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VIA U. S. AND ELECTRONIC MAIL

Mr. Steven M. Kahl, Executive Secretary
North Dakota Public Service Commission
State Capitol Building, Dept. 0408
600 East Boulevard
Bismarck, ND 58505-0480

RE: XCEL ENERGY 2020-2034 UPPER MIDWEST RESOURCE PLAN
CASE NO. PU-19-___

Dear Mr. Kahl:

Pursuant to the provisions of the Settlement approved by the Commission in Case No. PU-07-776, Northern States Power Company, doing business as Xcel Energy, submits eight (8) copies of its 2020-2034 Upper Midwest Resource Plan (Plan) filed with the Minnesota Public Utilities Commission.

We look forward to continued conversations with Commission Staff regarding this Resource Plan and the opportunity to build upon previous discussions to implement a separate, formalized Resource Plan process in North Dakota for the next planning cycle. We also offer to present this 2020-2034 Resource Plan to the Commission at a future Periodic Information Exchange meeting, Informal Hearing, or another venue of the Commission's choice.

Overview

The development of the Company's 2020-2034 Resource Plan is the product of a stakeholder process in Minnesota involving public workshops, an independent expert analysis, and information sharing. The Plan was also designed to support the Company's goal of reducing carbon emissions (in 2005) 80 percent by 2030, and continue progress toward its ultimate vision of 100 percent carbon-free energy by 2050.

At the same time, this Plan ensures the same level of reliability our customers have enjoyed for decades. This is accomplished primarily through the proposed extension of the Company's Monticello nuclear plant by an additional 10 years and the continued operation of the Prairie Island nuclear units through their current license. In addition, Xcel Energy proposes to purchase the 765 MW Mankato Energy Center combined cycle facility, and construct a new natural gas combined cycle plant at our Sherco site in 2026. These large, dispatchable resources will be critical as we retire 2,400 MW of coal-fired baseload in the next decade and transition to a system that is more than 50 percent intermittent renewables. Finally, we also propose several peaking resources but defer these additions until the latter part of the Plan period with the view that resources such as batteries will continue to improve and decline in cost.

The key components of the 2019 IRP include:

- Extend the Monticello nuclear plant license from 2030 to 2040, and operate both Prairie Island units through the end of their current licenses (PI Unit 1 to 2033 and PI Unit 2 to 2034),
- Retire our last two coal units early: the King plant in 2028 (nine years early) and Sherco 3 in 2030 (ten years early);
- Continue our plan to retire Sherco 1 and 2 in 2026 and 2023, respectively, and commit to offering Sherco 2 into MISO on a seasonal basis until its retirement,
- Acquire and operate the 765 MW Mankato Energy Center (MEC) and build, own and operate a 750 MW Sherco Combined Cycle (Sherco CC) to satisfy capacity and operational need created by coal closures,
- Acquire 4,000 MW of utility-scale solar generation between 2025 and 2034,
- Add 1,202 MW of cumulative wind by 2034 as part of a “no going back” strategy, replacing wind scheduled to retire during that period.
- Starting in 2031, add 1,728 MW of cumulative firm dispatchable resources by 2034,
- Include energy efficiency programs representing an average of approximately 780 GWh of savings in Minnesota annually for each year through 2034, in addition to 400 MW of Demand Response by 2023.

With this proposed Plan, Xcel Energy believes it can keep annual cost growth at or below the rate of inflation. This is accomplished by deferring resource additions until later in the plan, making use of existing assets on our system, and through aggressive Demand Side Management activities, mainly in Minnesota. Additionally, the Company foresees that technological improvements will continue to drive the costs of renewables down - a key consideration in the Plan's inclusion of significant solar additions in the latter half of the next decade.

“North Dakota Plan” Assumptions Scenario (Exclusion of Externalities)

As discussed in the Planning Landscape chapter of this 2020-2034 Resource Plan, Xcel Energy plans and operates a single Upper Midwest system (the NSP System) that serves customers in five states. Consistent with the terms of the Settlement in Case No. PU-07-776, since 2008 we have filed our Upper Midwest Resource Plans with the North Dakota Commission, and included in each of them an analysis of a Resource Plan scenario compliant with Federal and North Dakota laws only.

As with the previous 2016-2030 Resource Plan, the current Plan refers to this scenario as simply the “North Dakota Plan”. It differs from the Preferred Plan in three ways:

1. All assigned CO₂ costs have been removed;
2. Exclusion of MN Community Solar Garden program costs; and
3. Exclusion of incremental Demand Response program cost.

While there are no renewable energy objectives or policy mandates currently impacting the expansion resources, the Company’s long-term objective relative to power generation is to achieve an 80 percent reduction in its 2005 carbon emissions by 2030, and to achieve carbon-free generation by 2050. For the North Dakota Plan scenario, we maintain this goal and propose the same resource additions to our system as reflected in our Preferred Plan.

You will note that in the modeling for the North Dakota Plan, solar additions for 2027-2029 in the Preferred Plan are delayed to 2029 - 2030. The exclusion of the Community Solar Gardens (CSG) do not impact the resources additions for the North Dakota Plan. Instead, the costs of CSG are allocated so that North Dakota customers pay a market rate for the energy from the CSG resources. The allocation of the costs to North Dakota will also reflect previous cost-recovery decisions that exclude costs related to the disputed resources identified in the rate case Settlement of Case No. PU-12-813 and subsequent cases. As discussed previously, our preferred plan also includes a large incremental addition of demand response in recognition of the Minnesota Commission’s Order requiring 400 MW of additional DR by 2023. The Present Value of Revenue Requirements (PVRR) over the 2020 – 2034 period for the North Dakota Plan is \$37,598,000 while that of the Preferred Plan is \$37,851,000.

While modeling a “North Dakota Plan” scenario may provide some additional insight for this Commission, the Company is committed to exploring how we can improve the resource planning process in North Dakota. We proposed in December 2018 a framework outlining some of the essential pieces of a more formal, focused North Dakota resource plan process, including a presumption that the default approach to NSP System planning would continue to be initiated from an integrated system view. Xcel Energy presented the proposal further at an Informal Hearing with the Commission in March of this year. At that time, the Commission indicated interest in exploring a formalized North Dakota process, so the Company looks forward to engaging further to develop such a framework for the next resource planning cycle.

North Dakota Combustion Turbine

Pursuant to the Settlement in Case No. PU-12-813, the Company agreed to take steps to locate a system natural gas combustion turbine (CT) in the state of North Dakota, to be operational by December 31, 2025. Specifically, Xcel Energy agreed to:

“...develop, own, and operate (or alternatively, cause to be developed and operated on its behalf through a power purchase agreement or other contractual arrangement) a combustion turbine with a capacity of at least 200 MW in eastern North Dakota, no later than December 31, 2025. The costs of the generating facility will be allocated to all state jurisdictions served by the Company in a manner consistent with other NSP System resources. Attainment of this commitment is contingent on the Company's receipt of all necessary and appropriate permits and regulatory approvals. Further, except as modified by this Section II, all provisions of the 2036 Commitment remain in place, including without limitation, the requirements that the combustion turbine agreed to in this paragraph reasonably 1) addresses a system capacity need and 2) represents a least-cost resource when also considering the local reliability and system benefits of developing thermal generation in North Dakota.”

The 5 year Action Plan within this 2020-2034 Resource Plan runs from 2020 through 2024. Thus, the Commission will not find specific mention of a North Dakota natural gas CT addition in the current short term Action Plan; rather, proposed resource additions in 2025 will be within the Action Plan developed in the next Resource Planning cycle and addressed directly in that filing.

While the longer term plan for resource additions does not reflect a firm peaking plant need until 2031, Xcel Energy acknowledges the Negotiated Agreement commitment and will continue to assess 1) NSP System capacity needs over the next couple of years, 2) the likelihood of gaining the necessary approvals in all NSP System states, and 3) the operational feasibility and cost-effectiveness of a peaking plant located in eastern North Dakota. Given the long planning horizons in these Resource Plans, many

things can change in the next 5 to 10 years in terms of energy policy, technology, and economic conditions. The Company remains committed to locating more generation in the state, and a more timely and beneficial option may become evident over time.

Summary

This plan demonstrates that we can achieve our 2030 environmental goal with existing technologies and resources while maintaining both reliability and affordability. And it advances a framework that achieves our objectives in manageable steps as opposed to transitioning the entire system and grid all at once. By doing so, we can continue to ensure the reliability of our system and maintain flexibility to respond to future market trends, technology advancements, and changing regulatory policies.

Please contact me at (701) 241-8632 or via email at dave.sederquist@xcelenergy.com. Alternatively, you may wish to contact PJ Martin at (612) 321-3065 or Philip.J.Martin@xcelenergy.com if you have any questions regarding this filing.

Sincerely,



David H. Sederquist
Sr. Regulatory/Financial Consultant
Xcel Energy

cc: Pat Fahn
Jack Schuh