BEFORE THE PUBLIC UTILITIES COMMISSION OF
THE STATE OF SOUTH DAKOTA

In the Matter of the Application of Northern States Power Company dba Xcel Energy for Authority to Increase its Electric Rates	)))	Docket No. EL11-019

COST RECOVERY FOR THE NOBLES WIND PROJECT

TESTIMONY AND EXHIBIT OF KAVITA MAINI
ON BEHALF OF
THE COMMISSION STAFF

Public VERSION

April 16, 2012

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I. INTRODUCTION

Q. Please state your name and occupation.

A. My name is Kavita Maini. I am the principal and sole owner of KM Energy Consulting, LLC.

Q. Please state your business address.

A. My office is located at 961 North Lost Woods Road, Oconomowoc, WI 53066.

Q. Please state your educational and professional background.

A. I am an economist with over 20 years of experience in the energy industry. I graduated from Marquette University, Milwaukee, Wisconsin with a Masters in Business (1986) and a Masters in Applied Economics (1991). From 1991 to 1997, I worked for Wisconsin Power & Light as a Market Research Analyst and Senior Market Research Analyst. In this capacity, amongst other responsibilities, I conducted linear optimization modeling for asset valuation and resource planning purposes. From 1997 to 1998, I worked as Senior Analyst at Regional Economic Research, Inc. in San Diego, California where I learned to use neural network models for load forecasting purposes. From 1998 to 2002, I worked as a Senior Economist at Alliant Energy Integrated Services' Energy Consulting Division. In this capacity, I assisted with internal strategic planning and was responsible for analyzing wholesale energy market dynamics. I also assisted industrial, commercial and institutional customers in optimizing rates and minimizing costs in regulated and deregulated states.

Since 2002, I have been an independent consultant. Aside from assisting retail customers with their pricing decisions in regulated and deregulated states, I have

provided comments as a technical expert related to a variety of energy policy issues on behalf of the Wisconsin Industrial Energy Group in various Wisconsin regulatory and federal regulatory proceedings. I have also conducted workshops on several energy related matters. In Minnesota, I was the lead expert in developing comments for several of Xcel Energy's and Otter Tail Power Company's renewable and transmission cost rider proceedings including the utilities' integrated resource plans. In North Dakota, I was the expert witness on Otter Tail's case dealing with renewable power and transmission cost recovery issues.

I represent the Wisconsin Industrial Energy Group Midwest Industrial Customers (MIC) at MISO. The MIC is a coalition of four end user associations including the Wisconsin Manufacturers' and Commerce, American Forestry & Paper Association, Wisconsin Paper Council and Wisconsin Industrial Energy Group. As a representative of MIC, I participate in several MISO committees and working groups. I represent the End Use Sector at the Planning Advisory Committee (PAC). The PAC is responsible for providing policy guidance to MISO relating to transmission planning. As such, this includes considerable discussion related to MISO's use of futures scenarios and input assumptions in its screening and hourly production cost models.

Q. **Please summarize your relevant experience in evaluating integrated resource plans and renewable generation related costs.**

A. The following are relevant recent cases and experience:

- Expert witness in the Otter Tail Power combined rate case and renewable energy rider proceeding in North Dakota in 2009 (PU-08-862 and PU-08-742) on behalf of Large Industrial Group.
- Comments and Reply Comments related to Otter Tail's Integrated Resource Plan in MN (MPUC Docket No. E017/RP-10-623) on behalf of Minnesota Chamber of Commerce.
- Comments related to Xcel Energy's Transmission Cost Recovery Rider (MPUC Docket No. E002/M-10-1064) and Xcel Energy's Renewable Energy Rider (MPUC Docket No. E002/M-10-1066) on behalf of Minnesota Chamber of Commerce; similar filings for Otter Tail Power Company on behalf of Minnesota Chamber of Commerce (MPUC Docket No. EOI7/M-09-1484, MPUC Docket No. E017/M-10-1061).
- Comments related to Xcel Energy's 2010 Integrated Resource Plan (MPUC Docket No. E002/RP-10-825 comments are due on May 21, 2012) on behalf of Minnesota Chamber of Commerce.
- Technical support and analysis regarding cost recovery of wind generation related costs (Whispering Willows East) in Interstate State Power & Light's rate case in Minnesota (MPUC Docket No. E001/GR-10-276).
- Represent Midwest Industrial Customers (MIC) at MISO. The MIC is a coalition of four end user associations including the Wisconsin Manufacturers' and Commerce, American Forestry & Paper Association, Wisconsin Paper Council and Wisconsin Industrial Energy Group.

Q. **On whose behalf are you testifying in this proceeding?**

A. I am testifying on behalf of the South Dakota Public Utilities Commission Staff ("Staff").

Q. **What is the purpose of your testimony in this proceeding?**

A. This testimony reflects Staff's position regarding cost recovery associated with Xcel Energy's ("Xcel") Nobles Wind Project ("Nobles").

II. NOBLES WIND INVESTMENT

Q. **Please briefly describe the Nobles Wind Project.**

A. Xcel's petition in Minnesota for approval of Nobles describes it as follows:

> "The Nobles Wind Project is a 201 MW wind energy generation facility consisting of 134 General Electric ("GE") 1.5 MW sle wind turbines located within a project site encompassing approximately 25,000 acres in Nobles County, Minnesota."

See Exhibit _____(KM-1), Schedule 1, page 29 of 67

The project was built by enXco and the ownership of the project was transferred to Xcel Energy. Commercial operation began in December 2010.

Q. **Please describe the revenue requirements being sought by Xcel in the current rate case.**

A. Xcel originally sought $2.085 million in direct testimony. However, it updated its revenue requirement to $2.039 million to reflect actual investment placed in service through 2011. Xcel intends to submit these revised numbers in its rebuttal testimony. **See Exhibit _____ (KM-1), Schedule 2**. This revenue requirement is based on the Commission's approved rate of return from Xcel's last base rate case.

Q. **Should the Commission approve this amount of revenue requirement for Nobles?**

A. No; for reasons outlined below, Staff believes that Xcel should not be granted this amount of revenue requirement. In fact, the testimony that follows will demonstrate that the entire amount should be denied. It will conclude that Nobles was not built for capacity or energy reasons; rather, it was built for policy reasons. Specifically, it was built primarily to satisfy Minnesota's Renewable Energy Standard ("RES") that requires Xcel to fulfill roughly 25% of its 30% renewable requirements through wind. It should be noted that prior to Nobles being built, Xcel was already fulfilling South Dakota's voluntary Renewable Energy Objective ("REO") of 10% by 2015.

Notwithstanding the foregoing, Staff has made concerted efforts to recognize that at the time the decision was made, there were estimated fuel and non-fuel benefits. Staff is providing recommended adjustments based on these estimated benefits in spite of the challenges associated with assessing the reasonableness of the assumptions used to calculate the benefits four years after the fact. In the event that the Commission determines that this method of adjusting the revenue requirements is not compatible with traditional ratemaking principles, Staff recommends that the entire revenue requirement be denied.

III. NOBLES WAS NOT BUILT FOR ENERGY OR CAPACITY NEEDS

Q. **Was Nobles built as a result of including wind to satisfy capacity needs in the 2007 resource plan?**

A. No; since wind is an intermittent resource, its dependable capacity is a small fraction of its installed capacity and is not viewed as a reasonable resource for capacity purposes. This is further reinforced by the following response from Xcel:

> "Wind is primarily just an energy resource and not a capacity resource. **Wind replaces fuel that would have been consumed in the production of generation from other resources that already exist or that would have been added to the system regardless of the addition of wind *(emphasis added).*** As a result we did not, and do not plan to install any additional capacity resources to back-up the Nobles Wind Project or other wind generation. Therefore, there are no associated costs as such."

See Exhibit _____(KM-1), Schedule 3.

Q. **Was Nobles built as a result of including wind to satisfy energy deficiency needs in the 2007 resource plan?**

A. No; as per the foregoing response from Xcel, wind replaces fuel that would have been consumed in the production of generation from other resources that already exist or that would have been added to the system regardless of the addition of wind. This is further demonstrated by the fact that Xcel forced wind in the model to comply with renewable policy. **See Exhibit _____(KM-1), Schedule 4.**

Q. Please explain how Xcel justified the selection of wind in its 2007 resource plan?

A. Xcel indicates that wind generation was chosen to comply with the various state mandates for renewable resources. Xcel stated the following:

> "We are required to comply with state mandates for renewable resources, absent circumstances justifying a request to be released from those obligations. Consequently, the resource modeling process selects the amount of wind resources needed to comply with our system requirements. Therefore, in our 2007 Resource Plan, we identified the

amount of wind that would be needed to comply with the renewable energy standards in all of our jurisdictions."

See Exhibit _____(KM-1), Schedule 5.

Q. **What did Xcel state that it did once the decision to acquire wind was identified in the resource plan?**

A. Xcel stated that it conducts a competitive bidding process and compares actual project proposals against other wind projects as well as other, non-renewable resource options. Xcel stated the following in response to a discovery request:

> "The outcome of resource planning is not an actual selection of a new resource. Our work in resource planning is a programmatic assessment to examine whether it is reasonable to proceed to actual acquisition which is the step where competition among resources occurs. When we acquire individual wind projects through competitive bids or other competitive processes, we focus the analysis further by comparing actual project proposals against other wind projects as well as other, non-renewable resource options."

See Exhibit _____(KM-1), Schedule 6.

Q. **Did Xcel implement a competitive bidding process to compare renewable and non-renewable projects?**

A. No; Xcel implemented a competitive bidding process for build/transfer projects for wind generation only. There were no non-renewable projects that were compared to the build/transfer options in the competitive bidding process.

Q. **Was Nobles identified as part of this competitive bidding process?**

A. Yes; Xcel conducted a Request for Proposal (RFP) for a build/transfer option for wind generation and was able to demonstrate that building Nobles was cost competitive as compared to other bids as well as Purchase Power Agreements

(PPA) for wind generation only. For example, Witness McCarten states the following:

> "The Nobles wind project arose out of our ongoing efforts to acquire timely and cost-effective wind energy generation resources to serve our customers and to comply with the renewable requirements and objectives of the states in which we operate. To maintain a robust system and minimize impacts to our customers, we need a diversified portfolio of wind resources, including Company-owned resources. Prior to the Nobles project coming on-line, however, less than 10 percent of our wind resources were Company owned. The Nobles wind project helps bring more balance to our wind energy portfolio.
>
> In order to meet the renewable requirements and objectives of the states in which we serve, we initiated a competitive bidding process in 2007. The Nobles wind project was selected pursuant to this process in which we evaluated 30 proposals submitted in response to a request for proposal ("RFP") for up to 500 MW of wind energy generation."

See McCarten Direct Testimony, Pages 6-7.

Xcel also provided the initial screening of the responses to the RFP for a build/transfer option for wind only. **See also Exhibit _____(KM-1), Schedule 7 (Confidential).**

Q. What are your findings so far?

A. So far, my findings have established that:

1) Nobles was not built to fulfill capacity or energy needs;

2) Nobles was chosen as part of a competitive bidding process that compared build/transfer bids for wind generation; and

3) It is Xcel's position that Nobles was built to comply with the renewable requirements of the states in which it operates.

Q. **Has Xcel been able to demonstrate that Nobles needed to be constructed in 2010 to comply with South Dakota's renewable policy?**

A. No; it is Staff's opinion that Xcel has failed to demonstrate that Nobles needed to be constructed in 2010 to meet South Dakota's renewable policy for the following reasons:

1) At the time the decision was made to construct Nobles, Xcel had already reached and in fact slightly surpassed REO, a voluntary goal, of 10% by 2015, see SDCL §49-34A-101. In sharp contrast, Minnesota has a stringent RES mandate with not only fulfilling 30% by 2020, but prescribed timelines for fulfilling this mandate as well as a requirement that roughly 25% must be achieved through wind generation.
2) Unlike Minnesota, South Dakota has no financial repercussions or penalties for not complying with its REO – it is a goal, not a mandate.
3) Xcel sought an exemption for a Certificate of Need in Minnesota on the basis that Nobles was being built to meet Xcel's obligation under Minnesota's RES.
4) South Dakota's REO statute seeks a comparison of renewable resources with other non-renewable resources, see SDCL §49-34A-104. Since Nobles was not built to fulfill capacity or energy needs, there are no non-renewable resources for comparison per se. In other words, Nobles could be viewed as a "discretionary" and not a necessary supply side resource from South Dakota's perspective.
5) In the absence of fulfilling capacity or energy needs, the only other option was to examine the economics (i.e. costs and benefits) associated with Nobles. Xcel's analysis with and without Nobles indicates that costs exceed benefits by including Nobles.

I describe each of these reasons in more detail below.

IV. NOBLES WAS NOT BUILT TO FULFILL SOUTH DAKOTA'S RENEWABLE POLICY NEEDS

1. STATE RENEWABLE POLICIES ARE SIGNIFICANTLY DIFFERENT

Q. **Are the state renewable mandates the same for Minnesota, North Dakota and South Dakota?**

A. No. There are significant differences.

In Minnesota, Xcel has a 30% renewable energy standard mandate out of which roughly 25% must be achievable from wind generation. Further, there is a prescribed timeline for fulfilling the mandate as follows:

(1) 2010 15%
(2) 2012 18%
(3) 2016 25%
(4) 2020 30%

See Minnesota Statute 216B.1691.

North Dakota and South Dakota have an REO of 10% by 2015. This is a voluntary standard and not a mandate such as that established by Minnesota.

Q. **What percentage of South Dakota's REO was already fulfilled before building Nobles?**

A. Xcel indicated that prior to building Nobles, it had already procured and purchased enough renewable resources to meet South Dakota's requirements at 10.3%. **See Exhibit _____(KM-1), Schedule 8.** Thus, it was not necessary to construct any wind or other renewable resources from South Dakota's REO

perspective at the time the decision was made to build Nobles. In 2008, Xcel was already meeting the South Dakota goal that needed to be fulfilled by 2015.

2. NO FINANCIAL IMPACTS DUE TO NON COMPLIANCE IN SOUTH DAKOTA

Q. **Are there financial repercussions associated with not meeting the renewable energy objective in South Dakota?**

A. No, unlike Minnesota, there are no financial repercussions. SDCL §49-34A-101 states that "[t]his objective is voluntary, and there is no penalty or sanction for a retail provider of electricity that fails to meet this objective." In Minnesota, however, the statute states the following:

> Subd. 7.**Compliance.**
>
> The commission must regularly investigate whether an electric utility is in compliance with its good faith objective under subdivision 2 and standard obligation under subdivision 2a. If the commission finds noncompliance, it may order the electric utility to construct facilities, purchase energy generated by eligible energy technology, purchase renewable energy credits, or engage in other activities to achieve compliance. If an electric utility fails to comply with an order under this subdivision, the commission may impose a financial penalty on the electric utility in an amount not to exceed the estimated cost of the electric utility to achieve compliance. The penalty may not exceed the lesser of the cost of constructing facilities or purchasing credits. The commission must deposit financial penalties imposed under this subdivision in the energy and conservation account established in the special revenue fund under section 216B.241, subdivision 2a. This subdivision is in addition to and does not limit any other authority of the commission to enforce this section.

See Minn. Statute §216B.1691

3. CERTIFICATE OF NEED EXEMPTION FOR NOBLES IN MINNESOTA

Q. **Did Xcel seek a petition for approval of Nobles before the Minnesota Public Utilities Commission?**

A. Yes; on December 3, 2008, Xcel sought such a request in MPUC Docket No. E-002/M-08-1437. Further, as part of the same petition, Xcel also sought an exemption for a Certificate of Need ("CON").

Q. **Did Xcel provide an explanation of the exemption for the CON?**

A. Based on Xcel's responses, it is my understanding that its CON exemption request for Nobles was done on the basis that it was intended to meet Xcel's obligation of Minnesota's RES. Xcel also stated that "[t]he two wind energy projects proposed in this petition are specifically designed to help the Company meet our obligations under the RES." **See Exhibit 1, Schedule 1, page 27 of 67.**

Further, Xcel stated the following as part of a response to a Data Request:

> "The Company's CON exemption request for Nobles, a renewable resource, was made pursuant to Minn. Stat. § 216B.243, Subd. 9 and in consideration of the following conditions:
> 1) The Nobles Wind Project is a wind energy conversion system that is contemplated by the RES statute;
> 2) It is intended to meet or exceed Xcel Energy's obligations of the RES; and
> 3) It is a reasonable and prudent approach for Xcel Energy to satisfy the RES."

See Exhibit _____(KM-1), Schedule 9.

All other large generating facilities of 50 MW or more have to obtain a CON under this statute. There is not an exemption available for non-renewable generation facilities. So, essentially, the exemption was granted on the primary basis that it was intended to meet Xcel's obligation of Minnesota's RES.

4. IMPLICATIONS OF NOT CONSTRUCTING NOBLES FOR CAPACITY OR ENERGY NEED

Q. **From Staff's perspective, what are the implications for constructing Nobles since it was not built to satisfy capacity or energy need?**

A. South Dakota's REO statute seeks a comparison of renewable resources with other non-renewable resources. Since Nobles was not built to fulfill capacity or energy needs, there are no non-renewable resources for comparison per se. Rather Nobles is displacing energy or capacity from existing units or new units that would have been built anyway. In other words, Nobles is more of a "discretionary" rather than a necessary supply side resource from Staff's perspective.

Since Nobles was not constructed to satisfy need, any costs incurred to build this resource must therefore be compared on the basis of costs and benefits.

5. NOBLES COSTS EXCEED BENEFITS

Q. **Did Xcel provide a cost benefit analysis for Nobles?**

A. Yes. Xcel conducted runs using the Strategist model with and without Nobles. The Strategist model is a preliminary screening model used to identify whether it is appropriate to examine the actual acquisition of resources. Xcel provided the Present Value of Revenue Requirements (PVRR) of various sensitivities with and without Nobles using this screening capacity expansion tool.

Q. **What did this analysis indicate?**

A. This analysis indicated that in Xcel's base case and various sensitivity runs, the costs associated with building Nobles exceeded the benefits. All sensitivities and the base case included assumptions for carbon. Only at a $30/ton carbon assumption do the costs and benefits roughly break even. The base case included a carbon price of $17.50/ton. Not surprisingly and from a relative standpoint, the lower the assumed price of carbon, the more the costs exceed

the benefits. **See Exhibit _____(KM-1), Schedule 1 (Table 3, page 56 of 67 Confidential).**

Q. **Why was a carbon price assumption of $17.50/ton used in the base case?**

A. According to the Next Generation Energy Act, the Minnesota Commission is required to estimate how the future regulation of carbon dioxide emissions will affect the cost of generating electricity. See Minn. Stat. §216H.06. The Act directed the Commission to establish a range of estimates by January 1, 2008. The Commission issued an Order in December 2007 establishing a range of $4/ton to $30/ton for CO2 emitted in 2012 and thereafter. The Commission's Order also required electric utilities to apply these estimates in all proceedings to acquire electric generation resources to serve the needs in Minnesota. See Docket No. E-999/CI-07-1199.

It is likely that Xcel used this assumption to be somewhat in the middle of the range prescribed by the Minnesota Commission's Order.

Q. **Is there an approved federal law on carbon regulation at present?**

A. No; none exists today.

Q. **Does South Dakota have a similarly prescribed policy?**

A. No. It is my understanding that no such prescribed policy exists in South Dakota.

Q. **Based on these findings, does Staff conclude that Nobles was built for the purpose of fulfilling Minnesota's RES mandate and not for South Dakota's REO?**

A. Yes; for reasons identified above it is Staff's opinion that Xcel has failed to demonstrate that Nobles needed to be constructed in 2010 to meet South

Dakota's renewable policy. Rather, it was built for the purpose of fulfilling Minnesota's RES mandate.

Q. **Does Xcel allocate costs associated with energy efficiency programs in Minnesota to its South Dakota jurisdiction and vice versa?**

A. No. Each jurisdiction is assigned the costs it incurs for energy efficiency initiatives. Each jurisdiction has its own policy regarding energy efficiency and Xcel accordingly and appropriately allocates these costs.

Q. **Should Xcel utilize the same method for fulfilling renewable policy and allocating costs associating with such policy?**

A. Yes; since each jurisdiction has a different policy, the costs should be assigned to those jurisdictions that cause the costs. Xcel should utilize the same fundamental principle for allocating costs to jurisdictions regarding renewable resources as it does for energy efficiency.

Q. **Based on these findings and in accordance with traditional ratemaking principles, should the entire cost recovery for Nobles be denied?**

A. Yes; Since Xcel did not build Nobles to address capacity or energy deficiencies and since Xcel has failed to demonstrate that Nobles needed to be constructed in 2010 to meet South Dakota's REO, there are strong justifications to deny the entire cost recovery.

V. STAFF'S RECOMMENDED ADJUSTMENT TO NOBLES' REVENUE REQUIREMENTS

Q. **Notwithstanding the foregoing conclusion, did Staff also consider non-traditional ratemaking mechanisms to identify a methodology where for example, the fuel savings and other non-fuel savings could be recognized?**

A. Yes. Staff has made efforts to identify a non-traditional mechanism which would allow for recognition of such savings. Staff utilized the estimated cost benefit analysis associated with Nobles at the time Xcel filed the petition to seek approval to build this project in Minnesota. As discussed earlier, Xcel used a planning screening model called Strategist to estimate the PVRR of costs and benefits associated with Nobles. Staff calculated the percentage by which the estimated costs exceeded the benefits and used that percentage to identify the amount of revenue requirements that must be disallowed. The rationale behind this method is to consider what information Xcel used when making the decision to build Nobles.

Q. **Did Staff include other disallowances in addition to the one described above?**

A. Yes; Staff believes that the costs needed to be capped at **[confidential begins]** [redacted] **[confidential ends]** at the outset since that is the amount included in the same petition where Xcel provided the PVRR costs and benefits and sought approval to build the project in Minnesota. **See Exhibit _____(KM-1), Schedule 1 Page 29 of 67.**

Since Xcel sought to demonstrate that Nobles was a less expensive option through competitive bidding with other build/transfer wind generation options, it stands to reason that the utility should be held accountable to this amount.

Further, in PPA arrangements, suppliers cannot seek recovery of cost overruns and neither should Xcel be allowed to do so.

Q. **At the outset, what do you wish to clarify?**

A. I want to clarify that in this testimony, I am utilizing the revenue requirements of $2.039 million as the starting point. As mentioned earlier on in the testimony, this is the amount requested by Xcel and it is based on Xcel's approved rate of return of 8.32% from the last base rate case. I recommend that to the extent the Commission makes a determination to adjust the rate of return, that the revenue requirements be adjusted accordingly prior to making the adjustments I describe below.

Q. **Prior to providing the numerical calculations utilizing the methodology provided above, please explain what components are included in the costs and benefits.**

A. Xcel calculated the following:

- PVRR of the gross revenue requirements that included capital costs, operating costs and production tax credits
- PVRR of the benefits that includes fuel savings, O&M savings, avoided capacity and energy payments and avoided emissions costs

Q. Please provide the numerical calculation of the adjustments.

A. Xcel's actual costs exceed the amount in the Nobles petition by **[confidential begins]** [redacted] **[confidential ends]** million. This results in a **[confidential begins]** [redacted] **[confidential ends]** reduction at the outset. The requested

revenue requirement of $2.039 million is reduced to **[confidential begins]** [redacted] **[confidential ends]** million with this first base adjustment.

The next step consisted of utilizing the cost benefit case with the $4/ton assumption for carbon to identify the percentage by which the PVRR of the gross revenue requirements exceeded the PVRR of the benefits. We found that the $4/ton carbon case is reasonable to give some quantifiable recognition to emission reductions because at the time constructing Nobles was being contemplated, there was no actual legislation on carbon emissions – in fact, none exists today.

In the $4/ton carbon case, the PVRR of the benefits was **[confidential begins]** [redacted] **[confidential ends]** lower than the PVRR of the gross revenue requirements. See Table 1. This results in reducing the adjusted revenue requirements from **[confidential begins]** [redacted] **[confidential ends]** million to **[confidential begins]** [redacted] **[confidential ends]** million or a net reduction of **[confidential begins]** [redacted] **[confidential ends]** from Xcel's requested amount.

Table 1: Nobles: Costs Exceed Benefits Calculation (Confidential)

[redacted]

Q. **To be clear, is Staff recommending a [confidential begins] [redacted] [confidential ends] disallowance to the revenue requirement?**

A. Yes. Once again, it should be noted that the **[confidential begins] [redacted] [confidential ends]** disallowance is based on the revenue requirement of $2.039 million to be provided in Xcel's rebuttal testimony that utilizes the 8.32% rate of return authorized by the Commission in a previous rate case. As mentioned earlier, to the extent the Commission authorizes a different rate of return, the revenue requirements should be adjusted accordingly prior to calculating the **[confidential begins] [redacted] [confidential ends]** disallowance.

Q. **Was there rationale to lower the revenue requirements further that were not considered?**

A. Yes. Given actual results so far, Staff is giving Xcel the benefit of the doubt by taking their 2008 estimates. Since Nobles was not built based on need, there are justifiable reasons for adjusting the costs and the benefits based on Nobles actual operations in 2011 when it was in service for one full year. These include the following:

1) On the gross revenue requirement side, the production tax credits were based on a 41% capacity factor whereas the actual capacity factor for Nobles for 2011 was 32.76%. **See Exhibit _____(KM-1), Schedule 10.** This would result in raising the PVRR of the gross revenue requirements.

2) On the benefits side, no adjustments were made to fuel savings even though in 2011, the estimated savings were significantly lower at **[confidential begins] [redacted] [confidential ends]** million using actual hourly Nobles output

and locational marginal prices (LMPs) instead of the projected **[confidential begins]** [redacted] **[confidential ends].** Further, as a result of surplus of capacity at MISO, the prices for capacity in 2011 were very low (i.e. $10 per MW month or less for the summer months[1] as opposed to Xcel's projected forecast using **[confidential begins]** [redacted] **[confidential ends].**

3) It is also not clear if Xcel included the costs associated with the cycling of coal plants needed to accommodate wind.

4) Finally, it should be noted that Staff made repeated attempts to ask for a Renewable Energy Credit (REC) value to justify building so far in advance of need, Xcel did not provide such a value. **See Exhibit _____(KM-1), Schedule 12(a) and Schedule 12(b).** However, when there were discussions with Xcel regarding the prescribed methodology to adjust the revenue requirements downwards, Xcel provided a REC value of $3/MWh and stated that they wanted this value to be recognized. There is no documentation or rationale for why this estimate was given especially since no estimate was provided in earlier inquiries. Since Xcel has not sold any RECs to date, there is no justification to recognize this value.

Q. **What are the impacts on the revenue requirement for Nobles should the Commission wish to consider lesser or greater impacts of carbon?**

A. The revenue requirements would be **[confidential begins]** [redacted] **[confidential ends]** million (i.e., **[confidential begins]** [redacted] **[confidential ends]** disallowance)

[1] **See Exhibit 1_____(KM-1) Schedule 11.**

for the $0/ton carbon case and **[confidential begins]** [redacted] **[confidential ends]** million (i.e., **[confidential begins]** [redacted] **[confidential ends]** disallowance) for the $17.50/ton carbon case. If the Commission wishes to place lower or higher emphasis on carbon than what Staff recommends, it can require Xcel to revise the amount in the rate base accordingly. Also, as mentioned earlier, to the extent the Commission authorizes a different rate of return, the revenue requirements should be adjusted accordingly prior to calculating the disallowance.

Q. **In the event the Commission does not want to consider the foregoing non-traditional method of adjusting the revenue requirements for Nobles, what is your recommendation?**

A. On behalf of Staff, my recommendation is complete disallowance of costs for reasons identified earlier in my testimony.

Q. **Does this conclude your testimony?**

A. Yes.