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AN ALLETE COMPANY

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December 20, 2024

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

Re: In the Matter of a Commission Inquiry into Electric Vehicle Charging and Infrastructure
Docket No. E015/M-23-258
SUPPLEMENTAL FILING

Dear Mr. Seuffert:

On May 17, 2022, the Commission issued an order accepting Minnesota Power's 2021 Transportation Electrification Plan. Point 2B of the Order stated, "Minnesota Power shall provide a timeline for development of a pilot program facilitating access to charging facilities for residents of multi-dwelling units." On July 15, 2022, Minnesota Power responded in Docket No. E-999/M-17-879, committing to develop and submit a proposal for an MDU Pilot Program by the fourth quarter of 2024.

The attached petition, filed as a supplement to Minnesota Power's 2023 TEP, contains a proposal for a pilot program fulfilling this commitment.

Please contact me at (218) 355-3178 jmccullough@mnpower.com with any questions related to this matter.

Respectfully submitted,

Jess McCullough
Public Policy Advisor

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Attach.

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of a Commission Inquiry into Electric Vehicle Charging and Infrastructure	Docket No. E-015/M-23-258 **SUPPLEMENT FILING**

I. INTRODUCTION

In 2021, Minnesota Power (or, the "Company") reached the milestone of providing 50 percent renewable electricity to its customers a decade ahead of schedule, and has continued to increase this factor in the three years since. As part of its effort to efficiently utilize this renewable energy for the benefit of customers and to meet state transportation electrification goals, the Company has provided incentivizing tariffs for both residential and commercial customers, rebates on home charging systems, and is in the final stages of building out public charging infrastructure so that no customer in Minnesota Power's service territory shall be more than 30 miles from a direct current fast charger. While the Company is proud of these accomplishments, it recognizes that obstacles continue to exist for customers living in multi-dwelling units (or, "MDU"). After extensive research, outreach, and education efforts, the Company is pleased to propose the following Pilot Program, which is intended to promote just, equitable, and affordable access to home charging for customers in MDUs. As the Company will demonstrate below, the make-ready nature of this proposal will also provide a useful framework to advance public, workplace, and fleet charging initiatives.

To further these goals, the Company seeks approval from the Commission to:

- Waive the Contribution in Aid of Construction (or, "CIAC") for eligible participants in the Pilot Program, as the Commission did for Xcel Energy's petition for a make-ready EV pilot on July, 17, 2019.[1]
- Provide new rebates for customers to offset the cost of building out EV infrastructure on the customer side of the meter.

[1] Docket No. E-002/M-18-643.

- Track and recover incurred customer-side costs via a new rider.
- Treat utility-side capital additions and depreciation expenses as Distribution Plant expenditures and recover them in a future general rate case.

In the sections below, the Company lays out its reasoning and projected outcomes for these requests.

II. BACKGROUND

On December 28, 2017, the Commission opened a docket to gain a better understanding of the possible impacts of EVs on the electric system, utilities, and customers.[2] On February 1, 2019, the Commission issued its Order in that docket, stating findings about transportation electrification and the role utilities should play in promoting EVs. Specifically, the Public Utilities Commission (or, the "Commission") noted that electrification is in the public interest and that Minnesota's electric utilities have an important role in facilitating the electrification of Minnesota's transportation sector and optimizing the cost-effective integration of EVs. The Commission also established a requirement for investor-owned utilities to submit a Transportation Electrification Plan ("TEP") outlining its planned EV-related initiatives.

Minnesota Power submitted its third TEP filing on June 1, 2021, describing its existing EV program offerings and planned initiatives including rebates for residential customers installing EV chargers, direct current fast chargers ("DCFC") for public use, and a commercial rate for EV charging. In comments, the Clean Energy Groups ("CEG") acknowledged that elements of Minnesota Power's EV programs are accessible to residents of multi-dwelling units but requested that Minnesota Power provide more information on its plans to develop and propose a program for MDU EV charging. The CEGs also requested that the Company consider increased EV education and outreach specific to more urban areas, like Duluth.[3]

[2] Docket No. E-999/CI-17-879.
[3] Docket No. E-99/CI-17-879, "Initial Comments", September 30, 2021.

On May 17, 2022, the Commission issued its Order accepting Minnesota Power's 2021 TEP. Point 2B of the Commission's Order stated: "Minnesota Power shall provide a timeline for development of a pilot program facilitating access to charging facilities for residents of multi-dwelling units."[4] On July 15, 2022, Minnesota Power filed a letter in Docket No. E-999/M-17-879 committing to develop and submit a proposal for an MDU Pilot Program by the fourth quarter of 2024.[5]

The Company has taken a thoughtful approach to EV program development, focusing first on initiatives that align with the Commission's description of the utility's role regarding EVs. In its February 1, 2019 Order, the Commission found that the role of the utility is to facilitate the electrification of Minnesota's transportation sector through policies and investments that educate customers on the benefits of EVs and enhance the availability of charging infrastructure and to optimize the cost-effective integration of EVs through appropriate rate designs, policies, and investments that improve system utilization/efficiency and benefit utility ratepayers, including non-EV owners.[6]

Minnesota Power currently offers a variety of EV rates and programs designed to expand access to public charging, reduce the upfront cost associated with EV ownership, encourage off-peak charging and increase awareness of the benefits of EVs. These programs include installation of 16 DCFC stations throughout northern Minnesota, a rebate for the purchase of a qualified Level 2 charger and/or installation of a dedicated EV service (if applicable), discount rates to encourage off-peak charging in residential, fleet and public applications, and outreach to contractors, dealerships, customers, and communities.[7] While these programs have reduced some of the most prevalent barriers to EV adoption for Minnesota Power customers, other challenges remain, particularly as they relate to customers in MDUs.

[4] Docket No. E-999/CI-17-879, "Order", May 17, 2022.
[5] Docket No. E-999/CI-17-879, "Letter", July 15, 2022.
[6] Docket No. E-999/CI-17-879.
[7] Docket No. E-999/CI-15-120, Docket No. E-999/CI-19-337, Docket No. E-999/CI-20-638, Docket No. E-999/CI-21-257.

The Pilot Program described below aims to address the high upfront cost of installing EV charging infrastructure with a focus on the unique challenges experienced in MDU buildings.

III. MARKET OUTLOOK AND RESEARCH

EV adoption in Minnesota Power's service territory continues to grow. According to data compiled by the MPUC, there are 770 EV owners in Minnesota Power's service territory based on 2022 vehicle registration data, which is up nearly 45 percent from 2021 data.[8] Despite steady growth, the Company continues to see EV adoption in northern Minnesota lag behind the national average by roughly 6 years.[9] This lag is the result of a variety of factors including access to reliable EV charging. At the timing of filing the Company's 2023 Integrated Distribution Plan, there were only 61 public EV charging stations in Minnesota Power's service territory, many of which are frequently unavailable as a result of equipment failure or proprietary connectors.

While the majority of EV charging occurs at home, access to EV charging infrastructure and concerns about range are still commonly cited as the top barriers to EV adoption.[10] Widespread and equitable access to EV charging infrastructure will be particularly important to support EV drivers that cannot install an EV charger at their residence for various reasons including access to off-street parking, prohibitive costs in multifamily buildings, home ownership status, and more. According to Minnesota Compass, over 35 percent of Duluth households are occupied by renters who may not have the ability to install an EV charger.[11] Similarly, many Duluth households do not have access to off-street parking. In these scenarios, reliable charging in public, workplace, or other community settings will be critical.

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[8] "Minnesota electric vehicles." Data pulled January, 2023. https://mn.gov/puc/activities/economic-analysis/electric-vehicles/.
[9] Docket No. E015/M-23-258.
[10] CR Survey Research Department. *Battery Electric Vehicles & Low Carbon Fuel Safety.* April 2022. p.12. https://article.images.consumerreports.org/image/upload/v1657127210/prod/content/dam/CRO-Images-2022/Cars/07July/2022_Consumer_Reports_BEV_and_LCF_Survey_Report.pdf.
[11] "Duluth data." https://www.mncompass.org/profiles/city/duluth.

Minnesota Power is currently in the process of installing 16 public DCFC stations throughout its service territory to provide equitable access to EV fast charging in Greater Minnesota and help address driver concerns related to EV range and refueling expectations.[12] Locations were strategically selected based on gaps in existing infrastructure, population density, heavily used travel corridors, and areas of concern for environmental justice as identified by the MPCA. While these efforts do provide opportunities for customers that cannot install EV chargers at their residence, the Company recognizes that there are still significant barriers to EV charging infrastructure installation, particularly in multifamily buildings where significant coordination among parties is required, a high degree of variation between buildings exists, and installation can be very complex and costly. Minnesota Power has engaged with several MDU property owners and tenants to discuss the installation of EV charging infrastructure. The Company is aware of only three multifamily buildings within its service territory that currently have EV chargers installed and none of those customers are on a rate that incentivizes off-peak charging, indicating that additional incentives are needed to spur activity in these facilities.

To identify best practices for increasing access to electric vehicle charging in MDUs, the Company utilized The United States Department of Energy's ("DOE") Alternative Fuels Data Center, which hosts a wide array of resources dedicated to the topic, including *Overcoming Barriers to Electric Vehicle Charging in Multi-unit Dwellings*[13]. The top policy tools recommended by this report are:

1. Design incentives to reduce the cost of EVSE installation.
2. Implement Plug-in Electric Vehicle ("PEV") ready new construction codes.
3. Expand availability of public PEV charging opportunities for MDU residents.
4. Conduct outreach to drive PEV ownership and EVSE installation in MDUs.

[12] Docket No. E015/M-21-257.
[13] Overcoming Barriers to Electric Vehicle Charging in Multi-unit Dwellings: A Westside Cities Case Study by J.R. DeShazo, Ph.D., UCLA Luskin School of Public Affairs, 2017.

Despite Point 2 being out of the realm of direct utility control, the Company believes that the following Pilot Program will make substantial progress toward reducing the cost of charger installation in MDUs, as well as incentivize the development of further public charging infrastructure while combined with robust education and outreach efforts to potential stakeholders.

On October 24, 2024, the Company held a stakeholder meeting to provide an overview of the Pilot Program and receive feedback. Attendees included MDU property owners, MDU tenants, clean energy organizations and regulators. Additionally, Minnesota Power had follow-up discussions with several parties including the Department of Commerce (or, the "Department"), Fresh Energy and interested electricians to get more detailed input. Participants provided feedback that was incorporated into the design of this Pilot Program including:

- Application process questions – multiple stakeholders expressed the desire to see an application process that is transparent, provides adequate outreach to rural and lower-income areas, and which equitably distributes funds across customers with various housing arrangements (e.g. renters/owners).
- Technical assistance questions – stakeholders expressed that the technical process of site planning and application may be unduly burdensome on MDUs operated on a voluntary or independent basis.
- Expandability questions – stakeholders were curious if there was the possibility of assistance for expanding the number of chargers in the future should the need arise.
- Adequate rebate incentives – stakeholders expressed interest in evaluating whether the proposed program will provide sufficient incentive for MDU owners to install EV infrastructure.

The Company considered these questions and others when designing the Pilot Program detailed below.

IV. PROGRAM PROPOSAL

Minnesota Power's Pilot Program builds on lessons learned through engagement with customers including MDU tenants and building owners as well as ongoing efforts to expand access to electric vehicle charging infrastructure throughout its service territory.[14] The Pilot Program has been designed to complement the Company's other program offerings including rebates for Level 2 chargers, time-based rates to encourage off-peak charging, and standard distribution processes to best utilize delivery resources. Coordinating these offerings will allow customers to take advantage of all available resources and streamline program delivery, reducing confusion for customers and contractors.

According to the DOE, most EV charging occurs at home. However, access to EV charging infrastructure and concerns about range are still commonly cited as the top barriers to EV adoption.[15] Widespread and equitable access to EV charging infrastructure will be needed both to encourage adoption of EVs and to support EV drivers that cannot install an EV charger at their residence for various reasons including access to off-street parking, prohibitive retrofit costs in existing multifamily buildings, home ownership status, and more. According to an article published in ScienceDirect, "EV charging infrastructure, which increases the ease of operation, is correlated with the EV adoption rate both at the national and municipal levels. Although home chargers are the most important and the most used type of chargers in EV adoption and operation, public chargers are crucial for residents without off-street parking and home chargers."[16]

Minnesota Power's Pilot Program aims to address the concerns related to EV charging infrastructure by providing financial incentives and project coordination support. This

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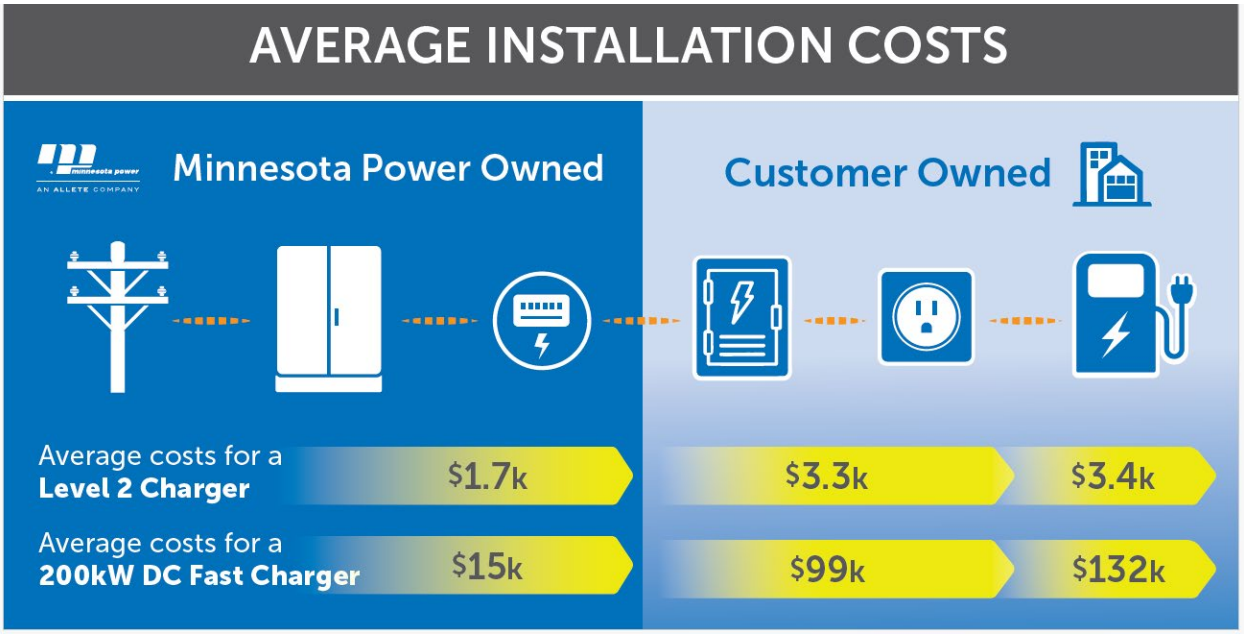
[14] Minnesota Power is currently installing Level 2 and DC fast chargers at 16 sites across its service territory as approved by the Commission in Docket No. E015/M-21-257.
[15] *Battery Electric Vehicles & Low Carbon Fuel Safety.* p.12.
[16] Chih-Wei Hsu & Kevin Fingerman. "Public electric vehicle charger access disparities across race and income in California. *Science Direct*. Vol.100. Jan. 2021. p.59-67. https://www.sciencedirect.com/science/article/pii/S0967070X20309021.

proposal focuses primarily on MDU buildings but will also provide support for EV charging in the public, fleet, and workplace sectors to encourage equitable distribution of EV charging infrastructure.

A. Proposal Overview

Customers installing a new commercial EV service are required to pay a CIAC which represents the cost of extending lines to serve the new load. Minnesota Power currently offers a $500 rebate to residential customers establishing a residential EV service to help offset some of the upfront costs. However, the Company does not currently have a program that provides the same support to commercial customers establishing a new commercial EV service. Installing EV charging equipment in commercial settings is typically more costly and complex than a residential service. Based on experience gained through the Company's own efforts installing DCFC and Level 2 chargers, the average cost of installing the infrastructure needed to support a Level 2 charger is $5,000 and the average cost of infrastructure to support a DCFC is nearly $115,000. These figures do not include the cost of EV chargers, which average around $3,400 and $132,000 respectively. As shown in Figure 1 below, a significant portion of these costs are on the customer side of the meter.

Figure 1: Average Costs of EV Infrastructure Installation



equipment on both the utility- and customer-side of the meter. Make-ready programs can be structured in a variety of ways ranging from utility contribution and ownership of the

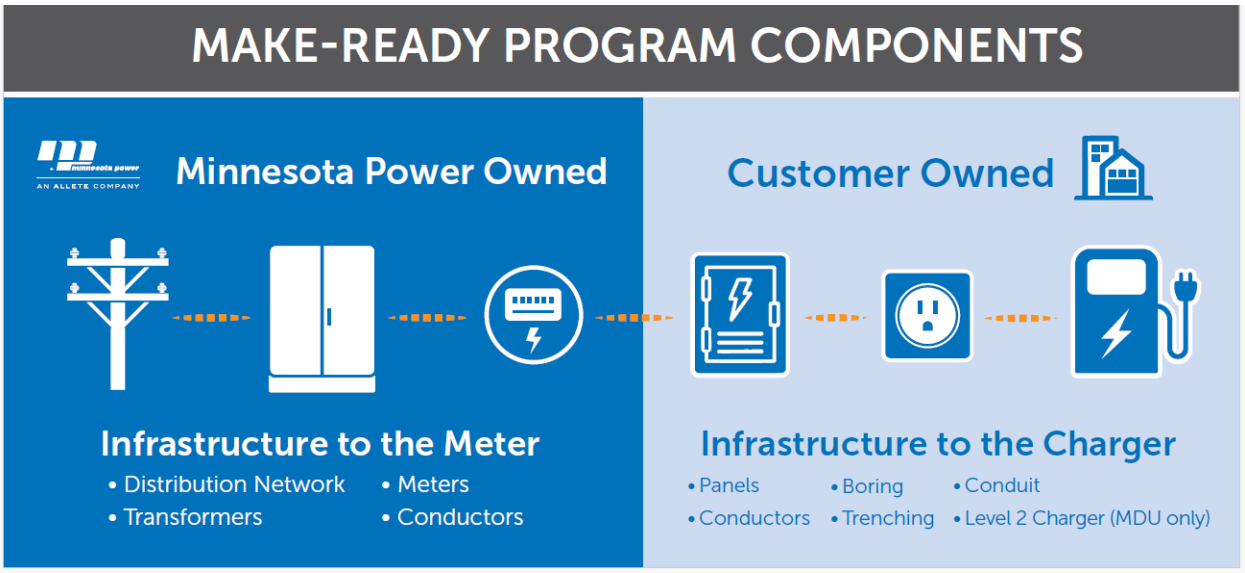
entire project to customer incentives. The Company spoke with representatives from Xcel Energy, Dominion Energy, and National Grid to better understand the challenges associated with each option and determine which program model is most appropriate for Minnesota Power based on current customer interest levels and existing business practices.

Based on market research, the Company is proposing a make-ready program that provides additional support for infrastructure on the utility side of the meter by waiving the CIAC and offering a rebate to cover all or a portion of the infrastructure costs on the customer side of the meter. As shown in Figure 2 below, Minnesota Power proposes to install, own, and maintain a dedicated service for EV charging including all infrastructure on the utility side of the meter. The customer would install, own, and maintain all equipment beyond the meter including a new service panel, conduit, and wiring up to the EV charger. Depending on charging application and income eligibility, participating customers will be eligible to receive a rebate to cover anywhere from zero to 100 percent of the costs of infrastructure on the customer side of the meter. The Company will include the cost of two Level 2 chargers in the rebate calculation for MDU projects. Minnesota Power also proposes a $500 rebate for qualified Smart Level 2 chargers to any resident of an MDU with a dedicated EV service within its service territory. The application process and equipment requirements for this rebate will be equivalent to Minnesota Power's current residential Level 2 Smart Charger rebate approved in the Company's 2023 rate case.[17] Offering these rebates ensures that residents in MDU buildings receive similar benefits as those in single-family homes.

[17] Docket No. E-015/GR-23-155.

This approach allows the Company to avoid equipment ownership on the customer side of the meter, which would be too administratively burdensome for a small pilot, while still addressing the high upfront costs of EV charging infrastructure that is commonly cited as a barrier to adoption.

Figure 2: Make-Ready Program



As described above, the primary focus of this Pilot Program is to reduce the cost of installing EV charging infrastructure in existing MDU buildings. However, widespread availability of public EV charging is imperative to EV adoption, particularly for individuals without access to reliable home charging. To address this need, the Company has included public and workplace charging applications in this Pilot Program with a goal of increasing access to EV chargers more broadly throughout Minnesota Power's service territory while also evaluating what level of funding is needed to spur activity in these various sectors. The Company will also include a small budget for fleet charging applications. Project caps will be implemented, as described in Table 1 below, to ensure that program budgets are controlled, and customer impacts are mitigated during the pilot phase.

Like other customer segments, EV adoption among fleets has also been slow across Minnesota Power's service territory. While the barriers to adoption and charging patterns are different among fleets and residential EV drivers, the Company is interested in testing the make-ready program model in both applications. Minnesota Power proposes to allow fleet customer participation, on a very limited basis, in this Pilot Program to determine whether make-ready is an effective program model for this customer segment and which level of support is needed to spur adoption. Minnesota Power will only provide a contribution on the utility side of the meter for fleet applications and will assume one three-phase (DCFC) project up to $50,000 per year of the pilot phase.

Table 1: Summary of Maximum Contribution Per Project

Customer Segment	Maximum Utility-side Contribution (per project)	Maximum Customer-side Contribution (per project)[1]
MDU Building	**Single Phase (Level 2):** Up to **$10,000**	**75%** of project costs (Up to $45,000) **Income-qualified[2]:** **100%** of project costs (Up to $60,000)
Public[3]	**Single Phase (Level 2):** Up to **$10,000** **Three Phase (DCFC):** Up to **$50,000**	**25%** of project costs (Up to $7,500) **Located in Disadvantaged Community, Environmental Justice Area, or Tribal Lands[4]:** **50%** of project costs (Up to $15,000)
Workplace	**Single Phase (Level 2):** Up to **$10,000**	**25%** of project costs (Up to $7,500)
Fleet	**Three Phase (DCFC):** Up to **$50,000**	**N/A**

[1]The maximum customer-side contribution includes all infrastructure on the customer side of the meter. In MDU buildings, this includes the cost of two Level 2 chargers. In public and workplace settings, this includes up to but not including the EV charger.

[2] Minnesota Power proposes to align the definition of "income-qualified multifamily building" for this Pilot Program with the definition used in the Energy Conservation and Optimization (ECO) program. Under this definition, buildings with five or more units must have at least 66 percent of the units occupied by low-income households. If a building meets this threshold of occupancy by low-income households, 100 percent of the building can be considered low-income.

[3] Customers installing public chargers will be eligible for a utility-side contribution for both Level 2 and DCFC chargers, subject to different caps as described above. However, customers installing a public DCFC will not be eligible for a rebate towards costs on the customer side of the meter. Customer-side contributions are limited to the installation of Level 2 chargers for this Pilot Program.

[4] For purposes of this program, disadvantaged communities will include those determined using the Climate and Economic Justice Screening Tool published by the Council on Environmental Quality, environmental justice areas, as determined by the Minnesota Pollution Control Agency or as defined under Minn. Statute 216B.1691 Subdivision 1(e), and federally identified Tribal lands located within Minnesota Power service territory.

B. Participation Requirements

Flexibility is critical during the pilot phase of this program. The Company has aligned the program requirements to industry best practices[18] where possible and has also incorporated feedback from stakeholders and utility peers. The following requirements must be met to participate in the program:

- Limit of one project per customer per year.
- Minnesota Power account must be in good standing.
- Be the facility owner or have written consent from the building owner to participate.
- Be willing to maintain the chargers by adhering to ongoing maintenance recommendations of the manufacturer and perform site maintenance (snow and vegetation management, etc.) as needed.
- Must establish a dedicated EV service separate from all other load on site and be billed on one of Minnesota Power's EV rates.
- Require a minimum of two installed charging plugs (Level 2 or DCFC where applicable) per project.
- DC fast chargers must use Combined Charging System ("CCS") and/or North American Charging Standard ("NACS") connectors.
- Provide proof of purchased charging stations and dates for expected arrival of charging stations prior to the Company beginning deployment of make-ready infrastructure.
- Requests to future proof infrastructure for future charging expansion cannot be funded through this program. If desired, the incremental costs associated with future proofing initiatives can be funded by the customer.
- Open Charge Point Protocol ("OCPP")-compliant chargers will be required in MDU settings where the Company is including the cost of two Level 2 chargers in the rebate calculation.

[18] Lepre, Nicole. *EV Charging at Multi-Family Dwellings.* 2021. https://atlaspolicy.com/wp-content/uploads/2021/01/EV-Charging-at-Multi-Family-Dwellings.pdf.

Additionally, the Company will encourage the following criteria where practicable:

- Equipment capable of administering user fees or passing energy costs through to the end-user.
- Networked chargers that are OCPP-compliant.

C. Application Selection

The Company recognizes the importance of a robust and transparent application process. Because this Pilot Program is limited in scope, it is important that the projects selected are diverse and support equitable installation of EV charging equipment. Proposals will be accepted during an annual application period (or biannual if needed, based on participation levels). The Company will work with interested customers, contractors and community members to publicize the application period in advance to ensure customers across Minnesota Power's service territory are aware of the opportunity to participate.

In collaboration with interested stakeholders, Minnesota Power has developed an evaluation framework that will be used to review and select project proposals received from customers. The evaluation framework, as shown in Table 2, will be available to customers when applying to the program to provide transparency in the project evaluation and selection process. Projects located in disadvantaged communities, Tribal lands, an environmental justice area, or that meet MDU income qualifications will be heavily weighted to ensure that projects serving this sector are prioritized.[19] Minnesota Power will support interested customers year-round in developing an EV charging infrastructure plan and assist with the application process to ensure that the administrative burden of preparing an application is not a barrier to participation.

[19] Minnesota Power has a preference for projects located in disadvantaged communities as determined using the Climate and Economic Justice Screening Tool published by the Council on Environmental Quality, environmental justice areas as determined by the Minnesota Pollution Control Agency or as defined under Minn. Statute 216B.1691 Subdivision 1(e), and Tribal lands located within Minnesota Power service territory.

Table 2: Evaluation Framework

Weight	Criteria
50%	**Site and Utilization**
	• Current or planned use of renewable energy • Chargers are publicly available • Income-qualified facility or located within recognized disadvantaged community • Proximity to MDU buildings (for publicly available, non-MDU proposals) • Make up of renters vs. owners (for MDU proposals specifically) • Estimated number of EV drivers expected to utilize chargers
30%	**Financial and Timeline**
	• Minnesota Power account in good standing • Project timeline feasibility • Estimated project costs • Required distribution system upgrades • Previous participation in make-ready program
20%	**Infrastructure**

	• Total planned charger capacity
	• Total number of Level 2 or DCFC (where applicable) plugs
	• Estimated increase in number of Level 2 or DCFC (where applicable) plugs within three years
	• Chargers are OCPP compliant
	• MDU Projects:
	  ○ Percent of spaces directly served by customer-side infrastructure
	  ○ Percent of spaces with access to Level 2 chargers, NEMA outlets or junction boxes

D. Education and Outreach

Education and outreach are commonly cited as critical components to a utility make-ready program or MDU support initiative. As described above, the Company leveraged a variety of sources in designing this Pilot Program including a case study titled *Overcoming*

Barriers to Electric Vehicle Charging in Multi-unit Dwellings.[20] One of the policy tools recommended to increase EV adoption in MDU buildings is to conduct outreach to drive PEV ownership and EVSE installation. The Company has identified three categories of education and outreach to support this Pilot Program.

Program Awareness

MDU building owners and tenants have begun to contact Minnesota Power for more information related to EV charging, typically with requests for an on-site presentation. Similarly, in comments on Minnesota Power's 2021 TEP, the Clean Energy Groups requested information about how additional EV education and outreach specific to more urban areas like Duluth could be designed and developed to advance EV adoption even further.

Through this initiative, the Company proposes to increase the amount of direct outreach to MDU building owners and tenants. This includes:

- Targeted, paid advertisements promoting the benefits of EV in general and the availability of this Pilot Program.
- On-site meetings and collaborative information sharing sessions with different customer segments including MDU owners and tenants, employers interested in workplace charging or EV fleet adoption, and businesses interested in public charging.
- Participation in multifamily related events, tradeshows, and conferences.

Project Coordination and Trade Ally Support

Minnesota Power has found that developing a strong network of participating contractors is a successful delivery strategy for many customer programs. The Company's current

[20] Luskin Center for Innovation, Southern California Association of Governments. *Overcoming Barriers to Electric Vehicle Charging in Multi-unit Dwellings: A Westside Cities Case Study.* 2017. p. 42-46. https://innovation.luskin.ucla.edu/wp-content/uploads/2019/03/Overcoming_Barriers_to_EV_Charging_in_MUDs-A_Westside_Cities_Case_Study.pdf.

participating heating, ventilation and air conditioning ("HVAC") contractor network is a valuable and trusted resource for customers interested in energy-efficient electric heating and cooling systems. Minnesota Power proposes to establish a similar participating electrician network to achieve the following objectives:

- Provide training opportunities for regional electricians on EV charging installation best practices.
- Promote the Pilot Program and other EV program offerings to participating electricians, allowing them to share the information with their customers.
- Maintain a list of electricians that are informed about EV charging technologies and Minnesota Power's EV programs that customers can access.

EV-Readiness and New Construction Support

Installing EV charging infrastructure at the time of new construction, as opposed to adding it later, is significantly less expensive in MDU buildings. A Smart Columbus case study, found that installing a Level 2 charger in existing MDU buildings can cost more than $10,000 per port.[21] To address this issue, cities around the country are adopting EV-readiness building codes and ordinances that require new multifamily buildings to be designed with EVs in mind. The Company intends to work with building developers and municipalities throughout Minnesota Power's service territory to promote the concept of building EV-ready. Minnesota Power will engage with MDU developers, city officials and other interested stakeholders to share information about EV adoption trends, projections, and infrastructure costs.

E. Budget

The Company is proposing a modest budget for this Pilot Program to minimize the impact to non-participating customers while the benefits and effectiveness of the Pilot Program are being evaluated. While more customers are beginning to express interest in offering

[21] Atlas Public Policy. *Smart Columbus Kickstarts EV Charging Deployments at Multi-Unit Dwellings*. 2018. p.5. https://d2rfd3nxvhnf29.cloudfront.net/legacy/uploadedfiles/playbook-assets/electric-vehicle-charging/mud-case-study-final.pdf.

EV charging, it is unclear which customer segments will be the most willing to participate or how many applications will be received. Minnesota Power has intentionally designed the Pilot Program with flexibility to accommodate a mixture of projects from each sector. However, Minnesota Power will reserve funding for a minimum of four MDU projects per year. The remaining projects could be additional MDU projects or a mixture of public, workplace, or fleet charging (limited to one project per year) customers.

Each project will be subject to the maximum project contributions as described in Table 1 and while the number of projects completed will depend on the customer type and actual installation costs, Minnesota Power will not exceed the total program budget shown in Table 3. This flexibility will allow the Company to accommodate a wide variety of project proposals while still prioritizing MDU installations and other favorable criteria as outlined in the project evaluation matrix.

Based on the Company's own experience installing EV chargers, it is likely that some projects may encounter unexpected challenges, potentially impacting project costs or timelines. The Company proposes that any unspent make-ready incentive funds (due to such circumstances as low early participation or variable project timelines) will roll over to the following year for the duration of the pilot period.

Table 3: Pilot Program Annual Maximum Budgets

	2026	**2027**	**2028**
Make-ready (utility side)*	$330,000	$350,000	$360,000
Make-ready (customer side)*	$277,500	$330,000	$390,000
Education & Outreach	$15,000	$15,000	$15,000
MDU Smart Level 2 Rebate	$2,500	$5,000	$5,000
Total	$625,000	$700,000	$770,000

**Maximum budget may increase in years where unspent make-ready incentive funds were rolled over from the prior year during the duration of the pilot period.*

F. Evaluation

The Company has intentionally limited this Pilot Program in scale to allow time for proper evaluation and customer feedback. The main objectives of this program are to determine what level of funding is needed to incentivize EV charging infrastructure for different customer segments, better understand the costs associated with this infrastructure, and determine the drivers and barriers to participation for future program offerings. The Company has not conducted a cost-benefit analysis for this Pilot Program as the costs for which recovery is sought are minimal. Additionally, one of the purposes of the Pilot Program is to gather sufficient data to support a meaningful cost-benefit analysis, which the Company is open to conducting following the conclusion of the Pilot when weighing future program options based on its findings.

If this proposal is approved, Minnesota Power offers to file an annual report to the Commission on participation in the Pilot Program. The Company will not own any of the EV chargers installed through this Pilot Program, so information reported will be based on meter data, project costs, and qualitative feedback from participating customers and contractors via surveys. This information will include:

- Number of applications received, and number of projects selected by customer segment/charging application (MDU, public, fleet, workplace, hospitality)
- Site characteristics
    - MDU Projects: makeup of renters vs. owners, building age, parking structure, charger availability details, payment mechanism and responsibilities of building owner vs. tenant
    - Public and Workplace Projects: site host amenities, payment mechanism
    - Fleet Projects: number and types of vehicles charging, future expansion plans
- Number of chargers installed including ports and port capacity
- Project costs broken down by utility-side and customer-side infrastructure
- Rebate amount provided (if applicable)

- Billed energy and demand to determine charger utilization
- Feedback from participating customers including drivers and barriers to participation, and any unexpected project challenges or costs.

V. COST RECOVERY

As indicated in the program and budget sections of this petition, the Company has two categories of expenses associated with this Pilot Program. The Company proposes to treat all costs incurred on the utility side of the meter as Distribution Plant expenditures and include the capital additions and depreciation expenses through deferred accounting in a general rate case. The Company proposes to recover Operation and Maintenance ("O&M") costs associated with customer rebates and education and outreach, currently estimated to be up to a total of $1,042,500 over the three-year Pilot Program, through a new rider consistent with other statutory rider petitions. Recovery of these costs through a new rider would allow greater flexibility to respond to market changes and funding needs without the need to align cost recovery with rate case timing.

The Commission has the authority to implement a rider under its general ratemaking authority. Additionally, Minn. Stat. § 216B.1614, subd. 2(c)(2) recognizes that it is appropriate to allow utilities the opportunity to recover costs related to educating customers on the benefits of EVs. If the proposed EV costs and rider authorization are approved in this petition, Minnesota Power will submit a subsequent factor filing to put proposed costs on customer bills consistent with how the Commission has approved cost recovery for other statutory riders. This information includes costs reasonably necessary to comply, including costs to inform and educate customers about the financial, energy conservation, and environmental benefits of electric vehicles and to publicly advertise and promote participation in the pilot. In addition, the Commission released its own general findings, specific findings, and outlined directives for Minnesota's utilities related to the advancement and adoption of electric vehicle integration. [22] In its 2019 Order, the

[22] Order, Docket No. E999/CI-17-879, February 1, 2019.

Commission discussed cost recovery options for EV investments and noted: "The Commission has also authorized cost recovery outside of a rate case through riders."[23] Because of the above cited precedents, the limited dollar amount requested for this pilot, and because this filing represents a proposal that was mandated by the Commission in its May 17, 2022 Order[24], Minnesota Power believes rider treatment is the appropriate cost recovery mechanism for O&M costs consistent with Minn Stat. § 216B.1614 and overall Commission public policy directives to facilitate EV implementation.

While the Commission has previously determined that Deferred Accounting is the appropriate cost recovery mechanism for EV projects across utilities, the Company believes rider cost recovery of a portion of the Pilot Program expenses will allow greater flexibility and response to customer needs as the EV market develops. Should the Commission deny the Company's request for cost recovery of customer side rebate expenses through the proposed rider, the Company proposes to utilize deferred accounting to recover O&M costs through a general rate case, including a return on capital at the Company's authorized rate of return.[25] The proposed program costs are outlined in Table 3 in section IV.E.

VI. PUBLIC INTEREST

This proposed Pilot Program is in the public interest both directly and indirectly. According to 2018 Census data, nearly 700,000 Minnesotan renters live in MDUs.[26] This does not include those who own condominiums, apartments, or other MDU dwelling groups. According to the Minnesota Housing Partnership's 2024 State of the State's Housing report, the Northland[27] contains the "highest percentage of cost-burdened renters in the

[23] Order, Docket No. E999/CI-17-879, February 1, 2019.
[24] Order, Docket No. E999/CI-17-879, May 17, 2022.
[25] Docket No. E015/M-20-638, Docket No. E015/M-21-349, Docket No. E015/M-21-257.
[26] Kraker, Dan. "Census 2020: Minn. Cities move to make sure renters get counted." MPR News. March 13, 2020. https://www.mprnews.org/story/2020/03/13/census-2020-minn-cities-move-to-make-sure-renters-get-counted.
[27] Defined in the report as Aitkin, Carlton, Cook, Itasca, Koochiching, Lake, and St. Louis Counties, as well as the Duluth Metropolitan Statistical Area and Bois Forte, Fond du Lac, and Grand Portage Native Nations. A substantial portion of this region is in Minnesota Power's service territory.

state" living in rental properties of which half were constructed before 1970.[28] The primary benefit to the public interest from this Pilot Program is the way in which it will help to provide equitable charging access to a sizeable portion of Minnesota's population by lowering cost-related and administrative barriers to residential charging infrastructure which, to date, has primarily been accessible for single family units. The secondary benefits of the program lie within its ability increase transportation electrification in general and are identified by the Commission in Docket No. E999/17-879 as improving utility system utilization and efficiency, stimulating the development of renewable energy use, and reducing harmful emissions and greenhouse gasses emitted by the transportation sector.

VII. CONCLUSION

Minnesota Power is committed to meeting not only the State of Minnesota and the Minnesota Public Utilities Commission's goals for greenhouse gas reduction and electrification of transportation, but also the needs of its customers. Customer-focused outreach, market research and industry best practices informed the development of the Company's MDU Pilot Program which was designed to reduce the primary barriers to multi dwelling unit residential EV adoption. The Company is pleased to present this proposal to the Commission.

Dated: December 20, 2024December 20, 2024

Respectfully submitted,

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[28] Minnesota Housing Partnership, *State of the State's Housing 2024*, p.11-12. https://mhponline.org/wp-content/uploads/FINAL_SOTS_2024.pdf.

STATE OF MINNESOTA)
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COUNTY OF ST. LOUIS)

AFFIDAVIT OF SERVICE VIA ELECTRONIC FILING

Tiana Heger of the City of Duluth, County of St. Louis, State of Minnesota, says that on the 20th day of December, 2024, she served Minnesota Power's Supplemental Filing in **Docket No. E015/M-23-258** on the Minnesota Public Utilities Commission and the Energy Resources Division of the Minnesota Department of Commerce via electronic filing. The persons on E-Docket's Official Service List for this Docket were served as requested.

Tiana Heger