

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

Beverly Jones Heydinger	Chair
Nancy Lange	Commissioner
Dan Lipschultz	Commissioner
Matthew Schuerger	Commissioner
John Tuma	Commissioner

IN THE MATTER OF XCEL ENERGY’S
2016-2030 UPPER MIDWEST RESOURCE
PLAN

DOCKET NO. E002/RP-15-21

REPLY COMMENTS

INTRODUCTION

Northern States Power Company, doing business as Xcel Energy, submits to the Minnesota Public Utilities Commission this Reply to the July 8, 2016 Comments received on its 2016-2030 Upper Midwest Resource Plan in the above-referenced docket.

The process for approving this resource plan has taken longer than anticipated, due in large part to the unprecedented level of collaboration between the Company and our stakeholders. This collaborative approach helped to reshape our proposal to achieve greater carbon dioxide (CO₂) emissions reductions – and to achieve significant stakeholder alignment on key elements of our plan. This resource plan is also non-traditional in that the Commission is being asked to consider *location* in addition to the traditional size, type, and timing decisions – and to more definitively consider specific plan components beyond the typical 5-year action plan period. We believe these departures from traditional resource planning have had a positive effect on our Current Preferred Plan and have resulted in the significant consensus on our plan reflected in stakeholders’ comments.

For example, some of the supportive feedback in Comments includes the Department concluding that our plan is the least-cost scenario and that it “clearly stands out as the best overall plan.”¹ This conclusion was based on an extensive analysis that considered a number of baseload plant retirement scenarios. Similarly, we understand Comments from other stakeholders such as the Clean Energy Organizations (CEO), Minnesota Pollution Control Agency (MPCA), the City of Becker, Sherburne County,

¹ Department Reply Comments at page 15 (July 8, 2016).

NextEra Energy Resources, LLC, and Invenergy LLC to reflect considerable support for our plan. There is widespread agreement among stakeholders, for instance, to add significant wind resources – particularly in the early years of the planning period – in order to capture Production Tax Credit (PTC) benefits for customers. Likewise, our stakeholders broadly agree with our proposal to retire Sherco Units 1 and 2 in the mid-2020s and to begin the process of transforming our fleet.

With the consensus that has emerged, the next question is what issues remain unresolved. While parties take somewhat different views on the timing and amount of renewable additions, we recognize that there is more than one reasonable path forward and do not foresee significant impediments to moving ahead with our plan. Likewise, while the Department analyzed a scenario that excluded North Dakota from the rest of the NSP System, we do not interpret the Department's Comments to preclude approval of our Current Preferred Plan. We believe this issue is best addressed in the open docket on jurisdictional cost allocations.

There is one issue however, where we believe the Commission must make a determination in order to pave the way to achieve the 60 percent reduction in CO₂ emissions that we have proposed. Namely, we need the Commission to go a step beyond what is typical in resource planning by approving the size, type, timing, *and location* of the generation that is needed to partially replace Sherco Units 1 and 2 and support the regional grid.

Some of our stakeholders have expressed an interest in preserving flexibility as to the replacement generation that will be needed once the Sherco Units are retired. Similarly, while the Department affirmed the need for the addition of a combined cycle resource upon the second Unit retirement, it noted that there appears to be sufficient time for another resource plan cycle to be completed before a decision on the acquisition of the resource would be required. We respectfully maintain that the record supports a decision in this resource plan and that the decision should not wait for our next resource plan.

Executing the transition of major baseload generating assets like Sherco Units 1 and 2 will take considerable time and advance planning. The same is true for the planning and construction of an onsite combined cycle to support our grid reliability following the retirements. Our Current Preferred Plan provides a runway for the Company to complete the acquisition, planning, permitting, and construction processes. This runway is critical to achieving the Sherco retirements by the dates proposed in our plan.

In this proceeding, we have presented extensive analysis regarding the impact that the

Sherco retirements would have on the regional grid, central Minnesota and the City of Becker, Liberty Paper's business operations, and our Sherco employees. All of these issues are best mitigated by an onsite natural gas combined cycle at Sherco. Approval of our plan, including the size, type, timing, and location of replacement generation for Sherco should not wait for our next resource plan. Similarly, with respect to the substantial wind additions proposed in our plan and affirmed by the Department and others, we believe it is important for us to describe the acquisition process that we intend to use. This will allow us to move swiftly to deliver the cost savings associated with 100 percent PTC qualification to our customers.

We are eager to move forward, and we respectfully request that the Commission approve of the Company taking the following actions:

- Retiring Sherco Units 1 and 2 in 2026 and 2023, respectively, and construct a combined cycle generating unit at Sherco with an in-service date to coincide with the second unit retirement. Work with the Department of Commerce on the specific aspects of an acquisition filing to ensure the Company provides the information necessary to fully analyze its proposal;
- Acquiring at least 1,000 and possibly as much as 1,500 MW of cost-effective wind resources in the pre-2020 timeframe, maximizing available PTC benefits for customers, and targeting an overall mix of 50 percent owned resources and 50 percent purchased power;
- Monitoring solar resource additions from the Company's small solar programs; propose additional solar projects that the Company believes will provide benefits to its customers;
- Achieving 1.5 percent energy efficiency savings over the planning period;
- Continuing to examine the jurisdictional cost allocation issues in the established separate proceeding (Docket No. E002/M-16-223);
- Filing its next Integrated Resource Plan in 2018 and including:
 - A full and thorough cost effectiveness study that takes into account the possibilities for expanded and more dispatchable demand response on its system including sensitivities at different economic dispatch price points. Pricing programs such as dynamic pricing and critical peak pricing should be considered in the report, a movement toward smart meters and interactive technology. (*Department recommendation*)
 - A range of potential greenhouse gas reduction achievements. (*Department recommendation*)
 - The outcomes from the Company's jurisdictional cost allocations proceeding (Docket No. E002/M-16-223)
 - An in-depth analysis regarding the future of Prairie Island

We focus the balance of this Reply on the processes we intend to employ to implement our plan, as follows:

- *Construct the Sherco Combined Cycle to mitigate identified impacts of retiring Sherco Units 1 and 2.* In Section I, we discuss the acquisition filing we intend to submit within 18 months of the Commission’s approval of our plan for the Sherco combined cycle, which will provide further detail on our process, timeline, and costs. We intend to continue to work with the Department on the specific aspects of the acquisition filing to ensure we provide the information necessary to fully analyze our proposal.
- *Add wind resources that deliver PTC benefits for our customers.* In Section II, we discuss the existing acquisition processes that we intend to use to add our proposed wind resources to our system – whether it be through purchased power or a self-build option. For projects other than self-build, we propose to use the Track 1 competitive Request for Proposal (RFP) process. For self-build projects, we propose to use the Renewable Energy Standard (RES) exemption provided by Minn. Stat. § 216B.243, subd. 9, in combination with Track 1 results to demonstrate the competitiveness of our self-build proposal. We believe this process will benefit our customers by ensuring that all resource additions are cost competitive – and that we serve our customers through a mix of resource types.

Finally, in Section III, we respond to parties’ Comments, including jurisdictional cost allocations, early retirement of our A.S. King plant, further analysis of Prairie Island (PI) costs and Clean Power Plan (CPP) compliance, the acquisition of additional solar resources, and our demand and energy forecast. We acknowledge the importance of these issues; however, none of the issues raised preclude the Commission from approving our plan. Rather, we agree with the Department’s analysis that our Current Preferred Plan is the best overall plan.

We appreciate the Department’s and other stakeholder’s analyses and comments on our plan. We recognize this resource plan has gone beyond what is typical of resource planning dockets. It has taken longer, involved an exceptional level of stakeholder collaboration, expanded the analysis typical of the 5-year action plan through the mid-2020s, and included specialized analyses toward location-specific considerations. We believe each of these departures from traditional resource planning has had a positive effect on the plan we have proposed and resulted in significant alignment among our stakeholders.

I. PROPOSED COMBINED CYCLE AT SHERCO

In October 2015, we proposed to retire Sherco Units 1 and 2 – two of the largest generating units in the Upper Midwest – and in doing so, establish retirement dates that are technically feasible, allow for an orderly workforce transition, and align with our resource needs. To that end, we proposed to cease coal operations at Sherco Unit 2 in 2023 and Sherco Unit 1 in 2026.

An important consideration in assessing the technical feasibility of retiring generating units is the replacement plan. While we have proposed to construct a natural gas combined cycle onsite at Sherco by 2026, we have not proposed to replace Sherco Unit 1 and 2 capacity megawatt for megawatt. Rather, we have proposed to replace approximately half of the megawatts with the combined cycle – and committed to energy efficiency gains, grid modernization, and the addition of significant renewable resources to replace the remaining megawatts. Our proposal to accelerate renewable additions in the pre-2020 timeframe is partly to capitalize on favorable market pricing and anticipated tax credits, but also to bring replacement generation online to ensure reliable service for our customers during the Sherco transition.

As we have discussed, the size, type, and timing of additional thermal generation involves multiple considerations, including system stability needs, resource needs, and regional, state, and local economic and policy considerations. The Department's analysis affirmed the need for a combined cycle in 2026. We have demonstrated through the studies we have conducted that a combined cycle generating unit at the Sherco location provides many important benefits to the transmission system, including reactive power for voltage support and dynamic response for system stability. Further, it will cost-effectively mitigate the grid impacts identified in the Midcontinent Independent System Operator (MISO) Attachment Y2 study that we discussed in our January 29, 2016 Supplement.

A combined cycle at Sherco also reinforces our commitment to Central Minnesota generally, and Becker specifically – providing continued commitment through jobs, property taxes, and presence in the communities of Central Minnesota. It will enhance natural gas supply and provide options for continuing support of steam supply to Liberty Paper, an important employer in the Becker area and a critical part of Minnesota's recycling industry. Finally, our customers will benefit from our ability to capitalize on the existing infrastructure at the Sherco site, including transmission, land, water, and site services.

Constructing a natural gas combined cycle at Sherco is a large-scale project that will require extensive planning, engineering, and coordination over an approximate seven-

year timeframe. This time is necessary to obtain the necessary approvals and permits, engineer and build the combined cycle generating facility, and coordinate the project with the decommissioning of the coal units at the existing plant site. Thus, to accomplish the Sherco retirements by the dates proposed in our plan, we need to begin the planning and acquisition work soon. For that, we need to establish a path certain not only for the Unit retirements – but also for how we will replace the energy and capacity on the system, ensure grid reliability to MISO’s satisfaction, and continue to support our employees and host community of Becker following the transition.

As we noted previously, the CEO and Department suggested there is time to allow for technologies to evolve or to complete another resource planning cycle before taking action. If this were a traditional resource plan with no locational impacts and no specific retirement commitment for large, baseload generating facilities, we might agree that the determination of how to best meet the capacity and energy need could wait for the next planning cycle. However, we have demonstrated that the Sherco combined cycle is more than just capacity and energy on the system. As described in our January 29 Supplement, we have gone beyond the analyses typically conducted in resource planning proceedings and identified reliability and socioeconomic impacts that must be considered.

Specifically, we conducted multiple transmission studies – including MISO Attachment Y2 Study and a third-party transmission study – to assess the grid implications of no longer operating Sherco Units 1 and 2 and siting capacity at other locations on the NSP System. We completed a Black Start Plan Analysis to assess the implications associated with altering our system restoration path in the event of a major system outage. Finally, we commissioned a socioeconomic analysis to assess the socioeconomic impacts of our revised plan on the Becker area.

Among other things, the MISO Y2 Study concluded that retirement of Sherco Unit 1 and Sherco Unit 2 would result in violations of applicable planning criteria that would require transmission upgrades and the need for Units to be designated as System Support Resources (SSR). Assuming a future Attachment Y study would have similar results, MISO would require that the identified violations be mitigated to its satisfaction prior to retirement of Sherco Units 1 and 2. We therefore believe it is important to approve our proposal for replacement generation in this resource plan, and believe the record supports a decision as to the size, type, timing and location of the onsite combined cycle at Sherco.

We agree with the CEO that a further proceeding is appropriate to demonstrate that our proposal complies with relevant state energy policies, contains customer protections, and facilitates public participation. However, it is important to begin this

process before the next resource planning cycle so we have sufficient time before 2026 to plan the project, optimize the engineering design of the facility, and leverage the major equipment supply contracts to the benefit of our customers. These tasks are critical for the Company to successfully plan and build a cost-efficient generating unit that allows retirement of the second Sherco Unit.

For additional context, below we outline major milestones and the estimated time required to complete them toward a 2026 in-service date – some of which are sequential, while others can be done at least somewhat concurrently:

- *Acquisition filing.* We would submit the acquisition filing within 18 months of Commission approval of our Resource Plan. Based on past proceedings, we expect this proceeding could take approximately two years to complete, once filed.
- *Site and air permits for the new combined cycle plant.* We expect this permitting will take approximately one year.
- *Site permits for the natural gas infrastructure.* We expect the permitting for the new natural gas infrastructure to serve the combined cycle plant will take up to one year.
- *Land and right-of-way agreements, engineering, procurement and construction of the new gas pipeline.* We expect these project aspects will take up to three years.
- *Detailed engineering design, procurement of major equipment, the balance of plant design and construction, and commissioning of the new units.* We expect these project components will take up to five years.

We expect our acquisition filing will incorporate detailed cost estimates for the project, an analysis of alternatives to the onsite combined cycle, and a description of the competitive procurement process to obtain the major equipment in a cost-effective manner to the benefit of our customers. We intend to work with the Department on the details of this filing to ensure we provide the information necessary to fully analyze our proposal.

Assuming a 2018 acquisition filing, the earliest we would likely be able to achieve commercial operation of the onsite Sherco combined cycle is 2025. This timeline does not allow for completion of another resource planning cycle before initiating an acquisition filing. Obtaining certainty for the onsite Sherco combined cycle now ensures we can cease coal operations at Sherco Units 1 and 2 on schedule. It allows reasonable time to address any unforeseen delays; the ability to make our Attachment Y filing with MISO sooner to obtain certainty regarding the mitigation of grid

impacts;² and, we will have the flexibility to adjust to market price volatility during the procurement process to our customers' benefit. A delay in a determination regarding the proposed Sherco combined cycle to the next Resource Plan will put at risk the dates-certain we have proposed for retiring the Sherco Units.

II. WIND ACQUISITION PROCESS

We are proposing to add at least 1,000 MW and possibly as much as 1,500 MW of wind resources in the pre-2020 timeframe. In order to secure 100 percent of the PTC cost-saving benefits for our customers, projects must obtain safe harbor in 2016, and must be in-service by the end of 2020. We therefore believe that it is important that we describe the acquisition process we intend to use, so that parties know what to expect and we are therefore better positioned to capture the full benefits for our customers.

In Comments, the Department also requested that we explain the acquisition process for the resources proposed in our Current Preferred Plan – along with any modifications necessary to acquire the resources in a fair and transparent manner, while minimizing costs to our customers. In this Section, we discuss the processes we intend to use for the near-term wind resources we have proposed, which we note are existing processes. We additionally provide as Attachment A, the process information that the Department requested.

We believe an overall mix of 50 percent purchased power and 50 percent Company-ownership of wind resources balances the risks and benefits for the Company and our customers. Likewise, maintaining a balance of ownership structures provides predictability and an important hedge against future market prices, and ensures that our customers realize the full benefits of resource additions such as Emission Rate Credits or other environmental attributes.

We intend to pursue a self-build project and propose to use the RES Exemption provided by Minn. Stat. § 216B.243, subd. 9,³ in combination with a Track 1 RFP process⁴ for the dual purpose of procuring wind projects and demonstrating the

² The Attachment Y2 Study is to determine whether it is likely that the system resource would qualify as a System Support Resource (SSR) in conjunction with an Attachment Y Study, which is a final, binding study that must be conducted under the MISO tariff once a retirement date-certain is determined. *See* Section 38.2.7 of the MISO Open Access Transmission, Energy, and Operating Reserve Markets tariff.

³ Notably, even if the Commission does not agree that our proposed wind additions qualify for treatment under the RES Exemption, we believe a similar regulatory path could be achieved by utilizing a comment process under Minn. Stat. § 216B.243 or by finding that our proposed process qualifies as a “bidding process approved or established by the Commission” under Minn. Stat. § 216B.243, subd. 5(b).

⁴ The Commission established the current two-track process in Docket. No. E002/RP-04-1752.

competitiveness of our self-build proposal. Specifically, we propose to use a process that will include the following steps:⁵

1. We would issue an RFP for wind project proposals.
2. The day before we receive responses to that RFP, we will submit our self-build project petition. This petition will contain an estimate of final costs for the project and other project details necessary to evaluate our proposal in accordance with the factors identified above.
3. After receiving bids in response to our RFP, we will evaluate the bids and select projects for contract negotiation that are in the best interest of our customers. We will evaluate the bids using a number of factors, such as:
 - Levelized cost;
 - Financial capability;
 - Project schedule;
 - Project design;
 - Project risks;
 - MISO queue position status;
 - Interconnection and network upgrades;
 - Energy production profile;
 - Site control;
 - Project output delivery plan;
 - Expected turbine availability;
 - Pricing options;
 - Project development milestones;
 - Exceptions to standard contract terms and conditions; and
 - Other relevant factors

Using these criteria, we will select projects that are in the best interest of our customers and will negotiate contracts with each of the developers.

⁵ We believe that applying a Track 2 process to Company self-build projects would be both lengthy and burdensome, and would not provide greater benefits to our customers. We note that the recent Track 2 acquisition process in Docket No. E002/CN-12-1240 (CapCON) took nearly two years from the time bids were submitted to the time the Commission issued its final Order. In order to participate in a Track 2 proceeding, bidders not only have to prepare bids, but must participate in a contested case proceeding before an Administrative Law Judge. This requires the submission of Direct Testimony, Rebuttal Testimony, Briefs and Discovery. While the process ensures a robust review, the participation of only four bidders in the CapCON process may indicate that bidders viewed the process as unduly burdensome. In contrast, we received 57 project proposals in response to our Wind RFP using a Track 1 process in our most recent wind acquisition.

4. We will then make a filing to the Commission that will include the contracts for projects selected from the RFP, as well as a comparison between those projects and our self-build proposal. We will include a ranking and bid data for all bids received in response to the RFP and an analysis of the factors identified above for all projects for which we conduct due diligence. Additionally, we will provide an independent third-party auditor report of our RFP process, which will review our evaluation of proposals and due diligence, as well as our selection of proposals for contract negotiation.

We believe this process is fair and transparent and will ensure that we are able to acquire additional wind resources in a reasonable and timely manner. We have already taken steps internally to segregate employees working on a self-build proposal from the employees overseeing the RFP process.

We note that projects acquired under the Track 1 process are exempt from the Certificate of Need statute.⁶ And as already discussed, we propose to file under the RES Exemption provided by Minn. Stat. § 216B.243, subd. 9, which provides an exemption to the Certificate of Need requirements for wind and solar facilities. That statute states:

Renewable energy standard facilities. This [certificate of need] section does not apply to a wind energy conversion system or a solar electric generation facility that is intended to be used to meet the obligations of section 216B.1691; provided that, after notice and comment, the commission determines that the facility is a reasonable and prudent approach to meeting a utility's obligation under that section. When making this determination, the commission must consider:

- (1) the size of the facility relative to a utility's total need for renewable sources;
- (2) alternative approaches for supplying the renewable energy to be supplied by the proposed facility;
- (3) the facility's ability to promote economic development, as required under section 216B.19, subdivision 9;
- (4) the facility's ability to maintain electric system reliability;
- (5) impacts on ratepayers; and
- (6) other criteria as the commission may determine are relevant.

We will analyze these six-factors in our self-build Petition.

⁶ Minn. Stat. § 216B.2422, subd. 5 or Minn. Stat. § 216B.243, subd. 9

Subsection (b) of 216B.1691, subd. 2a, sets out renewable energy objectives specifically for Xcel Energy (defined as “[a]n electric utility that owned a nuclear generating facility as of January 1, 2007”). The statute requires that, by 2020, at least 30 percent of the Company’s total electric sales to retail customers in Minnesota be generated by renewable energy sources such as wind and solar. It goes on to provide more specific requirements with respect to our mix of wind and solar:

Of the 30 percent in 2020, at least 25 percent must be generated by solar energy or wind energy conversion systems and the remaining five percent by other eligible energy technology. Of the 25 percent that must be generated by wind or solar, no more than one percent may be solar generated and the remaining 24 percent or greater must be wind generated.⁷ [Emphasis added]

In order to comply with the “24 percent or greater” wind objective, we will need to add significant wind resources to maintain our compliance when the full requirement takes effect in 2020. The following chart details our RES obligations based on our Fall 2014 forecast, our forecast of qualifying generation based on the Strategist modeling for our Current Preferred Plan, and our resulting compliance with the RES:⁸

Total RES Obligation Summary – State of Minnesota (GWh)

	2016	2017	2018	2019	2020	2021	2022
Total MN Calendar Year REC Production	8,111	8,656	8,779	8,547	8,568	8,558	8,525
RES Obligation	7,693	7,701	7,720	7,735	9,296	9,273	9,298
<i>Difference (Production - Requirement)</i>	418	954	1,059	812	(728)	(716)	(773)
Minnesota RES Wind Obligation	2016	2017	2018	2019	2020	2021	2022
Total MN Wind Production	6,029	5,996	5,978	5,692	5,665	5,633	5,623
MN State 2020 RES Wind Obligation (24%)					7,437	7,419	7,438
<i>Difference (Production - Requirement)</i>					(1,772)	(1,785)	(1,815)

As shown above, we do not expect to have sufficient generation to meet our 2020 RES requirements without additional wind generation.⁹ Because the wind additions proposed in our self-build Petition would be used to satisfy the RES, we believe it would qualify for the Certificate of Need exemption set-out in Minn. Stat. § 216B.243,

⁷ Minn. Stat. § 216B.1691, subd. 2a, subsection (b).

⁸ Our June 1, 2016 REO-RES Compliance Report (Docket Nos. E999/M-16-83 and E999/PR-16-12) differs primarily due to the use of an updated (Spring 2016) sales forecast and updated commercial operation dates for the Odell and Courtenay projects. The updated CODs for Odell and Courtenay result in a reduction of approximately 1,000 GWhs in 2016.

⁹ The Company could rely on banked RECs, but would still need to add wind in order to maintain compliance.

subd. 9. As discussed in Attachment A to this Reply, the Commission has relied on this exemption to evaluate the Company's previous wind approval petitions, including the Petition for Approval of the Prairie Rose PPA¹⁰ and the Petitions to Acquire the Border Winds, Courtenay, Odell, and Pleasant Valley projects.¹¹

To be sure, we currently project that we will have sufficient Renewable Energy Credits (RECs) to meet our RES obligations through 2024. However, we do not currently track RECs generated by wind separately, and we obtain a significant portion of our RECs from resources other than wind. Therefore, to ensure compliance with the 24 percent wind requirement in 2020, we propose to add sufficient wind resources to meet the minimum wind generation requirement. Additionally, we note that the renewable energy statute sets only minimum standards, using the phrase "24 percent or greater must be wind generated."

We believe the process outlined above provides a fair and transparent path for the acquisition of the wind resources in our 5-year action plan. We appreciate the opportunity to present our intended process in these Reply Comments. The near-term acquisition of wind resources is an important part of our overall plan to reduce CO₂ emissions and bring replacement generation online to ensure reliable service for our customers during the Sherco transition, while maintaining reasonable rates for our customers.

III. MISCELLANEOUS

In this section, we discuss a few additional issues raised in parties' July 8, 2016 Comments – none of which preclude the Commission from approving the plan we have proposed.

A. Jurisdictional Cost Allocations

While the Department did not raise any issues that suggest the Commission cannot move forward with the plan we have proposed, the Department analyzed a scenario that excluded North Dakota from the rest of the NSP System in an effort to examine the impact of potential jurisdictional cost allocation issues. We agree that the jurisdictional cost allocation issues we separately raised are an important issue and will have implications on the integrated NSP System. However, we also agree with the Department that this issue need not be resolved as part of this resource plan and is

¹⁰ Docket No. E002/M-11-716.

¹¹ Docket Nos. E002/M-13-603 and E002/M-13-716.

best addressed in the open docket on jurisdictional cost allocations (the Resource Treatment Framework or RTF).¹²

Our RTF analysis continues to be underway, with maintaining the integrated NSP System structure at one end of the spectrum, and the scenario the Department analyzed – separating North Dakota from the NSP System – at the opposite end of the spectrum, with many options falling in between. We respectfully disagree with the Department that the allocation issues stem from our inability to manage multiple NSP System jurisdictions. As we discussed in our June 13, 2016 filing in the RTF docket, we have successfully managed the integrated NSP System for almost 100 years. During all but the most recent years of this period, we have effectively maintained and operated an integrated system and received the support of regulators in all of the states we serve with respect to our resource decisions. However, future resource decisions related to the turnover of our fleet will continue to put pressure on the traditional integrated system model.

We have committed to submit the results of our RTF analysis and recommendations to the Minnesota and North Dakota Commissions by January 1, 2017. We look forward to a continued dialogue with the Commission on these issues and next steps.

B. Early King Plant Retirement

As we noted previously, the Department's analysis concluded that our proposed plan that includes retiring and replacing Sherco Units 1 and 2 in the mid-2020s is the least cost scenario and clearly stands out as the best plan. However, the Department also analyzed scenarios that involve early retirement of our A. S. King plant in lieu of the second Sherco retirement. The Department's modeling included placeholders for significant considerations such as transmission impacts – and noted that the additional uncertainty of the impacts from an early retirement should be kept in mind when considering the modeling results.¹³

As we discussed in our March 21, 2016 Comments in this docket and our response to Department of Commerce Information Request Nos. 70 and 71, substantial further technical and economic study work would be needed to present a meaningful analysis of advancing an early retirement of King. From a transmission perspective, like Sherco Units 1 and 2, the King plant is situated on the 345 kV transmission system serving the Twin Cities metropolitan region. King is a large synchronous power

¹² See IN THE MATTER OF XCEL ENERGY'S FILING ON JURISDICTIONAL COST ISSUES, Docket No. E002/M-16-223.

¹³ The Department also recommended before a shutdown of the A.S. King plant is ordered that the Company obtain an estimate of the transmission impact. See Department Reply Comments at page 9 (July 8, 2016).

source that provides system voltage support along with necessary reactive power, and as a baseload generating facility, plays a very important role in maintaining system stability and reliability.

Additionally, because of its location on the eastern side of the Twin Cities near the border with Wisconsin, King also supports system stability and reliability in western Wisconsin, and transfers between the two areas. Because of its importance to the transmission system, an early shutdown of King could result in impacts to system stability, restoration, and reliability. We would need to conduct studies to understand transmission impacts, reliability concerns, black start capabilities, workforce implications, and economic impacts, including stranded cost recovery. Further, because King is situated on the St. Croix River and a scenic byway, we would need to consider the environmental impacts of its retirement and associated mitigation measures, including the possible construction of replacement generation and transmission and natural gas infrastructure.

We agree with the Department that there is significant uncertainty regarding the impacts of early retirement of the King plant. Because of this uncertainty, we do not believe that an early retirement of King is a viable alternative at this time. Rather, the Commission should approve our Current Preferred Plan, which the Department has also affirmed as the best plan.

C. Prairie Island and Clean Power Plan

The Xcel Large Industrials suggested that a final decision on our resource plan cannot be fully evaluated until there is more certainty around PI costs and the CPP. We respectfully disagree with this conclusion. In Comments, the Department noted that its analysis of PI was an initial high-level screening review to begin to respond to the Commission's inquiry about PI costs – and was done with the expectation that a decision regarding PI is not expected to be made for some time.¹⁴ The Department agreed with the Company that a decision to shut down PI should not be made at this time – and that it intends to continue its analysis. We agree with the Department that there are no decisions to be made on PI in this proceeding. We will provide an in-depth analysis concerning the future of PI in our next Resource Plan.

With respect to the CPP, we acknowledge that its status is currently uncertain. The U.S. Court of Appeals for the D.C. Circuit is currently hearing consolidated

¹⁴ Department Reply Comments at page 27 (July 8, 2016).

challenges,¹⁵ with a decision expected in late 2016/early 2017, which is expected to be followed by a petition for Supreme Court review and a Supreme Court decision potentially in 2017 or 2018. Enforcement of the CPP is stayed pending resolution of these challenges.¹⁶ However, like all utilities we reasonably expect to face new state and federal environmental regulations that will require continued action to reduce CO₂ and other emissions and evolve their generation portfolios. Whether those regulations are in the form of the CPP or other state or federal regulations, we have presented a plan that significantly reduces emissions at a reasonable cost, and we believe this plan to be in the best interests of our customers, stakeholders, shareholders and the environment.

In the event the CPP is upheld, one of the benefits of our plan is that it provides certainty for CPP compliance. It will bring our CO₂ emissions well below the CO₂ allowance budget we believe could reasonably be allocated to the Company in Minnesota's CPP state plan – and as such, may generate allowance revenues for our customers' benefit. Nonetheless, considering the likelihood of state or federal regulation, the multiple benefits of our plan, and its reasonable costs, we believe there is no reason to delay a decision.

D. Solar Additions

Based on our increased small solar forecast, the Department recommended that no additional solar resources beyond Solar*Rewards Community (Community Solar Gardens or CSG) be acquired during the 5-year action plan. In support of this conclusion, the Department cited: (1) the uncertainty around the capacity to be obtained through the CSG program; (2) the fact that no contingency other than lower prices resulted in solar units being selected; (3) the falling costs of solar power expected in the future; and (4) the potential for wind additions in excess of what was modeled in our Current Preferred Plan.¹⁷

We built our Current Preferred Plan to include cost-effective, large-scale solar additions that would put us on track toward achieving Minnesota's 10 percent Solar Energy Standard (SES) goal with little impact on the overall cost of the plan. To that end, we proposed to acquire 200 MW of large-scale solar in the pre-2020 timeframe, which we believe would put us on a reasonable path toward achieving that goal. However, we have maintained throughout this proceeding that the significant interest

¹⁵ *State of West Virginia, et. al., v. EPA, et. al.* U.S. Court of Appeals for the District of Columbia Circuit, No. 15-1363.

¹⁶ U.S. Supreme Court. February 9, 2016 Order in pending case 15A773 *State of West Virginia, et. al., v. EPA, et. al.*

¹⁷ Department Reply Comments at page 16 (July 8, 2016).

in our CSG program may affect our future need for large-scale solar. We continue to believe that it is important for our customers that we maintain flexibility in terms of the timing and mix of solar resources we add to our system.

We have sufficient solar resources to meet our near-term 2020 compliance obligations under Minnesota's SES. Additionally, we do not need to act with the same sense of urgency as with wind resources to capture available federal tax benefits for our customers, as the current benefit levels will be sustained for several years.¹⁸ Over the long-term, we continue to believe that a mix of small and large solar resources is important for our customers. In the near-term, we believe it is particularly important to monitor market forces driving down the cost of large-scale resources, and participation in our CSG program. We therefore seek flexibility to monitor the impacts of our CSG program, including the quantity of resources it delivers to our system and its rate impact on our customers. Simultaneously, we will monitor the large solar market, and propose additional solar during the 5-year action plan period if it proves to be in the best interest of our customers.

E. Sales Forecast and Energy Savings Potential

Finally, the CEO suggests that our load forecast overestimates future demand, and that we have underestimated cost-effective energy savings potential. We have demonstrated in the record of this proceeding that we have a strong track record of significant energy efficiency and demand response achievements – and stated our commitment to find new ways to elicit even greater levels of savings that will benefit both our customers and the whole system. To this end, we accepted the Department's recommended 1.5 percent demand side management goal through the planning period, which translates to 444 GWh of savings over that period.

With respect to our sales forecast, the CEO presents graphical representations of historical and forecasted sales growth for both the Company and the United States, and suggests that that since historical sales growth has been flat, a forecast of load growth must be flawed. However, we agree with the Department that our forecast is reasonable for planning purposes.¹⁹ Over the 2000 to 2007 time period, our sales grew at a pace of 1.4 percent per year. Our forecast for this resource plan is for our load to grow, on average, only 0.4 percent per year through 2030. This level of growth is in-line with the growth we have seen since 2007 after considering several

¹⁸ Investment Tax Credit (ITC) – The full bonus ITC of 30% is available for all projects that begin construction by the end of 2019 and are placed in service before the end of 2023. Additionally, a reduced bonus ITC is available for projects that begin construction by the end of 2020 (26%) or the end of 2021 (22%), so long as they also begin operations by the end of 2023.

¹⁹ Department Reply Comments at page 10 (July 2, 2015).

unique, one-time factors: (1) the great recession, which resulted in a 2.7 percent loss in sales in 2009; (2) firm wholesale contracts that accounted for 3.6 percent of total sales in 2007 that expired and were not renewed; and, (3) the loss of several large customers in 2012 due to plant closures, resulting in negative sales growth in both 2012 and 2013.

We have a long track record of achieving significant energy savings with our customers and have accepted the Department's recommendation for a sustained 1.5 percent energy savings goal over the planning period. We believe that our sales forecast is reasonable, and note that the Department has recommended the Commission approve it for planning purposes.²⁰

CONCLUSION

The plan we have proposed is in the public interest. It reflects substantial stakeholder collaboration and consensus, builds on our strong foundation of environmental performance, and ensures we will continue to reliably meet our customers' electricity needs in a cost-effective manner. It puts the Company on a path to transform its fleet in a planful, coordinated way that ensures we will meet current and evolving environmental regulations. Our Current Preferred Plan maintains a balanced diversity of energy sources and promotes an orderly, gradual transition of our generation fleet.

Dated: August 12, 2016

Northern States Power Company

²⁰ Department Reply Comments at page 52 (July 8, 2016).