

June 3, 2016

Northern States Power Company  
Attn: David Sederquist  
2302 Great Northern Drive  
P. O. Box 2747  
Fargo, ND 58108-2747

RE: Comments – MN Docket No. E002/RP-15-21  
ND Case No. PU-15-19  
Northern States Power Company  
Integrated Resource Plan  
Information

Dave,

I am writing to indicate what staff would likely argue and conclude concerning NSP's latest environmental plan for securing necessary generation resources for its integrated electric system. Whatever I write here is premature and could change. Still a general impression from staff may be useful to you as you try to develop the Regulatory Treatment Framework for operating in various states where laws and policies are not congruent.

#### Fargo CT

We agree that locating a simple cycle combustion turbine in ND by the end of 2025 is just and reasonable. The Company has already committed to building this resource<sup>1</sup>. The Company has operated for over 100 years in ND without installing any local generation to provide voltage support and enhance reliability.

#### Nuclear

We agree that operating the Company's nuclear units through their respective plant operating licenses is just and reasonable. We have been supportive of NSP's nuclear fleet from the beginning but our support is beginning to wain as regulatory and compliance costs in recent years have diminished the units' value and there is still no long-term solution for disposing of radioactive waste. The value of these plants is further eroded by low cost natural gas, CT's and tax subsidized wind generation. Still, we agree with NSP that a diverse portfolio is valuable in minimizing risk to consumers and that the net benefit of operating the nuclear plants remain.

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<sup>1</sup> See Page 3, First Revised Negotiated Agreement Relating to North Dakota Generation Resource Policy signed on February 22, 2016 in ND Case No. PU-12-813.

### Sherco 1 & 2

We do not agree with closing Sherco Unit 1 in 2026 and Unit 2 in 2023. In the Company's last rate case in ND, the Company identified the end of life for these two units as 2035<sup>2</sup>. The Sherco Units are highly cost effective and provide effective and reliable baseload power. The implementation of the Clean Power Plan (CPP) is not certain or even needed to reduce the carbon output of generation facilities. Highly subsidized wind and low natural gas costs have already significantly reduced carbon dioxide emissions across the country and will continue to do so. The timing of requiring Selective Catalytic Reduction (SCT) equipment is also not clear. Until we have more answers, it is premature to begin planning for the early retirement of these units. Please see the Conclusion found on pages 29 and 30 of Attachment G1 ("Economic Impacts of Sherco Plant Alternatives") to the Supplement for a number of reasons why closing the Sherco units early is not beneficial.

Please note that on page 44 of the Supplement, the Company states that the Plan may generate surplus carbon dioxide reductions under the CPP. If the CPP is implemented as proposed, Staff would rather see a less restrictive plan than over-compliance in the event additional compliance is necessary in the future. Early compliance may not be useful – or cost-beneficial - in satisfying future regulatory compliance.

We are concerned that ND customers will incur significant and unnecessary costs if the Company retires the Sherco Units early. Because these units are located in MN, we acknowledge that, unfortunately, ND will have little say in whether these units remain open and operational. As part of any request for recovery of either the stranded Sherco costs or its replacement generation, the staff will do a comprehensive review of the costs of continuing to operate the coal units as compared to a new natural gas unit. We do not believe that there will be much support for paying for both Sherco stranded costs and a new combined-cycle generating unit. Therefore, staff will likely argue, at a minimum, that the equipment is no longer used and useful and therefore any remaining stranded investment is not recoverable from customers.

### Wind and CT's

Generally speaking, staff supports PTC-subsidized wind development combined with combustion turbines given the current price of both wind and natural gas. Of course wind prices will change as PTC's are phased out by 2020 and any plans should consider the loss of these tax subsidies. Whether or not wind generated energy can remain competitive without PTC's remains to be seen. Like any resource addition, the Commission will expect that any proposed wind energy will be shown to be the least cost resource available, all things considered. As long as fracking is allowed and natural gas prices stay below \$4 a Dekatherm, it would be hard to argue for other capacity resources besides CT's. The MISO practice

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<sup>2</sup> See Exhibit \_\_\_\_ (LHP-1) Schedule 4, Page 2 of 4, Direct Testimony and Schedules of Lisa H. Perkett, filed on December 18, 2012 in ND Case No. PU-12-813.

of awarding capacity to wind and not distinguishing between baseload capacity and CT capacity adds to staff's support of wind and gas. Given the existing infrastructure at Sherco, we would likely not oppose placing a combined-cycle natural gas plant at Sherco so long as capacity is needed to meet MISO's reserve requirements.

#### Big Solar

Based on recent ADP filings, it is doubtful that solar resources in the near future will be acceptable to ND regulators. MN is the only state with a solar RPS and direct assigning any incremental or "premium" costs (and the related environmental attributes) to MN will hasten NSP's ability to meet the MN standard and hold other states' customers harmless to its high costs.

The costs for large solar projects are identified on page 5 of Attachment B to the Supplement as 9.5 cents per kWh. NSP's average cost of fuel in ND from January 2010 through May of 2016 was 2.7 cents per kWh and the average market price of energy is not much more. Wind energy is currently being secured for less than 3 cents a kWh. To the extent that the value of solar capacity does not offset the high cost of its energy; staff will oppose full cost recovery.

Staff is not opposed to solar energy per se; in general, we remain ambivalent to the type of energy and capacity used to meet resource requirements so long as it is cost effective.

#### Dinky Solar

Staff would object to the inclusion of very small distributed solar systems adding up to 675 megawatts on the same basis as it would object to large solar. While the Company does not discuss this in its Supplement, it appears that in reading Attachment B to the Plan, the Company is adding a significant amount of small solar onto its system during the planning period. On Page 2 of Attachment B, the Company states that small solar systems increase the PVRR of the Plan by \$760 million with an average cost of 12 cents per kWh. It is not clear why the Company would ask its ratepayers to pay more for the same type of resource than can be achieved on a larger scale for less. If this expensive foray into Solar Gardens is required by MN, NSP should assign all of the incremental costs to its MN jurisdiction.

#### EE and DSM Programs

Staff is not opposed to MN's energy efficiency programs as they are already directly assigned to MN. For ND programs, we largely require that such programs pass the ratepayer impact model test and few energy efficiency programs pass the test. We believe energy efficiency programs take money from all customers and redistribute it to a smaller subset of customers without providing much benefit to the whole. Instead, it has been the practice of this commission to encourage demand side management programs since peak reduction efforts provide value to all customers.

As a side note, we do not believe that ND is free-riding on MN's EE efforts. EE efforts are primarily about saving money through less electricity use and therefore participating Minnesotans enjoy the benefits of those programs. Further, any resulting demand reductions will correspondingly diminish MN's share of jurisdictional demand cost and thereby increase ND's share. We do not see any cross-subsidies occurring between jurisdictions because of the different EE / DSM approaches by the various states.

#### PPA vs Build

The commission has consistently expressed a preference for ownership over purchased power agreements (PPA) for reasons of security, reliability and a more certain long-term cost structure. If NSP proposes future PPAs, it will have to clearly demonstrate to staff and the commission how those PPAs will be more economic compared to owned assets over the long-run (30-40 years) given our preference for least cost planning.

#### Cost of Electricity Delivered to End Users

While the Company portrays its IRP as causing minimal adverse effects on customer bills, NSP should move ever so cautiously in this regard. NSP is getting beat at the meter by the other two IOU's operating in ND as well as a good share of ND coops, even while it serves three of our four largest urban areas. The farther NSP's costs diverge from that of other utilities in the state, the more difficult it will be for NSP to secure rate recovery in ND.

#### Wind, Solar, Gas if You Have To and Nothing Else

There is an old proverb that says don't put all your eggs in one basket. Over the years, NSP has long crowed about its resource diversity as it extolled its virtues. However, the future direction of NSP appears to fly in the face of this long held view as it proposes to retire efficient and useful coal (and ultimately, nuclear) plants and rely primarily on natural gas, wind, and solar in the future.

We hope these comments are helpful to the Company in its decision making process as it proposes a Resource Treatment Framework for going forward. We believe that in those areas where we have substantial disagreement with the Company's Current Preferred Plan, resources should be evaluated as "non-system" resources and assigned directly to the cost-causing state and any other jurisdiction that approves it.

A special thanks to Sara Cardwell who crafted the bulk of this letter. Please let us know if you have any questions.

Sincerely,



Mike Diller  
Director of Economic Regulation