

Staff Briefing Papers

Meeting Date	March 24, 2022	Agenda Item **2
Company	Xcel Energy E002/M-20-745	
Docket No.	In the Matter of Xcel Energy’s Petition for Approval of Electric Vehicle Programs as part of its COVID-19 Pandemic Economic Recovery Investments E,G999/M-20-492	
Issues	<p>In the Matter of an Inquiry into Utility Investments that May Assist in Minnesota’s Economic Recovery from the COVID-19 Pandemic.</p> <ol style="list-style-type: none"> 1. Should the Commission approve, modify, or reject Xcel Energy’s proposal to build, own, and operate public fast charging stations? 2. Should the Commission grant Xcel’s request to waive a portion of Xcel’s Section 6 tariff relating to Customer Wiring, Equipment, and Property? 3. Should the Commission approve, modify, or reject Xcel Energy’s request to accelerate its own fleet electrification? 4. Should the Commission approve, modify, or reject Xcel Energy’s rebate proposals for light duty vehicles, transit buses, and school buses? 5. How should the Commission handle cost recovery for Xcel’s proposed investments? 	
Staff	Hanna Terwilliger hanna.terwilliger@state.mn.us	651-201-2243
	Christian Noyce christian.noyce@state.mn.us	651-201-2215

Relevant Documents

Date

Xcel Petition and Supplements

Xcel – Initial Petition	September 25, 2020
Xcel – Supplement, Cost Benefit Analysis	January 1, 2021
Xcel – Supplemental Information	March 8, 2021
Xcel – Supplemental Comments Terms and Conditions	July 6, 2021
Xcel – Letter, Supplemental Information	October 1, 2021

Initial Comments

Greenlots	August 26, 2021
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Department of Commerce	August 26, 2021
Office of the Attorney General	August 26, 2021
Tesla	August 26, 2021
ChargePoint, Inc.	August 26, 2021
Clean Energy Groups	August 27, 2021
Reply Comments	
Xcel Energy	September 9 ,2021
Clean Energy Groups	September 20, 2021
Tesla	September 20, 2021
Weave Grid, Inc.	September 20, 2021
ChargePoint, Inc.	September 20, 2021
Greenlots	September 20, 2021
Department of Commerce	September 20, 2021
Alliance for Transportation Electrification (ATE)	September 20, 2021
Office of the Attorney General	September 20, 2021
Metropolitan Council/Metro Transit	September 20, 2021
Other Relevant Documents	
LiUNA – Comments	October 16, 2020
Citizens Utility Board (CUB) – Comments	October 16, 2020
Metro Transit – Comments	October 16, 2020
HourCar – Letter of Support	October 20, 2020
Minnesota Propane Association – Public Comment	October 23, 2020
Metropolitan Council – Reply Comments	October 30, 2020
Metropolitan Council/Metro Transit – Comments	May 24, 2021
City of St. Paul – Public Comment	June 9, 2021
Minnesota Department of Transportation – Letter of Support	June 9, 2021
Minnesota Pollution Control Agency – Letter of Support	August 5, 2021

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The attached materials are work papers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

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Statement of the Issues

1. Should the Commission approve, modify, or reject Xcel Energy’s proposal to build, own, and operate public fast charging stations?
2. Should the Commission grant Xcel’s request to waive a portion of Xcel’s Section 6 tariff relating to Customer Wiring, Equipment, and Property?
3. Should the Commission approve, modify, or reject Xcel Energy’s request to accelerate its own fleet electrification?
4. Should the Commission approve, modify, or reject Xcel Energy’s rebate proposals for light duty vehicles, transit buses, and school buses?
5. How should the Commission handle cost recovery for Xcel’s proposed investments?

Acronyms

BIPOC	Black, Indigenous, and People of Color
CBA	Cost Benefit Analysis
CIP	Conservation Improvement Program
DCFC	Direct Current Fast Charger
EV	Electric Vehicle
ICE	Internal Combustion Engine
LDEV	Light Duty Electric Vehicle
NPV	Net Present Value
OCP	Open Charge Point Protocol
PCT	Participant Cost Test
RIM	Ratepayer Impact Measure
SCT	Societal Cost Test
TEP	Transportation Electrification Plan
TOU	Time of Use
V2G	Vehicle to Grid

Background

Xcel initially proposed its electric vehicles (EV) investments as a portion of its broader COVID-19 Relief and Recovery proposals in Docket E,G999/CI-20-492 and Docket E,G002/M-20-716 on September 16, 2020. The EV investments included the following requests:

- Approval of an EV Rebate Program
- Approval of an Xcel Energy owned DC Fast Charging network

- Approval for acceleration of Xcel Energy’s internal fleet electrification
- A modification to Xcel’s existing Fleet EV Infrastructure Pilot in Docket 18-643

Given the historically high level of interest in Xcel’s EV proposals and diverse set of stakeholders, Staff proposed to evaluate Xcel’s suite of EV investments from Docket 20-492 as a separate package in Docket E002/M-20-745.

On September 25, 2020, Staff issued a notice of comment on the completeness of Xcel’s proposal and potential procedural paths in Docket E002/M-20-745.

Between October 16 and October 30, 2020, organizations filed comments and reply comments on the notice of completeness.

On January 11, 2021, Xcel filed a supplement with a cost-effectiveness analysis of electric vehicle adoption in Minnesota.

On February 10, 2021, Staff filed a notice requesting additional information from Xcel Energy based on the feedback from parties.

On March 8, 2021, Xcel submitted the requested additional information.

On March 17, 2021, Staff filed a notice for comment on Xcel’s COVID-19 Relief and Recovery EV Proposals.

On July 29, 2021, the Commission considered Xcel’s request to modify its existing Fleet Infrastructure Pilot, as requested in the Company’s initial filing.

On August 24, 2021, the Commission issued an Order modifying Xcel’s existing Fleet Infrastructure Pilot in Docket 18-643, which was requested in the initial petition in Docket 20-745.

On August 26, 2021, the following organizations filed initial comments:

- Greenlots
- ChargePoint, Inc.
- Department of Commerce
- Office of the Attorney General
- Tesla
- Clean Energy Groups (CEG)¹

On September 9, 2021, Xcel Energy filed reply comments.

On September 20, 2021, the following organizations filed reply comments:

- Greenlots
- ChargePoint, Inc.
- Department of Commerce
- Office of the Attorney General
- Tesla

¹ Fresh Energy, Sierra Club, Union of Concerned Scientists and Plug In America

- Clean Energy Groups (CEG)
- Weave Grid, Inc.
- Alliance for Transportation Electrification (ATE)
- Metropolitan Council – Metro Transit

On October 1, 2020, Xcel filed supplemental information about income verification and outreach costs.

On November 1, 2021, Xcel filed its multi-year rate plan in Docket 21-630 that included the full costs of the EV proposals in the present docket as a part of ratebase.

Xcel EV Charging Network

Xcel Energy proposed the implementation of a public DC fast charging (DCFC) network to alleviate barriers to electric vehicle adoption such as range anxiety, the worry that one's electric vehicle battery will run out of power before reaching a suitable charging point.² The Commission in their February 1, 2019, Order in Docket No. E999/CI-17-879, noted this barrier. With the intent to address this infrastructure gap in their service territory where charging markets are lacking, the Company hoped to expand upon their current public charging pilot as approved in Docket No. E002/M-18-643, with a new pilot. For communities not adequately served by the previous pilot, the Company proposed to own and operate a limited number of public fast charging stations.³

The Company proposed installing, owning, and operating 21 DCFC stations over the next three years within their service territory. All charging locations would feature, at minimum, a 150 kW charging station.⁴ The Company aimed to place these charging stations in locations not currently served by the existing private charging market in order to encourage electrification and diminish range and charging challenges for electric vehicle owners. Therefore, these stations are expected to be in rural communities and not in the Minneapolis-St. Paul area.⁵ The Company partnered with Guidehouse Consulting to determine advantageous locations based on forecasted charging demand and drive time from other existing and potential public charging stations at the Census tract level in year 2023, the last year of the proposed program.⁶ The below figure showed potential locations for public DCFC stations and can be found in Xcel's Petition on page 54.

² Xcel, Petition, p. 19

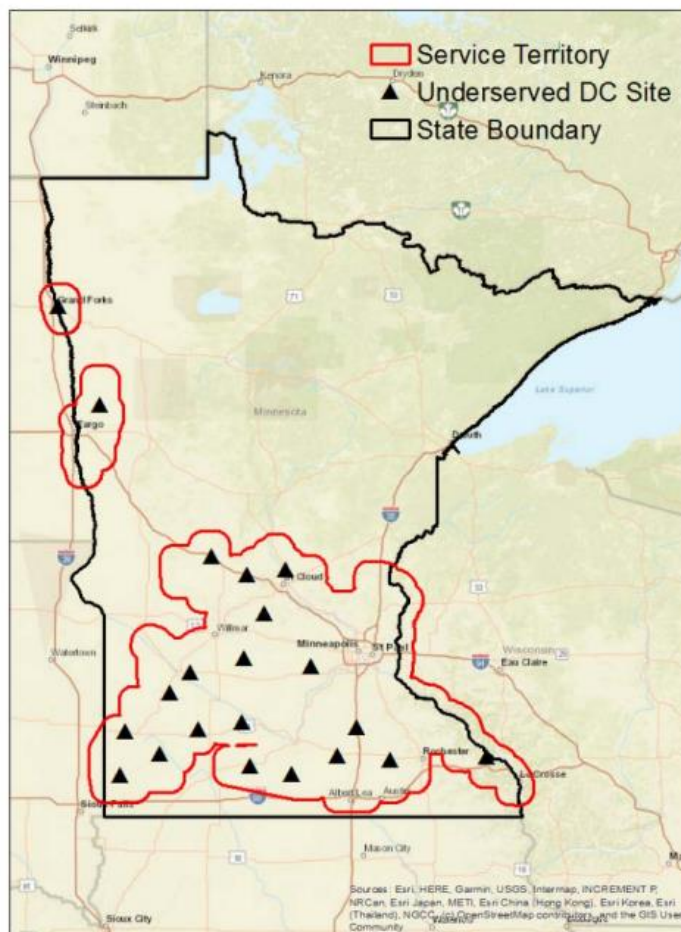
³ *Id.*

⁴ *Id.*, p. 52

⁵ *Id.*, p. 53

⁶ *Id.*

Figure 1: Potential Locations for Public DCFC Stations



Site hosts were determined based on these criteria:⁷

- Be an Xcel Energy non-residential electric customer located in Minnesota whose account is in good standing,
- Must prove ownership or lease of land for parking and DCFC station development,
- Allow the Company to develop and access DCFC station,
- Agree to make the charger available for public use,
- Must be located inside or near an identified underserved community,
- Must be located close to a highway or interstate
- Allow the Company to install permanent signage to increase awareness and understanding of the benefits and opportunities for transportation electrification,
- Must offer 24/7 parking availability for chargers,
- Provide at least two parking stalls for use of the charging station, with at least one parking space being ADA compliant. Additional parking stalls for future expansion is preferred,
- Site must be safe and well-lit,

⁷ *Id.*, p. 54

- Be responsible for timely snow removal of the parking stalls, and
- Participate in program evaluation activities such as surveys and questionnaires.

The Company hoped to engage consumers with outreach efforts to inform communities about the fast-charging option and used a time-varying rate shown below, based on their Residential Time of Use (TOU) Pilot program with \$0.30 per kWh added.^{8,9} This will signal to customers to efficiently use their DCFC stations and divert charging to level 2 chargers when appropriate.

Table 1 shows the proposed Xcel rate structure:

Table 1: Proposed DCFC Customer Charging Rates per kWh¹⁰

	June-September	Other Months	Hours
On-Peak	\$0.52576	\$0.49266	3pm to 8pm, M-F except Hol
Mid-Peak	\$0.39013	\$0.37515	All other hours
Off-Peak	\$0.32784	\$0.32784	Midnight to 6am, all days

The Company estimated development, installation, and operation will cost \$5 million over three years.¹¹ Table 2 is the Company’s estimated program budget for 2021-2023.¹²

Table 2: Estimated Program Budget – 2021-2023 (\$ Millions)

Category	Capital	O&M	Total
EV Service Connection	\$0.8		\$0.8
EV Supply Infrastructure	\$1.1		\$1.1
Charging Equipment	\$2.3		\$2.3
Installation Management	\$0.1		\$0.1
IT	\$0.2		\$0.2
Program Management		\$0.1	\$0.1
O&M		\$0.3	\$0.3
Total	\$4.5	\$0.5	\$5.0

In supplemental information filed March 8, 2021, Xcel indicated it planned to include the capitalized costs for the DCFC Network in rate base in a future rate case filing. Xcel included the costs of the network in its November 1, 2021, rate case filed in Docket 21-630.¹³ However, the Company requested Commission approval to defer expenses related to program marketing, outreach, and customer engagement via the existing EV Tracker Account established in Docket

⁸ *Id.*, p. 57

⁹ Approved in E002/M-17-775, Rate Codes, A72, A74. This rate structure will be used for Xcel’s approved EV Home Service Program

¹⁰ Xcel, Petition, p. 56

¹¹ *Id.*, p. 57

¹² *Id.*, p. 58

¹³ Bloch Distribution Direct, November 1, Docket 21-630, starting on p. 169

No. E002/M-15-111 for communication costs related to their residential EV rate under Minn. Stat. § 216B.1614.¹⁴

Xcel recommended decision options: 1, 3, 5, 6, 7

Comments

Comments were received from multiple organizations including: ChargePoint, Greenlots, the Department of Commerce, Tesla, Clean Energy Groups (CEG), WeaveGrid, and the Alliance for Transportation Electrification.

ChargePoint

ChargePoint recommended that the Commission reject Xcel's proposed charging rate structure and direct Xcel to allow site hosts to establish their own pricing policies for EV charging services provided at utility-owned and operated EV chargers installed on their property.¹⁵ ChargePoint felt that if the Commission maintains the current proposal by Xcel, the Commission should direct Xcel to develop at least one non-time-varying rate option to provide site hosts as an alternative to Xcel's proposed current time-varying rate.

ChargePoint recommended that the Commission modify Xcel's proposal to build, own, and operate public fast charging stations to allow site hosts to choose between at least two vendors for EV charging equipment and network service providers.¹⁶ ChargePoint also recommended that the Commission direct Xcel to eliminate the requirement in its Public Fast Charging Proposal for each DCFC station to have a capacity of 150-kW, and instead establish a 50-kW minimum power level for each station while including the concept of "future-proofing" to allow for site hosts to size deployments in accordance with current and prospective need depending on their use case.¹⁷

After reviewing other interested parties' comments, ChargePoint supported the Department's recommendation that Xcel be required to submit a compliance filing that addresses divestment issues and identifies possible divestment strategies for the utility owned stations.¹⁸ ChargePoint supported Tesla's recommendation regarding rate design that recommends at a minimum, rates should be based on an average of existing rates of publicly accessible fast charging stations in Minnesota.¹⁹ ChargePoint disagreed with Greenlots' recommendation to require third-party Open Charge Point Protocol (OCPP) certification similar to Minnesota Power's residential EV charging program, however ChargePoint agreed with Greenlots' recommendation encouraging Open Charge Point Interface-based roaming agreements with other networks.²⁰ OCPP allows for interoperability between EV component vendors and network operators. Open Charge Point Interface allows for those outside of the Xcel network to connect to Xcel's network using the network that they are a part of. This is similar to cellular

¹⁴ Xcel , Petition, p. 58

¹⁵ ChargePoint, Initial, p. 2

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ ChargePoint, Reply, p. 2

¹⁹ *Id.*

²⁰ *Id.*, p. 3

phone roaming agreements between companies to allow their clients to have greater access to services.

ChargePoint recommended decision options: 2A, 2B, 2D, 4A (preferred), 4B (alternative), 7

Greenlots

Greenlots supported Xcel's proposal while asking for OCPP certification and the use of roaming agreements to allow those outside of Xcel's service territory to have easy, seamless transactional experiences.²¹ Greenlots noted that this suggestion aligns with the Commission's Order on April 21, 2021 approving Minnesota Power's Residential EV Charging program.²² In their reply comments, Greenlots supported the Department's recommendation to grant Xcel's requested waiver of service policy provision and their deference of O&M costs related to the program marketing, outreach and customer engagement via its existing EV Tracker Account.²³ Greenlots noted that they are comfortable with Xcel's response regarding discussing divestment issues in their future Transportation Electrification Plan (TEP) filed in Docket 17-879 and agrees with Xcel regarding their response to ChargePoint's focus on site hosts:

While site hosts certainly are an important part of the EV charging ecosystem, they represent just one (key) part of it, and there are many other important considerations when designing pilots and programs that will most effectively grow the market.²⁴

Greenlots found ChargePoint's recommendations neither cost effective, in alignment with procurement best practices, nor supportive of customer choice. It noted the need for procurement flexibility that allows for the ability to set procurement requirements and make procurement decisions that are cognizant of market and consumer need realities. Greenlots found that the recommendations by ChargePoint regarding less than two dozen DC fast Chargers to increase costs by involving multiple network operators as site hosts and operators, finding this to be inefficient and impractical. Greenlots stated that the experience of many utilities in EV charging pilots is that the time, cost, and complexity to separately integrate with each EV charging provider's specific network offering, pointing to the Commission's consideration of a similar issue in Docket No. E002/M-19-559, Xcel's EV Home Service program, and Xcel's reply comments in the current docket.²⁵

Greenlots recommended decision options: 2D, 3, 5, 6, 7

Department of Commerce

The Department of Commerce asked the Commission to consider the long-term goal of developing a sustainable, long-term, competitive public charging market with many players and not long-term monopolistic tendencies. Therefore, the Department asked to see Xcel and other

²¹ Greenlots, Initial, p. 5

²² Docket 20-638

²³ Greenlots, Reply, p. 2

²⁴ *Id.*, p. 3

²⁵ *Id.*, p. 4

utilities develop divestment strategies once a long-term public charging market has been established.²⁶

The Department found that the TOU rate structure and pricing proposed by Xcel are reasonable and recommended that the Commission approve Xcel's Public Fast Charging Station proposal with the modification that at the conclusion of its pilot program, Xcel must make a compliance filing that addresses divestment issues and identifies possible divestment strategies.²⁷ The Department looked at several items when examining the rate structure and proposal. They wanted to encourage off-peak charging, reduce range anxiety, and keep in mind long term goals regarding the development of a competitive public charging market.²⁸ The Department specifically concluded that Xcel's rate structure will encourage off-peak use and that the proposed rates are reasonable and within the range of other fast charging rates in Minnesota. They came to this conclusion after reviewing the record and the Commission's February 1, 2019, Order in Docket No. E999/CI-17-879 on utilities' TEPs that states:²⁹

Time-of-use rates adjust the price of electricity based on the time that it is consumed, with low prices during low-demand periods and high prices during peak demand. A time-of-use rate could therefore encourage charging during times of low demand and impose higher rates for usage when demand is high to reflect the additional costs this usage imposes on the system. Using rate design to encourage charging during times of low demand can help the electric grid absorb and accommodate the new load created by EVs without the need for new generation or distribution infrastructure, thereby enhancing the efficient use of existing infrastructure and potentially driving down electricity rates.³⁰

In their reply comments, the Department agreed with Xcel and others that the Commission should reject ChargePoint's recommendation that site hosts be allowed to choose the charging equipment.³¹ The Department also agreed with Xcel's recommendation that a future TEP may be the best place to discuss divestment issues.³²

Waiver of Service Policy Provisions

Xcel requested Commission approval to waive a provision within its Service Policy.³³ The Company requested that the Commission approve Company ownership of the EV service connection, EV supply infrastructure, and EV charging equipment assets installed as part of this pilot. The Department believed it is reasonable to waive the provision in its Service Policy and allow the Company to own these previously stated items as part of this pilot.³⁴

Department recommended decision options: 1, 3, 5, 6, 7

²⁶ Department, p. 31

²⁷ *Id.*, p. 33

²⁸ *Id.*, p. 31

²⁹ *Id.*, pp. 34-35

³⁰ Docket 17-879, Feb. 1, 2019, Commission Order Making Findings and Requiring Filings, p. 5

³¹ Department, Reply, p. 19

³² *Id.*

³³ Xcel, Petition, p. 61

³⁴ Department, Initial, p. 35

Tesla

Tesla believed the Commission should provide further guidance to Xcel regarding appropriate rate levels to create a better price signal that does not push previous and new market players out of this competitive new market. As stated previously, there is concern regarding Xcel setting prices to be on par with other charging networks or if Xcel should calculate prices based on their stations' revenue requirements to cover the expected cost of service. Tesla believed further clarification on this issue by the Commission will help ensure that rates at Xcel owned DCFC are not arbitrary and do not harm non-utility owned DCFC stations.³⁵ This aligned with Tesla's support of competitively neutral policies and guidance for EV charging infrastructure programs.

Tesla disagreed that site hosts should be able to control pricing at the stations and that this level of customer choice is not warranted for this current proposal.³⁶ They did support customer equipment choice elements during the request for proposal phase of the process.³⁷

When it comes to rate prices, Tesla believed the Company should focus on a rate that reflects cost recovery and the rate of electricity, believing that Xcel's current TOU rate may not meet those objectives solely by adding 30 cents per kWh to their TOU rate. Tesla believed the utility should pay the same underlying electric rate it charges non-utility stations for their energy use and that the Company bill itself for the cost of electricity in the same way as other charging providers are charged, through a separately metered and individually billed customer account.³⁸

Tesla recommended decision options: 4C

Clean Energy Groups (CEG)

CEG recommended approval of Xcel's proposed public fast charging program with a modification that required Xcel Energy to file an updated EV retail tariff within 90 days of the Commission's Order to lower the energy charge to EV drivers so that it better reflects the actual cost of energy and provides the potential for fuel cost savings over gasoline at all company-owned DC fast charging stations.³⁹ CEG supported Xcel's use of a time-varying rate to incentivize off-peak charging but found that charging customers "market-rate" retail rates is not necessary when considering that these chargers are being placed in areas not currently served by market-rate charging stations.⁴⁰ Therefore, there is less of a need for market-competitiveness when the primary goal is to fill a market gap and not compete with existing or potential private market participants. CEG believed that having lower-than-market retail rates could support market development in underserved areas. Therefore, CEG recommended that Xcel file an updated EV retail tariff that is lower.

CEG recommended decision options: 1, 4D

³⁵ Tesla, Initial, p. 2

³⁶ Tesla, Reply, p. 3

³⁷ *Id.*

³⁸ *Id.*, p. 4

³⁹ CEG, Reply, p. 8

⁴⁰ *Id.*, p.7

WeaveGrid

WeaveGrid recommended that the Commission approve the Company's public vehicle charging proposal hoping that it will increase access to charging.⁴¹ They also asked the Commission to consider Tesla's additional guidance and considerations regarding public fast charging rates.⁴²

Alliance for Transportation Electrification (ATE)

ATE supported Xcel's public charging infrastructure proposal.⁴³

Xcel Reply Comments

In Reply Comments, Xcel was open to giving site hosts a choice in equipment that is selected through the utility's request for proposal, to the extent the site host has a preference. However, Xcel did not support allowing site hosts to choose their network service provider, as integrating multiple systems with the Company's billing, accounting, and IT systems would be burdensome. Xcel added it is the owner of the systems, not the site hosts, and as it will be paying the retail electric bill for each site, it should have control over these operations.⁴⁴

Xcel objected to ChargePoint's suggestion that site hosts control pricing at charging stations. It noted "the fact that the Company will be the owner and operator of the stations warrants giving the Company, with oversight from the Commission, control of charging pricing... having the Company in charge of pricing will ensure that the rates will have some form of price signals to encourage less on-peak charging so that EVs provide as many net benefits as possible to the grid."⁴⁵

The Company did not object to the Department's request to make a compliance filing about future divestment of its public charging stations, but suggested the TEPs as the appropriate forum for the discussion.⁴⁶

Staff Analysis

Xcel Energy's DCFC proposal is similar to Minnesota Power and Otter Tail Power's approved DCFC networks, which the Commission approved in Dockets 21-257 and 20-181 respectively. Staff notes ChargePoint's recommended modifications are also similar to modifications it requested in prior DCFC proceedings. Approval of Xcel's DCFC network and rejection of ChargePoint's suggested modifications is consistent with prior Commission decisions. Staff also recommends adopting a report decision option with the same reporting points that the Commission required Minnesota Power and Otter Tail Power to include in their DCFC network investment annual reports. Staff notes this includes language "to the greatest extent practicable" in case it is not feasible for Xcel to collect all of the requested information.

⁴¹ WeaveGrid, Reply, p. 7

⁴² *Id.*

⁴³ ATE, Reply, p. 7

⁴⁴ Xcel, Reply, pp. 13-14

⁴⁵ *Id.*, p. 14

⁴⁶ *Id.*, p. 15

Staff recommends the Commission approve Xcel's proposed TOU pricing for Xcel's DCFC network program as has been stated in the Commission and utilities' historical work on their TEPs. Ease of access through roaming agreements, third party and national certifications and standards, ease of payment for non-Xcel Energy customers, regular and rapid maintenance, and easy avenues to report maintenance issues are recommended to help move electrification forward, which exist in the current recommendations from docket parties. Staff recommends that Xcel submit their chargers, once running, to the United States Department of Energy's Alternative Fueling Station Locator.⁴⁷

Staff also recommends Xcel include in the record their plans for maintenance reporting by customers and payment planning for their system once decided upon. Xcel should have a specific phone number for those to call, labeled on the station, if there is a mechanical issue.

Staff notes that while a wide variety of charging levels are needed, fast charging should be as fast as possible for a fast-charging network based on this rate structure and these locations. The systems should be created to be upgradable, or future-proofed, in order to maintain flexible infrastructure if this innovative and growing sector requires shifts to meet customers' demands.

Regarding the Infrastructure and Jobs Act

During this docket, the Infrastructure Investment and Jobs Act (IIJA) was debated in Congress. The bill became law on November 15th, 2021. The law included, among many other initiatives, monetary resources to strengthen national transportation infrastructure as well as funding for electrical grid upgrades. Funding for a national EV charging network was included in the IIJA. This included approximately \$7.5 billion through formula grants and competitive funding programs for EV charging infrastructure. States are required to submit an EV Infrastructure Deployment Plan to the federal government (due August 1st, 2022) in order to receive many of the funds; in many states, including Minnesota, those plans are currently being completed by states' Departments of Transportation.

Staff recommends that if the Company receives any external funding to support their charging infrastructure procurement and installation here in Minnesota, the grants should be tracked in their current budget proposal and used to reduce the amount covered by Minnesota ratepayers. This would be similar to Docket 18-643 where the Commission examined how Volkswagen Environmental Mitigation Settlement monies, administered by the Minnesota Pollution Control Agency, would assist utilities in expanding their electrified transportation offerings and minimize risk to ratepayers.

Xcel Fleet Electrification

With an original plan to electrify their fleet over 10 years starting last year, Xcel Energy proposed to accelerate this effort over two years instead with the goal of delivering lower emissions and lower maintenance costs.⁴⁸ This involved purchasing light-duty vehicles for their business purposes along with the installation of charging infrastructure. In total, Xcel planned

⁴⁷ The DOE Alternative Fueling Station Locator information can be found here: <https://www.energy.gov/maps/alternative-fueling-station-locator>

⁴⁸ Xcel, Initial, p. 61

to purchase 40 vehicles and their supporting charging infrastructure.⁴⁹ The Company estimated O&M costs over 4 years of these vehicles to be \$2.2 million. They believed the cost of a charging station would be approximately \$10,000 per station, inclusive of all the infrastructure and site work with some additional O&M needed for maintenance after the chargers are placed in service. Currently, Xcel stated they are determining the exact number of chargers they expect to install.⁵⁰

Recommendations by Interested Parties

Department of Commerce

The Department recommended that, because the Company had not finalized the cost of the needed charging infrastructure or how many charging ports would be needed at their facilities for their fleet electrification procurement program, the Company submit testimony in its next rate case to support the project and address the higher EV fleet vehicle capital costs, lower maintenance costs, and overall net benefits to ratepayers.⁵¹

WeaveGrid

WeaveGrid recommended that the Company include testimony in its next rate case on their fleet electrification procurement program and that the Commission not use the acceleration of the project as the sole basis for future recovery disapproval.⁵²

Xcel Reply Comments

In reply comments, Xcel stated it would include testimony in its upcoming rate case about its fleet electrification project. It requested that the Commission:

Consider our fleet electrification proposal in a similar vein as other investments proposed in our initial COVID-19 Economic Recovery proposal...while not guaranteeing approval in a rate case, the Commission said it would not disallow recovery of the investments solely because of the acceleration of the investments. We request that the Commission make a similar ruling about our fleet electrification program in this docket.

Staff Analysis

Staff notes that since reply comments, Xcel filed its rate case in Docket 21-630, and has included testimony on the costs of its internal fleet electrification.⁵³ Therefore, Staff notes the Commission does not need to take action on the Department's request. Based on its reply comments, Xcel no longer appears to be requesting approval of its fleet electrification plans. The Company did ask for a similar finding to the Commission's decision in Dockets 20-492/20-716, where the Commission found that acceleration of projects that comply with the May 22, 2020, Order in Docket 20-425 would not be the sole basis for any disapproval of funds in a future rate case. Therefore, Staff has modified Xcel's decision option to contain language similar

⁴⁹ *Id.*

⁵⁰ *Id.*, p. 62

⁵¹ Department, Initial, p. 38

⁵² WeaveGrid, Reply, p.2

⁵³ Husen Direct, Employee Expenses, Docket 21-630, November 1, 2021, starting on p. 59

to the Commission's March 12, 2021, Order Determining That Proposals Have the Potential To Be Consistent With COVID-19 Economic Recovery.⁵⁴

Vehicle Rebates

As part of its COVID-19 Relief and Recovery Proposals, Xcel proposed \$150 million in rebates for electric vehicles, including \$50 million for light duty electric vehicles (LDEV) and \$100 million for electric transit and school buses. Xcel stated it hopes the rebates will increase electric vehicle adoption in Minnesota, which "will not only benefit the customers who drive EVs, but it will also benefit other customers through downward rate pressure and all our communities through reduced emissions."⁵⁵

Program Design

Eligibility

In order to receive a rebate for a light duty electric vehicle (LDEV or vehicle), customers must either be a residential electric service customer or be a commercial, non-profit, or political subdivision taking electric service who intends to predominantly charge the EV at a valid address within Xcel's Minnesota service territory.⁵⁶

New and used LDEV rebates have different eligibility requirements. In both cases, vehicles must be purchased or leased via a Minnesota purchase or lease contract and must be registered in Minnesota. Vehicles can also only receive one rebate over their lifetime. New light duty vehicles have the following additional eligibility criteria to qualify for a rebate:

- Has not been previously owned or leased.
- Has not been modified from the original manufacturer's specifications.
- Has a base manufacturer's suggested retail price (MSRP) that does not exceed \$50,000.
- Is purchased or leased after the launch of the program for use by the purchaser and not for resale.
- If leased, does not have a term less than two years.
- Has an odometer reading below 7,500 miles at the time of the purchase or lease.⁵⁷

In addition, Xcel explained customers must apply for a rebate within 3 months of purchase or lease and take service under a time-varying rate option. Commercial customers will need to explain how they plan to charge their EVs, including a description of existing charging equipment.⁵⁸

Applicants for the school and transit bus rebates must be a public transit agency, public school district, or provider of school buses to public school districts. They must also be an Xcel electric customer and plan to primarily charge the buses at an address in the Company's service

⁵⁴ Docket No 20-492/20-716, March 12, 2021 Order
<https://efiling.web.commerce.state.mn.us/edockets/searchDocuments.do?method=showPoup&documentId={D0D62778-0000-C23E-A39A-E8024622929F}&documentTitle=20213-171813-02>

⁵⁵ Xcel, Petition, Attachment C, p. 3 (PDF p. 41)

⁵⁶ *Id.*, p. 4 (PDF p. 42)

⁵⁷ *Id.*, pp. 3-4 (PDF pp. 41-42)

⁵⁸ *Id.*, p. 4 (PDF p. 42)

territory. Applicants must also provide charging data to Xcel annually. In order to qualify for the larger school bus rebate, the school bus must be Vehicle to Grid (V2G) capable, including the charging equipment, and the applicant must agree to work with the Company to ensure the site is V2G capable.⁵⁹ Buses must meet the following criteria to receive a rebate:

- Has not been previously owned.
- Has not been modified from the original manufacturer's specifications.
- Is purchased after the launch of the program.
- Must be registered in Minnesota.⁶⁰

Finally, buses receiving a rebate must be charged on a time-varying rate.⁶¹

Promotion and Engagement

Xcel will use its existing network of EV dealerships to promote the light duty rebates. The Company developed the "Xcel Energy EV Trade Ally Network" of over 75 car dealerships which it will use to notify EV purchasers about the rebates. Xcel plans to explore offering rebates at the time of the EV sale to increase the appeal of the rebates. The Company will also advertise the rebates through search engines and social media. For the bus rebates, Xcel will engage directly with transit operators and school districts in its service territory.⁶²

Rebate Operations

For LDEV rebates, customers will provide Xcel with a copy of the vehicle lease or purchase agreement and Minnesota registration via email, fax, or mail. Residential customers are limited to receiving one rebate in a calendar year. Commercial customers are limited to thirty LDEV rebates per calendar year, and there is no limit on rebate amounts for political subdivisions. Xcel will seek to issue rebate payments via check within six to eight weeks after approving a complete rebate application. Rebates will be issued on a first come-first served basis.⁶³

For the transit and school bus rebates, Xcel will work directly with purchasers to issue rebates upfront during the purchasing process. Xcel explained this is to support operators given the larger nature of bus purchases. The Company would "true-up any differences between final contract and invoice costs and any initial funds provided up to the preestablished annual limits in the proposed funding schedule." Customers must provide appropriate documentation of purchase or lease agreements for the buses and any charging equipment. A portion of available funds will be reserved for Metro Transit, with the rest available on a first come, first served basis.⁶⁴

Budget and Rebate Amounts

In its initial petition, Xcel budgeted a total of \$150 million for the rebate program, with \$50 million for LDEV rebates, and \$100 million for transit and school bus rebates. For the bus

⁵⁹ *Id.*, p. 5 (PDF p. 43)

⁶⁰ *Id.*, p. 4 (PDF p. 42)

⁶¹ *Id.*, p. 5 (PDF p. 43)

⁶² *Id.*

⁶³ *Id.*, p. 6 (PDF p. 44)

⁶⁴ *Id.*, pp. 6-7 (PDF pp. 44-45)

rebates, Xcel did not specifically allocate a certain amount for school bus vs transit bus rebates, but set a target of \$15 million for school bus rebates. It also earmarked \$65 million out of the \$100 million for Metro Transit.⁶⁵

Xcel proposed declining rebate levels over a five-year period for both light duty and bus rebates, laid out in Table 3. Xcel proposed higher rebate levels that decline over time.⁶⁶

Table 3: Initial Rebate Amounts by Year

	Year 1	Year 2	Year 3	Year 4	Year 5
New LDEV	\$2,500	\$2,500	\$2,500	\$2,000	\$1,500
Used LDEV	\$1,250	\$1,250	\$1,250	\$1,000	\$750
Transit Buses	\$1,000,000	\$1,000,000	\$750,000	\$500,000	\$250,000
School Buses (V2G)	\$325,000	\$325,000	\$325,000	\$300,000	\$275,000
School Buses (non-V2G)	\$275,000	\$275,000	\$275,000	\$250,000	\$225,000

Xcel estimated the rebate program would result in around 23,000 LDEV rebates being issued over the course of five years. For the transit and school buses, rebate amounts include charging infrastructure. Xcel proposed a cap of 20 buses for the V2G funding to have a limited pilot and evaluate the benefits.⁶⁷

Xcel laid out the total anticipated budget including program administration of an additional \$1 million in Table 4.⁶⁸

Table 4: Potential EV Rebates by Year (\$ in Millions)

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
LDEV	\$4	\$8	\$17	\$13	\$8	\$50
Metro Transit	\$5	\$60	\$0	\$0	\$0	\$65
Other Transit and School Buses	\$8	\$11	\$7	\$5	\$4	\$35
Sub-Total, Rebates	\$17	\$79	\$24	\$18	\$12	\$150
Program Administration	\$0.25	\$0.25	\$0.25	\$0.25	\$0.25	\$1.25
Total	\$17.25	\$79.25	\$24.25	\$18.25	\$12.25	\$151.25

Cost Recovery

In its initial petition, Xcel requested the Commission grant approval to establish a regulatory asset for the cost of the rebates. In its initial request, Xcel would earn a return on the capitalized costs of the rebates and amortize it over 10 years to prevent rate shock.⁶⁹ However,

⁶⁵ *Id.*, p. 7 (PDF p. 45)

⁶⁶ *Id.*, pp. 8-9 (PDF pp. 46-47)

⁶⁷ *Id.*

⁶⁸ *Id.*, p. 10 (PDF p. 48)

⁶⁹ *Id.*

since the petition was filed, Xcel also filed a new multi-year rate plan in Docket 21-630, and included the costs of the rebates in its test year. In the rate case, Xcel indicated it included the full \$150 million in the capital budget, along with the costs associated with a future expansion of the project starting in 2024.⁷⁰

Cost Benefit Analysis

In its initial petition, Xcel gave a general overview of the costs and benefits of electric vehicles and how increased EV adoption could result in societal benefits. In response to stakeholder and Commission staff, Xcel filed a more detailed cost benefit analysis (CBA) on August 6, 2021.⁷¹ Under most scenarios, adding electric vehicles to the system resulted in a positive net present value (NPV) under the Ratepayer Impact Measure (RIM), the Participant Cost Test (PCT) and the Societal Cost Test (SCT) in a variety of scenarios. Xcel tested a base case of managed charging, along with five sensitivities around unmanaged charging, DCFC installation, and rebates for vehicles. The net benefits, while still positive, were lower under the RIM and SCT in scenarios where rebates were offered. In the Transit Bus rebate program scenario, offering rebates resulted in net costs under the RIM and SCT. The results of Xcel’s CBA are summarized in Table 5.⁷²

Table 5: Net Present Value of net benefits for all vehicles adopted 2020-2030 (\$ Million)

		RIM	PCT	SCT
Base Case	Personal LDEV – managed charging	\$339	\$26	\$366
	Transit Buses (HDV) – managed charging	\$21	\$44	\$82
	Total Base Case Impacts	\$360	\$70	\$448
EV Programs and Sensitivities	Personal LDEV – unmanaged charging	\$346	-\$10	\$336
	Personal LDEV – High DCFC, managed charging	\$346	\$41	\$391
	Personal LDEV – unconstrained rebate program, managed charging	\$308	\$147	\$335
	Personal LDEV – constrained rebate program, managed charging	\$335	\$66	\$341
	Transit Bus Rebate Program – Managed Charging	-\$51	\$14	-\$35

Department

Evaluation of EV Rebate Proposals under 20-492 Criteria

The Department evaluated Xcel’s EV proposal under the criteria established by the Commission in Docket E,G999/CI-20-492, which included whether the investments:

⁷⁰ Xcel 2021 Rate Case, Docket 21-630, Bloch Direct, p. 170

⁷¹ Xcel filed an initial CBA on January 11, 2021, but filed the August 6 update after recognizing the original CBA ran the scenarios with an unconstrained budget for light duty vehicles, rather than the \$50 million proposed by Xcel.

⁷² Xcel, Aug 6 Supplement – Revised Cost and Benefits Analysis. Staff note: staff removed the Parcel Truck – managed charging case to avoid confusion since there is not a rebate proposal for parcel trucks at this time.

- Provide significant utility system benefits
- Reduce carbon or other pollutant emissions in the power sector or across economic sectors
- Increase access to conservation and clean energy resources for Minnesotans
- Create jobs or otherwise assist in economic recovery for Minnesotans
- Use woman, veteran, or minority owned businesses as much as possible and provide documentation of these efforts

Provide utility system benefits

The Department noted increased transportation electrification can result in lower electric rates if the increase in electric sales due to EV charging is greater than the costs of supplying the incremental energy. The Department concluded whether the rebates would provide system benefits results in a number of factors, including the amount and financing of the rebates and increased supply side costs.⁷³

Consistent with prior orders

The Department examined whether the rebate proposal would align with the Commission’s February 1, 2019, *Order Making Findings and Requiring Filings, In the Matter of a Commission Inquiry into Electric Vehicle Charging and Infrastructure* in Docket 17-879, which identified that transportation electrification is in the public interest, and encouraged utilities to take steps to “encourage the cost-effective adoption and integration of EVs.” The Department said that rebates are one way of meeting the Commission’s goal of electrifying transportation.⁷⁴

Reduce carbon and other emissions

The Department pointed out that calculating whether emissions are reduced primarily relies upon the marginal emissions that occur from the generation of electricity compared to emissions from gasoline or diesel. The Department explained in the short-term transportation electrification is unlikely to lead to an increase in renewable generation, at least until sufficient incremental load from EVs leads Minnesota utilities to procure a new resource.⁷⁵

Increase Access to Conservation and Clean Energy Resources for Minnesotans

The Department explained:

Although rebates for LDEVs and buses will not lead to increased customer access to conservation, the long-term impact of promoting electric transportation will be for customers to use different fuel sources for their transportation needs. As larger amounts of end uses are electrified and cause the need for a new generation resource, using a utility’s average emissions may provide a more accurate assessment of the impact of the new electrified load.⁷⁶

Create Jobs or Otherwise Assist in Economic Recovery for Minnesotans

⁷³ Department, Initial, pp. 11-12

⁷⁴ *Id.*, p. 13

⁷⁵ *Id.*, pp. 13-16

⁷⁶ *Id.*, p. 16

The Department stated LDEV rebates are unlikely to have an impact on Minnesota's economy, as LDEVs are not manufactured in Minnesota, and in general are substitutes for other vehicles that would have been purchased. For transit buses, the Department explained if the electric buses were purchased from a Minnesota manufacturer, that could result in economic growth to the state if the bus was manufactured in Minnesota.⁷⁷

Woman, veteran, or minority owned businesses

The Department did not have an analysis of this requirement.⁷⁸

Analysis of Rebate Program and Recommendations

The Department did not support Xcel's proposed rebates as filed, but did support a smaller "equity rebate" for light duty vehicles and a smaller amount of money for transit/school bus rebates.⁷⁹

Based on Xcel's cost benefit analysis, the Department found offering \$50 million in rebates for LDEVs would result in a reduction in ratepayer and societal net benefits compared to Xcel's base case scenario. While the overall net benefits would still be positive in a rebate scenario, they would decrease in comparison for ratepayers and society to a no-rebate scenario. Drivers, however, would see an increase in net benefits.⁸⁰

For electric transit buses, the Department's analysis found that offering \$100 million in rebates for transit and school buses would result in net costs to ratepayers, bus owners, and society. While Xcel's CBA showed positive participant benefits, the Department explained this was based on the assumption that the incremental cost of an electric bus was only \$490,000. However, Metro Transit now predicts the incremental cost of an electric bus is \$810,000, which would erase the \$14 million in participant benefits the CBA initially indicated.⁸¹

The Department explained that utility investments in transportation electrification should serve a public good, for example where there is a market failure leading to underserved regions for charging infrastructure. In the Department's view, offering rebates for private light duty vehicle adoption does not accomplish this goal, especially in light of Xcel's CBA showing a reduction in net benefits when rebates are offered compared to a scenario with no rebates. The Department pointed out manufacturers have already dropped the prices of EVs significantly since the rebate proposal was filed, citing Nissan's reduction of new Leaf prices in to under \$30,000 for a 2022 model, a 13% price reduction.⁸²

The Department acknowledged that access to EVs is not equal for all individuals, particularly those who are income constrained. Therefore, it recommended the Commission adopt a smaller \$5 million point-of-sale rebate program for income qualified customers purchasing light duty vehicles, similar to the Colorado PUC's decision on Xcel CO's Transportation Electrification Plan (TEP). The Colorado decision is included as an appendix to the Department's comments.

⁷⁷ *Id.*, pp. 16-17

⁷⁸ *Id.*, p. 17

⁷⁹ *Id.*, p. 18

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *Id.*, p. 22-23

Income qualified customers would receive \$5,500 for the purchase or lease of a new LDEV and \$3,000 for a used LDEV. The Department suggested increasing the rebate amounts to make it easier for income qualified customers to access electric vehicles, and also recommended the rebates be granted at the point of sale to put customers in a better position to take advantage of the offer. The Department recommended using existing standards to determine income eligibility, including Head Start, the Minnesota Family Investment Program (MFIP), Minnesota's Temporary Assistance for Needy Families (TANF) program, Low-Income Heating Energy Assistance Program (LIHEAP), Low-Income Weatherization Assistance Program (WAP), and Solar*Rewards Income Eligible.⁸³

The Department did not support Xcel's proposal to treat the rebate budget as a regulatory asset, and recommended expensing rebate amounts instead. The Department's analysis found that under Xcel's proposed regulatory asset, the Company would end up collecting more than \$204 million over the course of 15 years, with ratepayers paying about \$1.36 for every \$1.00 in rebates. The Department explained rebates are not a capital expense incurred by Xcel, rather they are a reimbursable expense incurred by a separate entity.⁸⁴

The Department suggested establishing a tracker account for the cost of the rebates that would accrue interest at the cost of Xcel's short-term debt. This would allow the Commission to track actual costs of providing the rebates, and has precedent in several other instances, such as rate case expenses, deferred tax assets, and gas affordability programs where the actual expense level is uncertain. The Department used Xcel's 2019 short term cost of debt (4.31%)⁸⁵ from its last completed rate case (Docket E002/GR-15-826) to perform an analysis of expensing the rebates compared to capitalizing them. This analysis indicated the cost for rebates would be \$1.02 for every \$1.00 in rebates spent when the costs are expensed instead of capitalized.⁸⁶

The Department shared Xcel's response to OAG IR 3, where the Company opposed treating the rebates as expense because "treating the rebates as expenses would create upward pressure on electricity rates, would not align the stream of benefits from additional EV adoption with the timing of the costs, and would not create equal footing between Company-owned infrastructure to support transportation electrification and rebates as other states have done."⁸⁷

In response, the Department pointed out IOUs "have recovered Conservation Improvement Program (CIP) expenses through a tracker account for years. The IOUs have not argued that their short-term recovery of CIP expenses created intergenerational inequities even though conservation resources expensed today provide benefits to ratepayers long into the future. Nor have the IOUs argued that their lucrative Shared Savings DSM financial incentives approved by the Commission in Docket No. E,G999/CI-08-133 should be spread out over time in recognition

⁸³ *Id.*, pp. 24-25

⁸⁴ *Id.*, p. 19

⁸⁵ The Department noted this is likely an overestimate since recent filings have had Xcel's short-term cost of debt as low as 0.81% in 2021.

⁸⁶ Department, Initial, pp. 19-20

⁸⁷ *Id.*, pp. 21-22 citing Xcel response to OAG IR 3

that benefits occur over several years. Using expensive rate-based financing to spread out the costs is not a reasonable approach in this circumstance.”⁸⁸

The Department conceded that expensing the entire \$150 million rebate amount could cause rate shock. However, the Department noted that its proposal to reduce the rebate budget to \$35 million over multiple years would limit the upward pressure on rates. If the Commission decided to approve larger amounts of rebates, the Department recommended creating \$10-\$15 million per year caps on program spending.⁸⁹ In response to Xcel’s claim that expensing rebates would not be equal treatment to other utilities, the Department pointed out the only other instance of a utility being allowed to offer and ratebase EV rebates was in Xcel’s Colorado service territory. In that proceeding CO PUC staff had similar concerns about the expense of offering a large-scale rebate program.⁹⁰

Office of the Attorney General (OAG)

The OAG did not support Xcel’s rebate proposals, and recommended Commission denial of the program. The OAG opposed the program for three reasons: first, that rebates are not utility service, second, offering rebates would worsen economic disparities among Xcel customers, and third, Xcel’s CBA showed rebates are not a cost-effective way to increase EV adoption. If, however, the Commission does approve the program, the OAG recommended a reduction in program size.⁹¹

The OAG claimed Minnesota law does not grant the Commission authority to approve ratepayer-funded EV rebates. According to the OAG, rebates for electric vehicles do not constitute “service” under Minnesota law, as it does not involve “the installation, removal, or repair of equipment or facilities for delivering or measuring . . . electricity.”⁹² Furthermore, the OAG explained that even if the rebates were for utility “service,” they are not “utility property” that is used and useful in rendering service to the public, and thus ineligible for ratebase treatment, and should be treated as an operating expense. The OAG said this is supported by Xcel’s acknowledgement that no tariffs are needed for the program because it does not involve utility rates.⁹³

In addition to denying the rebates for legal reasons, the OAG recommended denial of the petition for policy reasons. First, the OAG explained approving the rebates would add to Xcel Energy customer’s energy burden, particularly for low-income customers who are disproportionately Black, Indigenous, and People of Color (BIPOC). Additionally, customers using the rebates are likely to be affluent with the money to purchase, and a location to charge, an EV. The OAG noted ratepayer funded rebates are different than taxpayer funded rebates, which “are funded through progressive tax rates and low-interest government debt, as opposed to Xcel’s rate of return.”⁹⁴ Second, the OAG claimed ratepayer funded rebates are unlikely to

⁸⁸ *Id.*, p. 22

⁸⁹ *Id.*

⁹⁰ *Id.*, p. 21

⁹¹ OAG, Initial, p. 1

⁹² Minn. Stat. § 216B.16, subd. 6

⁹³ OAG, Initial, pp. 5-6

⁹⁴ *Id.*, pp. 8-9

significantly impact LDEV adoption rates. The OAG said the demand for EVs is already high in Minnesota, and policies like the existing federal tax incentives and recent clean cars standard contribute to increases in customer preferences along with EV supply.⁹⁵

Like the Department, the OAG pointed out that Xcel's CBA showed a negative NPV in ratepayer and society benefits for electric-bus rebates, and reduction in benefits across the ratepayer, societal, and driver tests for LDEVs. The OAG explained Xcel's CBA does not account for free-ridership, where customers who already planned to buy an EV also claim a rebate. According to the OAG, this means the CBA "assumes that every person who uses a ratepayer-funded rebate would not have purchased an EV if Xcel's rebate were not available," which is not a reasonable assumption given already high demand for EVs. Therefore, the OAG said the Commission should take the accuracy of Xcel's CBA into question when weighing approval of the rebates.⁹⁶

If the Commission deems it appropriate to approve the rebates, the OAG recommended two modifications to the program. First, the OAG recommended the Commission require Xcel to treat the rebate costs as expenses instead of capital assets, as they are not "utility property." The OAG agreed with the Department that treating the rebates as assets would increase the total cost of the program as Xcel would earn its full rate of return. The OAG countered Xcel's argument that expensing the rebates would lead to "rate shock" by suggesting the Commission spread out the expense over a period of several years, rather than immediately.⁹⁷

Second, the OAG recommended reducing the budget for LDEV rebates to \$5 million and the budget for electric-bus rebates to \$10 million, which would limit the ratepayer impact of the proposal. The OAG noted this would be consistent with the Colorado PUC's decision in Xcel Colorado's TEP, where the Colorado Commission reduced the Company's initial \$30 million LDEV rebate proposal to \$5 million.⁹⁸

Clean Energy Groups (CEG)

CEG supported offering EV rebates, noting they can help spur EV uptake beyond early adopters. Like the Department, CEG recommended decreasing the LDEV rebate budget and establishing rebates that expand access to EVs for income qualified customers, both residential and non-residential. CEG emphasized four considerations to designing an equitable EV rebate program:

1. Focus electric vehicle purchase incentives as cash rebates rather than non-refundable tax rebates, and design as point-of-purchase where possible;
2. Include progressive rebates that offer higher rebates to lower-income consumers and/or are restricted to certain incomes ("income cap" or "income qualified");
3. Provide rebates for both new and used vehicles; and
4. Pair these vehicle rebate programs with robust outreach and education and consider pairing with additional support like a charger rebate or pre-paid credit card and low-cost auto financing.⁹⁹

⁹⁵ *Id.*, p. 9

⁹⁶ *Id.*, pp. 11-12

⁹⁷ *Id.*, p. 13

⁹⁸ *Id.*

⁹⁹ CEG, Initial, p. 9

CEG pointed out the lack of EV purchase programs in Minnesota, and explained Xcel’s rebate program could fill the gap while other programs are proposed.¹⁰⁰

CEG proposed the following modifications to Xcel’s LDEV rebate proposals:

1. Create a \$5 million income-qualified rebate program for residential customers with multiple determinants of eligibility, including enrollment in energy assistance programs.¹⁰¹
2. Increase residential LDEV rebate amounts to \$5,500¹⁰² for new vehicles and \$3,000 for used vehicles with no step down in rebate amounts in later years of the program.¹⁰³
3. Create an up to \$1,000 rebate for EV chargers or a \$1,000 pre-paid charging card for customers without home charging.
4. Add an additional \$1.67 million for the program budget to pay for the charger rebates.¹⁰⁴
5. Create a community outreach advisory program and EV advisory service to help customers become aware of, and navigate the Rebate Program, including compensation for community organizations that assist with outreach.¹⁰⁵
6. Create a \$5 million LDEV program for non-residential customers focusing on smaller and less resourced entities including those outside the Twin Cities metro.
7. Establish non-residential LDEV rebates amounts at \$1,000 for new vehicles and \$500 for used vehicles, with no step down in rebate amounts.¹⁰⁶
8. Amend the requirement to participate in a managed charging tariff only if it is available to the customer, so as not to exclude participation from customers who do not have access to at home charging.¹⁰⁷
9. Allow flexibility with the MSRP base cap so as not to exclude light duty vehicles more commonly used by non-residential customers to meet their business needs.¹⁰⁸

CEG explained adding a home-charger rebate program is equivalent to including bus charging infrastructure funding in rebate amounts in the other portion of the program. It noted that while Xcel’s EV Home Service program provides the charger without upfront cost, that still does not cover other costs such as an electric panel upgrade or line extension. Therefore, it recommended a rebate that covers 100% of the costs of Level 2 charger installation, up to \$1,000, or a pre-paid \$1,000 charge card for customers without home charging availability to offset the higher costs of public charging.¹⁰⁹

CEG recommended viewing its modifications as a “Phase 1” to the rebate program, with the potential to expand eligibility if funding gaps remain.¹¹⁰

¹⁰⁰ *Id.*, pp. 9-10

¹⁰¹ *Id.*, pp. 11-12

¹⁰² CEG, Reply, p. 8. CEG updated its recommendation to match the Department’s recommendation

¹⁰³ CEG, Initial, pp. 12-13

¹⁰⁴ *Id.*, p. 13

¹⁰⁵ *Id.*, pp. 14-15

¹⁰⁶ *Id.*, pp. 15-16

¹⁰⁷ *Id.*, p. 16

¹⁰⁸ *Id.*, p. 17

¹⁰⁹ *Id.*, p. 13

¹¹⁰ *Id.*, p. 17

CEG also made recommendations to modify the EV Transit and School Bus rebates. CEG suggested lowering the rebate amount to \$30 million, with \$20 million dedicated to Metro Transit, \$5 million for other transit providers, and \$5 million for school bus operators. It also recommended changing the rebate amount to cover the incremental cost between a fossil fuel bus and an electric bus, inclusive of charging infrastructure costs. Furthermore, CEG suggested prioritizing EV bus deployment in communities that are under-resourced and the most burdened by transportation pollution.¹¹¹

CEG supported point-of-purchase rebates for LDEVs and up-front payments for transit and school bus operator bus purchases.¹¹² It also recommended creating an ongoing stakeholder advisory group to evaluate the program, along with a set of reporting requirements:

1. Number of applicants per rebate type (i.e. light-duty residential, light-duty nonresidential, transit bus, school bus) and number of recipients
2. If possible, analysis on why applicants did not complete process through to receiving rebate
3. Number of recipients who opted for point-of-purchase or upfront payment of rebate
4. Summary of residential rebate recipients who had access to home charging and joined a managed charging program vs. those who will rely on public charging, along with dwelling type (e.g. single-family home owned or rented, multi-family home owned or rented)
5. Number of dealers who opted into program, and general feedback
6. Challenges of program implementation and proposed solutions
7. Status report on education and community outreach for all types of rebates, with emphasis on light-duty residential for income-qualified customers
8. (if approved) number of light-duty applicants who claimed additional home charger rebate and number who claimed pre-paid card option¹¹³

CEG did not weigh in on cost recovery in initial comments, but requested Xcel provide a rates impact analysis of its proposed cost recovery and any methods proposed by other parties.¹¹⁴

Xcel Reply Comments

Program Budget and Operations

While Xcel still supported and preferred the total \$150 million budget of its initial proposal, it did not object to reducing the size and scope of the rebate package if the Commission agreed with parties. Specifically, the Company was not opposed to CEG's proposal for \$10 million for LDEV and \$30 million for bus rebates with the possibility for an expansion of the program at a later date. Xcel did not object to starting the program with a focus on income-qualified customers, although it still believed broader eligibility would do more to spur EV adoption. The Company did urge the Commission to remain open to higher levels of rebates in the future,

¹¹¹ *Id.*, p. 19

¹¹² *Id.*, pp. 20-21

¹¹³ *Id.*, p. 21

¹¹⁴ *Id.*, p. 22

stating it was necessary to support the market transformation needed to meet Xcel's and the State of Minnesota's transportation electrification goals.¹¹⁵

Xcel noted both CEG and the Department recommended setting rebate levels for transit and school buses at the incremental cost to an internal combustion engine (ICE) alternative, inclusive of charging equipment. The Company agreed with this approach, but recommended setting a cap for each (\$800,000 for transit busses and \$275,000 for school busses) with the total rebate not to exceed 75% of actual incurred costs instead. Xcel explained this would simplify the administrative burden so it would not need to have a case-by-case analysis of incremental costs.¹¹⁶ Xcel also requested flexibility in the overall program budget, and requested the Commission not set annual budget caps as that would "frustrate customer demand." In particular, Xcel requested the Commission not set caps within the transit bus program "to ensure we can maximize the deployment of funding for buses for the duration of the program without requiring strict adherence to specific budgets for specific types of buses (e.g., transit vs. school buses) as long as the overall program budget constraint is met."¹¹⁷

Xcel agreed with CEG that if the LDEV rebate program focuses on income qualified customers additional outreach and income qualification programs would be necessary. Based on its experience in Colorado, the Company estimated a budget of between \$0.5 and \$1 million to perform income verification and partner with third party organizations to do outreach to qualifying customers. In response to CEG's recommendation to provide rebates for EV charger installation or a prepaid charge card, Xcel stated the record was not yet developed enough to approve that option. However, the Company was open to exploring programs to reduce home wiring upgrade costs associated with EV charger installation. Xcel was also open to allowing some income-qualified customers to opt out of the managed charging requirement if it proved too burdensome.¹¹⁸

On reporting requirements, Xcel suggested using the existing EV Annual Reports (Docket 15-111) and Transportation Electrification Plans (Docket 17-879) as an avenue for reporting, instead of a separate advisory group. The Company pointed to its existing stakeholder sessions where it discusses its EV portfolio, and suggested it could incorporate feedback on the EV Rebates into that process. Overall Xcel was comfortable with CEG's proposed reporting requirements, but noted information on methods of charging used by rebate recipients would be difficult to gather unless the Company conducted surveys.¹¹⁹

OAG Legality Argument

Xcel disagreed with the OAG's claim that the Commission lacks authority to allow the recovery of rebates in rates because they are not "electric service." According to Xcel, the OAG's argument is "too limited in its understanding of Commission authority. Under Minn. Stat. § 216B.03, the Commission's primary responsibility with respect to electric rates is to determine that all rates are "just and reasonable." Accordingly, EVs can bring system benefits as indicated

¹¹⁵ Xcel, Reply pp. 3-5

¹¹⁶ *Id.*, p. 10

¹¹⁷ *Id.*

¹¹⁸ *Id.*, pp. 10-11

¹¹⁹ *Id.*, p. 11

by the Commission's findings in its February 1, 2019, Order in Docket 17-879, the Commission's Inquiry into EV Charging and Infrastructure.¹²⁰

The Company rejected the OAG's position that rebates cannot be treated as capital assets because they are not investments in physical plant:

Contrary to the OAG's implications, however, there is no requirement that capital assets and liabilities in utilities' rate base be limited to physical plant. The Commission has historically approved rates for the Company that include numerous non-plant assets and liabilities, such as accrued deferred income taxes and the Prairie Island Extended Power Uprate asset. Should the Commission agree with the Company that it is best for customers to include the proposed rebates in rate base and amortize them over several years, there is nothing restricting its ability to do so.¹²¹

Cost Recovery

Additionally, Xcel disagreed with the Department's and OAG's proposal to expense rebates instead of treating them as a capital asset. According to Xcel:

Recording the Company's investment in rebates to a regulatory asset both allows the Company to maximize the benefit of rebates by incentivizing near-term purchases and avoids potential rate shock that could come from expensing the rebate costs as they are incurred. In addition, by building up the costs and then amortizing them over several years, the Company is better able to match the costs of the rebates with the benefits to all customers that will be received through the life of the EVs purchased with the assistance of rebates. This helps preserve generational equity, as future customers will reap grid efficiency benefits and environmental benefits from having more EVs on the road in the near-term.¹²²

Xcel disagreed with the OAG's suggestion to expense the rebates over several years, stating doing so would limit the number of rebates that could be offered in a single year, which would delay the benefits of transportation electrification. It also disagreed with the Department's suggestion to track the rebates and accrue interest at the Company's short term debt rate. Xcel argued if the Commission implemented the Department's suggestion, it would deny the Company "the opportunity to recover the full costs of financing the rebates."¹²³ Xcel explained there are only a few instances where the Commission has limited rate recovery to the short-term debt rate, usually for punitive reasons or because a project is recovered through a rate rider. The Company pointed to the Colorado PUC's approval of EV rebates where similar arguments about the appropriate method of cost recovery were raised by CO PUC staff, however the CO Commission ultimately sided with Xcel's position, stating "allowing [Xcel] to amortize [EV] rebates will, in turn, incent the Company to invest in [EV] programs that use rebates."¹²⁴

¹²⁰ *Id.*, p. 5

¹²¹ *Id.*, p. 6

¹²² *Id.*

¹²³ *Id.*, pp. 6-7

¹²⁴ *Id.*, pp. 7-8

As requested by the Department, Xcel provided a monthly bill impact analysis of the rebate programs as filed, and with the reduction in total budget suggested by CEGs. It also compared the monthly bill impact of the EV rebate program to other customer programs. The bill impact analysis is based on a residential customer using 650 kWh a month.

Table 6: Monthly Bill Impacts¹²⁵

	2022 Budget	Monthly Bill Impact
Rebate Program as Filed	\$79,000,000	\$1.82
Reply Comments Rebate Scope	\$32,646,077	\$0.75
DSM Programs	\$128,485,463	\$2.95
Community Solar Gardens	\$189,478,021	\$4.36

Xcel also provide a NPV comparison of the revenue requirement for capitalizing vs expensing the rebates in response to the OAG’s request.¹²⁶

Table 7: Revenue Requirement Comparison

Recovery Method	NPV – Total Revenue Requirement	2022 Revenue Requirement	2023 Revenue Requirement	2024 Revenue Requirement
Capitalization	\$38,270,400	\$2,748,906	\$5,832,666	\$6,251,762
Expense	\$37,965,842	\$30,693,943	\$4,668,163	\$2,603,735

Xcel preferred decision options: 10, 21, 27

Xcel alternative decision options: 12, 14A, 18A, 18B, 23, 25A

Department Reply Comments

The Department noted Xcel did not present any new arguments in response to its suggestion that the Company expense the rebates instead of rate base them. In sum, the Department explained its three main points about cost recovery:

1. Since the Department proposed a maximum of \$35 million of rebates spread over several years, the Department was not concerned about upward pressure on rates.
2. CIP costs are expensed, and IOUs have not brought up the issue that the stream of benefits from additional CIP investments would not align with the timing of the costs (Xcel referred to this as intergenerational inequity), nor have they raised any concerns about receiving their lucrative Shared Savings DSM financial incentive mechanism payments in one lump sum instead of being spread out over the lifetimes of the CIP investments.

¹²⁵ *Id.*, p. 8

¹²⁶ *Id.*, p. 9

3. Xcel's statement about how other states had allowed a utility to rate base LDEV rebates was misleading; only Colorado has allowed rate-basing EV rebates, and it did so for Xcel Colorado, and only for \$5 million of income-qualified rebates.¹²⁷

The Department explained that its proposed tracker account would treat Xcel's rebate costs in a similar manner to how CIP expenses are treated, where cash outlays are recovered in the year they are incurred, removing the need to apply carrying charges at the Company's full weighted average cost of capital. Any under recovery of rebate expenses in a given year would be collected the following year, using Xcel's cost of short-term debt applied as a carrying charge.¹²⁸

The Department disputed Xcel's NPV comparison of expensing vs capitalizing the rebates. It pointed out that Xcel's analysis uses the company's weighted average cost of capital as a discount rate (7.35%), instead of a lower discount rate that is more commonly used with CIP programs (3.02%). The Department explained using a lower discount rate consistent how utilities treat CIP programs significantly increases the cost to ratepayers when comparing capitalizing expenses to expensing them. Finally, the Department stated it was unsure which short-term cost of debt value Xcel used in its NPV comparison, which would again lower the cost to ratepayers under the Department's proposed option to expense the rebates. Therefore, the Department concluded Xcel's comparison analysis of expensing vs capitalizing the rebates is not valid.¹²⁹

In initial comments, the Department recommended including administrative costs in the tracker. However, in reply it explained "administrative costs are not usually incremental costs and there is a representative level of these costs built in base rates. Thus, the Department concludes that the Company's overall administrative costs be determined in its next rate case and that the Commission does not start with the assumption that administrative costs for this program are incremental."¹³⁰

Therefore, the Department's final recommendation on cost recovery is for the Commission to allow Xcel to incorporate an expense level in its rate case using a tracker account. The Department recommended using the Company's updated short-term cost of debt on any under or over recovered expenses. In a subsequent rate case, the Department suggested "Xcel should propose representative expenses for the EV rebates and administrative costs as well as an annual tracker and a true-up mechanism."¹³¹

The Department agreed with CEG's recommendation to establish an additional \$5 million rebate program for less resourced groups, including small businesses, non-profits, and non-state governmental entities. However, the Department did not support exempting any of the above entities from the requirement to enroll in a managed or off-peak charging program. It

¹²⁷ *Id.*, p. 9

¹²⁸ *Id.*, p. 11

¹²⁹ *Id.*, p. 12

¹³⁰ *Id.*

¹³¹ *Id.*

was open to working with Xcel and other stakeholders to address barriers to managed charging for income qualified residential customers, including possible exemptions.¹³²

The Department continued to support its original recommendation for bus rebates of \$30 million, with \$24.3 million allocated to Metro Transit and \$5.7 million for other transit and school bus providers. To address Xcel’s concern about budget caps limiting the use of available funds, the Department suggested any money left unspent out of the \$5.7 million after year two of the program could be reallocated to Metro Transit. The Department also amended its position on including yearly budget caps overall, agreeing with Xcel that additional flexibility was more important.¹³³

Department preferred decision options: 12, 14A, 14B, 18A, 18B, 23, 26A-C, 29

OAG Reply

The OAG maintained its original recommendation to deny the rebate program, or in the alternative, reduce the total budget amount and expense the rebates. The OAG responded to Xcel’s point that “the Commission can approve EV rebates using its authority to set just and reasonable rates under section 216B.03 of the Public Utilities Act.” According to the OAG, “Xcel skips a critical step in the statutory analysis. The Act defines a “rate” as a charge for service. 4 Thus, a “rate” cannot exist without some underlying “service” that meets the statutory definition. As explained in the OAG’s initial comments, offering purchase incentives to shape consumer behavior is not “the installation, removal, or repair of equipment or facilities for delivering or measuring . . . electricity.””¹³⁴

The OAG also disagreed with Xcel’s assertion that because the Commission approves rebates in CIP, it can approve EV rebates. The OAG explained that CIP rebates are expressly authorized in statute, which does not exist for EV rebates. Finally, the OAG responded to Xcel’s point that there is not a requirement for capitalized assets to be limited to physical plant. The OAG agreed with Xcel that capital assets may be intangible, but they must be *assets*. The OAG explained that rebates are not an asset, they are an expense, and therefore ineligible to be placed in ratebase.¹³⁵

OAG preferred decision options: 11, 22

OAG alternative decision options: 12, 13, 23, 24, 28

Clean Energy Groups Reply

In reply comments, CEG maintained its recommendation to modify Xcel’s initial proposal by reducing the size and scope of EV rebates. CEG supported the Department’s potential list of eligibility criteria, stating it aligned with its initial recommendations.¹³⁶

CEG maintained its recommendation that Xcel provide supportive services to help customers through the process of enrolling in managed charging, and exempt customers who do not have

¹³² *Id.*, p. 14

¹³³ *Id.*, pp. 16-17

¹³⁴ OAG, Reply, pp. 1-2

¹³⁵ *Id.*, p. 2

¹³⁶ CEG, Reply, p. 2

access to one of Xcel’s EV charging programs. CEG explained that income qualified customers are more likely to be renters or reside in multi-family housing, two areas that still have gaps in access to home charging programs. CEG noted BIPOC individuals are a much higher proportion of renters in the Twin Cities, and renters in general are more likely to be cost burdened.¹³⁷

CEG maintained its preference that Xcel offer charger rebates or pre-paid charge cards as a part of the EV rebate program. However, in the event the Commission did not adopt a charger rebate program as part of the initial approval, CEG requested “that Commission direct Xcel to propose a residential charger program designed to support income-qualified residential customers who receive LDEV rebates within a year of the Commission’s order on this docket.”¹³⁸

Like the Department, CEG expressed concern about Xcel’s proposal to not “ earmark” funds within the \$30 million bus rebate program. CEG explained it did not want a well-resourced entity like Metro Transit to claim the entire amount, and that keeping the rebates separate would allow for better analysis of what barriers different customer segments face in applying for rebates.¹³⁹

CEG preferred decision options: 12, 14A-D, 16, 16, 18C, 18D, 19, 23, 25B, 25C, 30, 31

CEG alternative decision options: 17 (alterative if 16 not adopted)

Summary Table of Positions and Recommendations

Xcel, the Department, and CEG are broadly aligned in their recommendations concerning total rebate budget and amounts for a more limited offering, although there are some small differences. Staff has attempted to capture this in Table 8 below. Xcel’s preferred position is to adopt the rebate proposal as initially filed, with the entire \$150 million budget. The OAG prefers denial of the rebate proposal.

¹³⁷ *Id.*, pp. 3-5

¹³⁸ *Id.*, p. 6

¹³⁹ *Id.*, p. 7

Table 8: Final Party Recommendations – Rebates Amounts/Budget

	Xcel Energy*	Department	CEG	OAG**
Light Duty Vehicles (residential)	<p>\$5 million for income qualified residential customers</p> <p>New: \$5,500 Used: \$3,000</p>	<p>\$5 million for income qualified residential customers</p> <p>New: \$5,500 Used: \$3,000</p>	<p>\$5 million for income qualified residential customers</p> <p>New: \$5,500 Used: \$3,000</p> <p>\$1.67 million for charger rebates and charge cards</p> <p>Up to \$1,000 for charger installation OR \$1,000 pre-paid charge card</p>	\$5 million
Light Duty Vehicles (non-residential)	<p>\$5 million for nonprofits, non-state gov't, small biz</p> <p><u>Nonprofit/small biz</u> New: \$2,500 Used: \$1,250</p> <p><u>Non-state gov't</u> New: \$5,500 Used: \$3,000</p>	<p>\$5 million for nonprofits, non-state gov't, small biz</p> <p><u>Nonprofit/small biz</u> New: \$2,500 Used: \$1,250</p> <p><u>Non-state gov't</u> New: \$5,500 Used: \$3,000</p>	<p>\$5 million for non-profits, non-state gov't, small biz</p> <p>New: \$1,000 Used: \$500</p>	
Transit Buses	<p>\$20 million for Metro Transit</p> <p>\$5 million Other Transit providers</p> <p>\$800,000 per bus, including charging infrastructure</p>	<p>\$24.3 million for Metro Transit</p> <p>\$810,000 per bus, including charging infrastructure</p>	<p>\$20 million for Metro Transit</p> <p>\$5 million Other Transit providers</p> <p>Incremental cost of EV bus and charging infrastructure</p>	\$10 million
School Buses	<p>\$5 million for school bus operators</p> <p>\$275,000 per bus, including charging infrastructure</p>	<p>\$5.7 million for school districts/transit providers</p> <p>Cover the incremental cost of EV buses and charging infrastructure</p>	<p>\$5 million for school bus operators</p> <p>Incremental cost of EV bus and charging infrastructure</p>	
Admin	<p>\$1.25 million for program administration</p> <p>\$0.5 - \$1 million for outreach and income verification</p>		Supports inclusion of admin/outreach costs for income qualified program	
Total	\$42 million	\$40.3 million	\$41.67 million	\$15 million

*Xcel still prefers its initial proposal but does not object to the amounts listed in the table.

**The OAG does not recommend approval of the rebates, recommended amounts are an alternative.

Participant Comments

Letters of Support

Several organizations submitted letters of support for Xcel’s proposed rebate programs, including the Minnesota Pollution Control Agency, Minnesota Department of Transportation, Minnesota Department of Administration, City of St. Paul, East Metro Strong, HourCar, and Laborers’ International Union of North America – Minnesota and North Dakota (LiUNA). Commenters generally discussed similar benefits of approving the program, including reducing transportation carbon emissions, advancing equity and environmental justice, and providing funding for Metro Transit to procure EV buses.

Alliance for Transportation Electrification¹⁴⁰ (ATE)

ATE supported Xcel’s rebate proposal, and encouraged the Commission not to pare back the rebate amounts. ATE explained that given the climate crisis, the Commission should accelerate transportation electrification in any way it can, and that increasing vehicle rebates is an effective way to stimulate the EV market.¹⁴¹ ATE supported Xcel’s proposed method of cost recovery, stating “[t]his is not a time to be overly cautious and rely on overly conservative or narrow regulatory principles.”¹⁴² ATE suggested that instead of the \$40 million budget agreed to by Xcel, the Department, and CEG, the Commission consider allocating \$65 million to EV rebates, with \$40 million for bus rebates, \$15 million for Residential LDEV, and \$10 million for non-residential rebates. It also recommended the Commission include a 25% contingency above the overall amount in the budget, if Xcel can demonstrate it is warranted during the review process.¹⁴³

Citizens Utility Board

CUB offered comments on Xcel’s EV rebate proposal as part of broader comments on Xcel’s complete COVID Relief Package. CUB was skeptical of Xcel’s EV rebates, stating they “stood out as an example of an initiative that is unreasonable and/or likely to primarily benefit higher-income ratepayers who are not facing economic hardships.” CUB had concerns about the high level of rebate amounts for EV transit and school buses, stating the total rebates as initially proposed were more than the cost of a new bus. CUB also objected to Xcel’s proposal to capitalize and earn a return on the rebate amounts. Therefore, CUB recommended rejection of the EV Rebate proposal, but if approved, recommended reducing bus rebate amounts and considering income qualification for LDEV rebates.¹⁴⁴

Metro Transit

Metro Transit filed several letters of support for Xcel’s rebate proposal throughout the course of the proceeding. Metro Transit strongly encouraged approval of the EV transit bus rebates,

¹⁴⁰ “The Alliance, a 501(c)(6) non-profit corporation, is led by electric vehicle (EV) infrastructure firms and service providers, automobile manufacturers, utilities, and EV charging industry stakeholders and affiliated trade associations.”

¹⁴¹ ATE, Reply, p. 4

¹⁴² *Id.*, p. 5

¹⁴³ *Id.*, p. 7

¹⁴⁴ CUB, October 16, 2020, Comments, pp. 8-9

including rebates to support the installation of charging infrastructure. Metro Transit explained that while the incremental cost of a 40' foot electric was around \$465,000, the average total cost to procure an electric bus, the battery warranty and install depot and on route charging was \$1.3 million per bus, a cost premium of \$810,000 over a typical diesel bus.¹⁴⁵ Metro Transit supported the \$30 million budget proposed by parties, and the rebate amounts of up to \$800,000 per vehicle not to exceed 75% of actual incurred costs. Metro Transit noted that any funds available from the federal Infrastructure Investment and Jobs act would likely be allocated through a competitive process, and therefore not assured to happen. It added funding approved via Xcel's proposed EV Rebates could help the competitiveness of any federal grant applications.¹⁴⁶

Minnesota Propane Association

MN Propane Association (Propane) did not support Xcel's EV Rebate proposal. Propane expressed concern about the costs shift to customers who do not own electric vehicles to pay for the EV rebates and associated charging infrastructure. In particular, Propane objected to the EV School Bus rebates, stating that propane fueled buses result in similar air pollution reduction, lower the carbon intensity of transportation, and work better in Minnesota's cold climate without impacting electric rates. Propane asserted that electric buses should compete in the market without ratepayer funded subsidies.

61 members of the MN Propane Association filed letters objecting to the EV rebate proposal and asking the Commission to deny the program.

Tesla

Tesla supported the concept of EV rebates, but did not take a position on whether the Commission should approve the rebates. It advised the Commission to consider providing point-of-sale rebates to increase the efficiency of the program, and to allocate any approved funds on a "first come-first served" basis instead of instituting annual spending caps.¹⁴⁷ In reply comments, Tesla recommended that if the Commission chooses to run an income-eligible based rebate program for LDEV, it should remove the \$50,000 MSRP cap as it would be duplicative in nature and limit customers from choosing a vehicle that suits their needs.¹⁴⁸

WeaveGrid¹⁴⁹

WeaveGrid offered reply comments in support of Xcel's EV Rebate Proposal. It agreed with the Department and CEG that enhanced rebates should be offered to income qualified customers, including a dedicated budget of \$10 million dollars.¹⁵⁰ However, WeaveGrid also recommended the Commission not pare back the original \$150 million rebate proposal, and approve the full

¹⁴⁵ Metro Transit, May 24, 2021, Letter

¹⁴⁶ Metro Transit, Reply Comments, September 20, 2021.

¹⁴⁷ Tesla, Initial, pp. 2-3

¹⁴⁸ Tesla, Reply, p. 2

¹⁴⁹ "WeaveGrid is a managed charging-focused software company that helps utilities increase the adoption of electric vehicles ("EVs") through greater understanding of customer charging behaviors, managed charging programs, and distribution-level optimization."

¹⁵⁰ WeaveGrid, Reply, p. 3

amount. WeaveGrid explained that there is a need to move quickly on stimulating the EV market in Minnesota, especially as Minnesota lags other states in EV adoption and state level rebates.¹⁵¹ WeaveGrid also recommended removing the MSRP cap, as it could be restricting the purchase of pickup trucks that will be more popular outside the Twin Cities metro. Finally, it recommended approving Xcel's proposal for cost recovery, stating utilities need proper incentives to continue to offer innovative programs like vehicle rebates.¹⁵²

Staff Analysis

As the Commission is aware, Xcel filed a Multi-Year Rate Plan in November of 2021 (Docket 21-630) that asks for a 21% increase in customer rates over three years. Included in Xcel's filed rate case is the entire \$150 million budget for the proposed rebates, along with the programs proposed in this docket, and other approved EV programs. In total, Xcel's proposed and approved EV programs total over \$186 million.¹⁵³ The reduced budget of \$40 million for rebates suggested CEG and the Department would more than double Xcel's total approved EV spending in other dockets. As indicated by Xcel both in this petition and in its rate case, the Company sees the EV Rebates and its EV infrastructure investments as initial deployments to be scaled up in the next several years, and has included the budgets for those projects in its rate case. The Commission should consider the rate impact of Xcel's EV programs given the scope of approved and pending EV programs.

Xcel's portfolio of EV programs is starting the process of transitioning from pilot projects into full-fledged program offerings. This comes with increased budgets at a time when Xcel's rates are also increasing. Staff recommends that as the Commission examines upcoming utility TEPs (Docket 17-879, currently scheduled for PUC hearing on March 31, 2022) it considers how it can holistically look at a utility's entire planned budget for EV programming rather than as individual proposals. This will allow the Commission to weigh which EV initiatives it finds the most impactful while balancing ratepayer considerations.

If the Commission determines it is in the public interest to offer rebates, Staff notes the following areas where it would be important to get clarification from Xcel prior to program launch.

If the Commission approves an equity rebate program, Staff believe it will be important for Xcel and its stakeholders to further refine portions of the program before launch. Xcel was not opposed to CEG's suggestions theoretically, but noted they would need additional development before implementation, especially CEG's suggestion around charger installation rebates. As noted by CEG in its comments, it is important to offer support services to EV buyers who may not be as familiar with the technology, including assistance with home charging set up, or if home charging is not available, low-cost public charging options. Staff recommends the Commission require Xcel to work with stakeholders on the following areas and submit a

¹⁵¹ *Id.*, p. 4

¹⁵² *Id.*, p. 6

¹⁵³ Approved Programs: \$29.2 million – Fleet Charging Pilot (18-643): \$14.4 million. Public Charging Pilot (18-643): \$9.2 million. Multi-Unit Dwelling Pilot (20-711): \$4.4 million. EV Optimization Pilot (21-101): \$0.8 million. V2G School Bus Demonstration (21-101): \$0.4 million. Pending Programs: \$157.2 million – EV Rebates (20-745): \$150 million. DCFC Network (20-745): \$5 million. Xcel internal fleet electrification (20-745/21-630): \$2.2 million

compliance filing at least 60 days prior to pilot launch that outlines how it will address the issues identified by parties as needing further work:

1. A detailed plan for customer outreach and partnerships with 3rd party organizations.
2. Criteria the Company will use for income verification, and how the income verification process will work including requirements for potential participants to submit the information.
3. How Xcel plans to support income qualified LDEV rebate recipients in enrolling in existing managed charging options.
4. Possible exemptions from the managed charging requirement for residential customers unable to access home charging.
5. Potential additional financial support for charger installation or pre-paid charging cards.

Additionally, while Xcel, CEG, and the Department recommended a rebate program for “less resourced groups” including non-state governments, non-profits, and small businesses, they did not provide eligibility criteria for these organizations. In particular, Staff believes it would be important to define what qualifies as a “small business” and “less resourced”.

Staff was somewhat unclear on how Xcel plans to ensure customers who obtain a rebate enroll in a managed charging program, especially if they are receiving a point-of-sale rebate. It would be important for Xcel to have a developed plan where EV dealers ensure customers are aware of off-peak charging options.

As noted by CEG in their comments, a requirement for the program is that residential customers enroll in an off peak or managed charging program. However, all of Xcel’s residential customer EV charging programs require customers to have access to charging at their place of residence. The recently approved EV Optimization pilot in Docket 21-101 will provide customers with an alternative to participate in an off-peak charging program that does not require the installation of a Level 2 Charger or second meter, however the program terms and conditions still require customer to “charge an electric vehicle at the customer’s home address in Minnesota.”¹⁵⁴ In the EV Optimization Pilot the Commission declined to adopt CEG’s suggested modification that would have allowed customers without access to home-based charging to participate in the program. The Commission could consider requesting Xcel to propose a modification to the EV Optimization Pilot removing that requirement for EV Rebate Customers to give them an additional, low barrier option to enroll in a managed charging program.

Previously, Staff, the Department, and CEG recommended the Commission grant Xcel funds for V2G capable chargers as a part of the budget authorized in Docket 21-101. However, Xcel declined the funds, stating instead it preferred to wait for approval of the proposed rebates in the current docket. If the Commission does not approve rebates for EV school buses in this docket, it may wish consult with Xcel on how the V2G Demonstration Project approved in Docket 21-101 would move forward.

Finally, Staff makes four administrative recommendations that can apply to any approved projects. First, Staff has included standard language with the program specific reporting decision options that aligns with other EV dockets. Second, Staff recommends the Commission

¹⁵⁴ Initial Petition, Docket 21-101, Attachment I - EV Optimization Terms and Condition, PDF p. 147

include any approved projects in the quarterly compliance reports in Docket 20-492. Third, Staff proposes a negative check off process for any modifications to approved programs. The Commission has previously approved this process for EV programs in Docket 18-643 and 21-101. Fourth, as previously mentioned in these briefing papers, Xcel has included cost recovery for the proposed projects in its pending rate case (Docket E002/GR-21-630). The Commission may want to order Xcel to incorporate any changes to cost recovery, including the reduction or elimination of project budgets, made in this instant docket into the rate case proceeding.

Staff does not take a position on program approval but recommends the following decision options if the Commission approves any of the proposals: 8, 20, 31-35

Decision Options

EV Charging Network

1. Approve Xcel Energy's plan to install, own, and operate 21 DCFC sites. (Xcel, Department, CEG)

OR

2. Approve Xcel Energy's plan to install, own, and operate 21 DCFC sites with one or more of the following modifications:
 - A. Require Xcel to allow site hosts to choose between at least two vendors for charging equipment and network service providers (ChargePoint)
 - B. Lower DCFC capacity requirement from 150-kW to 50-kW (ChargePoint)
 - C. Require third party Open Charge Point Protocol certification (Greenlots)
 - D. Require Open Charge Point Protocol interface based roaming agreements with other networks (ChargePoint, Greenlots)
3. Approve Xcel Energy's Electric Vehicle Direct Current Fast Charging Service – Time of Day Pilot Rate Schedule (Xcel, Department, Greenlots)

OR

4. Approve Xcel Energy's Electric Vehicle Direct Current Fast Charging Service – Time of Day Pilot Rate Schedule with one or more of the following modifications:
 - A. Require Xcel to allow site hosts to establish their own pricing policies (ChargePoint preferred)
 - B. Require Xcel to develop non-time-varying rate option (ChargePoint alternative)
 - C. Require Xcel to bill through a separately metered account (Tesla, WeaveGrid)
 - D. Require Xcel Energy to file an updated EV retail tariff within 90 days of the Commission's Order to lower the energy charge to EV drivers that better reflects the actual cost of energy and provides the potential for fuel costs savings over gasoline at all company-owned DC fast charging stations. (CEG)
5. Approve Xcel Energy's request for Waiver of Service Policy Provision. (Xcel, Department, Greenlots)
6. Approve the deferment of O&M expenses related to marketing, outreach and customer engagement via Xcel's existing EV Tracker Account established in Docket No. E002/M-15-111. (Xcel, Department, Greenlots)
7. Require Xcel include in its next transportation electrification plan, and in subsequent transportation electrification plans, a section that addresses divestment issues and identifies possible divestment strategies. (Xcel, Department, ChargePoint, Greenlots)
8. Require Xcel Energy to prove the following information and data to the greatest extent practicable. Where Xcel Energy is not able to do so, it shall explain why. Reports shall be filed on an annual basis throughout the pilot as part of Xcel Energy's Annual EV report in Docket 15-111, with a copy filed in the present docket, 20- 745. Where applicable,

include data in spreadsheet (.xlsx) format. Delegate authority to the Executive Secretary to establish final report formatting, clean up any inconsistencies between various existing reporting requirements in individual dockets, and modify reporting requirements via notice after input from stakeholders. (Staff)

- A. DCFC and Level 2 Charging Stations
 - 1) Location of each charging site, including the number of chargers and ports, including port capacity
 - 2) Customer service and technical assistance needs
 - 3) Operation and maintenance costs
- B. Revenues
 - 1) Energy revenues
 - 2) Demand revenues
 - 3) Fixed fee revenues
- C. For each site, on a monthly basis:
 - 1) Energy consumption (kWh) for each period of Xcel Energy's rate schedule
 - 2) Coincident peak demand, at the MISO system peak and Xcel Energy system peak, including the time of day at which the peak occurred
 - 3) Non-coincident peak demand, including the time of day the peak occurred
 - 4) Number of charging events, times, and durations, to the extent available

Xcel Fleet Electrification

- 9. Find that Xcel's Fleet Electrification has the potential to be consistent with the Commission's request for proposals that could assist with economic recovery in the May 22, 2020, Order in Docket No. E,G-999/CI-20-425. The Commission will make decisions about reasonableness, prudence, and cost recovery in a future rate proceeding if Xcel moves the Fleet Electrification project forward, and the acceleration of these projects alone would not be the sole basis for any disapproval in the future. (Staff modification of Xcel Request)

Vehicle Rebates

Light Duty Vehicle Rebates

- 10. Approve Xcel's light duty EV rebate program as filed. (Xcel preferred)

OR

- 11. Reject the light duty EV rebate program. (OAG preferred)

OR

- 12. Approve Xcel's rebate program with modifications. (Department, CEG, OAG alternative, Xcel alternative)

AND [if decision option 13 is selected, the Commission must select either decision option 14 OR decision options 15. The Commission may choose to adopt any combination of decision options 16 through 21]

13. Reduce the total budget for light duty EV rebates to \$5 million. (OAG alternative)

OR

14. Modify Xcel's rebate program to approve a \$5 million income-qualified Equity Rebate program for residential customers with the following components:

- A. A rebate of \$5,500 for new LDEVs and \$3,000 for used LDEVs to be used for either purchasing or leasing the vehicles. (Department, CEG, Xcel alternative)
- B. To determine whether a customer is income qualified, use multiple verifiable federal, state and utility eligibility standards, such as:
 - 1) Head Start
 - 2) The Minnesota Family Investment Program (MFIP)
 - 3) Minnesota's Temporary Assistance for Needy Families (TANF) program
 - 4) Low-Income Heating Energy Assistance Program (LIHEAP)
 - 5) Low-Income Weatherization Assistance Program (WAP)
 - 6) Solar*Rewards Income Eligible. (Department, CEG)
- C. "Income-qualified" should be defined with flexibility and paired with existing low-income services to ease program implementation. (CEG)
- D. Rebates may be paired with managed charging if such an option is available to rebate recipient, but should not be required for recipients without access to managed charging. (CEG)

15. Direct Xcel Energy to create a robust community outreach program to encourage residential rebate applications and an advisory service or "concierge" to support applicants through the process as well as mitigating additional challenges to EV rebate program participation. (CEG)

16. Modify Xcel's rebate program to approve an additional \$1.67 million to fund a complementary charger program for recipients of the income-qualified residential rebate program. The charger program should offer one of two options for recipients:

- A. A charger rebate provided to cover 100 percent of customer costs related to installing a home charger (including related costs such as electrical upgrades, etc.) up to \$1,000 OR
- B. A pre-paid charge card with \$1,000 value (CEG)

17. Direct Xcel to propose a residential charger program designed to support income-qualified residential customers who receive LDEV rebates within a year of the Commission's order on this docket. (CEG alternative if charger rebates are not funded as part of the rebate program)

18. Modify Xcel's rebate program to approve a \$5 million LDEV rebate program for less-resourced non-residential customers (including nonprofits, non-state governmental entities, and commercial entities like small business). (Department, CEG, Xcel alternative)

- A. Rebates for non-profits and small business of \$2,500 for new LDEVs and \$1,250 for used LDEVs. (Department, Xcel alternative)
 - B. Rebates for non-state governmental entities of \$5,500 for new vehicles and \$3,000 for used vehicles. (Department, Xcel alternative)
- OR**
- C. Per vehicle rebates should be \$1,000 for new EVs and \$500 for used EVs through the duration of the rebate program, unless modified by a stakeholder advisory group. (CEG)
 - D. Rebates may be paired with managed charging if such an option is available to rebate recipient, but should not be required for recipients without access to managed charging. (CEG)
19. Ensure that the base MSRP cap of \$50,000 for light-duty vehicle rebates is inclusive of vehicle classes up to and including 2b and indexed to increase with inflation. (CEG)
20. Require Xcel to work with stakeholders to clarify the following areas and submit a compliance filing outlining details at least 60 days prior to program launch:
- A. A detailed plan for customer outreach and partnerships with 3rd party organizations.
 - B. Criteria the Company will use for income verification, and how the income verification process will work including requirements for potential participants to submit the information.
 - C. How Xcel plans to support income qualified LDEV rebate recipients in enrolling in existing managed charging options.
 - D. Possible exemptions from the managed charging requirement for residential customers unable to access home charging.
 - E. Potential additional financial support for charger installation or pre-paid charging cards.
 - F. Eligibility criteria for non-profit, non-state government, and small businesses to participate in the program. (Staff, if rebates are approved)

Bus Rebates

21. Approve Xcel's electric bus program as filed. (Xcel preferred)

OR

22. Reject the electric bus rebate program (OAG preferred)

OR

23. Approve Xcel's electric by rebate program as modified. (Department, CEG, OAG Alternative, Xcel Alternative)

AND [one of the following 3 options]:

24. Reduce the total budget for electric bus rebates to \$10 million (OAG alternative)

OR

25. Modify Xcel's electric bus program to approve a \$30 million bus EV rebate program, with \$20 million to Metro Transit; \$5 million for other transit providers; and \$5 million for school bus operators (CEG, Xcel Alternative)
- A. Rebates for electric transit buses of up to \$800,000 per transit bus and \$275,000 per school bus, capped at 75% of total costs, inclusive of charging infrastructure. (Xcel)
 - B. Rebate amounts should cover the incremental cost of an electric bus over an equivalent fossil-fueled bus, including costs related to charging infrastructure. (CEG)
 - C. Program should prioritize deployment of electric buses in BIPOC and low-income communities and those most burdened by transportation pollution. (CEG)

OR

26. Approve an electric bus rebate budget of \$30 million to cover:
- A. The incremental cost (\$810,000) of 30 electric 40-foot transit buses for Metro Transit;
 - B. \$5.7 million to provide rebates to school districts to cover incremental costs of electric school buses and infrastructure upgrades for charging.
 - C. At the end of year 2 of the program, Metro Transit would be eligible for any unused funds specified for non-Metro Transit entities (Department)

Cost Recovery

[select one of the following 3 options for cost recovery]

27. Allow Xcel to capitalize the cost of rebates and amortize the investment over 10 years. (Xcel)

OR

28. Require Xcel to expense the rebate amounts instead of capitalizing them. (OAG alternative if rebates are approved)

OR

29. Allow Xcel to incorporate an expense level in its rate case and using a tracker account. The tracker account would allow the Company and Commission to track the Company's actual rebate expenses and revenues recovered in rates via the rate case. Unrecovered balances would earn the Company's updated short-term cost of debt. Additionally, any over recovery of costs would also earn the Company's short-term cost of debt. In its next rate case, Xcel should propose representative expenses for the EV rebates and administrative costs as well as an annual tracker and a true-up mechanism. (Department)

Other

30. Create a stakeholder advisory group to provide feedback and oversight on all EV rebate programs (i.e. both light-duty and buses). The stakeholder advisory group should meet at a minimum twice per year. (CEG)

31. Require Xcel Energy to prove the following information and data to the greatest extent practicable. Where Xcel Energy is not able to do so, it shall explain why. Reports shall be filed on an annual basis throughout the pilot as part of Xcel Energy's Annual EV report in Docket 15-111 with a copy filed in the present docket, 20- 745. Where applicable, include data in spreadsheet (.xlsx) format. Delegate authority to the Executive Secretary to establish final report formatting, clean up any inconsistencies between various existing reporting requirements in individual dockets, and modify reporting requirements via notice after input from stakeholders. (Staff modification of CEG)
- A. Number of applicants per rebate type (i.e. light-duty residential, light-duty nonresidential, transit bus, school bus) and number of recipients
 - B. If possible, analysis on why applicants did not complete process through to receiving rebate
 - C. Number of recipients who opted for point-of-purchase or upfront payment of rebate
 - D. Summary of residential rebate recipients who had access to home charging and joined a managed charging program vs. those who will rely on public charging, along with dwelling type (e.g. single-family home owned or rented, multi-family home owned or rented)
 - E. Number of dealers who opted into program, and general feedback
 - F. Challenges of program implementation and proposed solutions
 - G. Status report on education and community outreach for all types of rebates, with emphasis on light-duty residential for income-qualified customers
 - H. (if approved) number of light-duty applicants who claimed additional home charger rebate and number who claimed pre-paid card option.

Miscellaneous

[the following decision options apply to all proposed projects]

32. Require Xcel to include any approve projects in its quarterly reports filed in Docket E,G999/M-20-492. (Staff)
33. Delegate authority to the executive secretary to approve, via notice, modifications to any of the approved programs, if no stakeholder or Commission staff object or file notice to object within 30 days of the filing. (Staff)
34. Require Xcel Energy to incorporate any changes to cost recovery, including the reduction or elimination of project budgets, into its pending rate case in Docket E002/GR-21-630. (Staff)
35. Where not otherwise noted, require Xcel Energy to submit a compliance filing consistent with the Commission's decision in this matter no later than 30 days after the issuance of the Order. (Staff)