unacceptable level of risk  
25 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?

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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.

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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.

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**Graph 1**

<b>Risk</b>	<b>Calpine/Mankato PPA</b>	<b>Mesaba 1 PPA</b>
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  
4 OF THE CALPINE/MANKATO PPA AND THAT IT WAS NOT CONSOLIDATED ON  
5 XCEL ENERGY'S BALANCE SHEET. HE CONCLUDES THAT THE CALPINE/  
6 MANKATO AND MESABA 1 PPAs "ARE VERY SIMILAR IN STRUCTURE, BOTH  
7 FROM A FINANCIAL AND OPERATIONAL STANDPOINT." DO YOU AGREE WITH  
8 THESE POINTS?

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 PPA's 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

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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 CO<sub>2</sub> profile and its capability to reduce CO<sub>2</sub> 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) CO<sub>2</sub> 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 CO<sub>2</sub> costs of \$6/ton and \$12/ton. See Attachment 3 to this response.

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



- 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.

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