

**STATE OF MINNESOTA  
BEFORE THE PUBLIC UTILITIES COMMISSION**

Katie Sieben	Chair
Joseph Sullivan	Vice-Chair
Valerie Means	Commissioner
Matt Schuerger	Commissioner
John Tuma	Commissioner

In the Matter of Xcel Energy’s 2023 Integrated  
Distribution Plan

DOCKET NO. E-002/M-23-452

**COMMENTS OF THE OFFICE OF  
THE ATTORNEY GENERAL**

**INTRODUCTION**

The Office of the Attorney General—Residential Utilities Division (“OAG”) respectfully submits the following Comments in response to Xcel Energy’s (“Xcel” or “the Company”) November 1, 2023 integrated distribution plan and, specifically, the Company’s transportation-electrification plan included therein.

Efforts to transition to an electrified transportation sector are increasing and will have major impacts for the power grid. The Minnesota Legislature recognized the need to get out ahead of these impacts and, earlier this year, passed a law requiring public utilities to file plans to maximize the overall benefits of electric vehicles while minimizing overall costs to the grid. These “transportation-electrification plans”—and the Commission’s oversight of them—are important because the grid is paid for by captive ratepayers, many of whom rely on it simply to keep the lights on, heat and cool their homes, and cook their food.

Rather than maximizing past investments in the grid, Xcel’s plan would let electricity demand grow uncontrolled while making anticipatory investments in areas of the grid where the Company forecasts new load may materialize. Moreover, Xcel proposes financial incentives exclusively for electric-car owners that would be paid for by ratepayers who are not fortunate

enough to own these vehicles. If implemented, these incentives would tend to increase the demand on the grid, drive up costs for all customers, and shift more of those costs to customers who use electricity solely for their basic needs.

Xcel makes money by investing in the grid, so it makes sense that the Company would want to increase that investment. But Xcel's investments are paid for by ratepayers and are made for their benefit. The Commission should therefore closely scrutinize Xcel's planned investments, require the Company to maximize the benefits of electric vehicles while minimizing their costs, and reject the elements of Xcel's plan that would subsidize electric-vehicle ownership on the backs of those least able to afford it.

## BACKGROUND

Gas-powered cars, buses, and trucks are major sources of planet-warming carbon dioxide emissions and other air pollutants. In Minnesota and around the country, residents, businesses, and governments are taking steps to electrify the transportation sector, whether by replacing their gas-powered vehicles with electric vehicles, manufacturing increased quantities of electric cars and trucks, or enacting policies that encourage the widespread use of these vehicles.<sup>1</sup>

Utilities that provide electric service stand to benefit immeasurably from transportation electrification and efforts to promote it. This is because the increased use of electric vehicles will

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<sup>1</sup> See Dan Gearino, *We Went to the First EV Charging Station Funded by the Federal Infrastructure Law*, Inside Climate News, <https://insideclimatenews.org/news/13122023/first-ev-charging-station-funded-by-federal-infrastructure-law/> (Dec. 13, 2023); Hannah Lutz, *Why Gas Stations Could Power the EV Future*, Automotive News, <https://www.autonews.com/mobility-report/ev-transition-will-be-led-part-oil-and-gas-giants> (Dec. 8, 2023); Walker Orenstein, *Ford, Xcel Partner on Commercial EV Chargers, Just Not in Minnesota Yet*, Star Tribune, <https://www.startribune.com/ford-pro-xcel-plan-commercial-electric-vehicle-charging-infrastructure-ev-wisconsin-colorado-mn/600324498/> (Dec. 5, 2023); Desirae Gostlin, *Electric Vehicle Driver Breaks Down Costs of Charging an EV*, Spectrum 1 News, <https://spectrumnews1.com/oh/columbus/news/2023/11/25/electric-vehicle-cost-monthly-charge> (Dec. 4, 2023); Megan Woods, *First Public Curbside EV Chargers Come to Ann Arbor*, ClickOnDetroit, <https://www.clickondetroit.com/news/local/2023/11/17/first-public-curbside-ev-chargers-come-to-ann-arbor/> (Nov. 16, 2023, 8:28 PM); Reuters, *U.S. Electric-Vehicle Sales Hit Record High, Tesla Loses Market Share, Report Says*, <https://www.reuters.com/business/autos-transportation/us-electric-vehicle-sales-hit-record-high-tesla-loses-market-share-report-2023-10-12/> (Oct. 12, 2023, 4:52 PM).

drive more electricity sales and trigger the need to further build out the power grid to handle the increased load.<sup>2</sup> And building out the grid allows an electric utility to expand the total investment, or rate base, upon which it earns a return on investment.

While transportation electrification holds great benefits for utilities, it carries risks for the average utility consumer. Under the right circumstances, ratepayers in general can benefit from the switch to electric vehicles as increased electricity sales help cover more of their utility's costs.<sup>3</sup> But this benefit depends on a utility managing the new load to minimize the need for system upgrades when utilities have an incentive to do the opposite.

The risk to ratepayers of transportation electrification is twofold: first, that the costs of grid upgrades needed to accommodate electric vehicles will overwhelm any ratepayer benefits and, relatedly, that costs caused by electric-vehicle users will be shifted to ratepayers who did not contribute to the need for those costs. Utilities have an incentive to make their electric-vehicle-related investments as large as possible. They also have an incentive to encourage sales growth and undercut nonregulated competitors by shifting as many electric-vehicle-related costs as possible to their captive customers.

Xcel's clean transportation portfolio filed last year (and withdrawn this summer)<sup>4</sup> showed the cost-shifting incentive in operation. In that proceeding, the Company proposed, among other things, a public-charging network with below-market rates that would have been subsidized by

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<sup>2</sup> See *In the Matter of a Commission Inquiry into Electric Vehicle Charging and Infrastructure*, Docket No. E-999/CI-17-879, Order Making Findings and Requiring Filings at 5 (Feb. 1, 2019) [hereinafter "Order Making Findings"] ("The growth of EVs has the potential to significantly impact the electric grid, because scores of EVs charging during times of peak demand could necessitate large investments in generation and distribution infrastructure to handle this new load.").

<sup>3</sup> Order Making Findings at 4 ("An increase in electricity sales can drive down rates for all ratepayers 'by spreading the utilities' fixed costs over a greater amount of kilowatt-hour sales,' especially if EV charging occurs during times of low demand when not as much electricity is consumed by customers.").

<sup>4</sup> See generally Docket No. E-002/M-22-432.

ratepayers as a whole, drawing objections from numerous stakeholders, including private charging providers and charging-site hosts.

The incentive to shift costs to nonparticipating customers is also evident in the current case, most notably in the Company’s proposal to selectively waive a longstanding policy that requires customers to contribute toward the cost of system upgrades that they request or that are otherwise needed to serve them.<sup>5</sup> Xcel proposes an exemption from this requirement for electric-car charging, leaving ratepayers to pick up the tab for the cost of nonstandard service requests by owners of “electric vehicles”—which Xcel defines to include not only passenger cars but off-road vehicles, motorboats, and even personal aircraft.<sup>6</sup>

Supporting electric-vehicle ownership through ratepayer-funded subsidies is problematic because rate subsidies are inherently regressive—much more so than taxpayer-funded subsidies. Income taxes are collected using rates that take a larger percentage of earnings from high-income households than from low-income households.<sup>7</sup> In contrast, low-income utility customers tend to pay a disproportionate share of their household income toward utility costs, a phenomenon known as “energy burden.”<sup>8</sup> Transportation-electrification programs funded through utility rates thus disproportionately burden low-income ratepayers and people of color, exacerbating energy insecurity within a utility’s service territory.

Just as the burdens of ratepayer-subsidized electric-vehicle programs are regressively distributed, so too are the benefits. Most utility investments—such as power plants or transmission lines—benefit all customers by minimizing energy costs and improving reliability. But the vast

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<sup>5</sup> See Xcel Integrated Distribution Plan (“IDP”) app. H at 79–80 (discussing CIAC-waiver proposal); *id.* app. H13 (detailing proposed tariff changes). Appendix H to Xcel’s IDP contains the Company’s transportation-electrification plan and will hereinafter be referred to as “Xcel TEP.”

<sup>6</sup> See Section IV, below.

<sup>7</sup> See Docket No. E-002/M-22-432, Direct Testimony of Andrew Twite at 12 fig.4, 14 fig.5 (showing federal and state tax rates by household income). Mr. Twite’s testimony is included as Attachment A to these Comments.

<sup>8</sup> *Id.* at 3.

majority of the benefits of utility electric-vehicle programs accrue to electric-vehicle owners themselves. Electric-vehicle ownership strongly correlates with income, and electric vehicles are much more prevalent among homeowners than renters.<sup>9</sup> This means that the very people who bear an unfair share of the cost of utility electric-vehicle programs—low-income households and renters—are overwhelmingly unable to benefit from those programs.

Moreover, the notion that a utility’s electric-vehicle programs will drive benefits for ratepayers and society as a whole depends on the unprovable assumption that a utility’s initiatives, rather than broader social and economic forces, are the primary cause of customers adopting electric vehicles.<sup>10</sup> Taken together, the distributive impacts of utility-funded electric-vehicle programs and these programs’ uncertain societal and ratepayer benefits justify a skeptical view of any proposals that would subsidize the costs of electric-vehicle ownership using ratepayer money.

Given the foregoing considerations, electric utilities have a central role to play in the electric-vehicle transition—managing the strain on the grid to minimize costs while ensuring that electric vehicles’ costs and benefits are distributed equitably. This task is challenging but necessary if utilities are to continue providing basic electric service at affordable rates consistent with longstanding principles of utility regulation.

## ANALYSIS

As the foregoing discussion suggests, Xcel has a key role to play in transportation electrification: wisely managing new electric-vehicle load to maximize ratepayer benefits while

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<sup>9</sup> *Id.* at 7–8. The correlation of EV ownership and income is not surprising considering that as of September 2023, the average price of an electric vehicle in the United States was \$50,683. See Reuters, *U.S. Electric-Vehicle Sales Hit Record High, Tesla Loses Market Share, Report Says*, <https://www.reuters.com/business/autos-transportation/us-electric-vehicle-sales-hit-record-high-tesla-loses-market-share-report-2023-10-12/> (Oct. 12, 2023, 4:52 PM).

<sup>10</sup> See, e.g., Xcel Response to OAG IR No. 16 (“We are unable to confirm the effect that waiving CIAC has on electricity sales. Waiving CIAC reduces the upfront service facilities cost to the customer. . . . For customers receiving a CIAC waiver, it is unknown if they would or would not have installed the service.”), included as Attachment C.

ensuring that the costs of the transition are not borne by those least able to afford them. Established law on public utility regulation, as well as Minnesota’s new transportation-electrification statute, reinforce these responsibilities. Xcel’s recently filed transportation-electrification plan is not fully consistent with its responsibilities as a regulated monopoly. Accordingly, the Commission should not approve Xcel’s plan without requiring the changes described below. Specifically, the Commission should: (1) require Xcel to make a proposal to actively manage electric-vehicle (“EV”) charging; (2) require the Company to remove aircraft from the definition of “electric vehicle” in certain service offerings; (3) reject changes to Xcel’s service regulations that would exempt EV owners from paying costs that all other customers are required to pay; and (4) reject Xcel’s proposal to offer home-wiring rebates of up to \$1,200 to EV owners to defray the cost of installing high-capacity chargers.

**I. LONGSTANDING MINNESOTA UTILITY LAW, AS WELL AS THE STATE’S NEW TRANSPORTATION-ELECTRIFICATION STATUTE, REQUIRE XCEL TO MINIMIZE ELECTRIC VEHICLES’ COSTS AND MAXIMIZE THEIR BENEFITS.**

Under longstanding principles of Minnesota utility law, the Commission must ensure that public utility rates are “just and reasonable,” protect ratepayers from “unreasonably preferential, unreasonably prejudicial, or discriminatory” rates, and ensure that no public utility grants “any unreasonable preference or advantage to any person or subject[s] any person to any unreasonable prejudice or disadvantage” as to rates or service.<sup>11</sup> Minnesota law also specifically directs the Commission to prioritize the public’s need for “adequate, efficient, and reasonable” basic utility service when determining just and reasonable rates.<sup>12</sup> Any doubt as to reasonableness must be resolved in consumers’ favor.<sup>13</sup>

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<sup>11</sup> Minn. Stat. §§ 216B.03, .07.

<sup>12</sup> Minn. Stat. § 216B.16, subd. 6.

<sup>13</sup> Minn. Stat. § 216B.03.

In 2023, the Minnesota Legislature enacted a new statute calling for certain utilities to file transportation-electrification plans, or “TEP.”<sup>14</sup> Though its focus is on the deployment of electric vehicles, the TEP Statute does not abandon these venerable principles. Far from it: the number-one requirement of a transportation-electrification plan is that it “maximize the overall benefits of electric vehicles and other electrified transportation while minimizing overall costs.”<sup>15</sup> When approving a transportation-electrification plan, the Commission must also consider whether the plan will “improve the operation of the electric grid” and “reasonably balance the benefits of ratepayer funded investments in transportation electrification and impacts on utility rates.”<sup>16</sup>

For the reasons discussed in the following sections, certain aspects of Xcel’s plan are not consistent with these legislative directives, and the Commission should not approve the plan without first modifying it to address those deficiencies.

## **II. XCEL’S INVESTMENT-HEAVY PLAN FOR ELECTRIFICATION FAILS TO MINIMIZE COSTS OR MAXIMIZE THE VALUE OF THE GRID FOR RATEPAYERS. THE COMMISSION SHOULD REQUIRE THE COMPANY TO MAKE A PROPOSAL TO ACTIVELY MANAGE EV CHARGING.**

Xcel proposes enormous investments in the electric grid to accommodate increased charging of electric vehicles and other electric end uses. But the Company’s plan omits any measures to actively manage EV load in order to integrate it efficiently into the existing system. As a result, Xcel’s transportation-electrification plan does not “maximize the overall benefits of electric vehicles and other electrified transportation while minimizing overall costs,”<sup>17</sup> as required by law, and the Commission should require the Company to propose specific measures to actively manage EV charging.

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<sup>14</sup> See generally Minn. Stat. § 216B.1615.

<sup>15</sup> *Id.*, subd. 2(a)(1).

<sup>16</sup> *Id.*, subd. 3(1), (9).

<sup>17</sup> *Id.*, subd. 2(a)(1).

Xcel’s plan for managing electrification is, first and foremost, an investment plan. The Company describes its distribution strategy as a plan to “invest in our distribution system so that capacity is available before our customers need it as well as prepare our system to accommodate increasing penetration of distributed generation resources.”<sup>18</sup>

In accordance with this strategy, Xcel proposes billions in preemptive investments to address yet-to-materialize load from electric vehicles and other end uses, including an average of almost \$290 million per year from 2024 to 2028 for “system expansion or upgrades.”<sup>19</sup> This is in addition to the Company’s budget for “age-related replacements and asset renewal,” which averages almost \$230 million per year over the same period.<sup>20</sup> Xcel’s total budget for distribution capital expenditures averages \$743 million per year through 2028, an amount that is equivalent to 75 percent of its total capital additions in *all categories* in 2022.<sup>21</sup>

Xcel states that the primary driver of its planned investments is that “the feeder peak load of the distribution system will triple in size over the next 30 years,”<sup>22</sup> due in part to electric-vehicle charging that “can be as much as 1x the load of an average residential customer.”<sup>23</sup> What the Company omits from this discussion, however, is the fact that EV-charging load is among the most flexible of all electric loads. This means that charging can be shifted to times when the demand on the distribution grid is low, potentially obviating the need for, and at minimum limiting the

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<sup>18</sup> Xcel IDP at 14.

<sup>19</sup> *See id.* IDP at 21 tbl.2. Combining the average budgets for the two lines that begin with “System Expansion” yields a total average budget of \$286.8 million. If these budgets hold, by the end of 2028, the Company will have spent more than \$1.4 billion on just these two categories of investments.

<sup>20</sup> *See id.*

<sup>21</sup> *Compare id. with* Docket No. E-002/GR-21-630, [Annual Compliance Report - 2022 True-Up Mechanisms](#) at 2 tbl.1 (Nov. 3, 2023) (showing 2022 capital additions of \$971.7 million excluding certain categories). Based on Xcel’s 2022 jurisdictional annual report, it appears that there may be an additional roughly \$20 million of relevant capital additions not reflected in the \$971.7 million figure due to their being recovered through riders.

<sup>22</sup> Xcel IDP at 2.

<sup>23</sup> *Id.* at 8.



extent of, system upgrades to accommodate that load.<sup>24</sup> And shifting load to nonpeak times has benefits beyond minimizing peak loads. For example, by increasing daytime minimum loads, it can facilitate the interconnection of larger amounts of distributed solar generation at lower costs.<sup>25</sup>

Utilities have several tools for efficiently integrating electric-vehicle load that fall under the broad rubric of “managed charging.” Managed charging comes in both “passive” and “active” varieties. Passive measures, such as offering cheaper rates for overnight charging, incentivize customer behavior that tends to benefit the grid. Such measures, however, are far from a silver bullet, for at least two reasons. First, passively managing electric-vehicle load does not require customers to avoid peak times—it only incentivizes this behavior. Second, and relatedly, passive measures cannot prevent localized peaks caused by multiple electric-vehicle users in an area starting to charge simultaneously in response to a price signal that tells them that topping up their battery will be several cents cheaper per kilowatt-hour at a particular hour of the night.<sup>26</sup>

In contrast to passive managed charging, active managed charging or “smart” charging involves direct communication with and control of the electric vehicle or its charger and is therefore far more effective at avoiding distribution-system upgrades.<sup>27</sup> The Commission

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<sup>24</sup> See Docket No. E-002/GR-21-630, [Rebuttal Testimony of Andrew Twite](#) at 17.

<sup>25</sup> See *In the Matter of a Formal Complaint and Request for Relief by the Minnesota Solar Advocates*, Docket No. E-002/C-23-424, [Xcel Comments](#) attach. A at 6 (Oct. 20, 2023) (describing “technical planning limit” on distributed-energy-resource interconnections that is a function of both equipment rating and daytime minimum load).

<sup>26</sup> *Accord* Docket No. E-002/GR-21-630, Xcel Initial Br. at 140 (Jan. 11, 2023). Xcel stated:

While it is true that rate design can help manage the impacts of increasing EV loads, rate design alone cannot entirely eliminate the need for distribution upgrades. This is because, while EVs can be programmed to charge during off-peak periods, EVs currently cannot recognize when neighboring EVs are charging coincident to their own charging and as a result can create new peak demands during periods that have been typically considered off-peak periods.

<sup>27</sup> See Docket No. E-002/GR-21-630, [Twite Rebuttal](#) at 19 (noting that in Xcel’s application for approval of a managed-charging pilot in Colorado, the Company cited a study that found that EV-related distribution-system upgrades “could be nearly eliminated with a combination of smart charging and time-varying rates”).

highlighted this benefit in its 2019 *Order Making Findings and Requiring Filings* on electric-vehicle grid integration:

Smart or managed charging takes rate design a step further by enabling the utility to actively manage the charging load. Chargers can be equipped with two-way communication capabilities between the utility and the EV, which allows the utility to remotely control the rate of EV charging in order to meet a local or regional system need. For example, the utility could ramp up EV charging during times of high wind generation, and the utility could curtail charging during peak demand in areas with high EV penetration to defer the need for distribution infrastructure upgrades.<sup>28</sup>

Nearly five years later, the smart-charging future that the Commission envisioned is still far from being realized. And, disappointingly, Xcel’s current transportation-electrification plan includes no proposals whereby the Company would actively manage EV charging. This omission is particularly disappointing given that Xcel is already piloting smart charging in Colorado, a point that the OAG raised in the Company’s recent rate case.<sup>29</sup>

Xcel’s Colorado pilot, known as “Charging Perks,” has been in operation since July 2021.<sup>30</sup> Under this program, participants simply plug in their vehicle when they get home and Xcel—by communicating directly with the vehicle—directs the charging to occur when “energy rates are least expensive and when the grid stress is lowest (which is also often when renewable energy is abundant).”<sup>31</sup> In 2022–2023, the pilot reduced on-peak capacity by, on average, 0.2 kilowatts per participating vehicle.<sup>32</sup>

Xcel has a plan to invest a lot of capital in the grid, but it has no plan to maximize the grid’s efficiency consistent with Minnesota law and the Commission’s *Order Making Findings and*

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<sup>28</sup> Order Making Findings at 5.

<sup>29</sup> See Docket No. E-002/GR-21-630, Twite Rebuttal at 19.

<sup>30</sup> *In the Matter of the Application of Public Service Company of Colorado for Approval of Its Electric and Natural Gas Demand-Side Management Plan for Calendar Years 2021 and 2022*, Proc. No. 20A-0287EG, [2022 Demand-Side Management Annual Status Report](#), page 95 of PDF (Mar. 31, 2023).

<sup>31</sup> EV Pulse, Charging Perks Enrollment, <https://chargingperks.xcelenergy.ev-pulse.com/> (last visited Dec. 19, 2022).

<sup>32</sup> Xcel Energy, Charging Perks, <https://ev.xcelenergy.com/charging-perks> (last visited Dec. 19, 2023).

*Requiring Filings.* An important step toward realizing this future would be to require Xcel to propose an active-managed-charging program for Minnesota EV users that incorporates lessons learned from the Colorado pilot. This would be a start, but it is not remotely enough.

The scope of Xcel's proposed investments suggests that ratepayers are at risk of underwriting billions of dollars in anticipatory system upgrades to subsidize electric vehicles and other new electric end uses. To protect ratepayers, the Commission will need to require Xcel to prove that it has done everything possible to use past investments efficiently, including deploying active management of electric-vehicle charging *at scale*. If Xcel fails to do so, the Commission should disallow any imprudent portions of Xcel's investment. Beyond that, the Commission should take every opportunity to limit rate subsidies in favor of electric-vehicle users so that the full costs of charging are reflected in user rates.

### **III. THE COMMISSION SHOULD APPROVE XCEL'S PROPOSAL TO CONVERT ITS EV SUBSCRIPTION SERVICE PILOT INTO A PERMANENT OFFERING BUT SHOULD REMOVE "AIRCRAFT" FROM THE LIST OF ELIGIBLE VEHICLES.**

Xcel proposes to convert its existing EV subscription-service pilot to a permanent offering, merging it into the Company's "EV Accelerate at Home" family of service offerings designed for at-home charging of electric vehicles. With this change, Xcel would offer two main varieties of EV Accelerate at Home: a "pay as you go" service where customers pay for each kilowatt-hour they use under a time-of-use rate, and a subscription service that offers up to 1,000 kWh of off-peak charging for a flat monthly fee.

As part of this transition, Xcel proposes several revisions to the subscription-service pilot. Under the pilot, customers were charged a flat fee of \$42.50 or \$32.65, depending on whether they prepaid the charger's cost, for unlimited monthly charging.<sup>33</sup> These fees assumed average usage

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<sup>33</sup> See Xcel TEP app. H6 (redlined tariff).

by participants of 340 kWh.<sup>34</sup> Actual average usage under the pilot, however, was higher: 403 kWh per month overall, and 372 kWh among those who charged less than 1,000 kWh per month.<sup>35</sup>

For the permanent subscription offering, Xcel proposes to cap unlimited charging at 1,000 kWh per month to ensure that customers can only use their subscription to charge a single vehicle.<sup>36</sup> It further proposes to increase the flat monthly fees to \$48.80 and \$38.81.<sup>37</sup> The new fees are calculated to reflect average monthly usage of 375 kWh, updated equipment costs, and an underlying three-period time-of-use rate structure consistent with other accelerate-at-home offerings.<sup>38</sup>

The Commission should approve Xcel’s proposed changes to electric-vehicle subscription service—in particular, the 1,000 kWh cap and the pricing update to reflect customer usage under the pilot. These changes are necessary to prevent other ratepayers from subsidizing the charging of subscription customers, a subsidy that would only grow as more customers subscribe. The Commission, however, should consider making a further change to all varieties of EV Accelerate at Home: removing “aircraft” from the list of eligible end-uses.

The Commission recently approved proposed changes to Xcel’s nonsubscription “pay as you go” accelerate-at-home offerings that included updating the definition of “electric vehicle” within the tariffed customer-service agreement.<sup>39</sup> The changes to the definition conform to the new statutory definition of “electric vehicle” in Minn. Stat. § 216B.1615, which includes “electric-

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<sup>34</sup> *In the Matter of Xcel’s Petition for Approval of a Residential EV Subscription Service Pilot Program*, Docket No. E-002/M-19-186, Order Approving Pilot with Modifications and Setting Reporting Requirements at 14 (Oct. 7, 2019).

<sup>35</sup> Xcel TEP app. H4 at 2.

<sup>36</sup> Xcel TEP at 49.

<sup>37</sup> Xcel TEP app. H5.

<sup>38</sup> *See id.*; TEP at 49.

<sup>39</sup> *In the Matter of Xcel Energy’s Petition for Approval of an Electric Vehicle Home Service Program*, Docket No. E-002/M-19-559, Consent Order (Oct. 31, 2023).

assisted bicycle,” “off-road vehicle,” “motorboat,” and “aircraft.”<sup>40</sup> As part of its proposal to merge the subscription pilot into EV Accelerate at Home, Xcel proposes a similar update to the “Availability” paragraph of the subscription-service tariff. This proposed change is shown in Figure 1, below:

**Figure 1**  
***Proposed Changes to the Scope of Subscription Service***<sup>41</sup>

**AVAILABILITY**

Available ~~while this Pilot Service is in effect~~ to Residential Service customers for service only to electric vehicle loads including battery charging and accessory usage. Bundled service includes Company installed and provided charging equipment. Pre-Pay Option service is available to customers electing to pay Company for the installed cost of charging equipment prior to beginning service with this tariff. ~~Customers electing Pre-Pay Option service is closed and not available to new customers are separately invoiced at the time of installation. BYOC Option service is available to customers electing to bring their own charging equipment as approved by the Company, prior to beginning service with this tariff. The customer must possess complete Company-approved documentation verifying possession, through ownership or lease, of an electric vehicle, meaning any device or contrivance that transports persons or property and that is able to be powered by an electric motor drawing current from rechargeable storage batteries, fuel cells, or other portable sources of electricity. Electric vehicle includes, but is not limited to, an electric vehicle as defined in Minnesota Statutes as defined in Section 169.011, subdivision 26a; an electric-assisted bicycle as defined in Section 169.011, subdivision 27; an off-road vehicle, as defined in Section 84.797, subdivision 7; a motorboat, as defined in Section 86B.005, subdivision 9; or an aircraft, as defined in Section 360.013, subdivision 37, of Minnesota law.~~

There may be times when updating tariffs to match statutory definitions makes sense. But, in this instance, the need to include electric aircraft in an offering designed for at-home charging of electric cars is unclear. Moreover, other revisions that Xcel proposes for its “rules and regulations” tariff,<sup>42</sup> when combined with the inclusion of aircraft in EV Accelerate at Home service, raise an additional concern that ratepayers will become obligated to cover the costs of system upgrades needed to refuel electric airplanes.

As discussed in the next section of these Comments, Xcel proposes to excuse customers on its electric-vehicle rates, including EV Accelerate at Home, from paying any of the costs of system upgrades necessary to connect their vehicles to the grid. (This payment is called a

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<sup>40</sup> Compare Minn. Stat. 216B.1615, subd. 1(c) (defining “electric vehicle”) with Docket No. E-002/M-19-559, [Xcel Tariff Compliance Filing](#), attach. A, sheet 7-114 (Nov. 15, 2023) (mirroring statutory definition).

<sup>41</sup> Xcel TEP app. H6, sheet 5-8.1 (tariff redlines).

<sup>42</sup> [Minnesota Electric Rate Book, Section 6](#).

contribution in aid of construction, or “CIAC.”) Xcel’s proposal to waive these required contributions for electric-vehicle owners, combined with the inclusion of aircraft as an eligible “electric vehicle” under EV Accelerate at Home, potentially means that the owner of an electric airplane could have Xcel complete distribution-system upgrades to serve his hangar at ratepayers’ expense.<sup>43</sup> Such a subsidy would be extremely regressive.

This possibility is not mere speculation. The EV Accelerate at Home tariff provides that “[t]hree-phase service or other service upgrade requests will be provided in accordance with Company service regulations.”<sup>44</sup> If the referenced service regulations are revised as Xcel is requesting, the regulations will no longer require EV Accelerate at Home customers to contribute anything toward any of the grid buildout that may be needed to accommodate their load.<sup>45</sup> Accordingly, the Commission should require Xcel to remove, from all EV Accelerate at Home tariffs (including tariffed customer-service agreements), provisions that define “electric vehicle” to include aircraft, as well as provisions allowing “three-phase service.”

#### **IV. THE COMMISSION SHOULD REJECT, AS A MATTER OF FUNDAMENTAL FAIRNESS, TARIFF CHANGES THAT WOULD EXEMPT ELECTRIC-VEHICLE OWNERS FROM COST-SHARING REQUIREMENTS THAT APPLY TO ALL OTHER UTILITY CUSTOMERS.**

Xcel’s tariffs reflect a longstanding policy of requiring individual customers to contribute something toward the cost of winter construction, line extensions, and other new facilities that are specifically needed to serve their load.<sup>46</sup> These payments are commonly called contributions in aid of construction, or “CIAC.”<sup>47</sup> The purpose of CIAC is “to charge an individual customer the

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<sup>43</sup> Moreover, under Xcel’s CIAC-waiver proposal, if the airplane’s owner required a line extension of more than 100 feet, winter construction, or unusual installation costs, these costs would all be covered by ratepayers.

<sup>44</sup> See [Xcel Electric Rate Book, Section No. 5](#), sheets 7, 8, 8.1.

<sup>45</sup> See Section IV, below.

<sup>46</sup> According to Xcel, these tariff provisions predate the electronic versions of its tariff, and one—requiring contributions for line extensions exceeding 100 feet—has been in use since at least 1974. See Xcel Response to OAG IR No. 16, attached.

<sup>47</sup> The tariff provisions governing CIAC are set forth in the “General Rules and Regulations” section of Xcel’s electric rate book. See [Minnesota Electric Rate Book, Section No. 6](#), sheets 22–31 [hereinafter “CIAC Tariff”].

cost that may exceed the standard cost of providing service to a customer.”<sup>48</sup> This ensures that “the rendering of service to the [customer] will not cast an undue burden on other customers.”<sup>49</sup>

**A. In 2020, Xcel Indicates that It Has Been “Reexamining” Its CIAC Policies for Residential EV Customers but Does Not Propose Any Tariff Changes.**

In July 2020, in docket 15-111,<sup>50</sup> four organizations filing jointly as the “Clean Energy Groups” recommended that the Commission require Xcel to “remove the estimated cost of potential distribution system upgrades from applicable charges for customers adding load under the Residential EV Service tariff.”<sup>51</sup> The impetus for this recommendation was that the Clean Energy Groups had heard of “instances in which Xcel had attempted to charge electric-vehicle owners for transformer upgrades in order to participate in the Residential Electric Vehicle Service” pursuant to its CIAC Tariff.<sup>52</sup>

Xcel indicated that it was in the process of reexamining cost-sharing requirements but was agreeable to waiving “potential distribution upgrade charges for customers participating under each of our residential EV-related time-varying rate tariffs.”<sup>53</sup> The OAG conducted discovery and was unable to confirm any instances of Xcel charging or attempting to charge an electric-vehicle owner more than \$925, an amount far less than the cost of a transformer.<sup>54</sup> The OAG recommended taking no action until Xcel had proposed a tariff revision that stakeholders could

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<sup>48</sup> Xcel Response to OAG IR No. 16, attached.

<sup>49</sup> CIAC Tariff, sheet 26.

<sup>50</sup> *In the Matter of Northern States Power Company d/b/a Xcel Energy’s Petition for Approval of a Residential Electric Vehicle Charging Tariff*, Docket No. E-002/M-15-111.

<sup>51</sup> Docket No. E-002/M-15-111, CEG Comments at 4 (July 7, 2020). The Clean Energy Groups included Fresh Energy, Minnesota Center for Environmental Advocacy, Sierra Club, and Union of Concerned Scientists.

<sup>52</sup> *Id.* at 2.

<sup>53</sup> Docket No. E-002/M-15-111, Xcel Reply Comments at 2.

<sup>54</sup> See Docket No. E-002/M-15-111, [OAG Reply Comments](#) at 5 and attach. C (Aug. 17, 2020) (attaching Xcel discovery response). The three instances where an EV customer was charged \$925 appear to have involved installing an underground second service.

review and comment on.<sup>55</sup> The Commission ultimately took no action on the Clean Energy Groups' recommendation, and Xcel never proposed any changes to its CIAC Tariff.

**B. In Its 2022 Rate Case, Xcel Admits to Having Implemented an Informal CIAC-Waiver Policy Not Reflected in Its Tariffs.**

Despite not asking for, or receiving, permission to change its tariff, Xcel apparently moved forward with an off-the-books policy change. Xcel's policy of not following its CIAC Tariff came to the OAG's attention in late 2022 during the Company's rate case. In response to an information request from the Just Solar Coalition asking "whether a customer would be responsible for paying some or all of the cost for a transformer upgrade that is driven by that customer's load addition," the Company disclosed that it treats residential customers on certain electric-vehicle-specific rates preferentially compared to other customers.

Xcel explained that, in the situation described by Just Solar, it would apply its tariffed CIAC requirements to commercial customers and to residential customers on standard, time-of-day, limited-off-peak, and energy-controlled service. That is, these customers would receive a credit of 3.5 times the anticipated annual revenue on their incremental load less fuel-related revenue but would have to pay the remaining cost.<sup>56</sup> But Xcel disclosed that, contrary to its tariff, it would not charge residential customers on the EV Service, EV Accelerate at Home (f/k/a EV Home Service), and EV Subscription Service rates *anything* if their load caused the need for a transformer upgrade.<sup>57</sup>

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<sup>55</sup> *Id.* at 5–6.

<sup>56</sup> See [CIAC Tariff](#), sheet 26 (setting forth policies for "general extensions").

<sup>57</sup> See Docket No. E-002/GR-21-630, Direct Testimony of Cody Davis at 35–36 (Oct. 3, 2022) (citing "[JSC Exhibit 16](#)," a document that was filed with JSC's direct testimony on October 4, 2022).



The OAG objected to this policy because it was contrary to Xcel’s tariff and created a regressive subsidy in favor of electric-vehicle owners.<sup>58</sup> In its final-rates order, the Commission approved the informal policy while simultaneously directing Xcel to file the amended tariffs necessary to authorize it.<sup>59</sup> The Commission also expressed its interest in better understanding how the CIAC-waiver policy is being implemented and required Xcel to discuss the policy further in its transportation-electrification plan.<sup>60</sup>

**C. In Xcel’s Transportation-Electrification Plan, the Company Proposes Tariff Revisions that Would Worsen the Subsidy Caused by Its Informal Policy.**

In its November 2023 transportation-electrification plan, Xcel finally proposed tariff revisions that would authorize its off-the-books CIAC-waiver policy.<sup>61</sup> Xcel’s proposed revisions go well beyond what was discussed in the 15-111 docket or in the Company’s rate case. In addition to waiving “general extension” contributions, the Company now also proposes to waive customer contributions for three additional types of nonstandard service requests: excess footage, winter construction, and unusual installations. Table 1 summarizes the CIAC Tariff provisions Xcel is currently proposing to waive:

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<sup>58</sup> See OAG Initial Br. at 74. The policy also violates Minnesota law requiring public utilities to file, and observe, their official rate schedules. Every public utility must file with the Commission “schedules showing all rates, tolls, tariffs, and charges which it has established and which are in force at the time for any service performed by it,” including “all rules that . . . in any manner affect the service or product, or the rates charged or to be charged for any service or product.” Minn. Stat. § 216B.05, subds. 1, 2. The law forbids a public utility from “charging, demanding, collecting, or receiving” from any person “directly or indirectly, by any device whatsoever, or in any manner” more or less compensation than what is provided for in its official rate schedules. Minn. Stat. § 216B.06.

<sup>59</sup> Docket No. E-002/GR-21-630, Findings of Fact, Conclusions, and Order at 125.

<sup>60</sup> *Id.*

<sup>61</sup> See Xcel TEP app. H13.

**Table 1**  
**CIAC Tariff Provisions that Xcel Proposes to Waive**

<b>CIAC Type</b>	<b>Tariff Page</b>	<b>Description</b>
General Extension	6-26	<p>Xcel will extend, enlarge, or change its distribution or other facilities for supplying electric service when the product of 3.5 times the anticipated annual revenue, excluding the portion of the revenue representing fuel-cost recovery, from the sale of additional service to result therefrom justifies the expenditure. When the expenditure would exceed that amount, the customer must cover the excess expenditure through one of the following methods:</p> <ul style="list-style-type: none"> <li>a. Pay the excess amount up front;</li> <li>b. Pay a special monthly charge;</li> <li>c. Pay annually a specified minimum charge; or</li> <li>d. Pay through a combination of these methods.</li> </ul>
Excess Footage	6-23	Residential customers must pay for the portion of line extensions that exceed 100 feet. Commercial customers must pay extension costs that exceed 3.5 times the customer's anticipated annual revenue excluding fuel-cost recovery.
Winter Construction	6-24	The customer must pay the extra cost of winter construction when winter construction is necessary because the customer failed to meet all requirements of the Company by September 30 or because the customer's property, or the streets leading thereto, are not ready to receive the underground facilities by that date.
Unusual Installation	6-24	<p>The customer must pay the excess installation cost that Xcel incurs because of:</p> <ul style="list-style-type: none"> <li>a. surface or subsurface conditions that impede the installation of distribution facilities,</li> <li>b. delays caused by customer, or</li> <li>c. paving of streets, alleys, or other areas prior to the installation of underground facilities.</li> </ul>

Tables 2 and 3 show the residential and commercial rates for which Xcel proposes to waive the above CIAC requirements:

**Table 2**  
***Residential EV Rates Affected by Xcel’s CIAC-Waiver Proposal***

<b>Rate Code</b>	<b>Description</b>	<b>Waiver Proposed</b>
A08	EV Service	Yes
A76	EV Accelerate at Home Voluntary Service Bundled	Yes
A77	EV Accelerate at Home Voluntary Service Pre-pay/Installation Only Option (Closed)	Yes
A79	EV Accelerate at Home Pay as You Go Bring Your Own Charger	<u>No</u>
A80	EV Accelerate at Home Pay as You Go Service Bundled	Yes
A81	EV Accelerate at Home Pay as You Go Pre-pay Option/Installation Only (Closed)	Yes
A82	EV Subscription Pilot Service Bundled	Yes
A83	EV Subscription Pilot Service Pre-pay Option	Yes

**Table 3**  
***Commercial EV Pilots Subject to CIAC Waivers<sup>62</sup>***

<b>Rate Code</b>	<b>Description</b>
A87, A88, A89	EV Fleet Pilot Service
A90	EV Public Charging Pilot
A91, A92, A93	Multi-Dwelling Unit EV Service Pilot

Given the Commission’s interest in transparency around Xcel’s CIAC policies, and to gain a better understanding of the impact any waivers may have had, the OAG asked Xcel for

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<sup>62</sup> The Commission has already approved tariffed CIAC waivers for commercial EV pilot participants. *See* Docket No. E-002/M-18-643, Order Approving Pilots with Modifications, Authorizing Deferred Accounting, and Setting Reporting Requirements (July 17, 2019). Those waivers are stated in the relevant pilot rate schedules, though not in the CIAC Tariff itself. The OAG does not seek to have the commercial CIAC waivers reversed at this time because they are limited to pilot programs and because the resulting cost is recovered entirely from commercial customers.

information on EV-related CIAC charged and waivers granted from January 2018 to date.<sup>63</sup> Xcel initially objected to disclosing how often it collects CIAC, how often those CIAC are electric-vehicle related, and the amounts of CIAC charged or waived.<sup>64</sup>

While the Company has not yet answered the OAG's questions in this docket, in docket 15-111, Xcel reported 407 instances between January 1, 2019, and July 18, 2020, in which the Company charged residential customers for "special facilities work."<sup>65</sup> Of those instances, 69, or 17 percent, were electric-vehicle-related. Among the EV-related instances, the maximum cost was \$925 and the average cost was only \$273.

Given the lack of evidence that Xcel has ever charged or attempted to charge residential electric-vehicle customers outlandish amounts to connect to the grid, Xcel's CIAC-waiver policy appears to be a solution in search of a problem.<sup>66</sup> As electric-vehicle usage increases, however, the policy could lead to significant costs caused by EV users being shifted to ratepayers at large. For the reasons discussed in the next section, the Commission should reject both Xcel's informal policy and its proposed tariff revisions that would codify the policy.

**D. Xcel's Blanket CIAC Waiver for Electric-Vehicle Owners Would Create an Arbitrary and Unreasonable Rate Preference in Violation of Minnesota Statutes Sections 216B.03 and .07.**

Contributions in aid of construction are a matter of fundamental fairness, requiring that customers interconnecting new loads contribute something toward the cost of interconnection so that serving their load "will not cast an undue burden on other customers."<sup>67</sup> CIAC policies have

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<sup>63</sup> See Xcel responses to OAG IR Nos. 18–21, attached.

<sup>64</sup> The Company has since indicated that it will provide the requested information, though not in time to inform the OAG's initial comments.

<sup>65</sup> See Docket No. E-002/M-15-111, [OAG Comments](#) attach. C (Aug. 17, 2020) (attaching Xcel's public response to OAG IR No. 2).

<sup>66</sup> Xcel itself suggests as much, stating, "we are not aware of any distribution system upgrades that have been made to date" related to residential EV usage. Xcel TEP at 10.

<sup>67</sup> [CIAC Tariff](#), sheet 26.

been in the Company's tariff for years, predating the electronic version of the tariff. The 100-foot residential line-extension allowance, for example, has been in the Company's tariff since at least 1974. Xcel has not provided a good reason why these longstanding policies should not apply to electric-vehicle users, and there are plenty of reasons that they should.

Minnesota Statutes section 216B.03 requires that public-utility rates be just and reasonable. The statute also requires that rates not be "unreasonably preferential, unreasonably prejudicial, or discriminatory" but rather "sufficient, equitable, and consistent in application to a class of consumers." Section 216B.07 prohibits unreasonable rate preferences: "No public utility shall, as to rates or service, make or grant any unreasonable preference or advantage to any person or subject any person to any unreasonable prejudice or disadvantage." Xcel's blanket CIAC-waiver policy for electric-vehicle owners violates both of these statutes by creating unreasonable rate preferences and regressive subsidies favoring the "haves" at the expense of the "have nots."

Xcel's tariff changes would grant electric-vehicle owners an exemption from all CIAC requirements simply because their load is deemed "beneficial." Xcel has not established that such a blanket preference is reasonable. All new load, regardless of the type, benefits the system to the extent it yields revenues that more than offset its costs. This is precisely the analysis that Xcel's CIAC Tariff requires: Xcel must estimate the annual nonfuel revenues from the load and give the customer a credit of 3.5 times this amount toward the cost of necessary upgrades. Xcel's proposed tariff changes would short-circuit analysis of the benefits of a customer's load by simply deeming any costs to connect it economically justified. As a result, the full cost of upgrades would be added to Xcel's rate base and earn a return for Xcel's shareholders.<sup>68</sup> The impact of this policy would be to take money away from those who need it most—energy-burdened ratepayers who rely on

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<sup>68</sup> See Xcel Response to OAG IR No. 16, attached (acknowledging that the "portion of CIAC that is waived does increase the Company's rate base").

electricity as an essential service—to benefit those who need it least—utility shareholders and people who own electric cars, motorboats, and personal aircraft.

As if this regressive subsidy were not bad enough, Xcel’s proposed tariff changes have several other problems that render them arbitrary and unreasonable. First, Xcel’s proposal is overinclusive in that it waives not only “general extension” charges but also excess-footage, winter-construction, and unusual-installation charges. Not only do these latter waivers go beyond what Xcel previously said its policy was, but the costs that these charges cover have absolutely no relationship to electric-vehicle load *per se*.

When it comes to excess-footage, winter-construction, and unusual-installation charges, there is nothing that distinguishes electric-vehicle load from other types of load. Under Xcel’s proposal to waive excess-footage charges, an electric-vehicle owner with a 40-acre parcel of land could build a garage in the middle of the parcel and Xcel would be required to extend service approximately 660 feet no cost to the owner.<sup>69</sup> Why the cost of this extension should be fully covered by Xcel’s ratepayers, when the cost of a similar extension for a non-electric-vehicle use would not, is unclear. Waiving winter-construction and unusual-installation charges for electric-vehicle owners is similarly arbitrary and overinclusive because those charges cover excessive costs that are the *fault of the customer*.<sup>70</sup>

Second, Xcel’s proposal is arbitrary because it is underinclusive. The Commission approved Xcel’s informal policy on the theory that it encourages customers to take service under Xcel’s electric-vehicle rates, which incentivize charging at off-peak times (but do not actively

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<sup>69</sup> A square 40 acres measures 1,320 feet by 1,320 feet. A garage at the center of such a parcel would be a minimum of 660 feet from any point on the perimeter.

<sup>70</sup> See CIAC Tariff, sheet 24 (stating that winter-construction charges are due to the customer’s failure to meet Xcel’s requirements in a timely manner and that unusual-installation charges can be incurred for delays caused by the customer).

manage charging to ensure this). But by this logic, Xcel should waive CIAC requirements for other passively managed load: residential time-of-day service, residential time-of-use pilot service, small general time-of-day service, general time-of-day service, and general time-of-use pilot service. Xcel's proposal also notably leaves out EV Accelerate at Home Bring Your Own Charger service from the list of rate codes for which CIAC are waived. The effect of this latter omission is to discourage accelerate-at-home customers from purchasing a charger of their choice and to push them toward the "pay as you go" option that is more lucrative for Xcel. To be clear, the OAG is not recommending that additional CIAC waivers be granted but merely pointing out the arbitrary rate preferences inherent in Xcel's proposal.

Finally, Xcel's CIAC-waiver proposal is unreasonable because there are alternatives to a blanket waiver that would reduce the upfront costs of system upgrades without burdening other ratepayers. The general-extension provisions in the CIAC Tariff specifically state that a customer can pay for necessary upgrades through an up-front payment, a special monthly charge, a specified minimum annual charge, or a *combination* of these methods.<sup>71</sup> It would not be reasonable to waive CIAC solely for electric-vehicle customers when options are already available in the CIAC Tariff that could limit their upfront cost. Shockingly, despite these options' being right there in its tariff, Xcel has not even considered using them.<sup>72</sup>

Xcel has also failed to consider revisions to the tariff that could decrease the amount of CIAC required of electric-vehicle owners without eliminating their contribution entirely. One way to do this might be to increase the "3.5 times annual revenue" threshold used for determining how much upgrade costs are economically justified. Before making any change to this threshold, of

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<sup>71</sup> CIAC Tariff, sheet 26.

<sup>72</sup> See Xcel Response to OAG IR No. 17, attached. ("Has the Company considered options that would recover the CIAC from a customer over time?" "No.")

course, Xcel would need to do the economic analysis to support a new threshold. Increasing the revenue threshold is just one possible option. There are likely other reasonable ways to recognize the benefits that electric vehicles bring to the system without unduly burdening nonparticipating ratepayers. A blanket CIAC waiver, however, is not one of them.

For all these reasons, the Commission should reject Xcel's proposed CIAC Tariff revisions and order the Company to end its informal waiver policy. If, however, the Commission does approve tariff revisions waiving CIAC for residential EV customers, it should require Xcel to track their use as the Company does for its commercial pilots.<sup>73</sup>

**V. THE COMMISSION SHOULD REJECT OR MODIFY XCEL'S PROPOSED HOME-WIRING REBATE PROGRAM BECAUSE IT WOULD EXACERBATE THE SUBSIDY CAUSED BY THE COMPANY'S CIAC-WAIVER PROPOSAL.**

Xcel proposes home-wiring rebates that would subsidize the cost of electric-vehicle owners rewiring their homes to support the use of high-capacity Level 2 chargers. The Company proposes two rebate levels: a "market" rebate of \$500 available to any customer and an "enhanced" rebate of \$1,200 for customers who reside in a disproportionately impacted community as defined by the Justice40 Initiative or an environmental justice area as defined by the Minnesota Pollution Control Agency, or who are a current or previous participant in certain affordability programs.<sup>74</sup> As a condition of receiving a rebate, customers would have to agree to take service under a time-varying rate for at least one year.<sup>75</sup> Xcel proposes to capitalize the costs of rebates issued, amortize recovery of the costs, and earn a return on the unamortized balance.

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<sup>73</sup> See Docket No. E-002/M-18-643, Order Approving Pilots with Modifications, Authorizing Deferred Accounting, and Setting Reporting Requirements at 12 (July 17, 2019) ("For all these reasons, the Commission will authorize a waiver of CIAC service policy provisions, and other customer contributions, for the three-year term of the pilots. The Commission will also direct Xcel to use its current CIAC formula to determine the amount of subsidy a participant would receive and then track and report these costs for each pilot, including revenues.").

<sup>74</sup> Xcel TEP at 53.

<sup>75</sup> *Id.* at 55. Eligible "managed charging" rates would include Residential EV Service, any version of EV Accelerate at Home, and the Optimize Your Charge pilot. Enhanced-rebate recipients could unenroll at any time, including before the first year is complete.



Xcel's home-wiring-rebate proposal poses equity concerns similar to those implicated by the Company's CIAC-waiver proposal—the rebates would benefit customers who own a home and an expensive vehicle by increasing the energy burden of people who can afford neither. They would also tend to drive up grid costs by incentivizing the use of higher-capacity chargers. Accordingly, the Commission should not approve the rebate proposal.

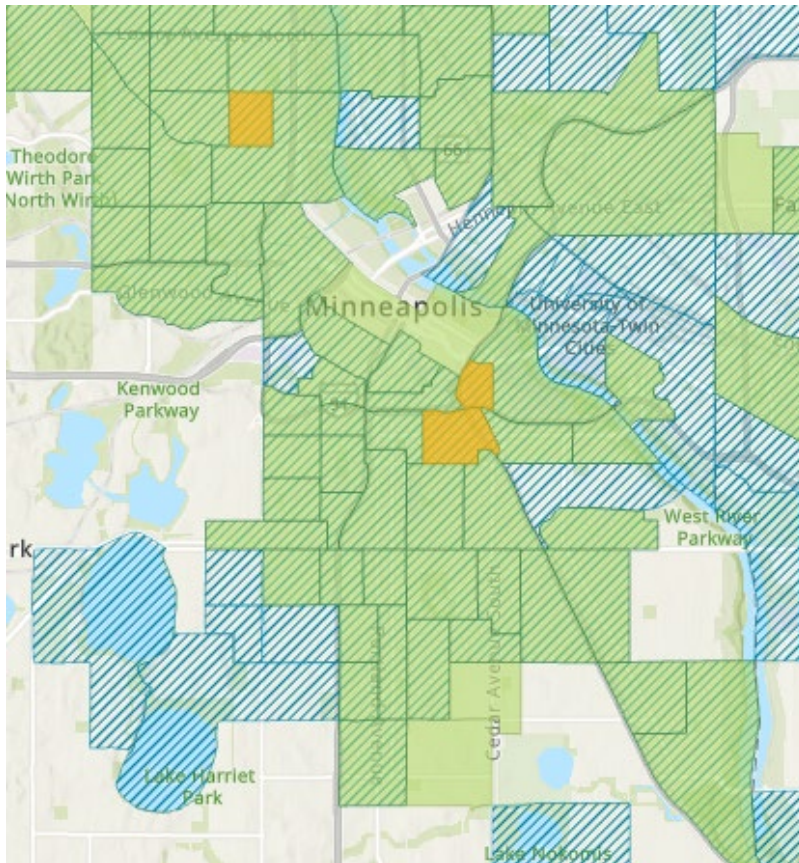
Xcel's proposal to offer enhanced rebates does not meaningfully mitigate the regressive nature of the rebates, for at least two reasons. First, the average cost of an electric vehicle in the United States is about \$50,000; it is unlikely that an extra \$1,200 for home wiring would increase the feasibility of that purchase for a household with poor credit making \$30,000 a year.<sup>76</sup> Second, Xcel's proposal would allow \$1,200 rebates to go to households that are not low-income or even moderate-income. This is because of how Xcel would define eligibility for enhanced rebates; eligibility is based not on a customer's income but on where the customer lives or whether he or she has received certain low-income assistance. These criteria, especially the geographic criteria, are overinclusive if the goal is to help low-income customers.

Particularly unreasonable is Xcel's proposal to use a customer's residence in an area the Minnesota PCA has designated as being of environmental-justice concern as an independent basis for enhanced-rebate eligibility. This is because, as can be seen in Figure 2, below, PCA's environmental-justice areas include neighborhoods with wealthier residents.

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<sup>76</sup> This is the 2023 federal poverty guideline for a family of four. See U.S. Dep't of Health and Human Servs., Poverty Guidelines, <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines> (last visited Dec. 18, 2023).

**Figure 2**  
**MPCA Areas of Environmental-Justice Concern<sup>77</sup>**



The overinclusiveness of the eligibility criteria may be why Xcel projects that 44 percent of rebate dollars would go to fund enhanced rebates. Based on Xcel’s overall rebate budget of \$4.2 million, 44 percent equates to 1,540 enhanced rebates, or about 25 percent of the total number of rebates that would be issued. In contrast, less than 5 percent of the rebates that Xcel has issued under a similar program in Colorado have been enhanced.<sup>78</sup> The difference may be explained by the fact that, in Colorado, the enhanced rebates are “limited to customers who are verified as income-qualified.”<sup>79</sup> Given the high cost of electric vehicles, and the overinclusiveness of the

<sup>77</sup> See Minn. Pollution Control Agency, Understanding Environmental Justice in Minnesota – Overview of Areas of Concern, <https://mpca.maps.arcgis.com/apps/MapSeries/index.html?appid=f5bf57c8dac24404b7f8ef1717f57d00> (last visited Dec. 18, 2023). All shaded or partially shaded areas are of concern.

<sup>78</sup> See Xcel TEP at 53.

<sup>79</sup> Xcel Response to OAG IR No. 9, attached.

proposed eligibility criteria for enhanced rebates, it is likely that these \$1,200 rebates will be taken advantage of overwhelmingly by higher-income customers residing in MPCA environmental-justice areas.

The Commission should not approve a home-wiring rebate proposal in any form because it would create inequitable subsidies. If, however, the Commission approves the rebates in some form, it should modify Xcel's proposal to minimize its regressive impact. First, the Commission should require Xcel to reserve the entire rebate budget for enhanced rebates, limit eligibility for enhanced rebates to customers who are verified as income-qualified (as the Company has done in Colorado), and require that any unspent rebate budget be forfeited at the end of each year. Second, the Commission should deny Xcel's request to capitalize rebate costs and instead require that rebates be expensed in the year issued. If the Commission allows Xcel to capitalize rebate costs, it should require Xcel's shareholders to cover half of the cost of each rebate.

**A. The Home-Wiring Rebate Budget Should Be Used Solely for Enhanced Rebates to Income-Verified Customers, and Budgeted Funds Unspent at the End of Each Calendar Year Should Not Roll Over for Use in Future Years.**

If Xcel's rebate proposal is approved in its current form, it would deepen disparities in energy burdens among the Company's customers. To help mitigate this impact, the Commission should require the entire home-wiring rebate budget be used to benefit low-income customers. To achieve this, Xcel would need to define criteria that ensure that participating customers are actually low-income. The OAG is agnostic as to the method used as long as it accomplishes this result, but using geographic criteria as an independent basis for eligibility would be unreasonable.

Further, to limit the ratepayer impact of the program, the Commission should specify that any budgeted funds unused at the end of a calendar year cannot be rolled forward to increase the budget in a future year. Xcel's proposed budget through 2027 is as follows:

**Figure 3**  
***Xcel’s Proposed Home-Wiring-Rebate Program Budget (millions)***

	2024	2025	2026	2027	Total
<b><u>O&amp;M Costs</u></b>					
Charging Equipment Maintenance	\$0.0	\$0.1	\$0.1	\$0.2	\$0.4
Program Administration	\$0.2	\$0.4	\$0.5	\$0.7	\$1.8
IT	\$0.0	\$0.0	\$0.1	\$0.1	\$0.2
<b>Total Annual O&amp;M</b>	<b>\$0.2</b>	<b>\$0.4</b>	<b>\$0.7</b>	<b>\$1.0</b>	<b>\$2.4</b>
<b><u>Capital Costs</u></b>					
Rebates	\$0.5	\$0.8	\$1.2	\$1.7	\$4.2
IT	\$0.0	\$0.1	\$0.1	\$0.2	\$0.4
<b>Total Annual Capital</b>	<b>\$0.5</b>	<b>\$0.9</b>	<b>\$1.3</b>	<b>\$1.9</b>	<b>\$4.6</b>

The OAG’s budget recommendation applies to the amounts listed on the “Rebates” line under capital costs. If the Commission were to approve Xcel’s proposed budget, and Xcel spent, for example, only half the approved rebate budget in 2024, the remaining \$0.25 million earmarked for 2024 should not be used to increase the approved budget in 2025 or any future years.

**B. The Commission Should Not Approve Xcel’s Proposal to Capitalize Rebate Costs, but If It Does, It Should Require Xcel to Cover Half the Cost of Each Rebate Issued.**

Xcel proposes to capitalize the cost of the rebates by placing them in a regulatory asset that earns a return at Company’s weighted average cost of capital, which includes a 9.25 percent return for the Company’s shareholders.<sup>80</sup> It is not reasonable to award Xcel an investment return on an expense from which its shareholders already stand to benefit.

The purpose of the rebates is to facilitate the use of Level 2 chargers, which put much greater demands on the grid than ordinary Level 1 chargers. Thus, shareholders already stand to benefit from increased electricity sales and infrastructure investments by issuing home-wiring

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<sup>80</sup> See Docket No. E-002/GR-21-630, Findings of Fact, Conclusions, and Order at 89 (July 17, 2023) (allowing Xcel to increase its return on equity from 9.06 to 9.25 percent).

rebates. It is not reasonable for Xcel to *both* offer rebates designed to benefit its shareholders *and* to award shareholders a return on the rebate costs. By tacking an investment return onto an operating expense, Xcel’s proposal would increase the overall cost of the rebate program and deepen the resulting subsidy.

Xcel argues that placing the rebates in a regulatory asset would allow cost recovery to be amortized over time, and that “[w]ithout the ability to spread out the rebate cost over the lifetime, the Company does not believe it would be feasible to scale this program.”<sup>81</sup> It is premature to conclude that the program should or will be scaled. The proposal before the Commission is to issue \$4.2 million in rebates over four years; expensing an additional \$1 million per year is not going to cause rate shock considering the magnitude of costs that Xcel is already recovering in rates. Therefore, if the current proposal is approved, Xcel should expense the rebates in the year they are issued. If the Commission approves rebates and Xcel later proposes to scale up the program, the merits of doing so and the mode of cost recovery can be addressed at that time.

Xcel also argues that the TEP statute allows the Commission to approve a return on rebates.<sup>82</sup> But the statute does not provide for this—it simply provides for recovery of an “appropriate rate of return” on utility investments.<sup>83</sup> While the statute does mention “rebates” in the same subdivision, it does not say that rebates are capital investments or otherwise alter the Commission’s ratemaking practice of not allowing a return on operating expenses.

Another recently enacted statute, the Energy Conservation and Optimization Act, also provides for utility-funded incentives to promote customers’ switching to electric vehicles. Under the ECO Act, public utilities must file an energy conservation and optimization plan that may

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<sup>81</sup> Xcel TEP at 57.

<sup>82</sup> *Id.* at 77.

<sup>83</sup> See Minn. Stat. § 216B.1615, subd. 4.

include “efficient fuel switching” measures. Such measures must, among other requirements, result in “a net reduction in the amount of source energy consumed for a particular use, measured on a fuel-neutral basis”; result in a net reduction of statewide greenhouse-gas emissions; be cost-effective from the perspective of the utility, participants, and society; and be installed and operated in a manner that improves the utility’s system load factor.<sup>84</sup> It would be against public policy to reward Xcel for proposing rebates in a way that avoids subjecting them to the exacting ratepayer-protection requirements of the ECO Act.

Finally, if the Commission allows Xcel to earn a return on rebates—which, to be clear, it should not—then the Commission should also require the Company to bear at least half of each rebate’s cost. Xcel’s contribution would acknowledge the benefits that its shareholders stand to receive as the rebates incentivize more electric sales and cause the need for more grid investments. This type of cost-sharing arrangement has a precedent in the Commission’s ratemaking treatment of utilities’ economic-development costs.<sup>85</sup> In many recent cases, the Commission has required utilities to split their economic-development expenses 50/50 with ratepayers to recognize the shareholder benefits of increased economic activity in a utility’s service area.

## **CONCLUSION AND RECOMMENDATIONS**

For all the foregoing reasons, the Commission should take the following actions with regard to Xcel’s transportation-electrification plan:

- Require Xcel to file a proposal to actively manage electric-vehicle charging that is informed by its Colorado Charging Perks pilot;
- Approve Xcel’s proposal to transition its subscription-service pilot to a permanent offering but require Xcel to remove aircraft from the definition of “electric vehicle” in

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<sup>84</sup> Minn. Stat. § 216B.241, subd. 11(d).

<sup>85</sup> See, e.g., Docket No. E-002/GR-21-630, Findings of Fact, Conclusions, and Order at 74 (July 17, 2023) (noting Commission’s “traditional practice” of allowing utilities to recover only half of their economic-development costs).

its EV Accelerate at Home offerings and also to remove the provision for three-phase service in these offerings;

- Reject Xcel's proposed changes to its CIAC Tariff that would create an unreasonable rate preference in favor of electric-vehicle owners; and
- Reject Xcel's proposal to offer home-wiring rebates.

Dated: December 20, 2023

Respectfully submitted,

KEITH ELLISON  
Attorney General  
State of Minnesota

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ATTORNEYS FOR OFFICE OF  
THE ATTORNEY GENERAL—  
RESIDENTIAL UTILITIES DIVISION

**BEFORE THE MINNESOTA OFFICE OF ADMINISTRATIVE HEARINGS**  
**600 North Robert Street**  
**St. Paul, Minnesota 55101**

**FOR THE MINNESOTA PUBLIC UTILITIES COMMISSION**  
**121 7th Place East**  
**Suite 350**  
**St. Paul, Minnesota 55101-2147**

**MPUC Docket No. E-002/M-22-432**  
**OAH Docket No. 71-2500-38758**

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***In the Matter of the Petition of Northern States Power Company  
for Approval of a Public Charging Network,  
an Electric School Bus Pilot, and Program Modifications***

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**DIRECT TESTIMONY OF THE MINNESOTA OFFICE OF THE  
ATTORNEY GENERAL—RESIDENTIAL UTILITIES DIVISION**

**WITNESS:**

**MR. ANDREW TWITE**

**FEBRUARY 7, 2023**

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**I. INTRODUCTION**

**Q. Please state your name, occupation, and business address.**

A. My name is Mr. Andrew Twite. I am a rates analyst with the Office of the Minnesota Attorney General, Residential Utilities Division (“OAG”). My business address is 445 Minnesota Street, Suite 1400, St. Paul, MN 55101-2131.

**Q. What is your educational and professional background?**

A. My curriculum vitae is attached as Schedule AT-D-1. I have been with the OAG since November 2020, specializing in rate design, class cost of service, integrated resource planning, and resource acquisition. Prior to joining the OAG, I spent four years as a senior policy associate at Fresh Energy—including several years as an electric vehicle (“EV”) advocate—and three years as a rates analyst at the Minnesota Public Utilities Commission (“PUC” or “the Commission”), where I was the Commission’s lead staff-person on several EV dockets. I hold a master’s degree in public policy and a bachelor’s degree in political science, both from the University of Minnesota. I have also been an EV driver since 2015 and have been an active member of the Minnesota EV Owners group for over six years.

**Q. How is your testimony organized?**

A. In Section II, I discuss the distributional impacts of Xcel’s EV proposals, which could be doubly regressive: the proposals’ costs would likely be recovered disproportionately from lower-income customers and people of color, while their benefits would likely accrue primarily to higher-income and Caucasian customers. I examine the distributional impacts of alternative funding sources in Section III. Each of these funding alternatives would be significantly more progressive than funding EV investments through utility rates.

**II. DISTRIBUTIONAL IMPACTS OF XCEL’S ELECTRIC VEHICLE PROPOSALS**

**Q. What is the purpose of this section of your testimony?**

A. In this section, I discuss the distributional impacts of Xcel’s EV proposals.

**Q. How do you define “distributional impact” as used in your testimony?**

A. Distributional impacts refer to the cost shifts within the population—typically with respect to the wealth or income of the individuals in the group—resulting from a public policy. Distributional impacts can refer to either how the costs of a policy are collected within the population or how the benefits of a policy accrue within the population.

Distributional impacts are “progressive” when the costs of the policy are collected primarily from higher-income individuals and/or when the benefits accrue primarily to lower-income individuals.<sup>1</sup> Conversely, distributional impacts are “regressive” when costs are borne disproportionately by lower-income individuals and/or when the benefits flow mainly to wealthier individuals.<sup>2</sup> A distributional impact can also be “proportional” if the costs and/or benefits apply equally to all members of the group.

Subsection A, below, analyzes the distributional impacts of cost recovery for Xcel’s EV proposals. Because utility costs typically make up a larger share of household income for lower-income customers than for higher-income households, funding EV investments through utility rates would be regressive. Subsection B examines how the potential benefits of Xcel’s EV proposals would be distributed among its customers. While the EV proposals’ benefits cannot be predicted with certainty, I suspect they will also be regressive, as EV adoption has historically been very strongly correlated with income.

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<sup>1</sup> For example, Figure 5 shows that Minnesota’s individual income tax is progressive, as higher-income Minnesotans contribute a larger share of their income toward income taxes while lower-income Minnesotans pay a smaller share.

<sup>2</sup> For example, Figure 6 shows that Minnesota’s state sales taxes are regressive, as lower-income Minnesotans contribute a larger share of their income toward sales taxes while higher-income Minnesotans pay a smaller share.

**A. DISTRIBUTIONAL IMPACTS OF EV PROGRAM COST RECOVERY**

**Q. Why are you focusing on the distributional impacts of utility spending in this case?**

A. By statute, the OAG is charged with identifying and promoting the needs of residential and small business consumers in matters before the Commission.<sup>3</sup> In executing the OAG's mission, it is important to recognize that the needs of customers within each class are not uniform, and rate increases do not affect all residential or small business customers equally.

Attorney General Keith Ellison strives to help Minnesotans afford their lives and live with dignity, safety, and respect. Electric service is not a luxury; it is essential to ensure one's safety and dignity. Unfortunately, for too many Minnesotans, utility costs are not affordable. This is particularly true for low-income customers and people of color.<sup>4</sup>

**Q. Why is it important to consider the impacts of Xcel's proposals on low-income customers?**

A. Low-income customers tend to pay a disproportionate amount of their household income toward energy costs, a phenomenon referred to as "energy burden." Figure 1 displays Minnesota's average energy burdens by income level in 2018.<sup>5</sup> As the figure shows, energy burdens vary greatly in Minnesota.<sup>6</sup> The average energy burden was just 2 percent in 2018, but for Minnesotan households at or below the federal poverty level, energy costs averaged 16 percent of household income, before factoring in the cost of housing, health care, and other essential needs. Even households earning slightly more than the federal poverty level still faced average energy burdens of eight percent. Notably, in 2018, 15

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<sup>3</sup> Minn. Stat. § 8.33, subd. 2.

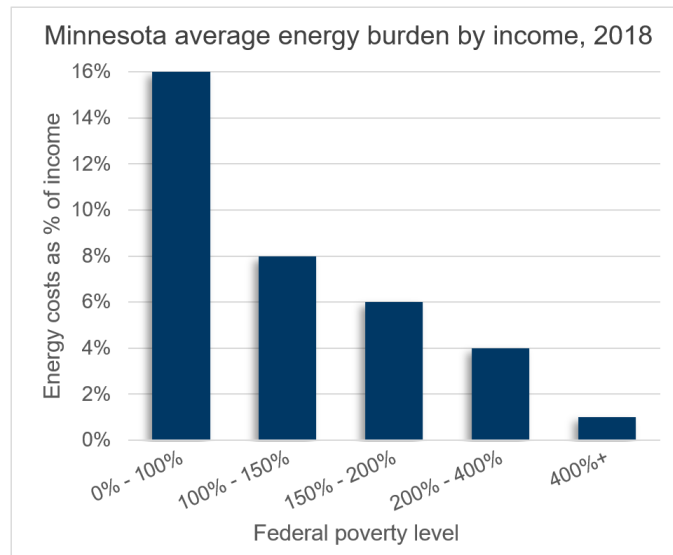
<sup>4</sup> Throughout this testimony, a "person of color" is defined as any person who identifies as a race other than "white, non-Hispanic or Latino."

<sup>5</sup> Compiled by the author using data from U.S. Dep't of Energy, [Low-Income Energy Affordability Data \(LEAD\) Tool](#) (last visited Jan. 24, 2023),

<sup>6</sup> Statewide data is used because Xcel does not have utility-specific data on energy burdens. See Xcel Energy's Response to OAG Information Request 3001 in Docket 21-630, included in Twite Direct Schedule AT-D-4 (in 21-630) at 29-116 (eDocket No. [202210-189488-02](#)).

percent of Minnesota households had incomes at or below 150 percent of the federal poverty level (\$37,650 for a family of four).<sup>7</sup>

**Figure 1**



**Q. Does Figure 1 fully reflect the impact of utility bills on household budgets?**

A. No. The data in Figure 1 only include households' direct utility bill expenditures. However, electricity and/or gas are also inputs to nearly all of the goods and services that consumers purchase. Because at least some of these costs are included in the price of goods and services, the full impact of utility spending on households' budgets is even larger than illustrated in Figure 1.

**Q. Why is it important to consider the impacts of utility spending on people of color?**

A. Minnesota is one of the most racially inequitable states by several measures, including educational attainment, labor force participation, and homeownership rates.<sup>8</sup> There are also appalling racial disparities in poverty rates in Minnesota: in 2019, Minnesotans who identified as American Indian/Indigenous or Black/African American faced poverty rates

<sup>7</sup> See U.S. Dep't of Energy, [Low-Income Energy Affordability Data \(LEAD\) Tool](#) (last visited Jan. 24, 2023) (utilizing data from the U.S. Census Bureau's American Community Survey 2018 Public Use Microdata Samples).

<sup>8</sup> Randy Furst and MaryJo Webster, [How Did Minn. Become One of the Most Racially Inequitable States?](#), STAR TRIBUNE, Sept. 6, 2019.

of roughly thirty percent, compared to just seven percent for those who identified as white.<sup>9</sup> Further, the Minnesota Pollution Control Agency has also found that people of color are also much more likely to reside in areas of environmental justice concern, meaning they tend to face greater exposure to the public health impacts of pollution.<sup>10</sup>

While the U.S. Department of Energy study cited above did not detail energy burdens by racial identification, previous scholarship has identified significant racial disparities in energy burdens in the U.S., with the average energy burdens for Native American and African American households being 50 and 46 percent higher than for white (non-Hispanic) households, respectively.<sup>11</sup>

**Q. Has the affordability of its bills been questioned in Xcel's pending electric rate case?**

A. Yes. In that case, witness Dr. Gabriel Chan noted that many Minnesotan households have difficulty meeting their energy needs, a concept known as "energy insecurity."<sup>12</sup> As Dr. Chan noted, inability to pay utility bills can lead to arrearages and disconnections, and "more than one-third of all energy insecure households in the United States received a notice of disconnection in the past year."<sup>13</sup> Notably, eviction filings increased sharply in Minnesota in 2022 and have remained well above pre-pandemic levels.<sup>14</sup>

**Q. Are there racial disparities in energy insecurity in Minnesota?**

A. Yes. Dr. Chan's rate case testimony documented dramatic racial disparities in energy insecurity in our state:

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<sup>9</sup> Minn. Dep't of Health, [People in Poverty in Minnesota](#) (last visited Jan. 30, 2023).

<sup>10</sup> Minn. Pollution Control Agency, [Understanding Environmental Justice in Minnesota](#) (last visited Jan. 30, 2023).

<sup>11</sup> ARIEL DREHOBIL, LAUREN ROSS, AND ROXANA AYALA, AM. COUNCIL FOR AN ENERGY-EFFICIENT ECON., [HOW HIGH ARE HOUSEHOLD ENERGY BURDENS? AN ASSESSMENT OF NATIONAL AND METROPOLITAN ENERGY BURDEN ACROSS THE UNITED STATES](#) at iv fig.ES1 (Sept. 2020).

<sup>12</sup> *In the Matter of the Application of Northern States Power Company For Authority to Increase Rates for Electric Service in Minnesota*, MPUC Docket No. E-002/GR-21-630, Direct Testimony of Dr. Gabriel Chan at 16–17 (Oct. 3, 2022) (eDocket No. [202210-189513-04](#)).

<sup>13</sup> *Id.* at 29.

<sup>14</sup> Erin Adler and MaryJo Webster, [Minnesota Eviction Filings Soared in 2022 and Continue into New Year](#), STAR TRIBUNE, Jan. 22, 2023.

[I]n Minnesota, 61% of Black households reported experiencing energy insecurity, compared to 52% nationally. In contrast, 14% of White households in Minnesota reported experiencing energy insecurity, compared to 23% of White households nationwide. This implies a difference in the experience of energy insecurity between White and Black households of 47 percentage points in Minnesota, compared to 29 percentage points nationwide.<sup>15</sup>

Dr. Chan also demonstrated that a significant percentage of Xcel customers are at risk of disconnection and concluded that “[w]ithin the communities served by Xcel Energy, there also appears to be a correlation between race, income, and utility disconnection.”<sup>16</sup>

**Q. What do you conclude regarding the distributional impacts of cost recovery for Xcel’s EV proposals?**

A. Low-income households in Minnesota tend to have significantly larger energy burdens than high-income households. There are also appalling racial disparities in poverty and energy insecurity across Minnesota and in Xcel’s service area. In this context, it is imperative that the Commission consider the distributional impacts of Xcel’s EV proposals and the risk of exacerbating energy insecurity among Xcel’s customers.

**B. DISTRIBUTIONAL IMPACTS OF EV PROGRAMS’ POTENTIAL BENEFITS**

**Q. Does the fact that utility costs are regressive mean utilities should not make infrastructure investments?**

A. No. As noted above, reliable electric service is essential to ensure Minnesotans’ safety and dignity. Utilities can and should make investments needed to provide safe, reliable service to their customers, even though the costs of these investments will be recovered disproportionately from low-income customers.

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<sup>15</sup> *In the Matter of the Application of Northern States Power Company For Authority to Increase Rates for Electric Service in Minnesota*, MPUC Docket No. E-002/GR-21-630, Direct Testimony of Dr. Gabriel Chan at 22 (Oct. 3, 2022) (eDocket No. [202210-189513-04](#)).

<sup>16</sup> *Id.* at 29–35.

1           However, the investments contemplated in this case differ in important ways from  
2           the typical investments made to ensure reliable service. Most utility investments—such as  
3           building power plants or transmission lines—benefit all customers by minimizing energy  
4           costs and improving reliability, among other things. The vast majority of the benefits of  
5           Xcel’s EV proposals, on the other hand, would accrue to the EV owners themselves.<sup>17</sup>

6           Thus, the distributional impacts of Xcel’s EV proposals’ potential benefits will  
7           depend largely on who makes the new EV purchases.

8   **Q.   Is it possible to determine conclusively how the benefits of Xcel’s EV proposals would**  
9   **be distributed?**

10 A.   No. The benefits of Xcel’s EV proposals are highly speculative: they rely on the  
11       assumption that Xcel’s investment in the program will trigger EV purchases that would not  
12       have otherwise occurred. It is impossible to determine conclusively how many new EVs  
13       would be purchased as a result of these programs, much less who would purchase them.  
14       Thus, there is much less certainty regarding the distributional impacts of the benefits of  
15       Xcel’s proposals than there is regarding the distributional impacts of their costs.

16 **Q.   Historically, has there been a relationship between EV adoption and income?**

17 A.   Yes. It is well documented in the record that EV adoption has been strongly correlated  
18       with income, with EV adoption rates dramatically higher among wealthier households.<sup>18</sup>  
19       Dr. Muehlegger’s testimony provides direct evidence regarding EV adoption by income in  
20       California<sup>19</sup> and also cites academic papers demonstrating that EV adoption has been more  
21       prevalent among homeowners than renters<sup>20</sup> and that the benefits of federal EV tax credits

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<sup>17</sup> For example, in Xcel’s calculation of the Societal Cost Test benefits (in the Personal LDV, unmanaged case), 96 percent of the expected benefits of the EV proposals would flow to new EV owners through lower fuel and maintenance costs. *See* Horii Direct sched. 2 at 5 tbl.4.

<sup>18</sup> Muehlegger Direct at 14–17.

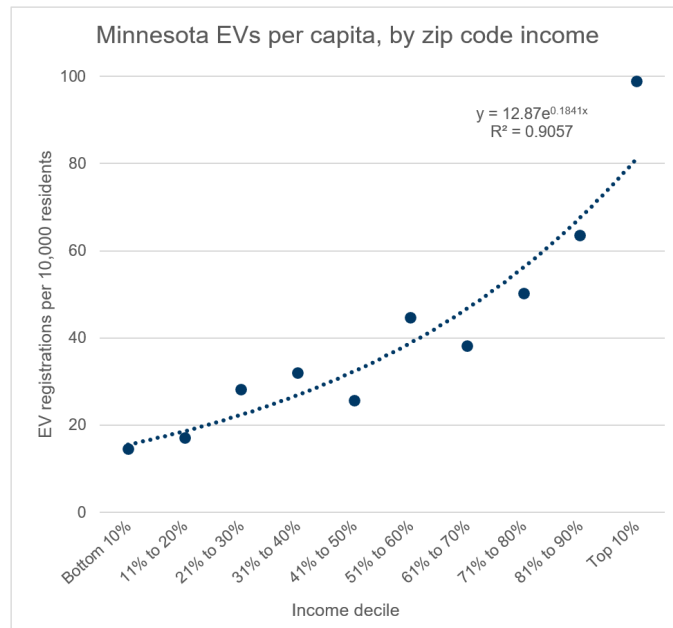
<sup>19</sup> *Id.* at 16 fig.2.

<sup>20</sup> *Id.* at 15 n.18.



have been strongly regressive.<sup>21</sup> Further, Figure 2, below, applies Dr. Muehlegger's California EV adoption analysis to Minnesota data.<sup>22</sup> As the figure shows, there has been a strong correlation between EV adoption and household income in Minnesota as well.

**Figure 2**



**Q. Will the correlation between EV adoption and household income continue?**

A. While it is impossible to say with certainty, my expectation is that the existing trends will continue during the period at interest in this case (2023 through 2030). Since EVs are a relatively new technology, there are relatively few used EVs available for purchase, which means nearly all of the EVs needed for Minnesota to meet its 2030 adoption goals will need to come from new car purchases. As Company witness Muehlegger notes, “[e]arly electric vehicles tended to have higher purchase prices than conventional vehicles.”<sup>23</sup> This EV price premium has been a major driver of income disparities in EV ownership. If EVs

<sup>21</sup> *Id.* at 15 n.15.

<sup>22</sup> Compiled by the author using data from the Minnesota Public Utilities Commission ([EV registration data, December 2021](#)) and the U.S. Census Bureau ([Series S1903](#), Median Income in the Past 12 Months, 2021 ACS 5-Year Estimates), each last visited on January 31, 2023.

<sup>23</sup> Muehlegger Direct at 15.

continue to have higher upfront costs than comparable internal combustion engine (“ICE”) vehicles, historical ownership trends will likely continue.

**Q. Do EVs currently have higher upfront costs than comparable ICE vehicles?**

A. It appears so. Calculating EVs’ upfront cost premium is difficult because most EV models do not have identical ICE counterparts. But for the few models that do, the premium is significant. For example, a 2023 Hyundai Kona EV costs roughly \$12,000 more (before tax credits) than an ICE Kona with the same trim, while a 2023 Ford F-150 Lightning costs roughly \$24,000 more than an ICE F-150 with the same trim.<sup>24</sup>

The Inflation Reduction Act’s EV tax credits will reduce upfront cost premiums, and battery cost reductions and/or EV manufacturing improvements could further reduce (or even eliminate) cost premiums in the future. In the near term, however, EVs will likely still have higher upfront costs than their ICE counterparts.<sup>25</sup>

**Q. Did the Company raise an additional concern regarding EV charging infrastructure?**

A. Yes. Company witness Muehlegger provides evidence that, “both fast-charging ports and level 2 charging ports in California are more common in more affluent zip codes than in less affluent zip codes.”<sup>26</sup> Dr. Muehlegger argues that it is important to avoid this outcome in Minnesota and that policymakers should work to ensure EV charging infrastructure is “equitably distributed.”<sup>27</sup>

**Q. How do you respond to the Company’s arguments?**

A. I agree that equitable distribution of public charging infrastructure is an important policy goal and that, when disparities arise, policymakers should take action to eliminate them.

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<sup>24</sup> The full trim-level comparison for these vehicles is included in Schedule AT-D-2.

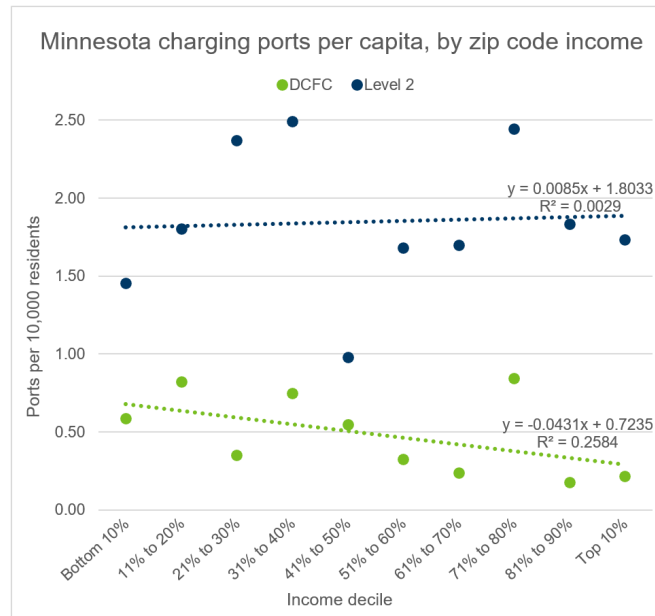
<sup>25</sup> EVs’ fuel and maintenance cost savings can more than make up for their higher upfront costs, giving EVs a lower overall cost of ownership. However, the upfront cost premium will still be a barrier for lower-income buyers who lack access to affordable financing.

<sup>26</sup> Muehlegger Direct at 18.

<sup>27</sup> *Id.* at 19–21.

However, Figure 3 shows that the income disparities Dr. Muehlegger identified in California do not currently exist in Minnesota.<sup>28</sup>

**Figure 3**



Moreover, simply providing access to chargers in low-income communities will not necessarily increase EV adoption among lower-income Minnesotans. Dr. Muehlegger cites the Minnesota Department of Transportation’s 2021 EV Assessment, which states:

Today, EV users are predominantly white, middle and upper income, and male, most often living in urban areas. Low- to moderate-income households, BIPOC communities, women, disabled residents, and rural residents may experience *intersecting barriers* to EV use and may be underserved by current EV programs and policies.<sup>29</sup>

In other words, the barriers to EV adoption among these groups are multifaceted. Simply increasing charging availability without also addressing other barriers—most notably, affordability and access to financing—will likely have minimal impact on adoption rates.

<sup>28</sup> Compiled by the author using data from the U.S. Department of Energy’s Alternative Fuels Data Center ([Electric Vehicle Charging Station Locations](#)) and the U.S. Census Bureau ([Series S1903](#), Median Income in the Past 12 Months, 2021 ACS 5-Year Estimates), each last visited on January 31, 2023.

<sup>29</sup> Muehlegger Direct at 20 (emphasis added).

1 **Q. Is there another important benefit of increased EV adoption?**

2 A. Yes. The Minnesota Department of Health has demonstrated that there are significant  
3 disparities in air quality in Minnesota, with lower-income communities and communities  
4 of color experiencing much higher levels of pollution.<sup>30</sup> Since EVs have no tailpipe  
5 emissions, increasing EV adoption could help reduce the health impacts of poor air quality.  
6 However, it appears these benefits were not included in Xcel's cost-benefit analysis.

7 **Q. Will increased EV adoption's air quality benefits be distributed equally?**

8 A. Not necessarily. Since lower-income communities and communities of color are  
9 disproportionately harmed by air pollution, they could see a greater share of the benefits of  
10 increased EV adoption's air quality improvements. However, these benefits are highly  
11 uncertain, since they depend on not only future EV adoption rates—which are difficult to  
12 predict—but also *where* the new EVs will be driven, which is nearly impossible to predict.

13 **Q. What do you conclude regarding the distributional impacts of the potential benefits**  
14 **of Xcel's EV proposal?**

15 A. Historically, EV adoption has been strongly correlated with income, with EV adoption  
16 rates dramatically higher among wealthier households. While it is possible this trend will  
17 change, given the complex barriers to EV adoption among low-income people and people  
18 of color, it is unlikely to change in the near term. If historical adoption patterns continue  
19 through 2030—as I expect they will—the benefits of Xcel's EV proposals will flow  
20 disproportionately to higher-income Minnesotans.

21 Thus, the combined distributional impacts of Xcel's EV proposals could present  
22 the worst of both worlds: the costs will likely fall disproportionately upon lower-income

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<sup>30</sup> See MINN. DEP'T OF HEALTH, [LIFE AND BREATH: TWIN CITIES METRO AREA](#) (Jan. 2022); MINN. DEP'T OF HEALTH, [LIFE AND BREATH: GREATER MINNESOTA CITIES](#) (Jan. 2022).

customers and people of color while the benefits will likely accrue primarily to higher-income and Caucasian Minnesotans.

### III. DISTRIBUTIONAL IMPACTS OF OTHER EV FUNDING SOURCES

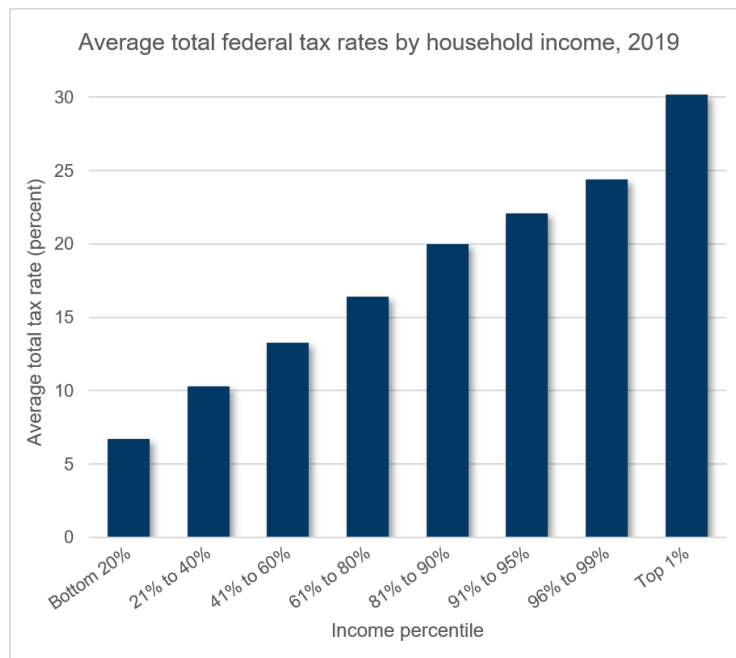
**Q. What is the purpose of this section of your testimony?**

A. In this section, I discuss the distributional impacts of other potential funding sources for public EV chargers, including federal and state tax revenues.

**Q. What are the distributional impacts of federal taxes?**

A. While particular taxes can be either regressive or progressive, on the whole, federal effective tax rates are strongly progressive: as shown in Figure 4, average federal tax rates increase significantly with income, which means lower-income households tend to pay a much smaller percentage of their income in federal taxes than higher-income households.<sup>31</sup>

**Figure 4**



<sup>31</sup> Compiled by the author using data from TAX POLICY CTR., [HISTORICAL AVERAGE FEDERAL TAX RATES FOR ALL HOUSEHOLDS: 1979 TO 2019](#) (Jan. 9, 2023).

**Q. Why are federal tax rates relevant to public EV charging infrastructure?**

A. As Company witness Muehlegger notes, the federal government will be providing significant funding to develop public EV chargers. Specifically, the 2022 Infrastructure Investment and Jobs Act (“IIJA”) is expected to provide Minnesota with more than \$68 million over five years to support public EV charging.<sup>32</sup> Minnesota could also receive funds from the IIJA’s \$2.5 billion competitive grant program, which will specifically target adding EV infrastructure in rural areas, low-income neighborhoods, and communities with higher concentrations of multiunit dwellings.<sup>33</sup>

Dr. Muehlegger also notes that the 2022 Inflation Reduction Act (“IRA”) provides a tax credit for commercial EV charging infrastructure installations.<sup>34</sup> The IRA also extended and expanded the federal tax credits for EV purchases. Notably, the IRA also included targeted tax increases to offset its new spending; a recent analysis found that the IRA’s funding sources are even more progressive than Federal taxes as a whole.<sup>35</sup>

**Q. What are the distributional impacts of Minnesota’s state taxes?**

A. Particular Minnesota state taxes can be either progressive or regressive. For example, Figure 5 shows the distributional impact of Minnesota’s individual income taxes—which make up roughly half of Minnesota’s state tax collections—which is very progressive.<sup>36</sup> Effective income tax rates for the bottom 20 percent of Minnesotans are negative, reflecting the impact of low-income tax credits that “can more than offset any income tax liabilities.”<sup>37</sup> Minnesota’s Estate tax and Property Tax Refund are also very progressive.

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<sup>32</sup> Muehlegger Direct at 22–23.

<sup>33</sup> *Id.* at 23.

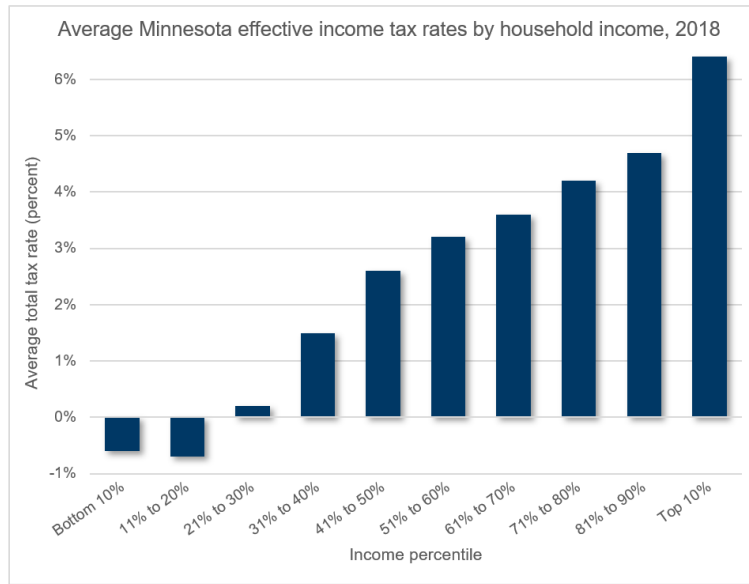
<sup>34</sup> *Id.* at 24.

<sup>35</sup> JOHN BUHL, TAX POLICY CTR., [THE INFLATION REDUCTION ACT PRIMARILY IMPACTS TOP 1 PERCENT OF TAXPAYERS](#) (Aug. 11, 2022).

<sup>36</sup> Compiled by the author using data from MINN. DEP’T OF REVENUE, [2021 MINNESOTA TAX INCIDENCE STUDY](#) at 29 tbl.2-3 (Mar. 4, 2021) (the relevant sections of this report are included as Schedule AT-D-3).

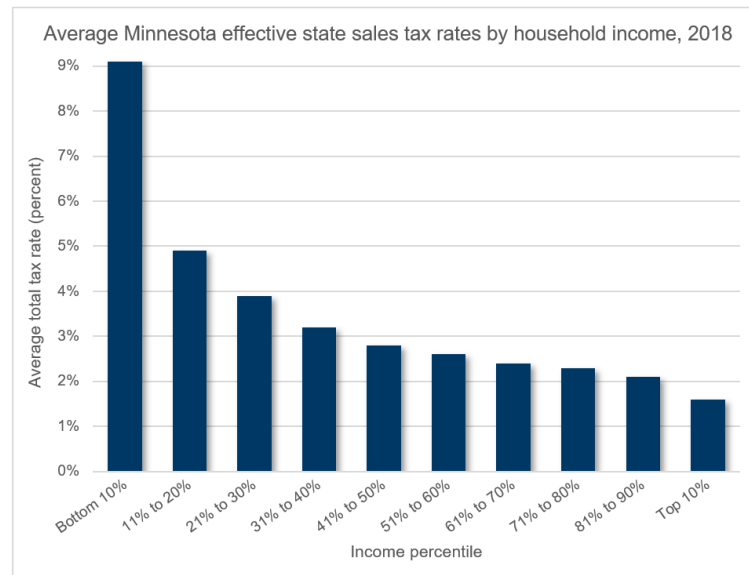
<sup>37</sup> *Id.* at 32.

**Figure 5**



Minnesota's state sales tax, on the other hand, is very regressive. As shown in Figure 6, low-income Minnesotans pay a much larger percentage of their income in state sales tax than higher-income Minnesotans.<sup>38</sup> Similarly, many of the state's other, smaller taxes are also very regressive.<sup>39</sup>

**Figure 6**



<sup>38</sup> Compiled by the author using data from MINN. DEP'T OF REVENUE, [2021 MINNESOTA TAX INCIDENCE STUDY](#) at 29 tbl.2-3 (Mar. 4, 2021) (the relevant sections of this report are included as Schedule AT-D-3).

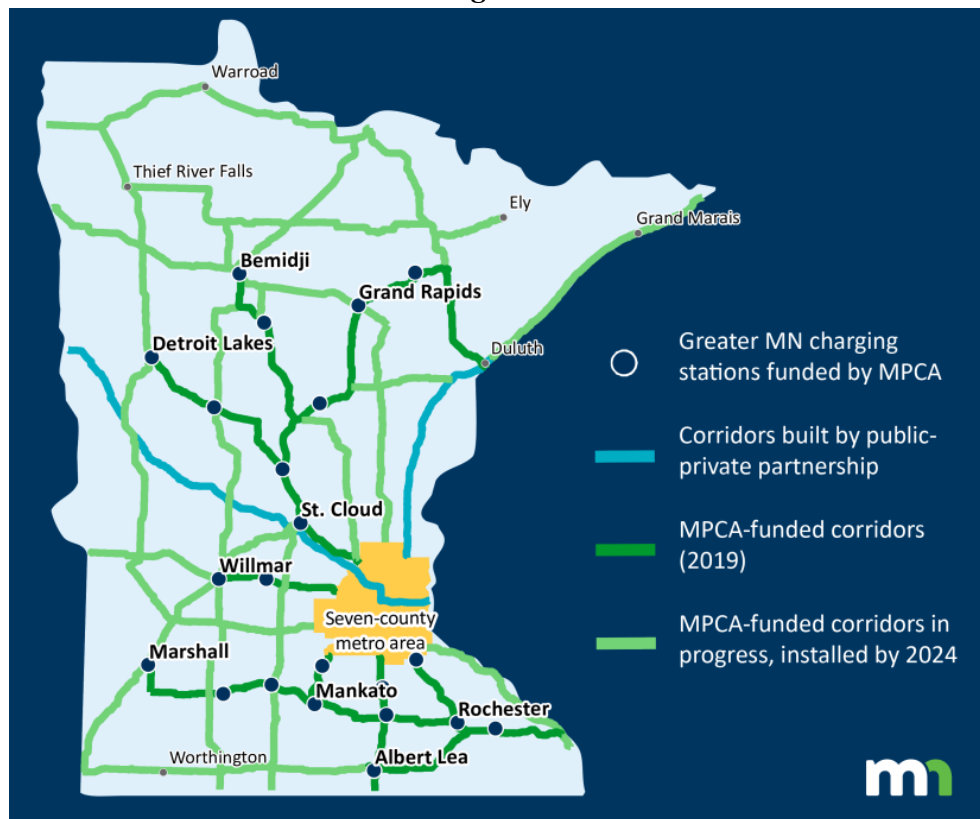
<sup>39</sup> *Id.* at 24 tbl.2-1. Note: a positive Suits Index indicates progressivity while a negative value indicates regressivity.

Overall, Minnesota's state taxes are slightly progressive, though much less so than federal taxes.<sup>40</sup>

**Q. Why are state tax rates relevant to public EV charging infrastructure?**

A. The progressivity of Minnesota's state taxes is relevant in this proceeding because the state legislature may also provide funding for public EV charging infrastructure. At minimum, the legislature will likely meet the 20 percent match to secure the \$68.2 million in IJA funds referenced above, which would provide an additional roughly \$14 million to support public EV charging infrastructure.

**Figure 7**



**Q. Are there other funding sources for public EV charging infrastructure in Minnesota?**

A. Yes. The Minnesota Pollution Control Agency ("MPCA") has been administering funds received by the state from a settlement agreement regarding German automaker

<sup>40</sup> *Id.*



Volkswagen's violations of the federal Clean Air Act.<sup>41</sup> Among other things, the MPCA has been using the funds to develop public fast charging infrastructure along Greater Minnesota highway corridors. As shown in Figure 7, the MPCA expects to expand the fast charging network in Greater Minnesota by over 2,500 miles by the end of the year.<sup>42</sup>

**Q. What are the distributional impacts of costs of these infrastructure investments?**

A. This EV charging infrastructure is being funded through Volkswagen's payments to the federal government. Thus, these funds will ultimately result in some combination of reduced corporate profits and higher new vehicle prices. While I am not aware of any detailed analysis of the distributional impacts of Volkswagen's settlement agreement, I suspect they are very progressive.

**Q. What do you conclude regarding the distributional impacts of these other potential EV charging infrastructure funding sources?**

A. The distributional impacts of the funding sources discussed in this section are much more progressive than funding similar investments through Xcel's electricity rates.

**Q. Does this conclude your direct testimony?**

A. Yes.

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<sup>41</sup> For more on the settlement agreement *see, e.g.*, MINN. POLLUTION CONTROL AGENCY, [MINNESOTA'S VOLKSWAGEN SETTLEMENT BENEFICIARY MITIGATION PLAN PHASE II \(2020–2023\)](#) (Feb. 2020).

<sup>42</sup> Minn. Pollution Control Agency, [Electric Vehicle Charging Stations](#) (last visited Jan. 27, 2023).

- ☐ Not-Public Document – Not For Public Disclosure  
☐ Public Document – Not-Public Data Has Been Excised  
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Xcel Energy	Information Request No.	9
Docket No.:	E002/M-23-452	
Response To:	Office of the Attorney General	
Requestor:	Peter Scholtz	
Date Received:	December 1, 2023	

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Question:

Topic: Home Wiring Rebate Program.

Reference: TEP at 56.

Xcel states that it anticipates that approximately 44 percent of the rebate-specific budget will be used to administer enhanced rebates. Why does the Company expect 44 percent of the rebate budget in Minnesota to be used for enhanced rebates when less than 5 percent of the rebates issued in Colorado have been enhanced?

Response:

While the proposed structure of the Home Wiring Rebate is similar to Public Service of Colorado's (PSCO) Home Wiring Rebate, eligibility criteria for the Enhanced Rebate is different between the two states and participation rates within PSCO's rebate is not directly applicable within NSPM territory. PSCO's Enhanced Rebate is limited to customers who are verified as income-qualified. Proposed eligibility criteria for NSPM's Enhanced Rebate is broader, available to customers located within Disproportionately Impacted Communities or Environmental Justice areas, both of which address a wide variety of issues, including income, energy burden, health issues, housing, English proficiency, and others. NSPM has not administered a Home Wiring Rebate previously, so there is no historical data on which to build a participation forecast. As such, the Company calculated the Enhanced Rebate participation on the number of residents within DICs or EJ Areas, as described in Minnesota Department of Commerce Information Request No. 7.

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Preparer:	Ryan Austin
Title:	Senior Product Developer
Department:	Customer Solutions & Innovation
Telephone:	303.571.7890
Date:	December 12, 2023

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Xcel Energy	Information Request No.	16
Docket No.:	E002/M-23-452	
Response To:	Office of the Attorney General	
Requestor:	Peter Scholtz	
Date Received:	December 1, 2023	

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Question:

Topic: Proposed Tariff Changes – CIAC Waiver.

Reference: TEP at 79–80; Appendix H13.

Xcel proposes to waive, for EV-service customers, tariff provisions that would otherwise require these customers to help defray distribution-system costs that they have caused by paying contributions in aid of construction, or “CIAC.”

1. What, in the Company’s view, is the purpose of a CIAC?
2. Is the Company aware of any utilities in Minnesota that do not have CIAC requirements? If so, explain.
3. When and in what docket(s) were the CIAC provisions of Xcel’s tariff originally approved by the Commission?
4. Confirm that waiving CIAC tends to increase electricity sales by lowering the upfront cost of obtaining service. If you cannot confirm this, explain why.
5. Confirm that waiving CIAC benefits shareholders by increasing utility rate base. If you cannot confirm this, explain why.

Response:

1. The purpose is to charge an individual customer the cost that may exceed the standard cost of providing service to a customer. The collection of CIAC can be necessary for a variety of activities, such as charges for excess footage, winter construction, unusual construction, and general extension charges. Specifics about those topics are included in our responses to OAG Information Request Nos. 18 through 21.

2. The Company has not researched and is not aware of the CIAC policies of other utilities.
3. The CIAC provisions are long standing tenets of providing service in our rate book pre-dating the electronic versions of our tariff. We do not have the original docket number, but the CIAC provisions have been included in our electric rate books since at least 2005 when the current tariff pages related to Standard Installation and Extension Rules (Section No. 6, Sheet No. 22) were approved in Docket No. E002/GR-05-1428. CIAC was collected before this though. See for example, our response to OAG Information Request No. 18 part 1.

The Company's proposal to add a CIAC waiver for our residential EV programs in this TEP comes as a requirement from the Commission. As was noted in our TEP, Order Point 66 of the Commission's July 17, 2023 FINDINGS OF FACT, CONCLUSIONS, AND ORDER requires the Company to include a proposal to waive cost sharing requirements, including CIAC, for EV-rate customers within this filing.

4. We are unable to confirm the effect that waiving CIAC has on electricity sales. Waiving CIAC reduces the upfront service facilities cost to the customer. The impact on Company sales is not tracked and is therefore unknown. For customers receiving a CIAC waiver, it is unknown if they would or would not have installed the service.
5. The portion of CIAC that is waived does increase the Company's rate base.

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Preparer: Nick Paluck  
Title: Manager, Regulatory Analysis  
Department: Regulatory Analysis  
Telephone: 612.330.2905  
Date: December 12, 2023

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Xcel Energy	Information Request No.	17
Docket No.:	E002/M-23-452	
Response To:	Office of the Attorney General	
Requestor:	Peter Scholtz	
Date Received:	December 1, 2023	

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Question:

Topic: Proposed Tariff Changes – CIAC Waiver.

Reference: Appendix H13.

One tariff provision that Xcel proposes to waive provides that “the Company will extend, enlarge, or change its distribution or other facilities for supplying electric service when the product of the three and one half (3.5) times the anticipated annual revenue, excluding the portion of the revenue representing fuel-cost recovery from the sale of additional service to result there from is such as to justify the expenditure.”

1. Explain why this 3.5x threshold was chosen as the basis for determining a customer’s contribution. If the Company has used different thresholds in the past, explain how those prior threshold levels were determined.
2. Has the Company considered options other than a blanket waiver, such as increasing the 3.5x threshold?
3. Has the Company considered options that would recover the CIAC from a customer over time?
4. Has the Company considered options that would recover the costs of EV-related upgrades from the entire class of EV users rather than socializing the costs to nonparticipating ratepayers?

Response:

1. The 3.5x threshold is a long-standing policy based on the historical relationship between expected annual revenues and the cost of making a standard service connection. Historically, the Company used a 3x threshold when fuel costs were embedded in electricity rates. The Commission approved the current 3.5x threshold when fuel costs became a separate charge.

2. For its Commercial Pilot Bridge proposal, the Company has not considered options other than continuation of a blanket waiver.
  3. No.
  4. No, nor have we recently considered targeting other end-use types.
- 

Preparer: Nick Paluck  
Title: Manager, Regulatory Analysis  
Department: Regulatory Analysis  
Telephone: 612.330.2905  
Date: December 12, 2023

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Xcel Energy	Information Request No.	18
Docket No.:	E002/M-23-452	
Response To:	Office of the Attorney General	
Requestor:	Peter Scholtz	
Date Received:	December 1, 2023	

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Question:

Topic: Waiver of Excess-Footage Charges.

Reference: Appendix H13.

Xcel proposes not to charge EV customers for the portion of residential service extensions exceeding 100 feet or for the portion of nonresidential service extensions that exceed 3.5 times the customer's expected annual revenues excluding fuel-cost-related revenue.

1. Explain how the 100-foot residential threshold was determined.
2. When was the last time that the excess-footage charges were updated for residential and nonresidential service? Do they remain reflective of current costs?
3. In an average year, how often does the Company collect excess-footage charges from a customer and how often are they EV-related? Please answer separately for residential and nonresidential excess-footage charges and provide the average number of instances for each.
4. Over the past five years (Jan. 1, 2018–date), how many times has a residential or nonresidential EV customer had to pay excess-footage charges—or would have had to in the absence of a waiver? For each instance, identify the date, the total length of the extension, the number of excess feet, whether the CIAC was waived, the total CIAC or waived CIAC in dollars, and the rate code. Provide your response in an Excel spreadsheet.

Response:

1. The use of the 100-foot threshold for standard service installations is a long-standing policy. It has been in use since at least 1974. The Company does not have records of how the threshold was originally determined.

The Company's proposal to add a waiver of excess-footage charges for our residential EV programs comes as a requirement from the Commission. As was noted in our TEP, Order Point 66 of the Commission's July 17, 2023 FINDINGS OF FACT, CONCLUSIONS, AND ORDER requires the Company to include a proposal to waive cost sharing requirements, including excess footage charges, for EV-rate customers within this filing.

2. A change to the excess footage charge was last approved in Docket No. E002/GR-10-971 and was effective September 1, 2012. The Company proposed a change to the excess footage charge in our most recent rate case, but we withdrew the proposal as the request was based on an incorrect engineering and supervision cost factor. More information about withdrawing the request is included in the Rebuttal Testimony of Christopher Barthol in Docket No. E002/GR-21-630. We do believe that the current excess footage charge is reflective of current costs.
3. The Company does not have this information readily available and objects to this request as unduly burdensome because, in order to provide the information requested, it would require the Company to perform a specialized manual study. This would entail a special IT query to get charge code details for each CIAC assessment. Then we would need to query our SAP databank for the specific job details, and finally, we would need to identify EV-related premises out of those jobs. We estimate this may entail gathering a voluminous number of records from at least the last five years. This potentially would take about 160 hours to complete.
4. See our response to OAG Information Request No. 18.3.

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Preparer:	Dave Olson
Title:	Manager Service Policy
Department:	Service Policy XES
Telephone:	612.337.2207
Date:	December 12, 2023



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Xcel Energy	Information Request No.	19
Docket No.:	E002/M-23-452	
Response To:	Office of the Attorney General	
Requestor:	Peter Scholtz	
Date Received:	December 1, 2023	

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Question:

Topic: Waiver of Winter Construction Charges.

Reference: Appendix H13.

Xcel proposes not to charge EV customers for the extra cost of installing underground facilities during the winter when the ground is frozen.

1. When was the last time that the winter construction charges were updated? Do they remain reflective of current costs?
2. In an average year, how often does the Company collect winter construction charges from a customer and how often are they EV-related? Please answer separately for residential and nonresidential CIAC and provide the average number of instances for each.
3. Over the past five years (Jan. 1, 2018–date), how many times has a residential or nonresidential EV customer had to pay winter construction charges—or would have had to in the absence of a waiver? For each instance, identify the date, the total amount of winter construction costs (the CIAC), whether the CIAC was waived, and the rate code. Provide your response in an Excel spreadsheet.

Response:

1. A change to the winter construction charge was last approved in Docket No. E002/GR-10-971 and was effective September 1, 2012. A revised winter construction charge was approved in our most recent electric rate case. The revised charge will go into effect on January 1, 2024. These revised costs are reflective of current costs.

The Company's proposal to add a waiver of winter construction charges for our residential EV programs comes as a requirement from the Commission. As

was noted in our TEP, Order Point 66 of the Commission's July 17, 2023 FINDINGS OF FACT, CONCLUSIONS, AND ORDER requires the Company to include a proposal to waive cost sharing requirements, including winter construction charges, for EV-rate customers within this filing.

2. See our response to OAG Information Request No. 18.3.
3. See our response to OAG Information Request No. 18.3.

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Preparer: Dave Olson  
Title: Manager Service Policy  
Department: Service Policy XES  
Telephone: 612.337.2207  
Date: December 12, 2023

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Xcel Energy	Information Request No.	20
Docket No.:	E002/M-23-452	
Response To:	Office of the Attorney General	
Requestor:	Peter Scholtz	
Date Received:	December 1, 2023	

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Question:

Topic: Waiver of Unusual Installation Costs.

Reference: Appendix H13.

Xcel proposes not to charge EV customers for unusual installation costs, which relate to surface or subsurface conditions that impede the installation of distribution facilities; delays caused by the customer; or the paving of streets, alleys, or other areas before underground facilities are installed.

1. What is meant by “surface or subsurface conditions that impede the installation of distribution facilities?” Provide examples.
2. What is meant by “delays caused by the customer?” Provide examples.
3. What is meant by “paving of streets, alleys, or other areas prior to the installation of underground facilities?” Explain how this might increase the cost to the company.
4. In an average year, how often does the Company collect unusual installation costs from a customer and how often are they EV-related? Please answer separately for residential and nonresidential CIAC and provide the average number of instances of each.
5. Over the past five years (Jan. 1, 2018–date), how many times has a residential or nonresidential EV customer had to pay unusual installation costs—or would have had to in the absence of a waiver? For each instance, identify the date, the total amount of unusual installation costs (the CIAC), whether the CIAC was waived, and the rate code. Provide your response in an Excel spreadsheet.

Response:

1. Surface or subsurface conditions that impede installation include things like ground frost, rocky ground, ground conditions requiring boring, and barriers for yard details like landscaping, patios, and decks.
2. Delays caused by customers primarily result from the customer not having the site ready for construction. Examples include not allowing access when agreed to or by not removing impediments that prevent work from starting. It is important to note that delays will only create a charge for customers if it creates additional costs for the Company. A prime example of that is a customer-caused delay pushing construction into the winter months.
3. Paving of streets, alleys and other areas can result in higher installation costs due to added complexity as it may require boring rather than standard construction situations. Projects would also entail more restoration costs if pavement and concrete need to be altered as a part of construction.
4. See our response to OAG Information Request No. 18.3.
5. See our response to OAG Information Request No. 18.3.

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Preparer: Dave Olson  
Title: Manager Service Policy  
Department: Service Policy XES  
Telephone: 612.337.2207  
Date: December 12, 2023

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Xcel Energy	Information Request No.	21
Docket No.:	E002/M-23-452	
Response To:	Office of the Attorney General	
Requestor:	Peter Scholtz	
Date Received:	December 1, 2023	

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Question:

Topic: Waiver of General Extension Charges.

Reference: Appendix H13.

In addition to waiving excess-footage, winter-construction, and unusual-installation CIAC, Xcel also proposes not to charge EV customers for other types of upgrades requested or otherwise caused by the customer. These “general extension” upgrades may involve extending, enlarging, or changing the Company’s distribution or other facilities to accommodate the customer’s load.

1. Provide examples of the types of upgrades contemplated by this provision of the Company’s tariff (section 5.2 of Section 6 of Xcel’s rate book).
2. In an average year, how often does the Company collect CIAC from a customer under this provision and how often is the CIAC EV-related? Please answer separately for residential and nonresidential CIAC and provide the average number of instances of each.
3. Over the past five years (Jan. 1, 2018–date), how many times has a residential or nonresidential EV customer had to pay a CIAC under this provision—or would have had to in the absence of a waiver? For each instance, identify the date, the total amount of the CIAC, whether the CIAC was waived, and the rate code. Provide your response in an Excel spreadsheet.

Response:

1. Potential upgrades contemplated under this provision include upgrades to transformers, conductor, and other distribution system facilities owned by the Company. This could create an extensive rebuild of infrastructure.
2. See our response to OAG Information Request No. 18.3.

3. See our response to OAG Information Request No. 18.3.

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Preparer: Dave Olson  
Title: Manager Service Policy  
Department: Service Policy XES  
Telephone: 612.337.2207  
Date: December 12, 2023



The Office of  
**Minnesota Attorney General Keith Ellison**  
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December 20, 2023

Mr. Will Seuffert  
Executive Secretary  
Minnesota Public Utilities Commission  
121 7<sup>th</sup> Place East, Suite 350  
St. Paul, MN 55101

**Re: *In the Matter of Xcel Energy's 2023 Integrated Distribution Plan***  
**MPUC Docket No. E-002/M-23-452**

Dear Mr. Seuffert:

Enclosed and e-filed in the above-referenced matter please find Comments of the Minnesota Office of the Attorney General—Residential Utilities Division.

By copy of this letter all parties have been served. A Certificate of Service is also enclosed.

Sincerely,

/s/ **Peter G. Scholtz**

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PETER G. SCHOLTZ

Assistant Attorney General

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## CERTIFICATE OF SERVICE

**Re:   *In the Matter of Xcel Energy's 2023 Integrated Distribution Plan***  
**MPUC Docket No.   E-002/M-23-452**

I, JUDY SIGAL, hereby certify that on the 20th day of December, 2023, I e-filed with eDockets *Comments of the Minnesota Office of The Attorney General—Residential Utilities Division* and served a true and correct copy of the same upon all parties listed on the attached service list by e-mail, electronic submission, and/or United States Mail with postage prepaid, and deposited the same in a U.S. Post Office mail receptacle in the City of St. Paul, Minnesota.

/s/ Judy Sigal  
JUDY SIGAL



First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_23-452_M-23-452
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_23-452_M-23-452
Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_23-452_M-23-452
Christine	Schwartz	Regulatory.records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7 Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_23-452_M-23-452
Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission	121 7th Pl E Ste 350 Saint Paul, MN 55101	Electronic Service	Yes	OFF_SL_23-452_M-23-452