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Xcel Energy

Docket No.: EL11-019

Response To: South Dakota Public Utilities Commission Data Request No. 8-13

Date Received: February 3, 2012

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Question:

Did NSP examine the purchase of REC's to defer or eliminate the need for Nobles? Please provide the study where this was examined. If not, please explain reasons why this was not examined.

Response:

At the time we contracted for this project, our analysis indicated that we would need Nobles and additional projects to meet our needs for compliance going forward. Furthermore, the renewable energy credit ("REC") market was not well developed at the time and still is not yet that developed, so relying on RECs would not have been the best course of action. Following is our discussion of the use of RECS for compliance from Pages 20-25 of the Company's December 3, 2008 Petition for investment approval of the project as submitted to the Minnesota Public Utilities Commission ("MPUC") in Docket No. E-002/M-08-1437.

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As of 2008, approximately 4,372,983 megawatt hours, or 10.3 percent of the electricity our customers use, come from renewable-based generation sources. By 2015, approximately 7,319,103 megawatt hours or just over 16 percent of the electricity we produce needs to come from renewable-based generation based on current statutes. Our most recent estimates indicate we will need to add on the order of 2,600 MW of wind power to our system by 2020 to meet the aggregate of these requirements. The Merricourt and Nobles Wind Projects are needed as an essential step in meeting the combined policy objectives in all of our jurisdictions.

We plan and operate our five-state system on a system-wide basis. The forecast used to determine the system's resource needs includes our customers' needs in Minnesota, Michigan, North Dakota, South Dakota and Wisconsin. In determining these needs, we forecast the number of customers and MWh sales by customer class for each of the five state jurisdictions separately and then aggregate them. To determine RES need, we evaluate each jurisdiction's retail sales separately and calculate that

jurisdiction's renewable requirements based on its specific law. We compare those requirements against available renewable energy credits (banked and generated) for each year to determine if additional resources are needed to meet the requirement.

## **1. M-RETS Program**

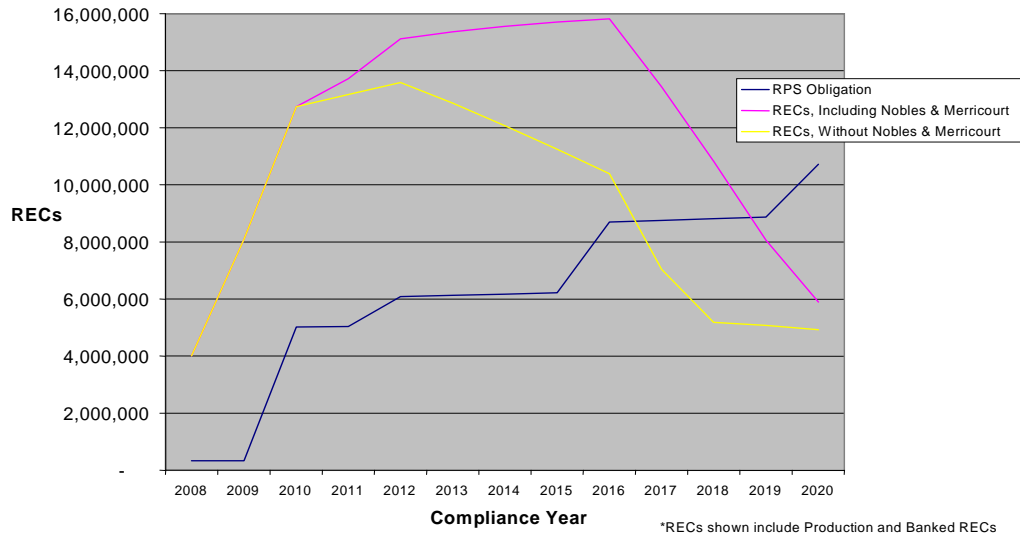
Compliance with the RES is accomplished by retiring Renewable Energy Credits ("RECs") from the Midwest Renewable Energy Tracking System ("M-RETS"). According to M-RETS, a REC refers to all of the attributes from one MWh of electricity generation from a renewable generating unit that is registered with M-RETS. Thus, if a utility needs to demonstrate that it had sufficient renewable energy to meet an obligation of 300,000 MWh, it would do so by retiring 300,000 RECs in its M-RETS account.

In approving the M-RETS system, the MPUC authorized utilities to save or "bank" RECs for up to four years after the year of generation, so if they are not needed for compliance in the year they are generated, they can be saved and used up to four years later for compliance purposes (Docket No. E-999/CI-04-1616). Banking is an important component of RES compliance, because it allows utilities to be more flexible in their implementation of renewable energy generation resources. For example, a utility may construct a larger wind farm earlier than needed for compliance in order to take advantage of a low cost or the federal production tax credit ("PTC").

On October 28, 2008, the MPUC ordered that the RES for 2008 and 2009 be set at one percent of retail sales and required all utilities to retire RECs for compliance at that level for both years. Excess RECs in those years can be banked pursuant to the four-year shelf life.

Based on all of these requirements, a comparison can be made between the fulfillment of the RES requirements with and without the Nobles Wind Project. Assuming that all of the RECs associated with our renewable energy projects are available for Xcel Energy's use, without the Nobles Project, we forecast that our RES obligation cannot be met with current production and banked RECs past 2016. The anticipated production from this wind project will allow us to meet our RES obligation through 2018 if all the other elements of our plan materialize. Figure 1 shows our expected RES compliance forecasts with and without the Nobles and Merricourt Wind Projects.

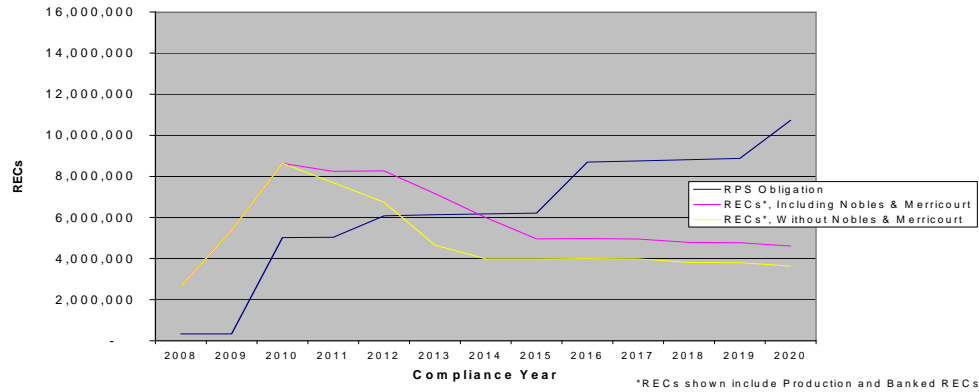
**Figure 1**  
**RES Compliance Forecast**  
**(Assumes All Available RECs)**



## 2. Treatment of Silent RECs

The above compliance forecast in Figure 4 assumes that all RECs associated with all of our power purchase agreements (“PPAs”) will be available to Xcel Energy. However, there is not currently an agreement over how to treat the RECs of some of our older PPAs where the contract does not specifically assign the RECs separately from the renewable energy purchased (“Silent RECs”). As a result, we have analyzed a scenario that assumes that we will not be able to count the Silent RECs. In 2010, contracts that are silent on RECs represent approximately 28 percent of our generation from eligible energy technologies, or 4.5 percent of our Minnesota retail sales. Figure 2 compares our RES obligation (in RECs) to the production of eligible renewable resources, not including the production from any PPAs that are silent on REC ownership. Under this scenario, if the Nobles and Merricourt Projects are not included in the forecast, the Company projects to meet our RES obligations only through 2012. With the inclusion of the Nobles and Merricourt Projects in the forecast, we expect to meet our RES obligation through 2013.

**Figure 2**  
**RES Compliance Forecast**  
**(Without Silent RECs)**



### 3. RES Compliance Hedge

Having the additional RECs that are represented by the Nobles and Merricourt Wind Projects in the early years provides us with a hedge against factors that could hamper our compliance with the RES. Our forecast compliance with the RES is based on many things we do not control. Two of these are our forecast of customer demand and energy and the capacity factor of the wind.

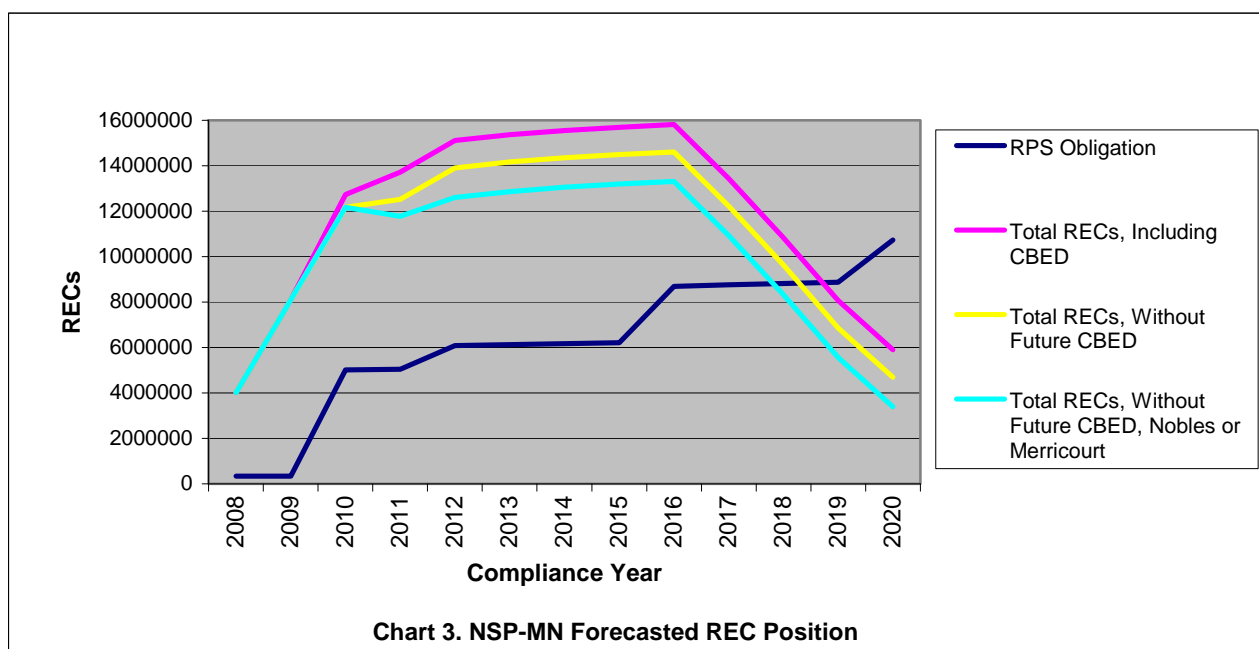
Our plan to meet the RES in futures years is based on our forecast of energy sales, but compliance is based on actual retail sales for the year in question. At the time we filed our 2007 Resource Plan in December 2007, our energy forecast was 3.5 percent higher. Due to economic conditions, in August, 2008 we revised that forecast downwards. Between now and 2020, the economic conditions could just as quickly change again, and the number of RECs we would need to comply would correspondingly increase. Our ability to bank any extra RECs produced by the Nobles and Merricourt Wind Projects now will provide the Company added flexibility should economic conditions suddenly change. Banking the additional RECs will not only provide a hedge against changing economic conditions, but will provide added flexibility for future compliance.

Similarly, while the RES is based on energy, we plan our compliance by determining how much capacity we will need to install to generate the required RECs. We do this by estimating the capacity factor of the wind resource. While wind forecasting is becoming more accurate, long-term weather patterns are still variable and we can

easily experience low-wind years where we might not generate enough energy to meet the RES, even though we planned appropriately.

In addition to these issues, we face other uncertainties that may influence compliance. As noted above, the treatment of Silent RECs has a large impact on our ability to comply with our RES after 2011. We have also included in our compliance planning a certain amount of C-BED contracts that may or may not reach commercial operation. Figure 3 demonstrates how C-BED contracts may affect the number of RECs we have available.

**Figure 3**  
**Forecasted RECs**  
**With & without Planned C-BED**



The Nobles and Merricourt Wind Projects are important parts of our strategy to meet our renewable energy obligations. It will add diversity to our renewable resources by adding an additional Company-owned resource to our portfolio. Further, the Nobles and Merricourt Wind Projects will provide hedges against an uncertain future and the possibility that certain planned for renewable resources will not be available.

#### 4. Summary of RES Compliance

The Nobles and Merricourt Wind Projects are appropriate projects for the Company to meet RES obligations. All of the following reasons support a finding that the project promotes RES compliance.

- We need to add approximately 2,600 MW of additional renewable energy generation to our system. The Nobles and Merricourt Wind Projects will provide an additional 351 MW of nameplate capacity to meet that goal.
- These projects provide a sound hedge against future uncertainty. Addition of these projects will help fill our RES requirements to the 2012 to 2018 time frame depending upon whether the Silent RECs can be included. Even with the Silent RECs, our ability to bank RECs is a key element in our strategy and will allow us to use RECs strategically in later years.
- These projects provide additional diversity in our wind energy generation portfolio by adding additional owned resources. Without these projects, the Company risks RES non-compliance if several hundred megawatts of C-BED projects currently in negotiation fail to materialize.
- Approval of the Projects will provide the Company some flexibility in dealing with uncertain economic conditions.

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