

July 26, 2021

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

RE: **Supplemental Comments of the Minnesota Department of Commerce, Division of Energy Resources**
Docket No. E002/M-20-812

Dear Mr. Seuffert:

Attached are the supplemental comments of the Minnesota Department of Commerce, Division of Energy Resources (Department) in the following matter:

Northern States Power Company, d/b/a Xcel Energy's 2020 Hosting Capacity Analysis Report.

The Report was filed on November 2, 2020, by:

Bria E. Shea
Director, Regulatory & Strategic Analysis
Northern States Power Company d/b/a/ Xcel Energy
414 Nicollet Mall
Minneapolis, MN 55401

The Department recommends that the Minnesota Public Utilities Commission (Commission) accept Xcel Energy's Report with requests for the provision of certain information in the next report. The Department is available to respond to any questions that the Commission may have on this matter.

Sincerely,

/s/ MATTHEW LANDI
Rates Analyst

ML/ja
Attachment



Before the Minnesota Public Utilities Commission

Supplemental Comments of the Minnesota Department of Commerce Division of Energy Resources

Docket No. E002/M-20-812

I. BACKGROUND

On November 2, 2020 Xcel Energy (Xcel or the Company) filed its 2020 Hosting Capacity Analysis Report (the 2020 Report or HCA Report) as required by Minn. Stat. §216B.2425, subd. 8 (the Statute) and the Minnesota Public Utilities Commission's (Commission) July 31, 2020 Order in Docket No. E002/M-19-685 (the 2020 Order).¹

On December 2, 2020, the Commission issued its *Notice of Comment Period* (Notice). The Notice requested comments on the 2020 Report regarding the following topics:

- Does Xcel Energy's 2020 Hosting Capacity Analysis Report achieve the requirements outlined in the Commission's July 31, 2020 Order[footnote omitted] and Minn. Stat. §216B.2425, Subd. 8?
- Do the Hosting Capacity Analysis Report and updates to the Company's online map improve the usefulness for customers and developers? Are modifications or clarification needed?
- Are there other issues or concerns related to this matter?

On or before April 7, 2021, the following parties submitted comments in this matter:

- The Minnesota Department of Commerce, Division of Energy Resources (Department);
- The Interstate Renewable Energy Council, Inc. (IREC); and
- The Institute for Local Self-Reliance (ILSR).

On or before May 21, 2021, the following parties submitted reply comments in this matter:

- IREC;
- The City of Minneapolis;
- Fresh Energy; and
- Xcel.

On or before May 24, 2021, Fresh Energy, on behalf of Impact Power Solutions (IPS), Nokomis Energy, Novel Energy Solutions, and United States Solar Corporation (US Solar), and the Minnesota Solar Energy Industries Association (MnSEIA), submitted copies of comments and reply comments of these parties that were submitted in the Commission's Investigation on Grid and Customer Security Issues

¹ [Order Accepting Report and Setting Further Requirements](#), dated July 31, 2020, filed in Docket No. E002/M-19-685.

Related to Public Display or Access to Electric Distribution Grid Data (Commission Investigation Docket) in Docket No. E999/CI-20-800 and Xcel's 2019 Hosting Capacity Analysis Report in Docket No. E002/M-19-685 (2019 Report).

Last, on or before June 4, 2021, Xcel submitted a Supplement to its May 21, 2021 Reply Comments (Supplement).

The Department offers the following comments in response to Xcel's Reply Comments and Supplement.

II. DEPARTMENT ANALYSIS

A. DEPARTMENT REQUESTS FOR ADDITIONAL INFORMATION FROM XCEL

1. The Department's First Request

The Department's April 7, 2021 Comments requested the following, additional information from Xcel:

The Department requests that Xcel clarify whether it was unable to provide all criteria violation and corresponding hosting capacity values in the pop-up field of its public-facing map. If it was unable to do so, the Department requests that Xcel explain what the nature of the technical limitations are that preclude it from providing all criteria violation and corresponding hosting capacity values in the pop-up field of its public-facing map.

In Xcel's May 21, 2021 Reply Comments, Xcel provided the following response and explanation:²

This question stems from Order Point No. 15 that requires the Company to publish the criteria violation and corresponding hosting capacity values for each HCA model run and location, and map with appropriate caveats. As we noted in our HCA Report, we were unable to publish all criteria violations in the pop-up, because the volume of data is so large – creating both technical and usability constraints. From a technical perspective, this functionality would require the addition of at least six new fields in each pop-up – and possibly more, if the sub-feeder is located in a more dense part of our system. As we have otherwise explained, we display the public HCA Map in a heat map form for security reasons. This means that in the dense portions of our system, a pop-up likely contains results for several sub-feeder segments. To also show all of the criteria violations rather than just the most limiting factor, we would have to add six additional data fields to each of the sub-feeder results that are already displaying the

² Xcel Reply Comments, dated May 21, 2021, at 25.

results for multiple sub-feeders on multiple pop-up pages in a single pop-up. This challenges our data capabilities and even more so complicates the display – we believe, making it practicably unusable.

The Department appreciates Xcel’s clarification and additional insight. Order Point No. 15 of the Commission’s 2020 Order required Xcel, in its 2020 HCA tabular report, to publish the criteria violation and corresponding hosting capacity values for each HCA model run and location, and map *with appropriate caveats* (emphasis added).

The Department concludes that Xcel’s explanation for why not all criteria violations are published in the pop-up box field of its public-facing map is reasonable, but expects Xcel to revisit this requirement if the Commission directs Xcel to file a public-facing map with actual line segments.

Overall, the Department concludes that the Company complied with Order Point No. 15.

2. *The Department’s Second and Third Requests*

The Department’s second request for additional information in our April 7, 2021 Comments was as follows:

The Department requests that Xcel provide responses to the following questions related to its use of the HCA in the Supplemental Review Screen of the MN DIP Process:

- a. How often would feeder models need to be updated in order to implement this modification to the Supplemental Review Screen?;
- b. Does the proposed quarterly cadence of updating the HCA accomplish the frequency of updates to the feeder models required to implement this modification?;
- c. What primary and secondary field data validation efforts, if any, are needed to implement this modification?;
 - i. Please explain the following statement from page 11 of Attachment F: The Primary System verification benefits the usefulness of the hosting capacity analysis and enable its potential use within the MN DIP Supplemental Review Screens.
- d. If primary and secondary verification are needed, what portions of those actions are related only to this modification?
- e. What is the timeline to implement this modification?
 - i. Why is the timeline to implement this modification not able to occur prior to Q3 of Year 4 (presumably Q3 of 2025) (referring to Figure 5 of Attachment F)?
 - ii. Why did Xcel state that the “Supplemental Screens would also require the Monthly HCA updates to be fully

functional”[footnote omitted] when it previously stated the Supplemental Screens are performed “about five times less often per year than the Initial Review Screens, reducing the need to update feeder models and HCA results more frequently in comparison”[footnote omitted]?

The Department’s third request for additional information contained the following:

The Department requests that Xcel explain how the Primary System verification it plans to do for its Advanced Distribution Management System (ADMS) project is related to the Primary System verification it would need to do in order to implement the use of the HCA in the Supplemental Review Screens of the MN DIP. Further, the Department requests that Xcel precisely explain what the costs are for these two different approaches to Primary System verification are, and indicate what, if any, the *incremental* costs are for performing the Primary System verification for the goal of using the HCA in the Supplemental Review Screen of the MN DIP.

a. Rationale for the Second and Third Requests

The Department’s second and third requests for additional information were intended to elicit additional information from the Company related to the implementation of the Commission’s long-term goal for the HCA, as adopted by Order Point No. 9 of the Commission’s July 31, 2020 Order in Docket No. E002/M-19-685, which states:

The Commission adopts a long-term goal to use the hosting capacity analysis in the interconnection process’s fast track screens. Xcel should work with stakeholders to refine the hosting capacity analysis. Xcel may seek cost and timing clarification from the Commission.

The Department’s April 7, 2021 Comments concluded that the use case for the HCA that most closely resembles the Commission’s long-term goal for the HCA is the use of the HCA to automate the Supplemental Review Screens.³ Xcel agreed with this characterization and generally refers to it as the Fast Track Supplemental Review Screen (FTSRS) Use Case.⁴

Order Point No. 4 of the Commission’s July 31, 2020 Order required Xcel to evaluate the costs and benefits associated with a hosting capacity analysis able to achieve the following objectives: (a) remaining an early indicator of possible locations for interconnection; (b) replacing or augmenting

³ Department’s Initial Comments, dated April 7, 2021, at 17-18.

⁴ Xcel Reply Comments, at 4.

initial review screens and/or supplemental review in the interconnection process; and or (c) automating interconnection studies.⁵

Since Order Point No. 9 of the Commission's July 31, 2020 Order established the long-term goal of the HCA to use it in the interconnection process's fast track screens (or, in Xcel's words, the FTSRS Use Case), and because Xcel was required to evaluate the costs and benefits of associated with replacing or augmenting the initial review screens and/or *supplemental review* in the interconnection process, the Department's second and third requests were generally intended to elicit a response from the Company that delineated the specific costs associated with fulfilling the Commission's long-term goal of the HCA and that fulfilled the requirements of Order Point No. 4.

In review of Xcel's Reply Comments, the Department found it generally difficult to find specific answers to its questions regarding the FTSRS Use Case and efforts that Xcel would need to undertake to implement the FTSRS Use Case. Many of the investments/improvements to the HCA that Xcel proposed or articulated relate to improvements identified by stakeholders that would make the HCA more useful for them, and ultimately, to a form of the HCA that integrates with the MN DIP to automate interconnection studies more broadly. It is difficult to parse out which investments/improvements are necessary only to implement the FTSRS Use Case.

The Department evaluates the Company's responses to each of the sub-items of its second request below.

b. What Frequency of Feeder Model Updates are Needed to Implement the FTSRS Use Case?

The Company stated that "full automation of the SRS would require that the subject feeder model(s) are updated at the time of study" but that "the monthly feeder build update process...would be largely sufficient to use in the SRS" but clarified that it "may need to run additional updates for certain feeders on an ad hoc basis to ensure we capture all relevant changes that have occurred."⁶

The Company further elaborated, explaining that "the monthly feeder model updates to support the monthly HCA may largely suffice due to the pace of large solar projects coming through the SRS on the same feeders will be spread out" which is "due to the sequential nature of MN DIP – meaning that we need to wait for one project to move through the process before we analyze another." The Company pointed out, however, that "smaller projects have the opportunity to move faster through the reviews if there is enough capacity" and so the "feeder model update tool we will need to deliver the SRS improvements requires an ad hoc update process, to be sure that we are continually accounting for additional DER that has connected to the system since the most recent scheduled/monthly update."⁷

⁵ This use case was first articulated in Order Point No. 6 of the Commission's August 15, 2019 Order in Docket No. E002/M-18-684 as one of three potential use cases, which was reiterated in Order Point No. 4 of the Commission's July 31, 2020 Order in Docket No. E002/M-19-685.

⁶ Xcel Reply Comments, at 21.

⁷ Xcel Reply Comments, at 22.

c. Are Quarterly HCA Updates Sufficient to Implement the FTSRS Use Case?

The Company clarified that the “production of quarterly HCA results is fully manual and has no bearing on integration of the HCA and MN DIP screens,” and in order for the Company to increase the cadence beyond quarterly, the Company “need[s] to develop an automated feeder build tool and database...[which] are also necessary precursors to integration of the HCA with the SRS that we have described.”⁸

d. What Primary and Secondary Field Data Validation Efforts are Needed to Implement the FTSRS Use Case?

The Company did not directly address what field data validation efforts are needed to implement the FTSRS Use Case, but indicated that the “DER integration team would be able to leverage the newly validated primary system data in freshly updated and automated feeder models that were necessary to realize a monthly HCA cadence” and that these improvements “negate currently manual portions of the supplemental screens.”⁹ In other words, it does not appear that additional primary and secondary field data validations are currently needed to implement the FTSRS Use Case, but that improving the frequency of updates of the HCA to a monthly cadence and the associated improvements would also benefit the FTSRS Use Case, and developers could obtain a “50 – 75 percent reduction in screening time from the current MN DIP timeline.”¹⁰

The Company indicated that “scope of the data effort most closely aligned with the Commission’s long-term goal for the HCA would be focused on the Primary System and would validate existing asset data in our GIS and collect the additional asset data necessary to support an interconnection Use Case.”¹¹ The Company indicated that the Secondary System data effort is necessary to automate the Fast Track Initial Review Screens, and “is also necessary to support automation of the Supplemental Review for smaller projects connected to the secondary portions of our system.”¹²

e. What Aspects of Primary and Secondary Field Data Validation Efforts are Needed Related Only to the FTSRS Use Case?

The Company’s Reply Comments did not provide a clear answer to this more tailored question. It seems that the Company’s proposal for Primary and Secondary Field Data Validation are most useful for the interconnection Use Case, but it is not clear to what extent, if any, these validation efforts can be narrowly focused to support the FTSRS Use Case only.

⁸ Xcel Reply Comments, at 22.

⁹ Xcel Reply Comments, at 13.

¹⁰ Xcel Reply Comments, at 13.

¹¹ Xcel Reply Comments, at 6.

¹² Xcel Reply Comments, at 7.

The Company also later indicated that the “improvements required to implement the improvements to the FTSRS [Use Case] are interdependent with improvements to the Initial Review Screens.”¹³

f. What is the Timeline to Implement the FTSRS Use Case?

The Company indicated that “from project initiation, we estimate the timeline to deliver these FTSRS improvements is approximately 9 to 12 months.”¹⁴

g. What are the differences between the ADMS-related and HCA-related Primary System Field Data Validation Efforts and What Are the Incremental Costs of Conducting the HCA-related Primary System Field Data Validation Efforts?

On pages 7 and 8 of Xcel’s Reply Comments, the Company indicated that the “asset data collection and validation work [it] would do on the Primary System would be complementary to what it is underway for the [ADMS].” The Company also stated that its responses to MPUC IR No. 1 and IREC IR No. 10 explained that “the ADMS asset data effort is narrower in scope and scale than the full asset data collection and validation necessary for an interconnection Use Case.” The Department reviewed the Company’s responses to MPUC and IREC IRs.

It remains difficult to discern what the specific differences between the Primary System verification is currently doing for ADMS versus the Primary System verification that Xcel would need to do in order to implement the FTSRS Use Case. Xcel’s response to IREC IR No. 10 generally and on page 8 of its Reply Comments specifically indicate that the Primary System verification related to ADMS is “narrower in scope and scale than the full asset data collection and validation necessary for an *interconnection Use Case*” (emphasis added). However, that is not responsive to the Department’s more tailored request for additional information related to the Primary System verification that Xcel would need to do in order to implement *the FTSRS Use Case*.

h. Conclusion Regarding the Costs of the FTSRS Use Case

Based on the Department’s review of the record, information regarding the specific costs of implementing just the FTSRS Use Case remains somewhat elusive.

Xcel proposed two paths intended to be responsive to the Department’s questions regarding the specific costs of implementing the FTSRS Use Case: Path 1 outlines the “functionalities and benefits of automating of the HCA and integration with the FTSRS below when done with a full Primary System asset data effort” and Path 2 “defers the Primary System data validation to a later point in time and delivers improved HCA and interconnection tools consistent with the Commission’s long-term goal sooner.”¹⁵ Both of these paths also deliver HCA improvements with separate cost components, but

¹³ Xcel Reply Comments, at 14.

¹⁴ Xcel Reply Comments, at 14.

¹⁵ Xcel Reply Comments, at 8.

neither path indicates *what level of effort and cost is needed to implement the Commission's long-term goal (the FTSRS Use Case) that is incremental to the ongoing ADMS Primary System verification* and that is separate and apart from other HCA improvements.

Instead, the Company indicated that if the Commission directed it to proceed with a Primary System data collection effort to support the HCA and its integration with MN DIP as explained in Path 1, it would “work closely with the ADMS team and return to the Commission with a more refined plan, costs, timeline, and proposal for cost recovery in 2022.”¹⁶ The Company stated that its estimated timeline to complete the Primary System asset data validation is approximately 2-3 years with a conceptual cost in the range of \$27 million - \$32 million. This provides the Commission with little insight into how this Primary System asset data validation effort is different from its ongoing ADMS Primary System asset data validation effort, nor does it fully explain whether the \$27 million - \$32 million cost estimate is *incremental* to the ADMS Primary System asset data validation effort.

In proposing Path 2, the Company explained that it “allows the ADMS effort to proceed as planned” and then would later “initiate a further asset data update process sufficient to support an HCA/Interconnection Use Case to fill-in where the Primary System data in our GIS is not robust enough to support an interconnection Use Case and gather and validate Secondary System asset data to enable further efficiencies for rooftop/smaller DER.”¹⁷ Again, this provides the Commission with little insight into what level of effort is needed, *if any*, to implement the FTSRS Use Case, nor what its incremental cost would be.

The Company indicated that some general HCA improvements incidentally relate to the FTSRS Use Case. For instance, the Company stated that Supplemental Review Screens (of the FTSRS Use Case) would “benefit from the combination of investments in Primary System asset validation and collection and the process automation necessary for the monthly HCA.”¹⁸ These investments involve implementation of Automated GIS/Synergi Queries and Automated Screening Tools, and further, this functionality “relies on completion of the work necessary to implement the monthly HCA.”¹⁹

It is not clear, however, whether these improvements are necessary to implement the FTSRS Use Case, or instead if they are other HCA improvements that incidentally benefit the FTSRS Use Case. Xcel stated that the “total conceptual cost estimate for the FTSRS functionality is \$700,000 to \$1.4 million” but that the “improvements to the FTSRS are interdependent with improvements to the Initial Review Screens.”²⁰ Again, it is not clear whether these improvements are necessary to implement the FTSRS Use Case.

¹⁶ Xcel Reply Comments, at 8.

¹⁷ Xcel Reply Comments, at 16.

¹⁸ Xcel Reply Comments, at 12.

¹⁹ Xcel Reply Comments, at 13-14.

²⁰ Xcel Reply Comments, at 14.

Additionally, the Company provided some indication that there may be threshold improvements that need to be made before the FTSRS Use Case can be implemented:²¹

Once the monthly HCA and feeder model build automation processes are up and running, we can initiate the work to integrate the HCA into the Supplemental Review and Initial Review Screening processes to start realizing time efficiencies for stakeholders in those processes.

It is not clear whether is responsive to the Department's tailored request, as it conflates automation of the Supplemental and Initial Review Screening processes. Is automation of the monthly HCA and feeder model build processes *necessary* to implement the FTSRS Use Case? What components of the automated monthly HCA and feeder model build processes relate to the Initial Review Screening process, and, separately, to the Supplemental Review Screening process? Is it possible to disentangle these improvements and delineate the specific costs to implement the FTSRS Use Case?

The Company indicated that the foundational Primary System data initiative articulated in the EPRI Whitepaper included with the 2020 Report, "combined with investments in other information systems would yield more frequent and more accurate HCA results and more accurate and faster FTSRS results for large solar projects" and that a Secondary System data effort is "necessary to support the automation of the Supplemental Review for smaller projects connected to the secondary portions of our system."²²

Unfortunately, however, the Department is not able to parse out the costs of implementing the FTSRS Use Case. As explained and agreed to by Xcel, this is the use case established by the Commission's long-term goal for the HCA. While Xcel attempted to generally articulate the costs of other improvements of the HCA that other stakeholders, and possibly even the Commission itself, are interested in, it seems that a specific delineation of costs regarding the implementation of the FTSRS Use Case in isolation has not been provided, or if it has, it is not clear to the Department what those specific costs are.

The Department is interested in *cost-effective* distribution system planning that furthers the energy policy goals of the state of Minnesota, including the facilitation of distributed energy resources development and integration. The cost-effective caveat generally refers to the following concepts that serve ratepayers best: (1) the principle of cost causation; (2) benefit-cost analysis (BCA); and (3) least-cost/best-fit analysis (LCBF).²³

²¹ Xcel Reply Comments, at 17.

²² Xcel Reply Comments, at 7.

²³ Additional information regarding BCA and LCBF analyses of utility-facing grid modernization investments can be found here: Woolf, Tim, et al. "Benefit-Cost Analysis for Utility-Facing Grid Modernization Investments: Trends, Challenges, and Considerations." (2021). Accessed at: <https://emp.lbl.gov/publications/benefit-cost-analysis-utility-facing>. Note that the Report indicates that many of the principles and concepts described are relevant to customer-facing grid modernization projects as well.

That is, distribution system planning should, to the extent practicable, follow the traditional and long-standing principle of cost causation: those who benefit from a utility investment or service should be required to pay their fair share of the investment or service, and as a corollary, those who cause the utility to incur costs in the course of the utility's provision of energy services should be required to pay for those costs.

Additionally, distribution system planning should, to the extent practicable, be guided by BCAs that identify all the relevant benefits and costs of a utility investment. To the extent that a utility investment has been demonstrated to be necessary, but whose benefits cannot be easily quantified and/or the investment will not lead to a net benefit, LCBF analyses should be used.

Applied to Xcel's HCA, these cost-effective caveats engender a general need for Xcel to provide more comprehensive and refined analyses regarding the costs and benefits of making improvements to future HCAs and any proposals to recover costs through the Transmission Cost Recovery (TCR) Rider as authorized by Minn. Stat. §216B.16, subd. 7b(4), as Xcel proposed to do.

Toward that end, the Department makes the following recommendations should the Commission require Xcel to pursue either Path 1 or Path 2 improvements to the HCA and if Xcel proceeds with its proposal to request cost recovery of these improvements through the TCR Rider:

- **The Department recommends that the Commission require Xcel to conduct a benefit-cost analysis of the Company's proposed Path 1 and Path 2 improvements of its hosting capacity analysis in any future cost recovery filing. This analysis should clearly indicate which improvements are incremental to any existing and planned grid modernization proposals, such as Xcel's ongoing Advanced Distribution System Management project. Additionally, this analysis should include a discussion of revenue generation from beneficiaries of any improvements.**
- **The Department recommends that the Commission require Xcel to exclude its hosting capacity analysis costs from its next rate case if the Company requests recovery of its HCA costs through its next Transmission Cost Recovery Rider Petition.**

Additionally, in furtherance of better understanding the cost implications of improving the HCA consistent with the Commission's previously stated long-term goal for the HCA, the Department makes the following recommendation:

- **The Department recommends that the Commission require Xcel to separately develop a proposal to implement the Fast Track Supplement Review Screen Use Case in the next hosting capacity analysis report consistent with the Commission's long-term goal of the hosting capacity analysis, and conduct a benefit-cost analysis of the FTSRS Use Case.**

3. The Department's Fourth Request

The Department's fourth request for additional information in our April 7, 2021 Comments was as follows:

[T]he Department requests that Xcel quantify the potential savings associated with using the HCA in the Supplemental Review Screens of the MN DIP. The Department also requests that Xcel identify any further savings that may result from using the HCA in the Supplemental Review Screens of the MN DIP, including savings experienced by developers, and to quantify those savings if they exist.

As stated previously, the Company inadvertently omitted a response to this request for additional information in its May 21, 2021 Reply Comments and submitted a supplement to its Reply Comments on June 4, 2021 (Supplement).

In the 2020 Report, Xcel estimated that its proposed efforts to improve the HCA could save nearly 1,000 hours of engineering time per year.²⁴ Xcel's Supplement provided a table providing more clear estimates of the potential savings associated with its proposed Path 1 and Path 2 improvements.²⁵

Additionally, in response to the second prong of the Department's fourth request to identify any further savings that may result from using the HCA in the Supplemental Review Screens of the MN DIP, including savings experienced by developers, Xcel explained that they are not able to quantify any accompanying reduction in processing times of developers' applications.²⁶

The Department appreciates Xcel's diligence in responding to requests for additional information.

B. OTHER ISSUES

1. Order Point No. 8

Order Point No. 8 required future HCA reports to be detailed enough to provide developers with a reliable estimate of the available level of hosting capacity at the feeder and sub-feeder levels at the time of the submittal of the report to the extent practicable, and requires the information to be sufficient enough to provide developers with a starting point for interconnection applications.

²⁴ 2020 Report, Att. F, at 18-19.

²⁵ Xcel's Supplement to Reply Comments, dated June 4, 2021, at 2. See Table 1: Annual Application Screening Volumes and Estimated Engineering Efficiencies – Based on Approximate 2020 Volumes.

²⁶ Xcel's Supplement to Reply Comments, at 3.

The Department's April 7, 2021 Comments indicated that, at the time of those comments and based on a close reading of Order Point No. 8, the Department tentatively concluded that Xcel complied with Order Point No. 8. However, the Department also caveated that conclusion by indicating that stakeholder comments should be considered before making a final determination, as those with more sophisticated knowledge and experience with DER interconnection are best positioned to evaluate how useful the HCA is.

The Department reviewed stakeholder comments, but does not have sufficient distribution system engineering experience to fully evaluate the competing claims made by stakeholders and the Company. In the broader context of Xcel's HCA and its plan for future improvements, the Department maintains its conclusion that, based on a close reading of the text, that Xcel complied with Order Point No. 8.

The Department expects that once the Commission refines its preferences for what improvements, if any, should be made to Xcel's HCA, and once those improvements are implemented, the Department and other stakeholders can monitor whether the HCA is detailed enough to provide developers with a reliable estimate of the available level of hosting capacity at the feeder and sub-feeder levels at the time of the submittal of the report to the extent practicable, and can determine whether the information is sufficient enough to provide developers with a starting point for interconnection applications.

- **The Department recommends that the Commission maintain Order Point No. 8 for future HCA reports.**

The Department does not have any other issues or concerns related to this matter at this time.

III. DEPARTMENT RECOMMENDATIONS

The Department appreciates the opportunity to comment further on Xcel's 2020 Hosting Capacity Analysis Report, and respectfully requests that the Commission accept this Supplemental Comment into the record for this proceeding.

The Department recommends that the Commission accept Xcel's Report and makes the following recommendations:

- **The Department recommends that the Commission require Xcel to conduct a benefit-cost analysis of the Company's proposed Path 1 and Path 2 improvements of its hosting capacity analysis in any future cost recovery filing. This analysis should clearly indicate which improvements are incremental to any existing and planned grid modernization proposals, such as Xcel's ongoing Advanced Distribution System Management project. Additionally, this analysis should include a discussion of revenue generation from beneficiaries of any improvements.**

- **The Department recommends that the Commission require Xcel to exclude its hosting capacity analysis costs from its next rate case if the Company requests recovery of its HCA costs through its next Transmission Cost Recovery Rider Petition.**
- **The Department recommends that the Commission require Xcel to separately develop a proposal to implement the Fast Track Supplement Review Screen Use Case in the next hosting capacity analysis report consistent with the Commission's long-term goal of the hosting capacity analysis, and conduct a benefit-cost analysis of the FTSRS Use Case.**
- **The Department recommends that the Commission maintain Order Point No. 8 for future HCA reports.**

/ja

CERTIFICATE OF SERVICE

I, Sharon Ferguson, hereby certify that I have this day, served copies of the following document on the attached list of persons by electronic filing, certified mail, e-mail, or by depositing a true and correct copy thereof properly enveloped with postage paid in the United States Mail at St. Paul, Minnesota.

**Minnesota Department of Commerce
Supplemental Comments**

Docket No. E002/M-20-812

Dated this 26th day of July 2021

/s/Sharon Ferguson

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Roxanne	Achman	rachman@co.benton.mn.us		531 Dewey Street Foley, MN 56329	Electronic Service	No	OFF_SL_20-812_Official Service List
Alison C	Archer	aarcher@misoenergy.org	MISO	2985 Ames Crossing Rd Eagan, MN 55121	Electronic Service	No	OFF_SL_20-812_Official Service List
James J.	Bertrand	james.bertrand@stinson.com	STINSON LLP	50 S 6th St Ste 2600 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_20-812_Official Service List
James	Canaday	james.canaday@ag.state.mn.us	Office of the Attorney General-RUD	Suite 1400 445 Minnesota St. St. Paul, MN 55101	Electronic Service	No	OFF_SL_20-812_Official Service List
John	Coffman	john@johncoffman.net	AARP	871 Tuxedo Blvd. St. Louis, MO 63119-2044	Electronic Service	No	OFF_SL_20-812_Official Service List
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_20-812_Official Service List
Riley	Conlin	riley.conlin@stoel.com	Stoel Rives LLP	33 S. 6th Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_20-812_Official Service List
Brooke	Cooper	bcooper@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022191	Electronic Service	No	OFF_SL_20-812_Official Service List
George	Crocker	gwillc@nawo.org	North American Water Office	PO Box 174 Lake Elmo, MN 55042	Electronic Service	No	OFF_SL_20-812_Official Service List
John	Farrell	jfarrell@ilsr.org	Institute for Local Self- Reliance	2720 E. 22nd St Institute for Local Self- Reliance Minneapolis, MN 55406	Electronic Service	No	OFF_SL_20-812_Official Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_20-812_Official Service List
Edward	Garvey	edward.garvey@AESLconsulting.com	AESL Consulting	32 Lawton St Saint Paul, MN 55102-2617	Electronic Service	No	OFF_SL_20-812_Official Service List
Janet	Gonzalez	Janet.gonzalez@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 55101	Electronic Service	No	OFF_SL_20-812_Official Service List
Adam	Heinen	aheinen@dakotaelectric.com	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Electronic Service	No	OFF_SL_20-812_Official Service List
Michael	Hoppe	lu23@ibew23.org	Local Union 23, I.B.E.W.	445 Etna Street Ste. 61 St. Paul, MN 55106	Electronic Service	No	OFF_SL_20-812_Official Service List
Alan	Jenkins	aj@jenkinsatlaw.com	Jenkins at Law	2950 Yellowtail Ave. Marathon, FL 33050	Electronic Service	No	OFF_SL_20-812_Official Service List
Richard	Johnson	Rick.Johnson@lawmoss.com	Moss & Barnett	150 S. 5th Street Suite 1200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_20-812_Official Service List
Sarah	Johnson Phillips	sarah.phillips@stoel.com	Stoel Rives LLP	33 South Sixth Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_20-812_Official Service List
Mark J.	Kaufman	mkaufman@ibewlocal949.org	IBEW Local Union 949	12908 Nicollet Avenue South Burnsville, MN 55337	Electronic Service	No	OFF_SL_20-812_Official Service List
Thomas	Koehler	TGK@IBEW160.org	Local Union #160, IBEW	2909 Anthony Ln St Anthony Village, MN 55418-3238	Electronic Service	No	OFF_SL_20-812_Official Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Peder	Larson	plarson@larkinhoffman.com	Larkin Hoffman Daly & Lindgren, Ltd.	8300 Norman Center Drive Suite 1000 Bloomington, MN 55437	Electronic Service	No	OFF_SL_20-812_Official Service List
Kavita	Maini	kmains@wi.rr.com	KM Energy Consulting, LLC	961 N Lost Woods Rd Oconomowoc, WI 53066	Electronic Service	No	OFF_SL_20-812_Official Service List
Pam	Marshall	pam@energycents.org	Energy CENTS Coalition	823 7th St E St. Paul, MN 55106	Electronic Service	No	OFF_SL_20-812_Official Service List
Maria	McCoy	maria@ilsr.org	Institute for Local Self-Reliance	2720 E 22nd St. Minneapolis, MN 55406	Electronic Service	No	OFF_SL_20-812_Official Service List
Joseph	Meyer	joseph.meyer@ag.state.mn.us	Office of the Attorney General-RUD	Bremer Tower, Suite 1400 445 Minnesota Street St Paul, MN 55101-2131	Electronic Service	No	OFF_SL_20-812_Official Service List
Stacy	Miller	stacy.miller@minneapolismn.gov	City of Minneapolis	350 S. 5th Street Room M 301 Minneapolis, MN 55415	Electronic Service	No	OFF_SL_20-812_Official Service List
David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	Electronic Service	No	OFF_SL_20-812_Official Service List
Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP	33 South Sixth St Ste 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_20-812_Official Service List
David	Niles	david.niles@avantenergy.com	Minnesota Municipal Power Agency	220 South Sixth Street Suite 1300 Minneapolis, Minnesota 55402	Electronic Service	No	OFF_SL_20-812_Official Service List
Carol A.	Overland	overland@legalelectric.org	Legalelectric - Overland Law Office	1110 West Avenue Red Wing, MN 55066	Electronic Service	No	OFF_SL_20-812_Official Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_20-812_Official Service List
Kevin	Reuther	kreuther@mncenter.org	MN Center for Environmental Advocacy	26 E Exchange St, Ste 206 St. Paul, MN 551011667	Electronic Service	No	OFF_SL_20-812_Official Service List
Isabel	Ricker	ricker@fresh-energy.org	Fresh Energy	408 Saint Peter Street Suite 220 Saint Paul, MN 55102	Electronic Service	No	OFF_SL_20-812_Official Service List
Richard	Savelkoul	rsavelkoul@martinsquires.com	Martin & Squires, P.A.	332 Minnesota Street Ste W2750 St. Paul, MN 55101	Electronic Service	No	OFF_SL_20-812_Official Service List
Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission	121 7th PI E Ste 350 Saint Paul, MN 55101	Electronic Service	Yes	OFF_SL_20-812_Official Service List
Bria	Shea	bria.e.shea@xcelenergy.com	Xcel Energy	414 Nicollet Mall Minneapolis, MN 55401	Electronic Service	No	OFF_SL_20-812_Official Service List
Ken	Smith	ken.smith@districtenergy.com	District Energy St. Paul Inc.	76 W Kellogg Blvd St. Paul, MN 55102	Electronic Service	No	OFF_SL_20-812_Official Service List
Sky	Stanfield	stanfield@smwlaw.com	Shute, Mihaly & Weinberger	396 Hayes Street San Francisco, CA 94102	Electronic Service	No	OFF_SL_20-812_Official Service List
Byron E.	Starns	byron.starns@stinson.com	STINSON LLP	50 S 6th St Ste 2600 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_20-812_Official Service List
James M	Strommen	jstrommen@kennedy-graven.com	Kennedy & Graven, Chartered	150 S 5th St Ste 700 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_20-812_Official Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Eric	Swanson	eswanson@winthrop.com	Winthrop & Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	OFF_SL_20-812_Official Service List
Lynnette	Sweet	Regulatory.records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	Yes	OFF_SL_20-812_Official Service List
Thomas	Tynes	jjazynka@energyfreedomcoalition.com	Energy Freedom Coalition of America	101 Constitution Ave NW Ste 525 East Washington, DC 20001	Electronic Service	No	OFF_SL_20-812_Official Service List
Lisa	Veith	lisa.veith@ci.stpaul.mn.us	City of St. Paul	400 City Hall and Courthouse 15 West Kellogg Blvd. St. Paul, MN 55102	Electronic Service	No	OFF_SL_20-812_Official Service List
Joseph	Windler	jwindler@winthrop.com	Winthrop & Weinstine	225 South Sixth Street, Suite 3500 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_20-812_Official Service List
Yochi	Zakai	yzakai@smwlaw.com	SHUTE, MIHALY & WEINBERGER LLP	396 Hayes Street San Francisco, CA 94102	Electronic Service	No	OFF_SL_20-812_Official Service List
Patrick	Zomer	Pat.Zomer@lawmoss.com	Moss & Barnett a Professional Association	150 S. 5th Street, #1200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_20-812_Official Service List