STATE OF MINNESOTA
PUBLIC UTILITIES COMMISSION

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In the Matter of the Petition of Xcel Energy for the Approval of a Solar Portfolio to Meet Initial Solar Energy Standard Compliance

MPUC Docket No. E002/M-14-162

COMMENTS OF CLEAN ENERGY ORGANIZATIONS

Fresh Energy, Minnesota Center for Environmental Advocacy, Sierra Club and the Izaak Walton League of America – Midwest Office (collectively "Clean Energy Organizations") submit these comments in response to the Commission's October 28, 2014 Notice of Comment Period in the above-captioned docket. Clean Energy Organizations' comments address the issue of whether it is reasonable and prudent and in the public interest for the Commission to adopt Xcel's proposal, in whole or in part, to meet the state's energy needs and Xcel's obligations under the Solar Energy Standard ("SES").

Clean Energy Organizations submit that it is prudent and in the public interest for the Commission to approve the full 187 MW portfolio of three proposals even if the Commission approves Xcel's power purchase agreement for the Aurora project (a separate solar acquisition) in the capacity docket. Xcel has suggested that the Commission limit its acquisition in response to the solar RFP to only the Marshall Solar and MN Solar I projects (totaling only 87 MW) if the Commission approves the Aurora PPA.[1] The Commission should instead approve the full 187

[1] *In the Matter of the Petition of Northern States Power Company for Approval of a Portfolio of Solar Projects to Meet Initial Solar Energy Standard Compliance*, Petition (October 24, 2014) (hereinafter "Petition"), p. 2.

MW portfolio in addition to the Aurora project because the proposals are cost effective and consistent with the policy objectives of the state.

I. THE COMMISSION SHOULD APPROVE THE ENTIRE 187 MW PORTFOLIO BECAUSE IT FURTHERS STATE POLICY GOALS.

The Commission is vested with the power to make policy decisions on behalf of Minnesota's citizens, and should use its authority to further the state's clear policy preference for increasing renewable energy. In this case, that means the Commission should approve the entire 187 MW portfolio of solar projects.

By statute, the Commission has both legislative and quasi-judicial functions. As a result, the Commission is called upon to make choices that are "historically and functionally legislative in character."[2] The Supreme Court has described the Commission's legislative function as "balancing both cost and noncost factors and making choices among public policy alternatives."[3] That is the exercise called for here. Xcel has presented a choice to the Commission that is ultimately a matter of policy: Should the utility invest now in more solar resources than it believes will be required to satisfy the short-term mandate of the solar energy standard? In deciding this issue the Commission must exercise its legislative function and should be guided by the state's very clear policy preference for renewables.

The state's preference for renewable energy is firmly rooted in statute. The Legislature declared in law that "the state has a vital interest in providing for . . . the development and use of renewable energy resources wherever possible..."[4] The Department of Commerce is directed to

[2] Minn. Stat. § 216A.02, subd. 2.
[3] *Matter of Request of Interstate Power Co. for Auth. to Change its Rates for Gas Serv. in Minnesota*, 574 N.W.2d 408, 413 (Minn. 1998)
[4] Minn. Stat. §216C.05, subd. 1.

"encourage deployment of cost-effective renewable energy developments within the state."[5] When choosing between resource options, Minnesota law prohibits the Commission from approving a new non-renewable energy facility unless it is shown that a renewable resource is not in the public interest.[6] Further, when making its public interest determination on resource acquisitions, the Commission must consider whether the decision helps the utility to achieve the state's greenhouse gas reduction goals, the renewable energy standard, or the solar energy standard.[7] The state's greenhouse gas reduction goals which require steep reductions in emissions – 30% by 2025 and 80% by 2050[8] – are especially relevant to energy policy and the deployment of renewable resources because the energy sector is the largest source of statewide greenhouse gas emissions. Finally, Minnesota's environmental laws prohibit the selection, based solely on costs, of a more polluting resource where there is a less polluting resource alternative.[9] There can be no dispute that the Legislature has established a clear and unwavering preference for renewable energy resources in the state's laws.

The question the Clean Energy Organizations address here – whether to approve the entire 187 MW portfolio – puts squarely before the Commission an opportunity to implement the state's policy preferences. As described in Xcel's filings, the energy from the 187 MW portfolio will displace fossil fuel resources.[10] Thus, the decision before the Commission is between new renewables and existing fossil fuel resources. Because the 187 MW solar portfolio is cost

[5] Minn. Stat. §216C.053.
[6] Minn. Stat. § 216B.2422, subd. 4
[7] *Id.*
[8] Minn. Stat. § 216H.02.
[9] Minn. Stat. § 116D.04, subd. 6 (prohibiting state approval of activities that would cause pollution where "feasible and prudent alternatives" exist and stating that "[e]conomic considerations alone shall not justify such conduct.")
[10] Petition, p. 22.

effectiveness and because of the state's policy preference for renewables, this question should be easily decided by the Commission.

II. THE BENEFITS OF APPROVING THE FULL 187 MW PORTFOLIO OUTWEIGH ANY RISKS.

There are both cost and noncost benefits to approval of the full 187 MW portfolio. The risks, in contrast, are limited to the unlikely scenario in which carbon dioxide remains unregulated for the next 25 years and the price of fossil fuel generation falls rather than maintaining its current upward trajectory. Even under such unlikely conditions, the risks are negligible. Below, Clean Energy Organizations discuss cost and noncost factors – all of which weigh in favor of approving the full 187 MW portfolio.

1. The 187 MW Portfolio Proposals Are Cost Effective And Will Benefit Ratepayers.

Xcel's filing shows that the full 187 MW portfolio results in a *savings* of $9.97 per megawatt hour of energy generated by the portfolio over the 25-year period of the agreements.[11] Some may insist that these are not "real" savings because the levelized cost analysis Xcel used to determine this figure included a value for avoided CO_2. Such arguments are misguided.

The CO_2 costs Xcel used in its analysis are *regulatory* costs, not *externality* costs. Those regulatory costs represent the Commission's best guess at what future carbon dioxide emissions will, in real terms, cost the utility and, by extension, ratepayers. Thus, the savings determined by the company's analysis are supported by the assumption that carbon dioxide emissions will be regulated in the future and that those regulations will result in a higher price for sources that emit carbon dioxide – that is an utterly reasonable assumption, especially in light of EPA's proposed rules to limit carbon dioxide emission from existing power plants under the Clean Air Act

[11] Petition, p. 22.

Section 111(d). These rules will be finalized in June 2015, with compliance requirements beginning in 2020.

Even if one assumed, however, that there will be no regulatory cost of carbon dioxide emissions over the lifetime of these proposals, the costs of the proposed solar portfolio are still negligible. Xcel's filing for approval of the 187 MW portfolio with the North Dakota Public Services Commission, for example, shows that the 187 MW portfolio has a net cost rather than savings per megawatt hour produced by the solar projects. In its analysis for North Dakota, Xcel made the assumption that ***absolutely no regulation*** of carbon dioxide resulting in any increase in price for sources that emit carbon dioxide will be put in place in the next 25 years. Even still, it concludes that "operating the system with the 187 MW Solar Portfolio under the various sensitivities uniformly results in a relatively negligible net cost."[12] Moreover, as discussed below, 25-year solar power purchase agreements at a fixed cost offers Xcel and its ratepayers a significant hedge value against increasing costs of fossil-fuel production. Those costs are increasing, not only due to carbon dioxide regulations which will be final in June 2015, but a number of other public health protections, including rules to strengthen national ambient air quality standards for ozone and sulfur dioxide, to limit the toxicity of coal combustion wastewater, and to safely dispose of toxic coal ash generated from Xcel's existing fossil fleet.[13]

In sum, it is not reasonable to assume that carbon dioxide emissions will remain unregulated over the next 25 years. Under reasonable assumptions – dictated by Minnesota

[12] *In the Matter of the Application of Northern States Power Company for an Advance Determination of Prudence for a 187 MW Portfolio of Utility Scale Solar Resources*, Direct Testimony, Kurtis J. Haeger, p. 18 (attached hereto as Exhibit A).

[13] The ratepayer impact analysis provided by Xcel shows that the full portfolio will result in only a very minor increase on the average customer's bill – 15 cents per month in 2017, dropping to 5 cents per month in 2025. What the rate impact analysis does *not* provide, however, is the rate increases associated with alternatives to the portfolio. It is, therefore, of limited value other than to show that the proposal will have no noticeable impact on customer bills.

Statutes – the 187 MW solar portfolio will *save* money. Because the proposals are cost effective, the Commission should approve the entire portfolio.

2. Approving The Full 187 MW Portfolio Ensures That Minnesota Ratepayers Will Benefit From The Federal Investment Tax Credit ("ITC").

As the Commission is aware, the 30 percent ITC for solar projects is scheduled to expire on December 31, 2016. The ITC plays a central role in the economics of the projects before the Commission and the impending expiration date with no assurance of renewal makes delay impractical. Xcel indicated that it designed the RFP process specifically to ensure that any projects selected could meet the December 31, 2016 deadline.[14] The fact that this significant benefit is available now weighs heavily in favor of approving the entire 187 MW portfolio.

Xcel, while recognizing the value of the ITC, "cautions against" selecting the full 187 MW portfolio in addition to Aurora because "with the advent of technology [it] believe[s] prices of solar projects will continue to go down…"[15] Xcel cites to "one industry source" that has predicted technology improvements over the next 5 to 8 years could more than compensate for the reduction in the federal tax incentives.[16]

The Clean Energy Organizations do not disagree that the price of solar as-installed is likely to continue to fall. But when, and by how much, is unknown. "One industry source" is hardly a reliable guide given the amount of uncertainty in predicting future innovations and prices. What is known today, however, is that the 187 MW portfolio, with prices based on the ITC, is a cost effective, renewable resource that will displace fossil fuel generation. It is the failure to secure this cost-effective energy that puts ratepayers at risk, not vice versa.

[14] Petition, p. 13.
[15] Petition, p. 2.
[16] Petition, p. 18.

3. Exceeding The SES Is In Ratepayers' Interests.

Xcel's recommendation to acquire only part of the 187 MW portfolio if the Aurora project is approved is based on the amount of solar it needs to meet the state's SES. But the SES threshold, for several reasons, does not weigh against approving the entire portfolio.

First, the SES is a floor, not a ceiling. There is nothing in the statute that would prevent Xcel from acquiring more solar than mandated to meet the requirement of 1.5% retail sales by 2020. Moreover, the SES is not limited to 1.5% by 2020. The statute goes on to establish "the energy goal of the state of Minnesota that, by 2030, ten percent of the retail electric sales in Minnesota be generated by solar energy."[17] As a result, acquiring more solar than is currently mandated by the SES is clearly in line with the goals of the state, and will benefit ratepayers in coming years because the utility will already have made progress toward the 2030 goal.

Second, as Xcel explained in its filing with the North Dakota Public Service Commission, the 187 MW portfolio "provides qualitative benefits to the NSP System and therefore to [its] customers."[18] These are significant benefits that go well beyond the generation of renewable energy credits to satisfy any state's renewable energy or solar mandate. For example, Xcel correctly points out that the 187 MW portfolio reduces customer cost uncertainty by providing a hedge against volatile gas and market prices: "If the Company were not to acquire these resources, future levels of natural gas consumption and MISO market purchases would be higher, creating higher cost uncertainty for our customers."[19] Further, the acquisition

[17] Minn. Stat. § 216B.1691, subd. 2f(c).
[18] *In the Matter of the Application of Northern States Power Company for an Advance Determination of Prudence for a 187 MW Portfolio of Utility Scale Solar Resources*, Direct Testimony, Kurtis J. Haeger, p. 24 (attached hereto as Exhibit A).
[19] *Id.*

displaces nearly 7 million tons of carbon dioxide emissions which Xcel says "will reduce [its] exposure to future environmental regulation and will lower the cost of compliance."[20]

Xcel's filing in North Dakota explains in some detail the value of the 187 MW portfolio regardless of the need to satisfy a renewable energy standard. Those same reasons apply to any increment of the 187 MW portfolio that may be viewed as in excess of Minnesota's SES requirement.

III. CONCLUSION

The question before the Commission requires it to exercise its legislative function consistent with the policies expressed in state law. In this case the Commission's decision is easy. The 187 MW solar portfolio is cost effective, likely saving millions of dollars over the 25-year term of these projects. In addition, approving the full portfolio is consistent with the state's clear preference for renewable energy. Clean Energy Organizations, therefore, respectfully request that the Commission approve all three of the solar PPAs in the 187 MW portfolio even if it also approves the Aurora project.

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Respectfully submitted,

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[20] *Id.*