

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

Dan Lipschultz	Commissioner
Matthew Schuerger	Commissioner
Katie J. Sieben	Commissioner
John A. Tuma	Commissioner

March 22, 2019

**In the Matter of the Distribution
System Planning for Xcel Energy**

Docket No. E002/CI-18-251

Reply Comments of Fresh Energy

Fresh Energy submits these reply comments in response to the Commission’s November 19, 2018 [Notice of Comment Period](#) on the initial Integrated Distribution Plan (“IDP”) of Xcel Energy (“Company”).

Introduction

Fresh Energy appreciates the thorough and thoughtful initial comments from other parties in this proceeding. We are pleased to see many consistent themes throughout the comments, including:

- The impacts of the transition to beneficial electrification will be significant and the Company must incorporate these impacts in its IDP.
- The Company must improve its capabilities related to load and DER forecasting.
- The Company must improve its approach to evaluating and implementing non-wires alternatives (“NWA”).
- The Company must include a more detailed and rigorous cost/benefit analysis of planned expenditures.
- The Company must demonstrate a sense of urgency in developing its IDP capabilities.

Fresh Energy specifically supports the recommendation by the Office of the Attorney General (“OAG”) to require the Company to disclose detailed feeder and substation information.¹

¹ Comments of the OAG, pp. 7-8

Detailed Feeder and Substation Information

The OAG recommends that the Company provide a spreadsheet combining information about feeder load factors, risk scores, and planned investments. As the OAG explains, such a spreadsheet “would allow the Commission and parties to understand how Xcel identifies and responds to risks on its system, track the utility’s performance over time, and better understand how its investment decisions are related to current capacity risks and growing distributed resource needs.”²

Fresh Energy agrees that such feeder- and substation-level detail is valuable, particularly for identifying opportunities to deploy NWA. Utilities in California³ and Nevada⁴ are required to publish an annual Grid Needs Assessment (“GNA”) and Distribution Deferral Opportunity Report (“DDOR”) containing detailed information by feeder and substation, including:

- 5-year forecasted demand and 10-year forecasted DER growth.
- The primary driver of each grid need (e.g., capacity deficiency, voltage fluctuations, aging equipment, etc.).
- The distribution service required (e.g., capacity, voltage support, reliability or resiliency).
- Equipment ratings and forecasted deficiency through the next 5 years.
- Equipment involved in the conventional solution (e.g., reconductoring, transformer bank replacement, voltage regulators, etc.).
- The anticipated upgrade in-service date.
- Months of need (e.g., Jul-Sep), duration of need (e.g., 3pm-7pm), and number of need events per year.
- The cost of the conventional solution.

The utilities in New York⁵ and Rhode Island⁶ provide similar information in the form of “heat maps”, which are color coded to identify circuits that would benefit from DER deployment and that have existing capacity for beneficial electrification opportunities.

² *Id.*, p. 8

³ See for example the GNA and DDOR format at pp. 12-13 of https://www.pge.com/tariffs/assets/pdf/adviceletter/ELEC_5277-E.pdf

⁴ <https://irecusa.org/tag/grid-needs-assessment/>

⁵ See for example p. 174 of Central Hudson Gas and Electric’s 2018 Distributed System Implementation Plan (“DSIP”) available at <https://jointutilitiesofny.org/system-data/>

⁶ <http://ricermc.ri.gov/wp-content/uploads/2018/09/2019-srp-report-final-draft.pdf>, p.

Xcel is already required to publish the results of their Hosting Capacity Analysis (“HCA”) by feeder. We recommend that the Commission require Xcel to file the OAG recommended spreadsheet combined with the most recent HCA results as well as detailed load and risk information with future IDP reports.⁷ This will allow the Commission and stakeholders to more clearly and easily understand the Company’s grid needs and opportunities to deploy DER.

Fresh Energy recommends that the Commission order the Company to provide a spreadsheet with detailed feeder and substation information as recommended by the OAG. In addition to the information recommended by the OAG, we recommend including:

- Feeder HCA results.
- Feeder daytime minimum loads.
- Details on grid needs and distribution deferral opportunities similar to those in CA and NV as described above.

Conclusion

Fresh Energy appreciates the opportunity to provide reply comments and looks forward to continuing to support this exciting work.

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⁷ Fresh Energy is recommending only that the most recent HCA tabular results be included in the IDP spreadsheet. We are not recommending the whole of the HCA and the IDP filings be combined. Over time, we expect the HCA to be filed more frequently than the IDP.