

July 21, 2022

Will Seuffert
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101-2147

RE: **Comments of the Minnesota Department of Commerce, Division of Energy Resources**
Docket Nos. E002/M-15-111, E002/M-17-817, E002/M-18-643, E002/M-19-186, E002/M-19-
559, E002/M-20-711, E002/M-20-745, E002/M-21-101, E015/M-15-112, E017/M-20-638,

Dear Mr. Seuffert:

On June 1, 2022, Minnesota Power (MP), Otter Tail Power (OTP) and Northern States Power d/b/a Xcel Energy (Xcel) submitted their Annual Electric Vehicle Reports.

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

Annual Electric Vehicle Reports for Minnesota Power, Otter Tail Power, and Northern
States Power Company d/b/a Xcel Energy

The Department **recommends that the Commission accept Minnesota Power, Otter Tail Power and Xcel Energy's 2022 Annual EV Reports** and is available to answer any questions the Minnesota Public Utilities Commission may have.

Sincerely,

/s/ CHRISTOPHER T. DAVIS
Public Utility Rates Analyst Coordinator

CTD/ja
Attachment



Before the Minnesota Public Utilities Commission

Comments of the Minnesota Department of Commerce Division of Energy Resources

Docket Nos. E015/M-15-112, E017/M-20-638, E002/M-15-111, E002/M-17-817, E002/M-18-643, E002/M-19-186, E002/M-19-559, E002/M-20-711, E002/M-20-745, E002/M-21-101

I. INTRODUCTION

Minnesota Power submitted its 2021/2022 Annual Electric Vehicle (EV) Report for its Residential Off-Peak EV Tariff and Charging Rebate Program Pilot covering the period from May 1, 2021 to April 30, 2022. The Company submitted this report pursuant to the Commission's April 16, 2021 Order in Docket No. E015/M-20-638.¹

Xcel submitted its Annual EV Report regarding its suite of EV charging tariffs, programs and pilots for the period ending April 30, 2022. The Annual Report was submitted pursuant to the Commission's Orders in Docket Nos. E002/M-15-111,² E002/M-17-817,³ E002/M-18-643,⁴ E002/M-19-186,⁵ E002/M-19-559,⁶ E002/M-20-711,⁷ E002/M-20-745,⁸ and E002/M-21-101.⁹

Otter Tail Power submitted its Annual EV Report in response to the Commission's December 12, 2019 Order in Docket Nos. E017/M-15-112¹⁰ and its Transportation Electrification Plan (Docket No. E999/CI-17-879).

II. DEPARTMENT ANALYSIS

In these comments, the Minnesota Department of Commerce, Division of Energy Resources (Department), provides brief observations of some of Minnesota Power and Xcel's pilot programs. The Department does not discuss Otter Tail's Direct Current Fuel Charging (DCFC) network charging program because the Company does not yet have any DCFC chargers installed yet.

As discussed below, Xcel will file evaluations of several of its programs in its 2023 Transportation Electrification Plans.

¹ At 7 and Appendix A.

² Orders dated June 22, 2015, September 11, 2018, and December 12, 2019.

³ Order dated May 9, 2018.

⁴ Order dated July 17, 2019.

⁵ Order dated October 7, 2019.

⁶ Order dated October 6, 2020.

⁷ Order dated August 2, 2021.

⁸ Order dated April 27, 2022.

⁹ Order dated March 15, 2022.

¹⁰ Paragraph 2.

A. XCEL

1. *Xcel Will Evaluate EV Programs in its 2023 Transportation Electrification Plan*

The Department appreciates Xcel's compliance filing reports for its multiple EV filings. In our September 30, 2021 Initial Comments in Docket No. E999/CI-17-879, Transportation Electrification Plans, the Department stated:

In general, the Department recognizes that EV projects should be evaluated before permanent versions of the projects are proposed. The evaluations may differ depending on the life cycle of the project, availability of data, cost, and which utility is carrying out the project. The evaluations may include cost-effectiveness analysis, analysis of impact of project on promoting off-peak charging, and comparison to other EV projects--state and nationwide--with the same goals.

In addition, the Department stated:

Since the next TEPs are due June 1, 2023, it appears to the Department that the only projects that might be ready for evaluation would be four of Xcel's projects—Fleet EV Service, Public Charging Infrastructure Pilot, Residential EV Subscription Service Pilot and EV Accelerate at Home. The Department requests that in Reply Comments Xcel to respond as to whether it believes these four EV projects would be ready for a more comprehensive evaluation in, or in advance of, the 2023 TEPs.

In its October 11, 2021 Reply Comments, Xcel stated that it would be reasonable for the Company to provide an evaluation of its existing EV pilots and programs in its 2023 TEP. The Company stated: "We anticipate the evaluations would primarily consist of a summary of pilot and programs, operations, data and metrics, and other information gathered as a part of our EV annual reporting requirements." The Department looks forward to reviewing and learning from Xcel's 2023 evaluations.

Below, the Department briefly summarizes information provided this year for the programs that Xcel will evaluate next year.

2. *Residential EV Subscription Service Pilot (Docket No. E002/M-19-186)*

Design

This pilot was designed to allow customers to charge off-peak for a preset monthly fee, encouraging off-peak charging and offering customers certainty in monthly charging costs. The pilot provides customers with all the services of EV Accelerate At Home, but instead of the three-part EV Time of Use rate, customers are charged a straightforward monthly subscription fee to make EV charging costs easy to understand and consistent from month to month.

Participation

Xcel reached the enrollment cap of 150 participants in 2021, but currently has a total of 134 participants since some of the customers dropped out and some switched to EV Accelerate At Home program as it made more economic sense for them. To date, 114 of the participants have chosen the bundled option, which allows them to pay for the charger monthly. In addition, 20 of the customers chose to prepay for the charger at the time of installation. Of the participating customers, 81 have chosen to source their electricity using Windsource.

Amount of Charging

When developing its EV Subscription Service pilot, Xcel estimated that the average customer's monthly usage would be 340 kWh. However, over the period of May 1, 2021 to April 30, 2022, the average customer's monthly charging usage was approximately 430 kWh per month. As shown in Table 1 below, the actual charging usage was 18 percent higher than Xcel projected.

Table 1: Xcel's EV Subscription Pilot Actual Energy Charge Related Revenue vs. Projected

	2021 Actual Energy Charge Related Revenue	2021 Projected Energy Charge Related Revenue	Projected Revenues - Actual Revenues	Projected Revenues/ Actual Revenues
Base Rate and Rider Energy Charges	\$0.0766	\$0.0766		
Off-Peak Usage	339.9	401.2		
Average Revenue per Bill	\$26.04	\$30.73		
No. of Bills (2021)	1,543	1,543		
Energy Charge Revenue	\$40,174	\$47,419	\$7,245	18%

Although the actual usage was 18 percent higher than projected, the small number of participants resulted in an under recovery of only \$7,245. In response to DOC IR No. 3, Xcel stated that the subscription service is an approved tariff without a true-up mechanism, thus the Company has no plans to recover the difference of \$7,245.

3. *Fleet EV Service Pilot (Docket No. E002/M-18-643)*

The Fleet EV Service Pilot project was designed to authorize Xcel's investment to install and maintain EV infrastructure for fleet operators (entities using groups of EVs). Xcel estimated that over 700 charging ports would be installed as part of this pilot program, and the Company expects to initially serve three customers: Metro Transit; the Department of Administration; and the City of Minneapolis.

Although the EV Service Pilot was approved in July 2019, its rollout has been slow. Xcel stated that several projects were delayed due to finalizing customer agreements with the partner entities. Since then, Xcel stated that it has received approval for modified contracts to move pilot projects forward, and the Commission also approved an expedited process for approving contract modification.

Participants

Xcel stated that the Company has four completed projects, six sites in design/construction phase, and 12 site applicants in process. The existing participants are operating 11 electric buses and six light-duty vehicles. Table 2 below shows the status of the EV Service Pilot program.

Table 2: Status of the EV Service Pilot

	In Process	Design / Construction	In Service
Applications	6	6	4
Sites	6	6	4
Charging Ports	62	50	19

Energy Usage and Charging Behavior

Xcel only reported energy usage for Metro Transit. Xcel stated that despite Metro Transit having a unique usage profile, with driving taking place throughout the day, they are still able to do the majority of its charging in off-peak periods.

4. *Public Charging Infrastructure Pilot (Docket No. E002/M-18-643)*

The Public Charging Infrastructure Pilot allows Xcel to install and maintain EV infrastructure for site hosts and developers of public fast-charging stations along corridors within Xcel's service territory, as well as for a network of EV community mobility hubs.

Participants

As of April 2022, Xcel had no completed projects, which is behind expectations. Xcel stated that it had 49 active applications, with 18 having reached an agreement and in the design/construction phase. The participating site hosts are in 10 counties and represent municipalities, private companies (such as auto dealerships) school districts, and counties. In response to DOC IR No. 44, Xcel projected that the Company would complete 35 projects by the end of 2022 as part of its Public Charging EV Service Pilot. The projects will include a total of 67 ports and be installed at a variety of facilities including city halls, community buildings, parks, offices, public right of way and auto dealerships. Hopefully Xcel will have achieved higher participation rates in time for the program evaluation in 2023.

Importance of Public Charging

Although not all parties to Xcel's EV dockets agree Xcel should own public charging stations, all parties agree that an increase in public charging stations in strategic locations (both in high- and low-population density areas) is imperative to the success of electrifying Minnesota's transportation system. The Department looks forward to review Xcel's progress towards installing public charging stations in 2023.

5. *Multi-Dwelling Unit (MDU) EV Charging Pilot (Docket No. E002/M-20-711)*

This pilot was designed to overcome the barriers to EV charging at MDUs¹¹, determine the financial support needed to incentivize the installation of EV charging at MDUs, and provide enough financial support to facilitate installation of EV infrastructure in affordable-housing MDUs.

Applications

Xcel received 52 applications seeking Tranche 1 level funding (which includes full funding for the line extension and the EV Supply Infrastructure). The estimated port count for the 52 applicants was 1,176, for an average of 23 ports per site. Applicant sites were located across 15 different cities, with most in

¹¹ The barriers at MDUs include high upfront installation costs, potentially differing interest between site hosts and residential customers, a lack of site host and developer education and technical knowledge of charging options, and a lack of incentive for building owners to provide charging on site.

the Minneapolis/St. Paul metro area. Xcel chose 10 applicants representing 368 multifamily charging points for Tranche 1 level funding. Xcel stated that four of the 10 customers chosen answered “yes” to the question, “Will this charging serve disproportionately impacted or underserved communities?”¹² Further eight of the 10 customers selected for Tranche 1 noted that charging would most often occur during off-peak and shoulder periods.

Tranche 2 Participation

Xcel offered 15 of the 52 applicants Tranche 2 level funding, which would provide utility funding for 50 percent of the EVSI project cost. At this point none of the applicants have accepted Tranche 2 level funding.

HOURLCAR¹³ Participation

Design and construction are underway on six HOURLCAR sites, representing 12 ports. The HOURLCAR vehicles will be available to those in the income-qualified multifamily housing and the surrounding community.

B. MINNESOTA POWER

1. Smart Charge Rewards Program (Docket No. E015/M-20-638)

The Commission approved Minnesota Power’s Portfolio of Electric Vehicle Programs in its April 21, 2021 Order in Docket No. E-015/M-20-638. The Portfolio included a Smart Charge Rewards Program, Customer Charging Rebate Program, and dedicated budgets for Education and Outreach and Program Development and Delivery. On April 25, 2022, Minnesota Power filed a letter notifying the Commission that it is no longer able to offer the Smart Charge Rewards Program as the vendor discontinued the service.

¹² In DOC IR, the Department asked Xcel whether the applicants provided proof that the charging would serve disproportionately impacted or underserved communities. In response, Xcel stated “For the pilot’s application, customers were not asked or required to provide proof that their project would serve disproportionately impacted or underserved communities. As part of the Commission Order, we worked with community member(s) and affordable housing professional(s), such as HOURLCAR, to ensure our application process appropriately addressed equity considerations for scoring criteria. The Yes or No check-box response format in the application allowed customers to raise any equity considerations to be objectively reviewed and scored alongside the rest of their application information by the program team. As we obtain operational learnings from the pilot and contemplate improvements for any future proposal, we will continue to refine how equity considerations are prioritized in the application review and scoring process by seeking stakeholder feedback and discussing our approach with community members and affordable housing professionals.”

¹³ HOURLCAR is a Minnesota nonprofit car-sharing organization serving Rochester and the Minneapolis-St. Paul area which provides members with short-term reservations to a fleet of cars, trucks, and crossovers.

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Minnesota Power stated it will continue to monitor the market for established and reputable vendors to provide additional offerings to encourage customers to charge their electric vehicles during off-peak times. Until a new solution is identified, Minnesota Power stated that it will encourage EV drivers to participate in the existing Residential Off-Peak Electric Vehicle Service tariff or the recently approved default TOD rate.

III. DEPARTMENT RECOMMENDATIONS

The Department recommends that the Commission accept the 2022 Annual EV Reports for Xcel, Minnesota Power and Otter Tail Power.