April 19, 2017

Via Electronic Filing

Daniel P. Wolf Executive Secretary Minnesota Public Utilities Commission 121 7th Place E., Suite 350 St. Paul, MN 55101

Re: Comments of the Institute for Local Self-Reliance in the Matter of Xcel's Biennial Distribution Study Report -- Hosting Capacity Analysis / Docket No. E002/M-15-962

Dear Mr. Wolf:

The Institute for Local Self-Reliance (ILSR) respectfully submits these comments in response to the Commission's notice to provide input on Xcel Energy's (the Company's) hosting capacity analysis. We're pleased that neither this Commission oversight nor the opportunity for public input has been preempted by legislative action.

In general, our comments on potential improvements and our questions reflect the purpose of the hosting capacity analysis expressed the Company's filing:

"ICF's Integrated Distribution Planning report prepared for the Minnesota Public Utilities Commission noted that a hosting capacity analysis should be robust enough to satisfy three purposes: 1) indication of distribution feeder capacity for DER, 2) streamlining interconnection studies, and 3) annual long-term distribution planning."

Improvements

ILSR believes the following improvements would help meet the three-part goal of the hosting capacity analysis outlined in the ICF study:

 Including impacts from existing distributed energy resources, as the Company suggested would be possible with the 2017 DRIVE Tool update

- Displaying these results on a heat map or similar visual tool in order to illustrate capacity in a way that aligns with the development process of securing land leases and physical project locations
- Developing a draft model or process that considers the potential impact of queued projects (e.g. those with signed interconnection agreements)
- Including sensitivity analysis that factors in the use of smart inverters to mitigate impacts of existing or queued projects

Other Questions and Comments

ILSR has the following questions about the hosting capacity analysis:

- How does the DRIVE Tool compare to the iterative and streamlined methods being used for hosting capacity analysis in California in terms of accuracy, time/cost, and ability to deliver improvements suggested in the prior section?
- In the Limitations section on page 10 of its report, the Company says "...[feeders] with existing DER have additional information that could not be utilized in the actual DRIVE Tool analysis for determining hosting capacity." What is the nature of this omitted information, and what further insights would it provide were it to be included?
- Is the "Installed DG" term used in the table in Attachment A the same as the "Existing/Known DG" referenced in the Limitations section on page 10?

Our final question relates to the ultimate use of the hosting capacity analysis. The ICF report refers to two uses -- to indicate capacity and to streamline interconnection studies -- but additional clarity about the ultimate goals and outcomes for the report would be helpful. In a review of the hosting capacity analysis for New York's Reforming the Energy Vision process, for example, intervenors have <u>suggested</u> the document can be used to "automate" the interconnection of distributed energy resources to the grid. ILSR agrees that this is a useful and desirable outcome, but hopes the Commission can

¹ https://www.greentechmedia.com/articles/read/New-York-Utility-Reformation-Is-Hard

provide more detailed guidance about its expectations in order to guide future iterations of the hosting capacity analysis.

Thank you for the opportunity to comment.

Sincerely,

/s/

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