

June 25, 2021

Will Seuffert Executive Secretary Minnesota Public Utilities Commission 121 7th Place East, Suite 350 St. Paul, MN 55101

RE: 2020-2034 Upper Midwest Integrated Resource Plan, Docket No. E002/RP-19-368

Dear Mr. Seuffert:

We thank the Public Utilities Commission for an opportunity to submit a reply comment on Xcel Energy's Integrated Resource Plan. St. Paul 350 is a grassroots climate action and environmental justice group staffed entirely by volunteers who are committed to ensuring a rapid and equitable transition away from fossil fuels, as well as improving climate change resiliency for our city.

Overwhelming scientific evidence shows that we are now in the early stages of a climate crisis, and the principal cause of this crisis is the burning of fossil fuels. It is therefore imperative that we transition away from using coal and fossil gas for electricity generation. There are two key components to this transition. First, we must avoid building new fossil fuel infrastructure and instead prioritize wind energy, solar energy, energy storage, and demand side management in our energy supply. This approach not only will result in the decarbonization of our electricity supply, but it also avoids fossil fuel generation facilities from becoming stranded assets for which ratepayers will be burdened. Second, the transition must be equitable so that all residents can benefit from decreased energy burdens and increased resiliency.

The technologies needed for the decarbonization of our electricity supply are either already mature or are rapidly approaching maturity. In their Preferred Plan, Xcel Energy has committed to substantial decarbonization of their electricity supply, with a goal to reduce carbon emissions 80% from 2005 levels by 2030, and achieve 100% carbon free generation by 2050. While we applaud these ambitions as important steps in the right direction, we also believe that there are serious deficiencies in the proposed Preferred Plan.

In our initial comment, on the basis of industry trends and the current and anticipated near-future state of technology, we argued that:

- 1. A reliable, cost effective generation and storage energy portfolio is feasible by 2034 without the Sherco gas plant proposed by Xcel in their Preferred Plan. Indeed, we believe that Xcel had not fulfilled the requirements of Minnesota law [1] in evaluating renewable options to the proposed Sherco gas plant. All scenarios considered in the IRP included the proposed Sherco gas plant as an assumption, which fails to demonstrate that renewables, storage, and demand side management cannot be used to replace the proposed Sherco gas plant. Furthermore, we argued that Xcel did not fulfill the requirements of the Public Utilities Commission's directive to evaluate energy storage options [2], but instead presented a perfunctory and inadequate evaluation of energy storage.
- 2. The Xcel IRP Preferred Plan vastly underestimated the potential for distributed solar. Distributed resources reduce the need for fossil fuel generation, defer expenses associated with transmission infrastructure, provide resiliency for communities, and allow community ownership of energy generation.

Ultimately a plan for replacing fossil fuel generation with renewables and storage must be rigorously evaluated and confirmed using sophisticated modeling. We are pleased to see that independent modeling has now been performed by three interveners: Sierra Club, Clean Energy Organizations [3], and the Citizens Utility Board. In addition, the Distributed Solar Parties [4] wrote an extensive comment on the important role that distributed generation must play in the transition to renewable energy.

All three alternate plans use rigorous and quantitative modeling at the same level of sophistication that Xcel used in their modeling [5]. All three alternate models confirm that reliable and cost effective generation and storage is feasible by 2034 without building new fossil fuel generation. All three models demonstrate that distributed solar can have a large role in decarbonization and reliability of electricity generation. All three models show that not only will replacing Sherco with renewables not increase electricity rates, but that substantial savings compared to the Xcel Preferred Plan will occur over the planning period. And all three models show that ratepayers can avoid the financial burden of a gas plant which has a high probability of becoming a stranded asset. These results confirm that indeed Xcel did not do due diligence in considering renewable options to building Sherco, as required by Minnesota law, nor did they fulfill the spirit of the PUC directive to seriously consider storage coupled with solar and wind to replace gas electricity generation in the IRP Supplement.

All of the alternate plans eliminate coal generation by 2030, in agreement with the Xcel Preferred Plan. The three alternate plans differ in some details such as the relative amounts of solar, wind, and storage required as well as whether or not the Monticello nuclear plant license should be extended to 2040. Two of the plans used the same modeling software as Xcel and the third used an alternate platform [5]. The fact that a diversity of approaches and assumptions all lead to the same conclusions only strengthens the case that Sherco is not needed, and that distributed resources can and should play a bigger role in our energy supply, and that significant additional savings can occur compared to the Preferred Plan.

The final details of an Xcel Integrated Resource Plan that avoids Sherco and properly accounts for the potential of distributed resources will still need to be worked out, but we now have ample evidence from three independent studies this is both feasible and desirable. We therefore urge the Public Utilities Commission to not approve the existing Xcel Energy Integrated Resource Plan and Supplement, and instead ask the PUC to direct the utility to re-do their modeling with scenarios that do not include Sherco as a resource, as well as incorporate realistic projections of distributed resources.

We recognize that per Minnesota statute [6] Xcel can likely bypass a certificate of need for Sherco. However, we urge the Commission to adopt the interpretation that this statute does not guarantee Xcel cost recovery through electricity rates. We know from past proceedings [7] that the Commission is very concerned about stranded assets, and we ask that they apply this same skepticism to Sherco. We believe that this "end around" the Commission's authority is not in the best interest of ratepayers and attempts to circumvent an important safeguard in the regulated monopoly structure.

Xcel has the potential to lead U.S. utilities in the equitable transition to carbon free electricity production. Thanks to the efforts of the aforementioned interveners, we now have proof that not only can reliable and cost effective electricity be achieved without building new fossil fuel infrastructure, but tangible benefits accrue to Xcel customers as well. Thank you for your consideration

IRP Working Group St. Paul 350

## References:

[1] According to Minnesota Statutes section 216B.2422 Subdivision 4, the Public Utilities Commission "shall not approve a new or refurbished nonrenewable energy facility in an integrated resource plan or a certificate of need, pursuant to section 216B.243, nor shall the

commission allow rate recovery pursuant to section 216B.16 for such a nonrenewable energy facility, unless the utility has demonstrated that a renewable energy facility is not in the public interest.

- [2] PUC order of November 19, 2019
- [3] The Clean Energy Organizations are Fresh Energy, Clean Grid Alliance, the Union of Concerned Scientists, and the Minnesota Center for Environmental Advocacy.
- [4] The Distributed Solar Parties are Vote Solar, The Institute for Local Self Reliance, Cooperative Energy Futures, and the Environmental Law and Policy Center.
- [5] Sierra Club and CEO used EnCompass, the same software used by Xcel, while CUB used WIS:dom.
- [6] SF85/HF113
- [7] See for example Commissioner Schuerger's comments during the Mankato Energy Center hearings, Docket 18-702:

"I do think the issue around stranded costs is a really important question...there are important questions in there for consumers around those future costs...2054 is a long way out, the world is changing rapidly"

(http://minnesotapuc.granicus.com/MediaPlayer.php?view\_id=2&clip\_id=1057 5:41:30)