Xcel Energy®

2024-2026 TRANSPORTATION ELECTRIFICATION PLAN

Public Service Company of Colorado

1. Executive Summary

A. Overview

Over the past three years, Colorado's market for clean transportation has progressed markedly. There is a growing ecosystem supporting electric vehicle ("EV") adoption in Colorado. That ecosystem is supported by the actions taken by Public Service Company of Colorado ("Public Service" or "Company") through its inaugural Transportation Electrification Plan[1] ("TEP"), as well as actions and investment by the federal government, the State of Colorado, local governments, vehicle and charging equipment manufacturers, dealerships, vendors, and importantly, customers. As a result of these collective efforts, Colorado is now a leading state in EV adoption. While it is on course for a robust EV future, to meet the State's laudable 2030 EV adoption target, much work is still necessary to hit the mark and deliver significant carbon emission reductions from the largest emissions source within Colorado and the nation - transportation. The encouraging news is that through continued holistic and bold efforts, the State can meet its 2030 goal in a cost-effective manner to deliver cleaner air for all and provide pocketbook savings for customers and drivers. As recognized by State law, utilities like the Company play a unique and critical role to provide comprehensive solutions for all customers to better advance this once-in-a-lifetime transition in an equitable, affordable manner.

When the Company submitted its first three-year TEP to the Colorado Public Utilities Commission ("Commission") for approval in May 2020, EV adoption was sparse. In 2020, EVs comprised a small percentage of all commercial and personal light-duty vehicles. Fast forward to 2023, and EVs are increasingly becoming a viable alternative to traditional internal combustion engines ("ICE"). This result is furthered by additional model availability from auto manufacturers; a continued focus on education and outreach about EVs and their benefits by the State of Colorado, electric utilities, environmentalists, and other organizations; and continued investment in charging infrastructure from the Federal Government, the State, third parties, and electric utilities like Public Service.

Despite this progress, the adoption of EVs remains in its early stages. Achieving the exponential growth in adoption and charging availability needed to achieve the State's transportation electrification goals will require collaborative and comprehensive efforts. Much ground is still left to cover. For EV adoption to become mainstream and to graduate from the "early adopter" phase to the "early majority" stage of the technological adoption curve, the Company and other public, private, non-profit, and individual efforts and investments must continue and expand.

To support EV adoption in these relatively early stages of market transformation, Public Service brings forward its next three-year TEP, covering the timeframe from 2024-2026. The Company's 2024-2026 TEP is designed to provide the scope and scale of support needed for the State to achieve its goal of 940,000 EVs in Colorado by 2030, and the TEP includes offerings that will directly address customer and community needs. Through this TEP, the Company proposes investments and programs designed to achieve three central customer and public policy goals: (1) accelerating the rate of EV adoption, (2) supporting equity and spreading the benefits of transportation electrification to all customers, and (3) helping to optimize the use of the grid for vehicle charging. Below is a summary of some of the key areas of focus to meet these outcomes.

[1] The Company's 2021-2023 TEP was approved by the Colorado Public Utilities Commission in Proceeding No. 20A-0204E.

- **Accelerate EV[2] adoption by**:
    - Helping customers overcome high upfront costs to install charging infrastructure in residential, multifamily housing ("MFH"), fleet, workplace, and public settings – a key preceding requirement in many instances to encourage the transition to EVs
    - Future proofing certain onsite charging infrastructure and provide needed grid assets, where applicable, to help speed up timelines for customers to adopt EVs
    - Helping eligible customers and communities overcome high upfront costs to acquire light, medium, and heavy-duty EVs
    - Helping customers overcome information barriers and increase awareness of EVs and the benefits they offer
    - Supporting access to public fast charging throughout the Company's service area, enabling a greater number of vehicle trips to be completed with EVs
    - Accelerating and promoting adoption of heavy-duty EVs in specific sectors through targeted demonstration projects
    - Maintaining a commitment to innovative projects and demonstrations to provide support for a rapidly evolving market

- **Support equity and access to the benefits of transportation electrification for all customers by**:
    - Increasing public fast charging throughout the Company's service area, supporting the network needed to give all customers access to the benefits of EVs
    - Enabling enhanced incentives for charging equipment, vehicles, and infrastructure for qualifying residential and commercial customers
    - Lowering upfront costs for Transportation Network Company ("TNC") and Delivery Network Company ("DNC") drivers to convert to EVs
    - Educating residential and commercial customers as well as communities on transportation electrification
    - Providing rebates and other support to electrify school buses

- **Optimize the grid by**:
    - Encouraging and automating EV charging so that it occurs at off-peak times or during optimal grid conditions while meeting driver needs
    - Introducing new rate options for EV charging
    - Expanding vehicle-to-everything ("V2X") demonstration projects
    - Targeted, proactive grid reinforcement in anticipation of projected near term EV load increases

[2] Public Service considers both battery electric vehicles ("BEV") and Plug-in Hybrid Electric Vehicle ("PHEV") to be EVs. The Company notes that it plans to support various other forms of electric transportation with its TEP programs, including electric motorcycles, scooters, all-terrain vehicles, and other forms of electric transportation.

In developing its 2024-2026 TEP, the Company used lessons learned from implementing the 20-plus programs launched in the inaugural TEP. Furthermore, customer and stakeholder input has been key in identifying improvement areas in existing offerings. The Company has used these data points to inform its proposals, and it has made programming changes to bring the benefits of widespread transportation electrification to more customers.

The 2024-2026 TEP includes six portfolios, each of which has standalone programming options. The portfolios include the following: (1) Advisory Services; (2) Clean Vehicles; (3) Public Charging Acceleration Network; (4) Residential; (5) Commercial; and (6) Innovation. Through these portfolios and their programming, the Company will offer necessary support to assist Colorado in leading transportation electrification.

This three-year TEP has a total budget of $439 million. The projected annual revenue requirement for each TEP year is approximately: (1) $22 million for 2024; (2) $45 million for 2025; and $79 million for 2026. With the 2024-2026 budget, the Company will continue to ensure that EVs place downward pressure on rates. Downward pressure on rates means that the new load from EVs supports customer programs and utility infrastructure necessary for the EVs and the electric system. In other words, the growth of EVs more than pays for itself, funds customer programs and utility infrastructure, and provides savings to all customers.

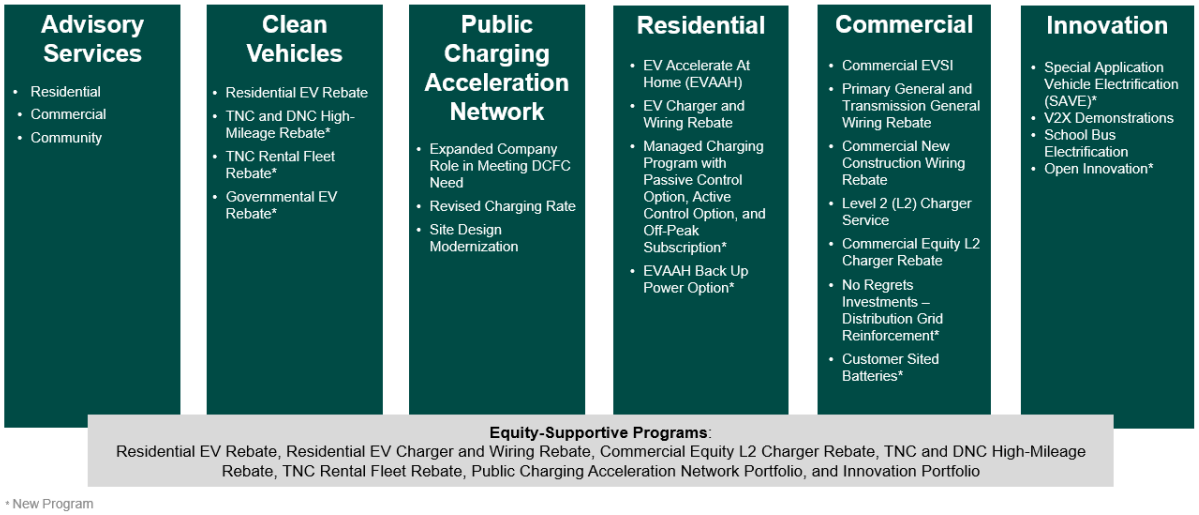
As identified in Senate Bill 19-077 (“SB 19-077”), the Company has a pivotal role in ensuring widespread transportation electrification. The Company takes that role seriously, and with this TEP it is positioned to lead efforts to reduce customer barriers in adopting EVs and promote the evolving EV marketplace. With the support of the Commission, our stakeholders, and customers, Public Service will continue its position as a trusted partner in the quest to electrify transportation.

B. Summary of the 2024-2026 TEP

Overview

In line with Colorado's transportation electrification goals, the Company is pleased to propose a comprehensive plan designed around key customer segments and EV ecosystem needs. The 2024-2026 TEP is organized by six portfolios and includes both modifications to existing programs and new programs that build upon the inaugural TEP. Below, the Company introduces each of the portfolios in more detail, along with their overall goals, and the programs and program elements that facilitate achievement of the goals. The table below shows the six portfolios and programs.

Table 1: 2024-2026 TEP Snapshot



Portfolio and Program Summaries

1. ADVISORY SERVICES

Portfolio Goal: Improve the customer experience, provide a clear and simple path to electric transportation planning and adoption, and deliver critical and timely data to enable our customers to make informed decisions on clean transportation.

Residential Advisory: Close the information gap that persists among the Company's residential customers regarding EVs and charging.

- **Drive Electric Experience at Community Events:** Quality public engagement at auto shows, ride-and-drives, and workplace charging events.
- **Advertising and Media:** Search-engine marketing via social digital, and traditional media.
- **Trade Ally Support for Auto Dealers and Electricians:** Continued growth of dealer and electrician networks.
- **Dealer Residential Referral Incentive:** Incentivize dealer partners to provide customers information about EVs, available rebates, and managed charging programs as well as achieving actual enrollment in applicable programs.
- **Digital Tools:** Improvements to existing webpage to tailor the presentation of offerings to residential customers' unique needs.

Commercial Advisory: Work with customers considering vehicle electrification and charging to support their end-to-end journey.

- **Fleet Electrification Advisory Program ("FEAP"):** Program that provides an in-depth fleet study to assist customers in the electrification of their fleets.
- **Education and Awareness:** Informing customers of the benefits of EVs and connecting them with relevant programs that can enable adoption.
- **Digital Tools:** Self-service digital tools to help commercial customers with their transportation electrification transition.
- **Trade Ally Network:** Expansion of dealer network to add dealerships focused on commercial vehicles to support fleet customers with vehicle procurement planning and delivery.
- **Commercial Workforce Training:** EV workforce training program geared toward educating and training commercial customers on the operation, maintenance, and functionality of EVs and charging equipment.

Community Advisory: Offer comprehensive EV and charging infrastructure planning to communities in our service territory.

- **Community EV Planning:** Continue support for our existing partners and build new relationships with communities just beginning their EV journey**.**

2. CLEAN VEHICLES

Portfolio Goal: Accelerate EV adoption by providing incentives for qualified customers purchasing or leasing new or used EVs.

- **Residential EV Rebate Program:** Continuation of the Company's current EV rebate with broader equity eligibility criteria.
- **TNC and DNC High-Mileage Rebate Program:** New rebate to support TNC and DNC drivers who log more than 25,000 miles per year on an app-based platform in their personal vehicles.
- **TNC Rental Fleet Rebate Program**: New rebate available to TNC rental car companies that will allow them to rent EVs to TNC drivers at lower weekly rental rates than comparable hybrid or internal combustion rental vehicles.
- **Governmental EV Rebate Program**: New rebate for state and local governmental customers for the purchase or lease of new EVs.

3. PUBLIC CHARGING ACCELERATION NETWORK

Portfolio Goal: Expand access to public charging by growing the Company's fast charging program, where the Company will install, own, and operate public charging stations, in partnership with applicable site hosts.

- **Expanded public charging coverage**: Provide reliable, cost-effective backbone of public charging infrastructure to support EV adoption and access for everyone.
- **Revised charging rate**: Time of use rates at the Company's fast charging stations equivalent to the average price of public fast charging in Colorado.
- **Modernization of site designs:** Design public charging installations to address the needs of drivers at different location types.
    - **Market Hubs:** Prioritize accessibility and amenities. These installations are anticipated to have four to six chargers at power levels of approximately 150 – 180 kW. They will be located at destinations such as retail, grocery stores, and restaurants in urban settings and allow drivers to charge while conducting other business.
    - **Connector Hubs:** Prioritize efficiency and convenience. These installations are anticipated to have two to four chargers, at power levels of approximately 350kW. They will be located along major highways and in rural areas to facilitate long-distance travel and meet rural charging needs.

4. RESIDENTIAL

Portfolio Goal: Help residential customers overcome cost barriers to adopting EVs and ensure that vehicle charging is managed for the efficient operation of the grid.

- **EV Accelerate At Home ("EVAAH"):** Provide residential customers hassle-free access to Level 2 charging at their home, with the goal to increase EV adoption within the Company's service territory. Add new option for participants to rent bi-directional charging equipment via a demonstration project, including an optional stationary battery.
- **EV Charger and Wiring Rebate:** Assist residential customers in overcoming the initial cost barrier to purchasing and installing an EV charger and installing home wiring. Includes both a standard and enhanced rebate option for eligible customers.
- **Managed Charging Program:** Streamline and expand managed charging options, by combining current offerings into one program and adding a new off-peak subscription rate option, as follows:
    - **Passive Control Option:** Encourage EV charging during off-peak hours by providing an annual bill credit to customers who conform to an off-peak charging schedule (currently offered as the Optimize Your Charge program).
    - **Active Control Option:** Encourage EV charging when it is most beneficial to the grid through dynamic remote management by providing customers a bill credit (currently offered as the Charging Perks pilot).
    - **Off-Peak Subscription:** Provide customers a flat monthly price for up to 1,000 kWh of off-peak charging per billing month.

5. COMMERCIAL

Portfolio Goal: Offer EV Supply Infrastructure ("EVSI") services, charger rebates, and charger rentals to support a variety of charging needs, including MFH, fleet, workplace, and public charging.

- **Commercial EVSI:** Provide customers with Company-owned, installed, and maintained secondary infrastructure at no cost to the customer to help lower the upfront costs of transportation electrification. Support certain EVSI future proofing beyond currently planned EVSE additions.
- **Primary General and Transmission General Wiring Rebate:** Provide a commercial wiring rebate to Primary General and Transmission General customers who are seeking to add EV infrastructure to their sites.
- **Commercial New Construction Wiring Rebate:** Provide a rebate for developers of new construction commercial buildings (including MFH) that install EV infrastructure above applicable code requirements.
- **Level 2 ("L2") Charger Service:** Continue to alleviate the upfront cost burden for commercial charging customers looking to electrify vehicles by providing them Company-owned L2 charging equipment for a monthly fee.
- **Commercial Equity L2 Charger Rebate:** Address the cost barriers associated with the purchase and installation of L2 EV chargers for equity-eligible commercial customers. Offer an enhanced rebate for property owners of income-qualified ("IQ") MFH buildings.
- **No Regrets Investments – Distribution Grid Reinforcement:** Plan and carry out proactive grid reinforcement projects across the distribution grid in anticipation of rapid acceleration of EV adoption.
- **Customer-Sited Batteries:** Build, own, and operate battery energy storage systems ("BESS") at customer facilities to support direct current fast charging ("DCFC") implementation by non-regulated entities, via a demonstration project.

6. INNOVATION

Portfolio Goal: Develop partnerships, promote innovation, and engage in research around EVs and charging infrastructure design and operation.

- **Special Application Vehicle Electrification ("SAVE"):** Accelerate and promote adoption of heavy-duty EVs in targeted sectors via rebates and funding for vehicles, chargers, and infrastructure.
- **V2X Demonstrations:** Expand upon V2X demonstration projects initiated in the 2021-2023 TEP.
- **School Bus Electrification:** Provide rebates for the cost of electric school buses and support their charging through Company-owned bi-directional chargers and infrastructure.
- **Open Innovation:** Identify new and additional projects based on the needs of the EV ecosystem during the 2024-2026 TEP and conclude existing project work from the 2021-2023 TEP.

2. Budget and Equity Eligibility

Section 2 provides the 2024-2026 TEP: (A) budget overview, organized by the above-outlined six portfolios as well as certain overall plan administration costs, and (B) overview of the equity eligibility parameters.

A. Budgets and Flexibility

Table 2 shows the budgets for the portfolios in the TEP, including capital and operations and maintenance ("O&M") expenses.

The starting basis for the Company's TEP budgets is the reasonable level of market participation in the Company's TEP programming associated with Colorado's goal of 940,000 light-duty EVs by 2030. That level of support is bolstered through use and consideration of a third-party forecast undertaken by Guidehouse. Guidehouse specifically forecasted the EV growth trajectory in the Company's service territory to accomplish the State's EV adoption goal. Through use of the Guidehouse forecast, the Company's budgets are reasonably related to the level of support that corresponds to the State's EV goal growth trajectory.

In considering the TEP budget, it is important to understand that the budgets reflect the high-end estimates for each segment to ensure that the Company has sufficient budget necessary to meet expected demand given current market uncertainty, and the Company will only recover TEP costs actually incurred. In addition, as programs are implemented in 2024 and beyond, Public Service will seek to balance the desire to launch new TEP programs and program changes quickly to support the market with the need to ensure a high-quality customer experience.

Table 2: 2024-2026 TEP Budget[3]

Portfolio	Spend Type	2024	2025	2026	2024-2026
Advisory Services	Capital	$0.28	$0.38	$0.54	$1.2
	O&M Expenses	$3.6	$3.8	$4.2	$11.6
	Total	**$3.8**	**$4.2**	**$4.7**	**$12.8**
Clean Vehicles	Capital	$8.8	$11.8	$14.5	$35.0
	Total	**$8.8**	**$11.8**	**$14.5**	**$35.0**
Public Charging Acceleration Network	Capital	$6.0	$30.2	$84.1	$120.3
	O&M Expenses	$2.2	$7.4	$15.1	$24.8
	Total	**$8.3**	**$37.6**	**$99.2**	**$145.1**
Residential	Capital	$4.5	$5.7	$7.4	$17.5
	O&M Expenses	$2.4	$3.4	$4.4	$10.1
	Total	**$6.8**	**$9.1**	**$11.7**	**$27.7**
Commercial	Capital	$7.8	$30.1	$53.6	$91.5
	O&M Expenses	$3.4	$5.6	$8.5	$17.5
	Total	**$11.2**	**$35.7**	**$62.1**	**$109.0**
Innovation	Capital	$4.0	$16.2	$24.4	$44.6
	O&M Expenses	$6.8	$5.9	$5.9	$18.6
	Total	**$10.7**	**$22.1**	**$30.3**	**$63.2**
Plan Administration	Capital	$5.2	$17.2	$12.1	$34.5
	O&M Expenses	$1.7	$5.7	$4.3	$11.7
	Total	**$6.9**	**$22.9**	**$16.4**	**$46.2**
Total Filing	Capital	$36.6	$111.6	$196.5	$344.7
	O&M Expenses	$20.0	$31.8	$42.4	$94.2
	Total	**$56.6**	**$143.4**	**$239.0**	**$438.9**

As with the inaugural TEP, the Company's ability to adjust spending within the approved TEP budget will continue to be an important aspect of our transportation electrification efforts. The budget flexibility to support this TEP includes the ability to: (1) move dollars between the portfolios, subject to a cap of 150 percent; and (2) increase the overall TEP budget across the three-year period, subject to a cap of 125 percent. Of these measures, budget flexibility for the overall plan—rather than on an annual basis—will help to make sure that projects that face obstacles in one program year can move forward in the next.

[3] While not a programming portfolio, for budgetary purposes and to provide increased transparency, the table shows an additional category of costs for overall Plan Administration, which includes costs associated with information technology and third-party evaluation of the Plan.

B. Equity Eligibility

One of the greatest immediate benefits of advancing EV adoption is the ability to improve air quality across the communities we serve, especially in areas that have been disproportionately impacted by pollution from the transportation sector. It is important for the benefits of transportation electrification to be realized by all of Public Service's customers, whether they drive an EV or not. Broadly, Xcel Energy has committed to considering environmental justice in its energy, climate and environmental initiatives.[4] Xcel Energy has also consistently prioritized ensuring equitable access to clean and electric transportation in its customer programs.[5] Programs implemented through Public Service's inaugural TEP exemplify that commitment.

The Company's approach to equity in its Commission-approved transportation electrification programs has incorporated input offered from stakeholders, as well as policy guidance enacted through State legislation. Since approval of our first TEP, new tools and guidance for mapping and prioritizing equity opportunities have been created as a result of the work of government, affected communities, and industry partners. Public Service will continue to root its programs in these efforts to refine equity measurement, such as through the identification of Disproportionately Impacted ("DI") Communities defined within Colorado House Bill 21-1266 ("HB 21-1266"), launch of Colorado EnviroScreen, release of the Colorado Energy Office's EV Equity Study, development of policy recommendations by the Environmental Justice Action Task Force, and continued work of the federal Justice40 Initiative.[6] These new guidelines will enable the Company to broaden access to its TEP equity programs, thereby ensuring that customers and communities that face heightened barriers to EV adoption will have more equitable opportunities to participate in the clean transportation transition.

While Public Service's inaugural TEP largely established eligibility for enhanced equity-based support on a program-by-program basis, in this 2024-2026 TEP, Public Service will extend access to its TEP equity programs to eligible customers across multiple portfolio segments using a more comprehensive approach. Notably, the Company is replacing in the 2024-2026 TEP its eligibility criteria based on Higher Emission Communities ("HEC"), with state DI Community criteria. In so doing, Public Service will use applicable new equity eligibility criteria for enhanced programs in the Residential, Commercial, Clean Vehicles, and Innovation portfolios. The specific criteria planned for these portfolios is summarized in Table 3 below.

[4] Xcel Energy, Position Statement Environmental Justice, Feb. 2022, available at: https://www.xcelenergy.com/staticfiles/xe-responsive/Company/Sustainability%20Report/2020%20SR/Environmental-Justice-Position-Statement.pdf.
[5] Xcel Energy, Drive Toward a Carbon-Free Future: Electric Transportation Vision, available at: https://www.xcelenergy.com/staticfiles/xe-responsive/Company/Xcel%20Energy%20Electric%20Transportation%20Vision.pdf.
[6] Colorado Environmental Justice Action Task Force, Final Report of Recommendations, Nov. 2022, available at: https://drive.google.com/file/d/1l4rN-o3h3OJg8TciUzh-qxytULvyD_NE/view.

Table 3: Equity Eligibility Criteria for Programs in the 2024-2026 TEP

Portfolio	Affected Programs	Equity Definition Type	Definition
Clean Vehicles	Residential EV Rebate Program	Income Qualified	Applicant must meet at least one of the following: • current enrollment in the State of Colorado Low-Income Energy Assistance ("LEAP") program; • current enrollment in Energy Outreach Colorado's ("EOC") Colorado Affordable Residential Energy ("CARE") program; • current enrollment in Colorado's Weatherization Assistance ("WAP") program; • current enrollment in the Company's IQ Demand Side Management ("DSM") program; • current enrollment in the Company's IQ Community Solar Gardens program; • current enrollment in the U.S. Department of Agriculture Supplemental Nutrition Assistance ("SNAP") program; • current enrollment in the U.S. Department of Health & Human Services Temporary Assistance for Needy Families ("TANF") program; or • have a household income below 60 percent of the state of Colorado's median income, below 200 percent of the relevant federal poverty level, or below 80 percent of area median income.
		Community	Customer resides in either: • An HB 21-1266 DI Community. This includes census block groups where more than 40% of the population are low-income, housing cost-burdened, or people of color. This also includes census block groups with an EnviroScreen Score (percentile) at or above 80[7]; or • A Justice40 Disadvantaged Community ("DAC")

[7] For more information and expanded definitions, see Colorado Enviroscreen, "Definitions," available at https://teeo-cdphe.shinyapps.io/COEnviroScreen_English/ . Accessed May 4, 2022.

		Tribes	Electric customer is enrolled in a federally recognized Tribe
Residential	EV Charger and Wiring Rebate	Income Qualified	Applicant must meet at least one of the following: • current enrollment in LEAP program; • current enrollment in EOC's CARE program; • current enrollment in Colorado's WAP program; • current enrollment in the Company's IQ DSM program; • current enrollment in the Company's IQ Community Solar Gardens program; • current enrollment in SNAP program; • current enrollment in TANF program; • have a household income below 60 percent of the state of Colorado's median income, below 200 percent of the relevant federal poverty level, or below 80 percent of area median income
		Community	Customer resides in either: • An HB 21-1266 DI Community; or • A Justice40 DAC
		Tribes	Electric customer is enrolled in a federally recognized Tribe
Commercial	Commercial L2 Charger Rebate	Community	Premise is in either: • An HB 21-1266 DI Community; or • A Justice40 DAC
	Commercial L2 Charger Rebate (IQ MFH Only)	Income Qualified	Applicant must be: • a building where 66 percent of the building population has household income below 80 percent of Area Median Income or participated in the Nonprofit Energy Efficiency Program ("NEEP") administered by EOC in the last five years
Innovation	All projects	Various	Projects will: • utilize the Commercial, Residential, and Clean Vehicle equity-eligible definitions, as applicable, for project funding and to meet portfolio equity funding commitments • consider geographic and topographic diversity in project prioritization to inform new technology development across varied use cases

The Company's adoption of the revised equity-eligibility criteria, including recognition of DI Communities and DACs, will allow our programs to align more closely with new statewide and federal definitions and tools to identify areas of our customer base that may benefit from enhanced incentives, allow for greater emission reductions from the transportation sector, and help address historical inequities that members of these communities have experienced.

3. Portfolio Descriptions

Section 3 provides more detailed overviews of the six portfolios comprising the 2024-2026 TEP, including: (A) Advisory Services; (B) Clean Vehicles; (C) Public Charging Acceleration Network; (D) Residential; (E) Commercial; and (F) Innovation. Specifically, for each portfolio, below we provide a summary, budget, program modifications, and more details on the program proposals.

A. Advisory Services

Summary

Through Advisory Services, the Company addresses one of the central obstacles to EV adoption for both personal and commercial vehicles: access to clear and trusted information on EVs and associated charging and their benefits. Our Advisory Services portfolio improves the customer experience, provides a clear and simple path to electric transportation planning and adoption, and delivers critical and timely data to enable our customers to make informed decisions about clean transportation. Our tailored support services and tools help enable our residential and commercial customers, as well as the communities the Company serves, to efficiently and effectively transition to electrified transportation. By providing more resources to increase familiarity with EVs and connect customers with the relevant Company EV programs throughout their electrification journey, the Advisory Services portfolio enhances the overall experience of acquiring and using EVs.

The Company's proposals for the 2024-2026 TEP build upon many of the successes and learnings from our first TEP. Public Service is proposing to extend, and in some cases modify and expand, key components of the Advisory Services portfolio currently in market.

Budget

The Company proposes the following budget to support Advisory Services.

Table 4: Advisory Services Budget

Spend Type	Category	2024	2025	2026	2024-2026
Capital (Rebates)		**$0.28**	**$0.38**	**$0.54**	**$1.2**
	Fleet Electrification Advisory	$0.28	$0.38	$0.54	$1.2
O&M Expenses		**$3.6**	**$3.8**	**$4.2**	**$11.6**
	Education and Awareness	$1.5	$1.4	$1.4	$4.3
	Digital Tools	$0.26	$0.20	$0.21	$0.7
	Trade Allies	$0.37	$0.39	$0.41	$1.2
	Advisory	$0.0	$0.0	$0.0	$0.0
Residential		**$2.1**	**$2.0**	**$2.1**	**$6.2**
	Education and Awareness	$0.23	$0.24	$0.24	$0.7
	Digital Tools	$0.14	$0.15	$0.17	$0.5
	Trade Allies	$0.11	$0.16	$0.24	$0.5
Commercial		**$0.5**	**$0.5**	**$0.6**	**$1.7**
	Community Advisory & Workforce Training	$1.0	$1.3	$1.5	$3.7
Community		**$1.0**	**$1.3**	**$1.5**	**$3.7**
Total		**$3.8**	**$4.2**	**$4.7**	**$12.8**

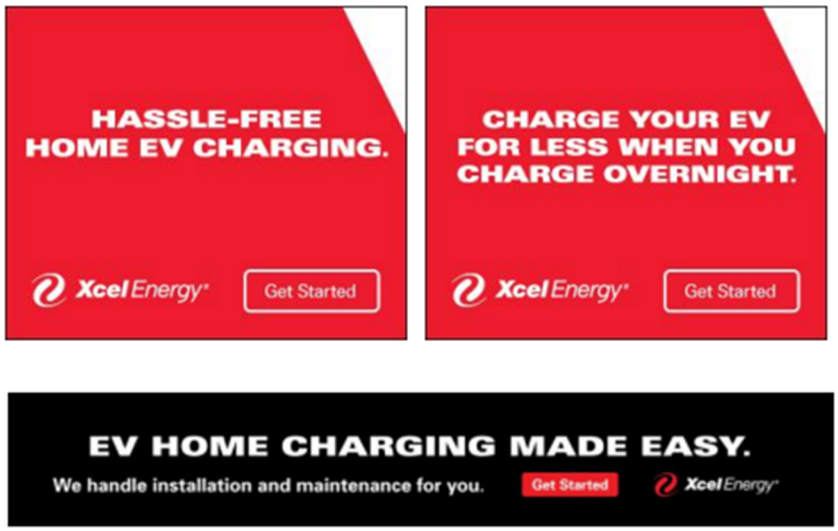
Program Modifications

i. Residential Advisory Services

Residential Advisory Services aims to close the information gap that persists among the Company's residential customers regarding EVs and charging. *According to a recent study by Consumer Reports, nearly two-thirds of respondents were not familiar with the fundamentals of EV ownership*.[8] As a result, customers are seeking information regarding EVs from a trusted energy advisor and their electric utility provider is often recognized as a reliable source.

In the Company's first TEP, our Advisory Services increased EV awareness and promoted our TEP programs through several different strategies designed to reach a diverse set of customers and convey appropriate information in a convenient and understandable manner. These efforts span multiple communication channels including sponsorship of community and workplace events, digital media, direct outreach, traditional media channels like radio and print, and engagement with trade allies. Some examples of these forms of communication are included in Figure 1 below.

Figure 1: Examples of Residential Media Communications



Currently, Residential Advisory Services for Public Service's customers encompass the following:

- **Drive Electric Experience at Community Events**. The Company participates in community and industry events to directly engage with customers on the benefits of EVs, provide opportunities to drive an EV, and interact with our educational garage and/or other educational materials that simulate what it is like to charge an EV. We also offer bi-lingual signage and brochures to help provide EV education to our Spanish speaking customers.
- **Advertising and Media**. The Company seeks to inform and connect with customers by providing relevant content on preferred platforms. Advertising channels include search-engine marketing,

[8] Consumer Reports, Battery Electric Vehicles and Low Carbon Fuel: A Nationally Representative Multi-Mode Survey, April 2022, available at: https://article.images.consumerreports.org/prod/content/dam/surveys/Consumer_Reports_BEV%20AND%20LCF%20SURVEY_18_FEBRUARY_2022.

social, digital, and traditional media such as print and radio.[9] Calls to action via this advertising drive traffic to our online resources for EV information at: ev.xcelenergy.com. Here, customers can also contact a customer care agent who can help answer EV questions.

- **Trade Ally Support for Auto Dealers and Electricians.** EV dealers remain an important partner, with three-quarters of EV shoppers preferring to buy at dealerships.[10] The Company continues to build upon established relationships with auto dealers to help provide a positive customer experience from point of sale to charging at home. The Company conducts sales-team training on the benefits of driving an EV, provides educational materials for customers about charging and rate options, and leads other coordinated EV education and promotion efforts. The Company continues to build its trade network for electricians who are interested in installing charging infrastructure and associated components. As part of this work, the Company conducts training focusing on the EV market, Public Service's rates, load management programs, renewable programs, and specific metering and distribution standards and considerations.
- **Dealer Residential Referral Incentive.** The Company will continue to implement and refine its dealer referral incentive to drive EV purchase and customer program enrollment at the point of sale. Our participating dealer partners have significant exposure to interested EV buyers and can play a crucial role in providing information about the vehicles, available rebates, and managed charging programs available to customers. As part of the Company's Residential Advisory efforts, an incentive is available to dealers for successful enrollment of Public Service residential customers in the Company's residential programs.
- **Digital Tools**. Our current website tools are intended to provide personalized, self-service information about EVs and programs to help residential customers compare EV models, purchasing options, charging programs, rebates, and incentives. All information and tools are available in both English and Spanish. In addition, the Home Charging Advisor tool provides estimated savings that would result from switching from an internal combustion engine vehicle to an EV, accounting for the benefits of available Public Service programs. To date, Public Service's digital advisory tools have provided customers with recommendations based on answers provided by customers to a series of questions. As the Company continues to build upon its website-based advisory services, it has been broadening the capabilities of these tools to provide more information on:
    - EVs available in the market, including pre-owned models;
    - Environmental advantages of EVs;
    - Costs and benefits of EVs, including fuel and maintenance;
    - Auto dealers who are knowledgeable about EVs;
    - Charging equipment options and estimated costs to install attendant wiring;
    - Available incentives for purchasing or driving an EV; and
    - Rate recommendations, including information encouraging customers to charge during off-peak periods.

The Residential Advisory program has seen success since its launch. Public Service attended 53 events throughout Colorado in 2022 to promote vehicle electrification and the Company's EV offerings, including auto shows, ride-and-drive events, and community events. In addition, as of Q1 2023, the Company has

[9] See, e.g., links to examples of residential EV program advertisements, available at: https://www.youtube.com/watch?v=MqVeOlSqTrs&ab_channel=XcelEnergy-InYourCommunity and https://www.youtube.com/watch?v=vL4ZZxN9d08&feature=youtu.be&ab_channel=XcelEnergy-InYourCommunity

[10] Three-Quarters of EV Shoppers Prefer to Buy at Dealerships: Survey, September 2022, available at https://insideevs.com/news/612761/three-quarters-ev-shoppers-prefer-buy-at-dealership-survey/#:~:text=The%20survey%20revealed%20that%2074%20percent%20of%20respondents,of%20each%20group%20prefers%20buying%20from%20a%20dealership.

partnered with 34 auto dealers in Colorado, with additional partnerships planned. Since launching in 2021, our EV Dealer Network has helped sell more than 2,600 EVs in Colorado.

The Company is still learning how it can best reach our customers to inform them about EVs and our offerings. While the Company has been successful at promoting EV adoption through public events and our EV dealer network, we have seen lower participation in our residential EV offerings than originally estimated during the inaugural TEP. Within the 2024-2026 TEP, the Company plans to take several steps to create a more streamlined, navigable customer experience to promote increased awareness of TEP programs for residential customers.

Proposal
The Company will continue offering Residential Advisory Services, with strategic enhancements aimed at bolstering the customer experience. The table below provides a snapshot of the updates to, and plans for, the Residential Advisory Service program, annotating changes from the current to the future state.

Table 5: Proposed Changes to Residential Advisory Services

Residential Advisory Service Category	Current State	Proposed Changes
Drive Electric Experience at Community Events	The Company participates in various community and industry events to support increased adoption of EVs and access to the benefits of transportation electrification.	Narrow and strategically focus budget on events where we experienced *high quality engagement* with the public during the inaugural TEP. This includes auto shows, ride-and-drives, and workplace charging events.
Advertising and Media	Advertising channels have included search-engine marketing, social, digital media and traditional media.	Narrow and strategically focus budget where we saw the greatest success during the inaugural TEP, including digital and rich media (video ads, for example).
Trade Ally Support for Auto Dealers and Electricians	Established EV dealer and electrician network.	Continue to grow and educate dealer and electrician network.
Dealer Referral Incentive	Provide dealer network partner incentives with enrollment to one of our EV programs at the point of sale.	Increase EV dealer network partner incentives to improve customer awareness and increase program enrollment.
Digital Tools	Website provides personalized, self-service information on EVs and programs to help customers compare EV models, purchasing options, charging programs, rebates and incentives.	Improve the existing webpages for mobile device user experience, searchability and add interactive guiding advisory tools, to further tailor the presentation of offerings to residential customers' unique needs and incorporate new program options.

Additionally, Public Service is looking to improve the existing static webpages by making them more mobile friendly, searchable and to offer interactive guiding advisory tools to tailor the presentation of information to residential customers' unique needs. The primary goals of this enhancement are to increase traffic to the Company's program pages, improve ease of identifying relevant programs, and grow participation in the existing and newly proposed residential program options.

Overall, we will continue to enhance our standard advisory support consisting of campaigns and events designed to generate public awareness about program information and enrollment assistance; advertising and media efforts; and trade ally support in the manner summarized in the above table. We will also leverage our internal resources, including our dedicated EV customer care agents, to help customers with program information and enrollment assistance.

ii. Commercial Advisory Services

Commercial Advisory Services has become an instrumental component of the Company's ability to support fleet owners, employers, MFH owners, businesses, and other entities regarding their plans for vehicle electrification, the associated charging infrastructure they are likely to need, and how the Company's TEP programs and commercial rate offerings can help. Our commercial advisors work with a wide range of customers, including those going through the FEAP program, considering vehicle electrification, and planning EV charging to support an end-to-end solution for customers needing advice on what to electrify, how, and when.

In 2021, Rocky Mountain Institute conducted a survey of 91 fleet managers through 18 in-depth interviews,[11] representing a cross-section of fleet types, sizes, and regions, highlighting that the transition to electrified transportation at scale involves much more than just adding more EVs and charging stations incrementally. For most, it will mean restructuring their internal business processes, and a more extensive relationship with utilities, local entities, automakers, and other stakeholders in the ecosystem. Learnings from our existing programs provides similar insights. Therefore, the Company proposes to expand and improve its EV Advisory Services for commercial customers to enhance the overall customer experience by delivering targeted education and outreach via tailored, real-time support and tools that help identify transportation electrification opportunities and assist commercial customers in making informed decisions as they consider EV purchases and EV charging infrastructure deployment.

Our current efforts have demonstrated that customers engaging in fleet planning value and need education and advice to aid their vehicle electrification and infrastructure planning transition. FEAP has helped inform our fleet customers as they consider plans to electrify their fleets and deploy charging infrastructure. The Company has learned that our fleet customers may need additional assistance in implementing their FEAP plans. Customers also indicate that more advice earlier in the process is necessary to understand the operations and maintenance processes, expenses, and strategies associated with EV fleet ownership. FEAP in the 2024-2026 TEP is intended to bridge that gap between information-gathering and real-world fleet electrification.

The Company proposes to improve its Commercial Advisory Services to enhance the overall customer experience by delivering targeted education and outreach via tailored, real-time support and tools that help identify transportation electrification opportunities and help customers make informed decisions as they consider EV purchases and EV charging infrastructure deployment and build their business cases regarding the same.

Proposal
The table below provides a snapshot of the updates to the Commercial Advisory Services, annotating changes from the current to the future state:

[11] Rocky Mountain Institute, Steep Climb Ahead: How Fleet Managers Can Prepare for the Coming Wave of Electrified Vehicles, available at: https://rmi.org/insight/steep-climb-ahead/ .

Table 6: Proposed Changes to Commercial Advisory Services

Commercial Advisory Service Category	Current State	Proposed Changes
FEAP	Program that provides in-depth fleet study for qualifying customers.	Broadening capabilities of fleet study to include more vehicles, chargers, and market information to help customers in planning for electrification.
Education and Awareness	Informal education and outreach via marketing and traditional channels.	Education and outreach targeted to commercial customers through more focused marketing and sponsorship tactics, (e.g., targeted email campaigns, fleet event sponsorship).
Digital Tools	Not currently offered.	Add self-serve tools on website that provide personalized information on EVs and programs to help customers compare EV models, purchasing options, charging programs, rebates, and incentives (similar to current Residential tools).
Trade Ally Network	Not currently offered.	Expansion of EV Dealer Network to add dealerships focused on commercial vehicles to support fleet customers with vehicle procurement planning and delivery.
Commercial Workforce Training	Not currently offered.	Collaborate with national, local, and community partners to create an EV workforce training program geared towards educating and training commercial customers.

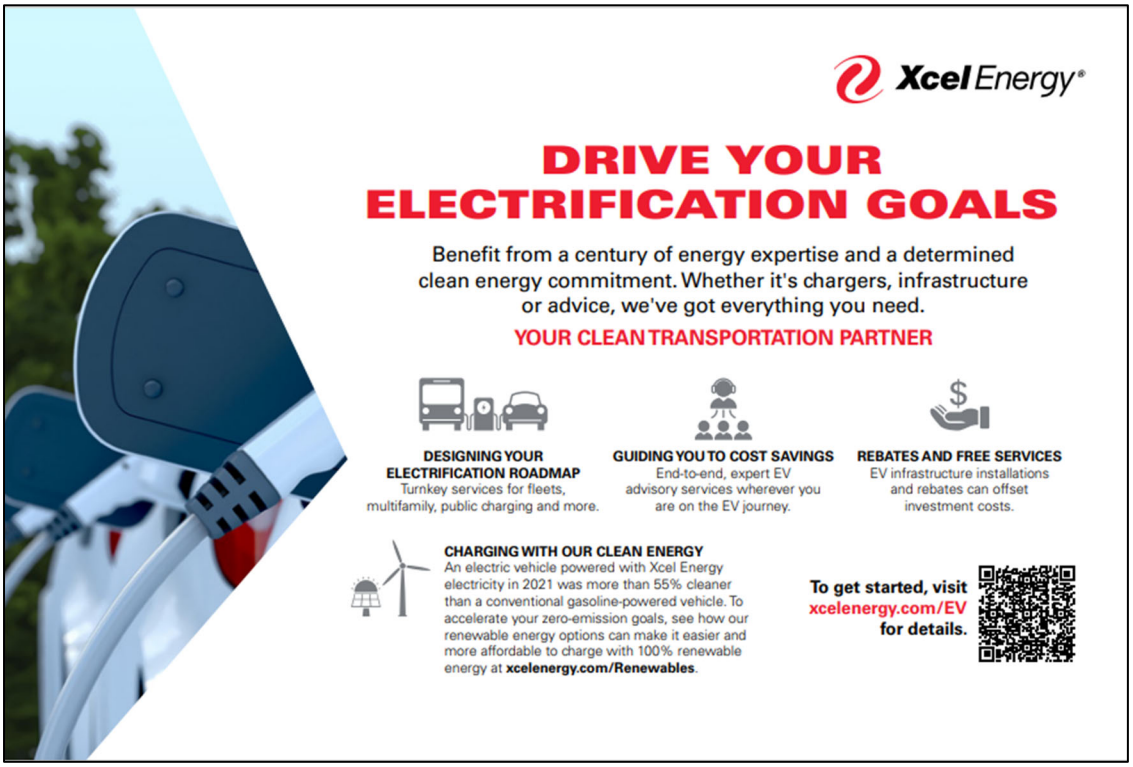
FEAP. FEAP is open to commercial Public Service customers operating a fleet of five or more vehicles primarily in Public Service's service territory. We will continue to enhance the fleet study approach to include more vehicles, chargers, and market information to help customers in planning for electrification. The study will also help fleet operators to identify take-home vehicle needs and gather insights from the estimated at-home charging costs.

Additionally, the Company is planning to extend its FEAP advisory services to aid fleet customers once they complete the initial FEAP process and receive a fleet electrification plan. Many commercial customers who are considering purchasing electric fleet vehicles for the first time may need additional hands-on support from a Company advisor to fully implement their FEAP plan. Through the increased education efforts, digital tools, trade ally network, and commercial workforce trainings outlined below, we seek to bridge the gap between information-gathering and real-world fleet electrification.

Education and Awareness. The Company's EV education and awareness efforts focus on informing customers of the benefits of EVs and connecting them with relevant programs that can enable adoption. Tools and communication channels are tailored and targeted to fleet and commercial customers. These educational efforts span multiple communication channels including dynamic communications and advertising via search engine marketing, social media, and traditional advertising such as print, sponsorship of public events, targeted outreach, and referral incentives for internal and external parties. Calls to action

drive traffic to our website and resources for EV information and programs. An example of commercial customer communications is included in Figure 2 below.

Figure 2: Example of Commercial Customer Communications



Public Service will continue to participate in and sponsor public events to engage relevant audiences, aligning with partners who also support increased adoption of EVs and access to the benefits of transportation electrification. Additionally, EV advisors will work with fleet operators and drivers with take-home EVs to enroll drivers in the Company's EVAAH program, which offers residential customers the opportunity to rent a Company-owned L2 charger for a flat fee applied to the customer's monthly bill. As a residential customer, the fleet driver will also be eligible for the EV Charger and Wiring Rebate to help offset the charger wiring and installation costs.

Digital Tools. Currently, the Company's digital tools include its residential digital tool. We plan to add a digital option for our fleet customers with the following services:

- Available fleet EV options, including Medium and Heavy-Duty ("MHD") and model comparisons, along with dealer information;
- Environmental advantages of EVs tailored to the commercial customer;
- Costs and benefits, including fuel and maintenance costs, tailored to the commercial customer; and
- Rate and managed charging program recommendations, including information encouraging customers to charge during off-peak periods.

The Company intends to offer the planned commercial digital tool to commercial customers on our website. The goal of the tool is to enable customers to compare vehicle models, estimate environmental impacts, assess benefits and costs, review available rates that promote charging during off-peak hours, connect with

fleet auto dealers who are knowledgeable about EVs, and review the current inventory at select dealer locations.

Trade Ally Network. Auto dealers are critical partners in driving EV adoption. Currently, the Company's network of trade allies is limited to passenger vehicle dealers and electricians. The Company proposes to expand our auto dealer network to include fleet vehicle dealers, to support customers with multiple vehicle procurement, planning, and delivery needs. This expansion of our current network of trade allies will support fleet customers in developing their electrification roadmap and building connections with local and/or national dealers to procure EVs. Vehicle availability has been a primary obstacle to fleet operator implementation of electrification plans provided through our FEAP assessments. By expanding our EV dealer network to include fleet and commercial vehicle specialists, the Company will assist our FEAP participants and other commercial customers in vehicle procurement.

Commercial Workforce Training. EV workforce training is critical to ensure the safety, reliability, and successful deployment and operations of EVs and charging stations in commercial fleets. Our commercial customers have shared feedback regarding the challenges they face during the EV transition, particularly with gaps in training for their workforce members including fleet operators, drivers, mechanics, and accounting and finance specialists. From the input received, the Company understands it is difficult for commercial customers to determine the necessary training and resources required for a successful transition to electric transportation.

The Company proposes to work with industry and community partners to collaborate on an EV workforce training program. This program will educate fleet customers on the operation, maintenance, and functionality of EVs and charging equipment.

iii. Community Advisory Services

Community Advisory Services seeks to address several market barriers that can hinder the adoption of EV growth and deployment of charging infrastructure in Colorado communities. These barriers include lack of technical expertise and/or understanding of complex EV technology, and the need for public education and charging infrastructure investment. Local community leaders need access to resources that support the development and implementation of a plan to meet their unique goals around the expansion of EVs and charging infrastructure. The Company's advisors work with the community to identify priorities to facilitate the development of a unique plan and implementation support to achieve the targets the community has identified.

In the Company's first TEP, our approved budget provided support for transportation electrification services to be added to the existing Partners in Energy ("PiE") program. This has enabled the Company to offer comprehensive EV and charging infrastructure planning to communities in our service territory. Through PiE, communities work collaboratively with the Company to develop an energy plan, often with objectives such as increasing use of renewable energy, lowering emissions, or increasing EV adoption and charging options. The Company has used PiE to offer tools, data, and expertise for EV planning to support local community goals. The Company's experience with community collaboration has been an asset as community leaders continue to reach out for assistance in achieving their EV targets.

The Company has completed the EV planning process for more than 15 PiE communities and is working with 12 more communities to develop plans. Communities that participate in PiE are informed by Company advisors of utility and third-party funding opportunities. Through PiE, the Company engages community leaders to make them aware of Company programs in a comprehensive fashion.

The PiE program is seeing a trend toward more regional community planning, where EV planning is moving from a single community to county levels. This shift provides opportunities for broader beneficial impacts and less confusion as drivers travel from community to community. Through this framework, the Company will continue to enable community leaders to take advantage of the Company's expertise to develop a structured approach to expand EVs.

Proposal

Community Advisory Services in the 2024-2026 TEP will continue supporting our existing partners and building new relationships with communities just beginning their EV journey. Leveraging existing relationships and the PiE framework, the Company will offer robust tools, data, expertise, and support to deliver EV planning services for our communities that encompass multiple strategies to accelerate growth in EV adoption as well as charging infrastructure deployment.

B. Clean Vehicles

Summary

To help achieve one of the main objectives of the Company's TEP – accelerating the adoption of EVs for all customers and communities – the Company is continuing and enhancing its programming that supports customers with the purchase, lease, or (in certain cases) rental of an EV.

By providing upfront cost support for new and used vehicle purchases and leases, working in tandem with dealers and community partners, the Company can directly encourage more robust EV adoption. In this TEP, the Company is proposing to expand the breadth of its ability to assist customers in mitigating upfront vehicle costs, extending the benefits of EV adoption to more customers.

More specifically, under the first TEP's EV Rebate Program, rebates were limited to the purchase or lease of new or used EVs for the Company's IQ residential customers. In the 2024-2026 TEP, the Company proposes expanding eligibility to a broader set of residential customers, including those residing in DI Communities. Through this expansion of our program eligibility, the Company can assist more customers to adopt EVs.

The Company also proposes three new programs that build upon components of the original EV Rebate Program. Two of these new programs promote EV adoption to replace vehicles that have higher emission impacts due to their long run time. These two programs provide vehicle rebates to support electrification among high-mileage TNC and DNC drivers, and TNC drivers who rent vehicles. The third new program will assist state and local governmental customers in electrifying their vehicles through a new rebate offering.

Budget and Assumed Participation

The Company proposes the following budget to support the Clean Vehicles portfolio:

Table 7: Clean Vehicles Portfolio Budget

Spend Type	Category	2024	2025	2026	2024-2026
Capital (Rebates)		**$8.8**	**$11.8**	**$14.5**	**$35.0**
	Residential EV Rebate	$1.8	$2.0	$2.3	$6.1
	TNC and DNC High Mileage Rebate	$0.38	$0.63	$0.86	$1.9
	TNC Rental Fleet Rebate	$1.9	$2.7	$3.0	$7.6
	Governmental EV Rebate	$4.8	$6.4	$8.3	$19.5
Total		**$8.8**	**$11.8**	**$14.5**	**$35.0**

Table 8: Clean Vehicles Portfolio Assumed Participation[12]

Program Name	Participants 2024	Participants 2025	Participants 2026	Participants 2024-2026
Residential EV Rebate	340	393	448	**1,181**
TNC and DNC High Mileage Rebate	83	135	189	**407**
TNC Rental Fleet Rebate	341	492	546	**1,379**
Governmental EV Rebate	732	984	1,280	**2,996**

[12] In this table, "participants" refers to rebates administered.

Program Modifications

i. Residential EV Rebate Program

The Company's Residential EV Rebate program was approved in the first TEP to be made available to IQ residential customers who purchase or lease a new or used EV. The current program supports increased affordability of EVs for the Company's IQ customers and promotes equitable adoption of EVs across the Company's service territory.

Given the continued high cost of many EV models and limited availability of EVs nationwide, the ability to purchase an EV can be out of reach for individuals with lower incomes. The Company can play a role in making EVs more affordable to address this concern. The changes being made to the existing EV Rebate Program will increase the population eligible for incentives and help ensure the Company's incentives can be used in tandem with other tax credits, with the goal of increasing EV adoption.

Lower than expected enrollment in the current program suggests that barriers to EV adoption among the Company's IQ customers persist. Upfront cost remains a significant barrier to EV adoption, particularly among IQ customers. Additionally, based upon customer and auto dealership feedback, the enrollment process has been too administratively burdensome, an area we are working to address now and with the 2024-2026 TEP.

Proposal

The Company is maintaining the existing program's new EV rebate amount of $5,500 and the used EV rebate amount of $3,000. The Company proposes increasing the eligible vehicle Manufacturers Suggested Retail Price ("MSRP") caps from the $50,000 cap approved in the first TEP to an MSRP cap of $55,000 for new passenger vehicles and an MSRP of $80,000 for new sport utility vehicles ("SUVs"), vans, and pick-up trucks, and an actual sale price cap of $50,000 for previously owned light-duty vehicles. This proposal aligns with the vehicle MSRP caps in the Inflation Reduction Act ("IRA").

The rebate amounts cover approximately 10 percent of average new EV costs that fall within the IRA MSRP cap for passenger vehicles and 8 percent of average used EV costs, assuming an average cost of $51,765 for new EVs[13] and $35,855 for a used EV.[14] Public Service will continue to assess the effectiveness of these rebate amounts particularly as market conditions change.

To accelerate EV adoption among all customers, the Company also proposes to expand access to this program to all electric residential customers meeting the new equity criteria for Residential programs, as described in Section 2.B of this TEP. This expansion will increase affordable access to the benefits of transportation electrification for the Company's customers and communities.

The Company's eligibility expansion does not replace income as a program qualifier, rather it adds geographic eligibility and Tribal membership as additional program qualifiers. This means a customer can receive the rebate if they are IQ, *or* if they meet the "Community" criteria, *or* if they are a member of a federally recognized Tribe.

Additionally, the Company proposes removing requirements that customers receiving the EV rebate do so in lieu of State of Colorado tax credits, such as the Zero Emission Vehicle Tax Credit. The removal of this requirement will allow customers to apply both Public Service's EV Rebate program funds and the State

[13] JD Power EV Index Average MSRP for New EV Cars (Sedans) under $55K and Average MSRP for New EV SUV/Trucks under $80K, January-February 2023.
[14] JD Power EV Index Average Vehicle Price for Used EV Cars (Sedans) Under $50K, January-February 2023.

of Colorado's Zero Emission Vehicle Tax Credit towards the purchase or lease of a new or used EV. The Company's Residential EV Rebate program will also continue to be stackable with federal incentives for EVs.

See Table 9 for a summary of some of the State and federal incentives that customers can use in conjunction with the Company's EV rebate.

Table 9: State and Federal EV Incentives[15]

Incentive	**Eligibility**	**Value**
State of Colorado Zero Emission Vehicle Tax Credit	Available to Colorado residents for purchase or lease of EVs. Not available for previously owned EVs.	Currently $2,000 Recently signed law will increase the tax credit to $5,000 then decrease annually through 2028. Additional $2,500 for EV MSRP<$35,000.
Colorado Vehicle Exchange ("VXC") Program[16]	IQ rebate for trading in an internal combustion engine vehicle 2011 or older (or that has failed emissions test) and replacing it with a clean vehicle. Offered through the Colorado Community Access Enterprise starting Summer 2023.	New Vehicle: $6,000 Used Vehicle: $4,000 EV MSRP<$50,000 (both new and used)
IRA Federal New Clean Vehicle Credit (30D)	Federal tax rebate for new vehicles. Subject to numerous materials, battery sourcing, final assembly, income and MSRP requirements.[17]	Maximum Rebate: $7,500
IRA Federal Previously Owned Clean Vehicle Credit (25E)	IQ rebate for previously owned clean vehicles.	Lesser of: 1) $4,000, or 2) 30% of vehicle sale price
IRA Federal Qualified Commercial Clean Vehicle (45W)	Rebate for leased clean vehicles as a tax credit.	Lesser of : 1) 30% of taxpayer's tax basis in the vehicle ,or 2) cost of vehicle. Maximum rebate for vehicles less than 14,000 pounds is $7,500 and $40,000 for all other vehicles.

[15] This list is not intended to be an exhaustive or all-encompassing list.
[16] Vehicle Xchange Colorado (VXC), VXC Presentation to CAE Board, April 2023, available at: https://drive.google.com/drive/folders/1qZnFMog9YbhAQRhuLZBcCP495wy-Ya0R
[17] Internal Revenue Service, Section 30D New Clean Vehicle Credit, April 2023, available at: https://www.federalregister.gov/public-inspection/2023-06822/section-30d-new-clean-vehicle-credit. Internal Revenue Service, Section 30D New Clean Vehicle Credit, April 2023, available at: https://www.federalregister.gov/public-inspection/2023-06822/section-30d-new-clean-vehicle-credit.

Program Enrollment
Customers can find information about and apply for the Residential EV Rebate program on ev.xcelenergy.com or at Xcel Energy EV Dealer Network locations. The Company, through its third-party verification partner or EV dealer network partner, will work with the customer to determine program eligibility.

The Company currently works with its EV dealer network members to apply the purchase and lease rebates to EVs upfront at the point of sale. Qualifying customers who purchase or lease an eligible EV at non-network dealerships can apply for a rebate through the Company's website with proof of purchase or lease after the sale of the EV.

ii. TNC and DNC High-Mileage Rebate Program

Electrification of ride-share and retail delivery services, also known as TNC and DNC services, presents an opportunity to grow EV ownership, including among lower-income households, while also reducing emissions and local air pollution from some of society's most intensively used passenger vehicles.[18] The average TNC driver drives 140 to 200 miles per day, compared to 35 miles driven each day by the average American.[19]

EVs are still out of reach for many TNC drivers. With an average household income below $50,000, many TNC drivers cannot afford EVs and have concerns they will lose earnings due to time spent charging.[20] About a quarter of the nation's ride-hailing drivers are not willing to charge during driving sessions and 41 percent are only willing to charge once.[21] In the absence of additional programmatic support for TNC drivers, most are likely to only have access to older models with limited range.[22]

To address affordability, charging logistics, and viability barriers while targeting the highest-mileage TNC and DNC drivers, the Company proposes a new TNC and DNC High-Mileage Rebate Program.

Proposal
The Company's proposed TNC and DNC High-Mileage Rebate program targets TNC and DNC drivers who drive more than 25,000 miles per year on an app-based platform (e.g., Uber, Lyft, Door Dash).[23] The rebate is designed to encourage the purchase or lease of a new or used EV by reducing the upfront cost. The Company is optimistic that its TNC and DNC High-Mileage Rebate Program will help eligible

[18] World Resources Institute, Electrifying Ride-Hailing in the United States, Europe, and Canada: How to Enable Ride-Hailing Drivers to Switch to Electric Vehicles, Nov. 2021, available at: https://www.wri.org/research/electrifying-ride-hailing-united-states-europe-canada. World Resources Institute, Electrifying Ride-Hailing in the United States, Europe, and Canada: How to Enable Ride-Hailing Drivers to Switch to Electric Vehicles, Nov. 2021, available at: https://www.wri.org/research/electrifying-ride-hailing-united-states-europe-canada.
[19] Lyft, Rideshare Drivers are Saving the Sedan, (Feb., 2023), available at: https://www.lyft.com/rev/posts/rideshare-drivers-are-saving-the-sedan.https://www.lyft.com/rev/posts/rideshare-drivers-are-saving-the-sedan.
[20] World Resources Institute, Electrifying Ride-Hailing in the United States, Europe, and Canada: How to Enable Ride-Hailing Drivers to Switch to Electric Vehicles, Nov. 2021, available at: https://www.wri.org/research/electrifying-ride-hailing-united-states-europe-canada. World Resources Institute, Electrifying Ride-Hailing in the United States, Europe, and Canada: How to Enable Ride-Hailing Drivers to Switch to Electric Vehicles, Nov. 2021, available at: https://www.wri.org/research/electrifying-ride-hailing-united-states-europe-canada.
[21] *Id*.
[22] *Id*.
[23] 25,000-mile threshold is based on an annual mileage benchmark defined by a consortium of environmental groups and TNCs in California.

customers switch to an EV and recognize the opportunity to enhance their earnings based on EVs' lower fuel and maintenance costs.

The rebate amounts proposed by the Company are a new vehicle rebate amount of $6,500 and a used vehicle rebate amount of $3,500 for these programs. Notably, these rebates represent about 12.5 percent of the cost of an EV that falls within the IRA MSRP cap for passenger vehicles and 10 percent of average used EV costs, assuming an average cost of $51,765 for new EVs and $35,855 for a used EV.[24] The larger percentage of vehicle costs covered under this rebate when compared to the Residential EV Rebate program acknowledges the larger emissions and air pollution reduction benefits of electrifying these high-mileage vehicles. Public Service will continue to assess changing market conditions that affect the impact of these rebate amounts on the proposed program benefits.

The Company's rebate offering can yield additional benefits, including emission reduction in communities with a higher concentration of low-income households. As an example, 38 percent of Lyft rides start or end in areas in Colorado where 50 percent or more of households have incomes below 60 percent of the Area Median Gross Income.[25] An added benefit of assisting high-mileage drivers in making the shift to EVs is that it is anticipated to give thousands of Colorado rideshare customers an EV ride-and-drive-like experience and the opportunity to participate in Colorado's clean transportation transition.

Program Enrollment
The Company will work with TNCs and DNCs to identify high-mileage drivers and notify them of their eligibility for the new rebate. Drivers meeting the minimum mileage requirements can apply through the Company's website. The Company will verify that the applicants are program eligible.

The Company will use the same processes for point-of-sale rebates and after sale vehicle rebates as it uses for the Residential EV Rebate program described above.

Eligibility
The Company will use the following eligibility requirements:

- Available to both active TNC (*e.g.,* Uber, Lyft) and DNC (*e.g.,* Door Dash, Grubhub, Postmates) drivers if they are Public Service electric customers who have driven more than 25,000 miles within the past 12 months *or* more than 6,250 miles per month over the past three months on an app-based platform. Following program launch, drivers that meet the mileage minimum will qualify on a rolling basis through program end.
- Available to drivers who use their existing personal vehicles and drivers who currently use rental vehicles for ride-share and retail delivery services.
- Same vehicle eligibility and incentive/rebate/tax credit stacking structure as Residential EV Rebate.

TNC and DNC drivers logging more than 6,250 miles for three consecutive months are considered full-time drivers who are likely to continue driving at that monthly rate, which would exceed 25,000 miles per year. Allowing these drivers to become eligible for the program after three months accelerates the transition to EVs for these drivers, avoiding an additional nine months of emissions before permitting the driver to qualify for the program.

[24] The Company is assuming an average cost of $51,765 for new EVs and $35,855 for used EVs. See JD Power EV Index Average MSRP for New EV Cars (Sedans) under $55K and Average MSRP for New EV SUV/Trucks under $80K, and Average Vehicles Price for Used EV Cars (Sedans) under $50,000, from J.D. Power Information Network, January-February 2023.
[25] Lyft Economic Impact Report 2023, Colorado.

iii. TNC Rental Fleet Rebate Program

Rental car companies rent vehicles to TNC drivers for use as ride-share vehicles. These TNC rental vehicles have relatively high utilization rates, around 80 percent, and log relatively high mileage compared to typical rental vehicles.[26]

Due to TNC vehicles' higher than average annual mileage, supporting the expansion of electric rental vehicles dedicated to TNC drivers can yield significant emissions and local air pollution reductions. However, electric rental vehicles' higher weekly rental costs compared to hybrid or ICE rental vehicles deter TNC drivers from renting EVs.

Proposal
The Company proposes a new $5,500 TNC Rental Fleet Rebate for rental car companies to allow them to acquire new BEVs and rent them to TNC drivers at a targeted 10 percent lower weekly rental rate than comparable hybrid or ICE rental vehicles for a three-year term per vehicle. This electric rental vehicle discount will save TNC drivers money, increase electric rental vehicle utilization, and reduce emissions and local air pollution from these high-mileage vehicles.

Program Enrollment
Program implementation will involve the Company:

- Introducing the new program to rental car companies that support TNCs in Colorado.
- Explaining the program terms, conditions, and requirements to interested rental car companies.
- Obtaining signed agreements from rental car companies.
- Establishing rental car companies as Company vendors.
- Processing bulk electric rental vehicle purchase / lease invoices from rental car companies
- Issuing rebates, taxable to the rental car companies.
- Gathering data and reviewing periodic reports from rental car companies to confirm that program funds are being used to maintain the targeted EV rental rate discounts for TNC drivers.

Eligibility
The Company will use the following eligibility criterion:

- Rental car companies will receive the rebates if they purchase or lease new BEVs and make them available for discounted use solely by TNC drivers for a term of three years per vehicle.
- Rental car companies must use the funds to offer targeted 10 percent lower weekly rental rates for electric rental vehicles when compared to hybrid or ICE rental vehicles for a term of three years per vehicle.
- Rental car companies must station the acquired electric rental vehicles at depots located in Public Service's electric service territory and dedicate the electric rental vehicles for use solely by TNC drivers for a term of three years per vehicle.
- The Company will apply MSRP caps of $55,000 for passenger cars and $80,000 for SUVs and light-duty trucks.
- Only new BEV's are eligible.

[26] Auto Rental News, Understanding Hertz's First-Mover Advantages with EV Rentals, May, 2022, available at: https://www.autorentalnews.com/10170054/understanding-hertzs-first-mover-advantages-with-ev-rentals.

iv. Governmental EV Rebate

As tax-exempt entities, state and local governmental customers can face a higher financial barrier in electrifying their vehicles than other commercial fleets, since they cannot take advantage of certain incentives, including the Colorado Zero Emission Vehicle Tax Credit, and may only be able to monetize the value of federal clean vehicle Investment Tax Credits (Internal Revenue Service Code Sections 30D and 45W) in limited circumstances. The Governmental EV Rebate will make vehicle electrification a more affordable option for state and local government customers supporting emissions reduction efforts.

Proposal
The Company proposes a new $6,500 Governmental EV Rebate for state and local governmental customers for the purchase or lease of new EVs. This rebate amount is intended to cover approximately 10 percent of the average cost of a light-duty vehicle (including passenger vehicles, SUVs and trucks) based on a current average cost of $67,300 per vehicle.[27] This rebate is designed to offset the cost to state and local governmental customers of electrifying their fleets. Public Service will continue to assess changing market conditions in considering the appropriate rebate amounts.

The Company is proposing that state and local governmental customers can receive rebates for a maximum of 20 new EVs purchased between 2024-2026. The rebate will not have MSRP caps, as certain governmental vehicles may require nonstandard modifications like those needed for police, traffic or other uses that could increase the cost of the EV.

Program Enrollment
Customers can learn about the Governmental EV Rebate and enroll through the Company's Business EV Solutions webpage (https://co.my.xcelenergy.com/s/business/ev). Commercial advisors will also direct eligible customers to this offering and support the application process.

The Company will work with its in-network Colorado dealerships to apply the purchase and lease rebates to the cost of a vehicle upfront at the point of sale. Qualifying customers who purchase or lease an eligible EV elsewhere will need to apply to the Company for a rebate and provide proof of purchase or lease after the sale of the EV.

Eligibility
- Available to state and local governmental customers who are Public Service Company electric customers.
- Must purchase or lease a qualifying new EV
- Vehicles must be registered in Colorado
- Rebates are available for a maximum of 20 vehicles per governmental customer during the 2024-2026 TEP

[27] JD Power EV Index Average MSRP for New EVs.

C. Public Charging Acceleration Network

Summary
As EV adoption continues to progress in Colorado and early adopters give way to an early majority, a concerted focus on the development of public charging infrastructure is increasingly important. For EV adoption to become common, especially among households without access to home or workplace charging or that have been hesitant to transition to EVs due to range anxiety, access to affordable, convenient, and reliable public charging needs to expand and improve. As evidenced by numerous surveys of current and prospective EV drivers, the availability of affordable public charging is a primary factor in EV purchase decisions.[28] To meet the State of Colorado's goals of electrifying 940,000 light-duty vehicles by 2030 and to support the electrification of MHD vehicles, a significant increase in investment in public charging infrastructure over a short time period is necessary.

To support the continued growth of public charging, the Company will engage in an expanded fast charging program, where the Company will install, own, and operate public fast chargers. Building on the program approved in the first TEP, in which the Company was approved to install up to 25 public DCFCs, the Company proposes to expand the program. The Company will expand its fast-charging program to develop up to 460 public fast chargers amounting to roughly 580 ports, to help meet the State's EV adoption goals, where such developments can continue to occur in subsequent TEPs beyond that for plan years 2024-2026.

Public Service partnered with Guidehouse to forecast the EV growth trajectory to meet the 2030 State EV adoption goal and determine the level of public fast charging infrastructure necessary to meet the charging demand based on that level of EV adoption. Table 10 shows the results of this analysis both at the state level and within the Company's service territory. This table shows the number of non-proprietary public fast charging ports currently available, the number of public fast charging ports necessary to meet the charging demand in 2030 to support the State's EV adoption goal, and the difference between the two.

Table 10: 2030 Fast Charging Needs (in Ports)

Fast Charging	Statewide	Service Territory
DCFC Today	421	246
DCFC Needed to Support 2030 Goal	10,271	6,313
Additional Public Charging Needed	9,850	6,067

Based on Public Service's analysis, public fast charging infrastructure will need to increase significantly in Colorado in the near term, with most of the growth taking place in the Company's service territory. Public Service proposes to address a portion of the charging need through an expansion of its public charging network. The expansion will fulfill less than 10 percent of the additional public fast charging needed within the Company's service territory by 2030.

[28] J.D. Power, Majority of Electric Vehicle Owners Are Intent on Purchasing Another One in the Future, Jan. 2021), available at: https://www.jdpower.com/business/press-releases/2021-us-electric-vehicle-experience-evx-ownership-study; Consumer Reports, More Americans Would Buy an Electric Vehicle, and Some Consumer Would Use Low-Carbon Fuels, Survey Shows, July 2022, available at: https://www.consumerreports.org/cars/hybrids-evs/interest-in-electric-vehicles-and-low-carbon-fuels-survey-a8457332578/; Consumer Reports, Battery Electric Vehicles and Low Carbon Fuel: A Nationally Representative Multi-Mode Survey, January/February 2022 Results, available at: https://article.images.consumerreports.org/prod/content/dam/surveys/Consumer_Reports_BEV%20AND%20LCF%20SURVEY_18_FEBRUARY_2022

Program Modifications

The public fast charging market currently faces many barriers and challenges to wide-spread deployment and reliability. A lack of convenient and reliable public fast charging acts as a barrier to EV adoption and limits EV growth. The Company's Public Charging Acceleration Network will help address these barriers through the widespread deployment of public fast charging stations in convenient locations.

In developing charging locations, the Company will seek to partner with site hosts to provide reliable, affordable, and convenient public fast charging. The Company will identify willing partners across its service territory who will agree to host the Company's fast charging stations. The Company may also use Company-owned property or acquire land rights in locations where charging is needed and there is not a site host match.

Based on customer surveys conducted by the Company, there is a strong interest among commercial customers in hosting EV charging on their premises. However, many of these customers are unsure of the ongoing maintenance responsibilities and costs associated with operating EV charging, while others do not have the upfront capital for charger installations or budget available for charger upkeep. This program will help site hosts overcome these barriers by building, owning, and maintaining fast charging on the customer's premises at no cost to them for the infrastructure and associated maintenance. Site hosts will receive the benefit of increased foot traffic to their locations, while being able to offer their patrons an important, additional service in addition to their normal operations.

The primary customers that this program is meant to serve are EV drivers traveling in and through the Company's service territory. As noted above, access to public fast charging or a lack thereof is frequently cited by consumers as a deciding factor in whether to purchase an EV. By increasing access to public fast charging across its service territory and doing so in a way that is reliable, affordable, and equitable, this program will reduce range anxiety, increase EV awareness, and accelerate the adoption of EVs in Colorado, in support of the State's EV adoption goals. The Company-owned public charging network will also strive to serve MHD fleets through the deployment of pull-through charging in strategic locations across the Company's service territory.

Overview and Updates to Existing Program

The Company is proposing two distinct site designs meant to address various market needs and provide desirable charging experiences. The current Company-owned public charging program consists of Market and Connector Hubs, with Market Hubs meant to provide fast charging at destinations within an urban setting and Connector Hubs meant to provide fast charging in rural communities or along major travel corridors to enable long distance travel. Under the current program, a uniform site design of two dual port chargers is being implemented across most sites regardless of site type.

The Company is modernizing its site designs for future installations to address the unique needs of drivers at each location type. These site designs will be used where possible to standardize the deployment process and provide a uniform experience across charging sites. The designs are subject to change based on individual site characteristics such as space or capacity availability.

- **Market Hubs** will prioritize accessibility and amenities and are anticipated to consist of four to six chargers between 150kW and 180kW.[29] These will be located at destinations such as retail, grocery stores, and restaurants in urban settings and allow drivers to charge while conducting other business.
- **Connector Hubs** will prioritize efficiency and convenience and are anticipated to consist of two to four high-capacity chargers (e.g., 350kW). These will be located along major highways and in rural areas to facilitate long distance travel and meet rural charging needs. The Company will strive to provide pull-through charging and to accommodate MHD vehicles at Connector Hubs where possible.

The Company proposes to remove siting restrictions in place for its fast-charging program under the initial TEP, and to build Company-owned public fast charging hubs in areas of identified charging need, as supported by a third-party (i.e., Guidehouse) assessment. The Company has identified a need for public fast charging in all census tracts in its service territory, which justifies the removal of all siting restrictions for Company-owned public charging. The Company also proposes to update the rate it charges drivers at Company-owned public fast charging hubs to be in line with market prices for public charging in Colorado. Further, the Company is working to identify ways to reduce the financial burden of EV charging for its IQ customers and will engage directly with its IQ/DI communities to understand their needs and identify appropriate ways to address these financial barriers through stakeholder engagement.

Program Implementation
The Company will actively seek out site hosts for its charging stations. Public Service will also accept applications from customers interested in hosting public fast chargers. Optimal sites will be identified based on the siting criteria outlined in the section below. Applications will be scored according to the following criteria with a focus on ensuring adequate access to public fast charging across our service territory and meeting customers' charging expectations:

- Charging need met (as quantified by Guidehouse Analysis);
- Interconnection costs and capacity availability;
- Site readiness;
- Equitable access to charging;
- Access to amenities; and
- Practical considerations such as space availability, overall site layout, access to three-phase power, etc.

Site hosts will sign an agreement to provide the Company access to their premise to build and operate the charging stations. The Company will be responsible for all construction, operation, and maintenance of the hub-specific infrastructure. Site hosts will be responsible for providing site access, performing basic site maintenance, and ensuring that the spaces are used exclusively for public charging and not general parking. Site hosts will work with the Company to report issues and outages to allow the Company and its charging network provider to dispatch maintenance teams and rectify any issues.

Once the charging stations are operational, EV drivers will be able to locate them and initiate EV charging through a mobile application provided by the Company's charging network provider. Multiple secure payment methods will be available to EV drivers as available through the market (e.g., mobile application, toll-free phone number, credit/debit card, and other contactless payment methods).

[29] Charger capacities may vary from these estimates based on the specific chargers procured for the program.

Public Service will work with its network provider and maintenance providers to conduct charger maintenance, with regularly scheduled preventative maintenance as well as corrective repairs. The network provider will provide the Company with charger monitoring software that the Company will use to monitor charger utilization and faults and dispatch maintenance crews when necessary. The Company will also provide the site host and customers with contact information to report any issues or repair needs with the chargers. Through these measures and multiple reporting sources, the Company will be able to effectively identify and respond to issues.

Budget

The Company proposes the following budget to support Company-owned public charging:

Table 11: Public Charging Acceleration Network Budget

Spend Type	Category	2024	2025	2026	2024-2026
Capital		**$6.0**	**$30.2**	**$84.1**	**$120.3**
	EVSI	$2.6	$13.1	$36.5	$52.2
	EVSE	$3.4	$17.1	$47.6	$68.1
Capital (Rebates)		$0.0	$0.0	$0.0	$0.0
O&M Expenses		**$2.2**	**$7.4**	**$15.1**	**$24.8**
	Infrastructure Maintenance	$0.53	$2.5	$7.1	$10.2
	Program Administration	$1.7	$4.9	$8.0	$14.6
Total		**$8.3**	**$37.6**	**$99.2**	**$145.1**

D. Residential

Summary
Under the 2021-2023 TEP, Public Service is providing EV offerings designed to help residential customers overcome complexity and cost barriers in adopting EVs and to ensure that vehicle charging is managed for the efficient operation of the grid. These offerings include:

- EVAAH;
- EV Charger and Wiring Rebate;
- Optimize Your Charge (a passive control managed charging program); and
- Charging Perks pilot (an active control managed charging pilot).

With the 2024-2026 TEP, the Company will continue and expand upon the existing Residential programs, with the continued goal of increasing EV adoption by addressing the equipment selection, upfront cost, and installation barriers that EV customers encounter, while continuing to encourage off-peak charging.

In the table below, we provide an overview of the new offerings and enhancements to existing programs included in this TEP.

Table 12: Proposed Changes to the Residential Portfolio

Program	Current State	Proposed Changes
EVAAH	Charger rental for residential customers	Offer new backup power package via demonstration; Update managed charging requirements.
EV Charger and Wiring Rebate	Rebate for charger and home wiring	Update rebate amounts; Expand eligibility for the enhanced equity rebate; Pay incentives through rebate, bill credit, or Automated Clearing House ("ACH") transfer.
Optimize Your Charge	Program; $50 annual incentive	Offer as option under single managed charging program; Update eligibility; Update minimum charging requirement within chosen window.
Charging Perks	Pilot; $100 sign-up incentive; $100 annual incentive	Move to full program; Offer as option under single managed charging program; $50 sign-up incentive; $50 annual incentive; Pay incentives through bill credit.
Off-Peak Subscription Option	Not currently offered.	New monthly flat fee for off-peak charging; Offer as option under managed charging program.

Budget & Assumed Participation
The Company proposes the following budget to support the Residential Portfolio:

Table 13: Residential Portfolio Budget

Spend Type	Category	2024	2025	2026	2024-2026
Capital (excluding Rebates)		**$0.94**	**$1.8**	**$2.9**	**$5.6**
	EVSE	$0.70	$0.80	$0.89	$2.4
	BESS	$0.24	$1.0	$2.0	$3.2
Capital (Rebates)		**$3.5**	**$4.0**	**$4.5**	**$11.9**
	EVSI	$0.63	$0.71	$0.80	$2.1
	EVSE	$2.9	$3.3	$3.7	$9.8
O&M Expenses		**$2.4**	**$3.4**	**$4.4**	**$10.1**
	Infrastructure Maintenance	$0.23	$0.33	$0.44	$1.0
	Customer Incentive	$0.42	$0.80	$1.2	$2.4
	Program Administration	$1.7	$2.2	$2.8	$6.7
Total		**$6.8**	**$9.1**	**$11.7**	**$27.7**

Table 14: Residential Portfolio Assumed Participation

Program Name	Participants 2024	Participants 2025	Participants 2026	Participants 2024-2026
EV Accelerate At Home	894	1,012	1,137	**3,043**
EVAAH Backup Power Option	12	48	100	**160**
Home Charger & Wiring Rebate	3,402	3,848	4,324	**11,574**
Optimize Your Charge	4,529	3,380	0	**7,909**
Charging Perks	3,774	12,674	23,561	**40,009**

In Table 14 above, participants refer to incremental quantities delivered per year, as follows: EV Accelerate At Home in number of ports, EVAAH backup power option in number of back-up systems, Home Charger & Wiring Rebate in number of rebates administered, and Optimize Your Charge and Charging Perks in number of incentives per year. No separate participation assumptions have been developed for the new Off-Peak Subscription Option.

Program Modifications

i. EV Accelerate At Home

EVAAH provides residential customers hassle-free access to L2 charging in their home, with the goal to increase EV adoption within the Company's service territory. Under EVAAH, Public Service owns and maintains L2 chargers and customers pay a monthly rental fee on their existing energy bill to cover the cost of the charger, installation, and maintenance over a ten-year period.

As of March 1, 2023, Public Service had over 1,100 customers enrolled in the EVAAH program and has experienced high customer satisfaction, with the average post-installation survey respondent during 2022 claiming they were 94 percent satisfied with their overall installation and enrollment experience.

EVAAH continues to provide value to our customers by removing the upfront cost and logistical barriers to purchasing and installing an EV charger as well as removing from the customer the burden of responsibility for maintenance or repair needed during the agreement term.

Public Service will continue offering the EVAAH program for residential customers, with the following modifications:

1. Add an option to allow customers to rent bi-directional charging equipment and an optional stationary battery through an EVAAH backup power package, as part of a demonstration project.
2. Expand managed charging to allow EVAAH participants to meet managed charging participation requirements by enrolling in either its residential time of use rate ("RE-TOU") or one of the three managed charging options.

a. Modification #1: Add an EVAAH backup power option demonstration

Through EVAAH, EV owners can rent a unidirectional charger (i.e., a charger where power only flows in one direction, to the vehicle) directly from Public Service for a low monthly fee. The offering allows EV owners to avoid the upfront cost of purchasing and installing an EV charger, while allowing Public Service to enroll these customers in a managed charging program.

Within the current EV market, unidirectional chargers meet the majority of EV drivers' needs, as most vehicles currently only support unidirectional charging. However, automotive original equipment manufacturers ("OEMs") are increasingly looking to support the next level of EV charging known as bi-directional EV charging, which allows electricity to flow both to the vehicle and from the vehicle to either the home, also known as Vehicle-to-Home ("V2H"), or, in theory, to the grid, known as Vehicle-to-Grid ("V2G").[30] At the same time, many hardware manufacturers, including Delta, Enphase, Emporia, Wallbox, and Dcbel are actively working on introducing residential bi-directional chargers that support V2H, V2G, or both, and that are not specific to any automotive OEM. Bi-directional chargers are a necessary hardware to enable future V2G, but at this time the sole residential bi-directional charger in market supports only V2H capabilities, with V2G capabilities to be introduced at an unspecified later date.

The Company has seen interest from EV drivers in the capabilities that bi-directional charging can offer, like back-up power. However, the market is still small and currently only Ford has brought a bi-directional charger to market for residential customers. Additionally, as within any nascent market, technology costs are high, and the purchase and installation of a bi-directional charger can be a cost barrier for would-be buyers.

With the ability to provide V2H integration, bi-directional charger packages are more complex and expensive than unidirectional L2 chargers that most EV owners install at their home. A bi-directional charging package with V2H capabilities costs approximately $4,000 for the equipment alone,[31] much higher than the typical unidirectional L2 charger. In addition, the needed circuit capacity for a bi-directional charger is higher. A standard unidirectionalL2 charger typically requires no more than 50 amps on a dedicated circuit. Many homeowners already have this capacity available within their existing electrical panel and simply require an electrician to add breakers in the panel and run additional conduit and wires to the area where the charger will be installed. However, the industry is introducing higher capacity chargers as vehicle batteries grow. Ford's bi-directional Charge Station Pro charger provides a charging capacity of 80 amps, for example, and Public Service anticipates future bi-directional chargers of similar size. Public

[30] As of early 2023, many OEMs, including Ford, Chevrolet, Nissan, GM, VW, Volvo, and Ram (a division of Stellantis), have introduced or announced plans to introduce vehicles that support bi-directional charging.
[31] See the following: Electrek, Ford F-150 Lightning electric pickup needs a $3,900 home device to use it as backup power, May 2022, available at: https://electrek.co/2022/05/02/ford-f-150-lightning-electric-pickup-needs-a-4000-home-device-use-backup-power/

Service anticipates that many homeowners do not have this capacity available in their existing electrical panel and would therefore require an electrical panel upgrade, further increasing cost.

Proposal
Given the ability to deploy V2H-supportive hardware as well as interest from customers, the Company will include a new option under EVAAH for customers to rent a bi-directional equipment charging package directly from Public Service, with a stationary battery option. EVAAH backup power will include the bi-directional charger, optional stationary battery, and the equipment necessary to support the charger, including the inverter, critical load panel, and accessory equipment.

Because of the newness of this technology, the Company proposes this offering as a program demonstration, building upon the technical demonstration for residential V2H approved in the initial TEP as part of the Innovation portfolio. Program participation will be capped at 160 total participants and lessons learned will inform future program design and the next TEP.

This offering seeks to reduce the upfront equipment and installation costs of bi-directional charging. Customers will be able to rent the equipment for a flat monthly fee over a ten-year agreement period. Like EVAAH, this rental program is fully paid for by participants. While V2G technology in the market is not yet ready for a fully scaled residential program, this rental program will allow the Company to deploy bi-directional charging equipment that could support future V2G offerings. The Company's V2G strategy is further described in the Innovation portfolio section below.

The Company anticipates interest from customers who own or plan to purchase a supported bi-directional EV, and those who value resiliency.

Public Service will seek to offer EVAAH backup power targeted to specific capable vehicles in partnership with relevant OEM or hardware manufacturers. Currently, OEM-supported bi-directional chargers are specific to each OEM. Therefore, a partnership approach is necessary to ensure technical integration.

Customers wishing to enroll in the EVAAH backup power option will follow an updated EVAAH digital enrollment process. Participants will pay a flat monthly fee to participate in the EVAAH backup power option. The flat monthly fee includes installation of the equipment, ongoing maintenance, data/service fees, and program support.

For those customers interested in adding additional flexibility around back-up power, the Company will provide an option to rent a stationary battery that integrates into the EVAAH backup power bundle. By offering both the bi-directional charger and stationary battery in a single package, we can offer a streamlined experience for customers.

Public Service will file final customer pricing after an OEM partner has been chosen and pricing agreed upon. This offering will have a 10-year agreement term, at which point ownership of the equipment converts to the participant. Customers who have taken service for less than 10 years under the backup power option may purchase the equipment through an early buy-out payment, which equals the total costs incurred to procure and install the equipment bundle, reduced annually on a straight-line, prorated basis over 10 years.

Once the Company has firm pricing, the Company will use the formula below to determine final monthly customer pricing:

Customer Charge = C x I / 12 + O&M

C = Capital Cost of Company-Owned Equipment
I = Annual Average Carrying Charges for the Company-Owned Equipment
O&M = Monthly routine operations and maintenance expenses

Eligibility Requirements

Eligibility requirements are similar to standard EVAAH eligibility requirements and require that the customer:

- Own or lease a bi-directionally-capable EV supported by the program or expect to take delivery of such an EV in the near future;
- Live in a residence that receives electric service from Public Service;
- Have access to Wi-Fi at the charging location;
- Install wiring to support the eligible bi-directional charger; and
- Either be on the RE-TOU rate or enroll in Public Service's managed charging program, under the active or passive option, for a minimum of one year. IQ customers can opt out of the managed charging requirement.

A customer may elect to terminate their participation in the managed charging program at any time after the first 12 months. If a customer chooses to end their managed charging participation after 12 months, they may continue to participate in the EVAAH backup power rental.

We anticipate some customers with existing solar installations to be compatible with the program, depending on installed solar configuration.

Participants within this offering will also be eligible for the standard or enhanced EV Charger and Wiring Rebate.

b. Modification #2: Broaden options for EVAAH managed charging

Under the current EVAAH program, participants must enroll in either Optimize Your Charge or Charging Perks for a minimum of 12 months.

As the Company seeks to streamline and expand its managed charging options, we propose updating the EVAAH requirements around managed charging participation to provide customers a greater number of options that encourage off-peak energy usage and satisfy this program requirement, including the following.

- **RE-TOU rates:** TOU rates are an effective tool to drive off-peak EV charging. As Public Service continues to deploy Advanced Metering Infrastructure ("AMI") and move residential customers to the default RE-TOU rate, this rate structure can act as the first and most widely available option to encourage EVAAH customers to charge during off-peak hours.
- **Passive Control Option:** Until AMI is fully deployed, not all residential customers are eligible for RE-TOU. For those customers not on RE-TOU, the Passive Control option allows EVAAH participants to manage their charging pursuant to a schedule and receive a bill credit.
- **Active Control Option:** For those customers who are interested in shifting energy usage to more efficient time periods (such as off-peak hours), by allowing the Company's managed charging program to control when their vehicle charges.
- **Off-Peak Subscription:** A new program in which participants pay a flat fee for charging during off-peak periods.

More information on the managed charging program and its interaction with rates can be found in the Managed Charging section below.

ii. EV Charger and Wiring Rebate

Public Service offers the EV Charger and Wiring Rebate to assist residential customers in overcoming the initial cost barrier to purchasing and installing an EV charger and installing home wiring. Eligible customers can use the rebate to offset the cost of the L2 home charger, the wiring costs associated with installing the charger, or both.

The Company currently offers a standard $500 rebate for residential customers and an enhanced rebate of $1,300 for IQ customers. Public Service based these rebate amounts on data available at the time the rebates were proposed in the first TEP that showed the average installation cost to be roughly $1,300.

Since inception through March 1, 2023, Public Service has administered nearly 1,700 rebates through the EV Charger and Wiring offering, with 99 enhanced rebates for IQ customers.

The Company is proposing the following modifications to the EV Charger and Wiring Rebate:

1. Expand eligibility for the enhanced rebate to Public Service customers who meet our expanded equity criteria;
2. Update both the standard and enhanced rebate amounts to reflect current market prices;
3. Expand options for customer incentives to be delivered through bill credits or ACH transfer, in addition to rebate checks and instant rebates.

a. Modification #1: Expand equity eligibility for the enhanced rebate

To accelerate EV adoption among all customers, the Company proposes broadening access to this program beyond income as the only criteria, consistent with state definitions, while maintaining a commitment to equity. To accomplish that proposal, the Company is adopting new equity eligibility criteria for the Residential portfolio, as defined in Section 2.B. of this TEP, "**Equity Eligibility."**

b. Modification #2: Update the standard and enhanced rebate amounts

Throughout administration of this rebate, the Company has tracked and analyzed home wiring and charger cost data provided by rebate recipients. Upon consideration of this data, Public Service has determined that currently the average charger and wiring costs are approximately $2,300.

As such, the Company proposes to increase the market rebate amount to $700 for Energy Star certified chargers to cover 30 percent of average charger and wiring costs, and to increase the enhanced equity rebate amount to $1,700 to cover approximately 70 percent of average charger and wiring costs. For installations without an Energy Star certified charger, the Company plans to maintain the market rebate amount of $500 for charger and wiring costs.

While residential market-rate customers participating in EVAAH are only able to apply the rebate to their actual wiring costs (since Public Service will own the charger and the customer will not have any upfront costs associated with the charger), equity-eligible customers participating in EVAAH will continue to be able to receive the entire rebate amount, even if that amount exceeds the cost of the wiring and charger.

c. Modification #3: Expand rebate options to include rebate check, instant rebate, ACH, or bill credits

The Company proposes to expand administration of the rebate to allow customer choice between a bill credit, ACH transfer, rebate check, or instant rebate at time of installation. Currently, the Company only issues a rebate to participants after the installation is complete or at the time of installation through electrician trade partners. Direct payments to a residential customer, such as rebate checks and ACH transfers, may be considered taxable income to the customer, requiring greater administrative burden on both the customer and Public Service. Bill credits are not considered taxable income and therefore offer a more streamlined, hassle-free customer experience and less administrative burden.

*Eligibilit*y
In order to receive the EV Charger and Wiring Rebate, customers must be on the RE-TOU rate or participate in one of the Company's managed charging options for at least one year, with the ability for IQ customers to opt out of this requirement.

Customers must meet the basic eligibility requirements outlined below. Upon enrollment, customers will execute a Customer Service Agreement. The agreement will further outline eligibility and terms and conditions that a participant must adhere to throughout their participation. These include requiring that the participant:

- Owns or rents a detached single-family home, townhome, row house, or duplex with separately metered service; and if renting, the premise owner must provide written consent for the driver to participate;
- Owns or leases an EV, or expects to take delivery of an EV in the near future;
- Have an active Public Service account that receives electric service;
- For market-rate rebate recipients, customers must either be on the RE-TOU rate or participate in one of the Company's managed charging options for at least one year; IQ customers may opt out of this requirement;
- For enhanced rebate recipients, customers must meet one of the equity eligibility criteria for the Residential portfolio as described in the **Equity Eligibility** section of this TEP;
- If the customer is requesting a rebate for charging equipment, the customer must provide evidence of the charging equipment that relies on the 240V circuit for which the customer seeks the rebate draws 50 amps or less (or 100 amps or less for an approved bi-directional charger), and the customer must provide a paid invoice or receipt for the charging equipment that is dated on or after the start date of the program; and
- If the customer is requesting a rebate for wiring costs, the customer must provide evidence that a licensed master electrician (or other authorized electrician provided in section 40-5-107(3)(a), C.R.S.) performed the work to install the 240v circuit and provide a paid invoice from the electrician that is dated on or after the start date of the program for labor and materials to install a 240V circuit.

iii. Managed Charging

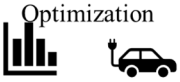
As EV adoption increases, more people are expected to adopt the charging behavior of plugging in their EV in the evening, imposing additional stress on the grid at times when demand is increasing. Managed charging programs are designed to offset this undesirable outcome and can generally be categorized in one of two ways: passive control and active control. A clear delineation between the two can be defined as follows:

- **Passive control** relies on customer behavior to impact charging patterns. For example, time-of-use rates provide predetermined price signals to customers to influence when they choose to charge their vehicles.
- **Active control** relies on communication signals to a vehicle or charger to control charging in a predetermined way. The communication signals used in managed charging can adjust the time and/or rate of charge (both load curtailment and load increase) relative to a baseline.

The Company has several managed charging options today, including both passive control and active control. Passive control options include time-of-use rates (e.g., RE-TOU, S-EV), and the Optimize Your Charge program, while active control options include the Charging Perks pilot, and the V2X pilots currently offered and expanding through the Innovation portfolio.

There are pros and cons when it comes to managing EV charging depending on the type of managed charging option implemented, as described in Table 15.

Table 15: Managed Charging Summary

	Managed Charging Options				
	Option	**Description**	**Public Service Example(s)**	**Pros**	**Cons**
Passive Control	Time of Use Rate 	Time-differentiated rate to encourage charging during off-peak hours.	RE-TOU	Simple, no additional equipment needed.	Can cause timer peaks, not responsive to changing grid conditions.
Passive Control	Static Optimization 	Annual bill credit to encourage charging during off-peak hours.	Optimize Your Charge	Easy-to-understand, effective substitute for TOU rate where not available.	Same as TOU plus can require additional equipment and data services.
Active Control	Dynamic Optimization 	Remotely manage EV charging to when it's most beneficial to the grid.	Charging Perks	Dynamic, can respond to changing grid conditions and support renewables.	Complicated, requires sophisticated software management tools.
Active Control	Vehicle To "X" 	V2X can provide resiliency (backup power), load-shifting (charge and discharge), and grid exports.	Innovation Pilot(s)	Can unlock additional value for both the customer and utility.	Very complicated, requires additional costly equipment, unproven in the market.

Xcel Energy has learned many lessons from operating managed charging pilots and programs across multiple service territories over the last several years, including in Public Service's territory.

First and foremost, managed charging programs are effective at incentivizing the behavior of EV drivers to charge their EVs during times of low peak demand and high renewable generation. Within the managed charging programs that Public Service and its affiliates have run:

- Nearly 90 percent of participants of Public Service's Optimize Your Charge program are complying with the program requirements by charging at least 25 percent of the time within their selected charging window.
- There was a 58 percent reduction in kW during on-peak hours (3 p.m. – 7 p.m.) during optimized days compared to baseline days in Public Service's Charging Perks Pilot.
- Approximately 96 percent of all charging took place during off-peak charging windows in Northern States Power Minnesota's Subscription Service pilot.

Second, the Company has learned that these programs are well received by customers:

- 92 percent of survey respondents of Public Service's Charging Perks pilot participants were motivated or extremely motivated to reduce electric bills by charging their EV during the lowest cost times.
- When customers were surveyed for how motivating different factors were in their decision to enroll in the Charging Perks pilot, the top three answers in ranking order were: (1) opportunity to reduce bills, (2) environmental impact, and (3) sign-up incentives.

Nevertheless, there is opportunity for improvement in the managed charging portfolio. Currently, Public Service customers can choose between Optimize Your Charge, a passive control optimization program, and Charging Perks, an active control optimization charging pilot. However, the outreach, enrollment, and ongoing engagement with the participating customers is inconsistent between the two offerings. The vehicle and/or charging equipment requirements are also inconsistent, and there is no subscription service option for customers in Public Service's territory (an offering that has been successful in other Xcel Energy jurisdictions).[32]

[32] Xcel Energy, Annual Report: Electric Vehicle (EV) Charging Tariffs, Programs, and Pilots, June 2022, available at: https://www.edockets.state.mn.us/edockets/searchDocuments.do?method=showPoup&documentId=%7b808D2481-0000-CC24-8E1E-2C2260223B56%7d&documentTitle=20226-186302-14.

Proposal

Public Service proposes to streamline and expand the managed charging options for its customers by combining the Optimize Your Charge program and the Charging Perks pilot into one comprehensive managed charging program that includes:

a. **Passive Control Option**: Customers choose an off-peak charging schedule and receive an annual bill credit for adhering to the schedule. The Company views this as an interim solution for customers who are not yet eligible for the RE-TOU rate. The Optimize Your Charge passive control option will be phased out over time (as described below).
b. **Active Control Option**: Provides incentives to participants for allowing the program to decide when to charge to help the grid operate more efficiently and use more renewable energy.
c. **New Off-Peak Subscription Option**: Customers pay a flat monthly subscription price for up to 1,000 kWh per billing month of off-peak charging.

Passive Control Option

The passive control option of the managed charging program requires participants to choose from different off-peak charging windows, outlined in Table 16 below. By providing customers with options for charging windows, the passive control option seeks to distribute charging load throughout the off-peak hours and avoid charging during peak hours, while providing customers several options to fit their schedule.

Table 16: Charging Windows

Managed Charging – Passive Control		
		
9:00 p.m.–6:00 a.m.	12:30 a.m.–9:30 a.m.	6:00 a.m.–3:00 p.m.

Passive managed charging, like TOU rates, relies on participants to change their behavior to align energy usage with off-peak windows.

The Company continues to deploy AMI and default RE-TOU rates to all Public Service residential customers, but they are not yet fully deployed. With this understanding, the Company considers the passive control managed charging option, currently known as Optimize Your Charge, generally as an interim solution that allows EV drivers who are not yet eligible for the RE-TOU rate to see the financial benefits of charging during off-peak times.

We propose to continue offering this passive control option as the Company continues to deploy the default RE-TOU rate for residential customers. Customers will remain eligible to enroll in the passive control option if they have not yet been placed on the default RE-TOU rate.

The Company plans to retire this passive control option when the default RE-TOU rate is fully deployed, and the standard residential rate is no longer available to Public Service residential customers. When the RE-TOU rate is available to all Public Service customers, the Company will inform participants in the passive control option that it is terminated and that they have the option to join the active control option.

To further drive charging during off-peak hours, customers will be required to charge during the window they select at least 50 percent of the time, an increase from the current 25 percent requirement, and in return they will receive an annual credit on their electric bill of $50 for each year that they participate in the program.

The current Optimize Your Charge passive control program partners include both auto OEMs and EV charger providers. The auto OEMs currently include Hyundai, Kia, Lexus, Tesla, and Toyota, and they allow program enrollment through WeaveGrid's evPulse platform. Partner EV charger providers include ChargePoint and Enel X. The Company intends to issue a Request for Proposal ("RFP") in 2023 to identify a software vendor that can assist in continuing to support these auto OEMs and EV charger providers, while also growing the number of supported auto OEMs within the managed charging program.

Active Control Option

The current Charging Perks pilot, which is scheduled to end in 2023, has partnered with various automotive OEMs including BMW, Chevrolet, Ford, Honda, and Tesla (via WeaveGrid). Of these, only Tesla supported program enrollment through the evPulse platform developed by WeaveGrid, while all other OEMs supported enrollment through the Open Vehicle-Grid Integration Platform ("OVGIP"). The program has separate contracts with each OEM for telemetry data collection, which is processed through OVGIP.

The Charging Perks pilot provides dynamic charging signals (EV/proxy price signal) to indicate the optimal time to charge. Through the pilot, the Company aimed to assess the potential for EV charging load as a flexible load that can be managed to support the integration of renewable energy, shift charging to reduce peak demand, and help reduce curtailment of excess renewable energy. The signal leverages daily energy forecasts that predict when electricity prices will be low and renewable production will be abundant. By harnessing the structure of the Charging Perks pilot, continuing that structure as a full program, and presenting it to customers as part of the managed charging program, the Company will build upon the successful implementation of this active control option, streamline the customer experience, and continue scaling a program that can expand and evolve to provide greater grid benefits by mitigating localized distribution constraints.

The active control option of the managed charging program will build on the learnings from the Charging Perks pilot, which allows participants to plug in their EVs anytime and then designate a deadline for when their EV should be fully charged. The participant's EV will be charged ahead of the specified deadline based on a dynamic charging signal. Participants will be provided $50 upon sign-up and an annual participation incentive of $50 – a decrease from the current $100 annual incentive. Upon assessment of pilot performance, the Company found that the current incentive amounts exceed quantified benefits to the

grid. We have updated the annual participation incentive to better align with the value the program is providing to the grid, while still considering the potential value managed charging could provide by mitigating localized distribution constraints.

Off-Peak Subscription Option

The Company proposes to offer a new managed charging option in the form of a flat off-peak subscription price for EV charging. This option will provide the simplicity of a consistent monthly price and the strong incentive to charge during off-peak hours.

Participating customers will pay a single monthly flat fee for EV charging from midnight to 6:00 a.m. up to 1,000 kWh per month. Any charging consumption outside of the subscription off-peak window, including consumption above the 1,000 kWh threshold, will be charged at the RE-TOU rate. The monthly subscription price is $50, which includes the rental cost of the charger, installation, and ongoing maintenance, plus up to 1,000 kWh of off-peak energy.

While this is a new option for Public Service customers, Xcel Energy has successfully piloted this program in Minnesota. The offering is designed to address the customer difficulty of assessing the economics of EV charging, including the potential benefits of TOU. The goal of the program is to create a simple charging option for customers that both drives off-peak charging and creates an easy, no-hassle experience for the customer. The Minnesota subscription pilot was successful in all of these regards, with 91 percent of respondents within a 2022 participant survey reporting they were very or extremely satisfied with the pilot and 90 percent reporting that they were highly likely to recommend the subscription pilot to a friend.[33] The Minnesota pilot has been extremely successful in encouraging off-peak charging, with 96 percent of all charging in the 2021 pilot occurring during the off-peak window.[34]

Pricing for Off-Peak Subscription Option

The monthly subscription price is based on the estimated average annual EV charging consumption of participating customers. As a starting point, we assessed actual mileage and energy usage from the Company's Minnesota subscription pilot and compared that data to publicly available data on EV usage and driving patterns specific to Colorado. The estimated Vehicle Miles Traveled ("VMT") for passenger vehicles is very similar between the two states. Therefore, we are using the same energy consumption assumptions for the subscription programs in both states.

During evaluation of the Minnesota EV subscription pilot, the Company found that 96 percent of customers charged below 1,000 kWh per month. By setting a cap of 1,000 kWh, the Company is able to align the program with the anticipated charging habits of the majority of participants and keep the monthly cost lower for all participants. And by reverting to the off-peak RE-TOU pricing for any off-peak usage over the 1,000

[33] Xcel Energy, Annual Report: Electric Vehicle (EV) Charging Tariffs, Programs, and Pilots, June 2022, available at: https://www.edockets.state.mn.us/edockets/searchDocuments.do?method=showPoup&documentId=%7b808D2481-0000-CC24-8E1E-2C2260223B56%7d&documentTitle=20226-186302-14.

[34] Xcel Energy, Annual Report: Electric Vehicle (EV) Charging Tariffs, Programs, and Pilots, June 2022, available at: https://www.edockets.state.mn.us/edockets/searchDocuments.do?method=showPoup&documentId=%7b808D2481-0000-CC24-8E1E-2C2260223B56%7d&documentTitle=20226-186302-14.

kWh cap, we still allow participants who need to charge above the cap to benefit from lower prices for charging during off-peak times.

Additionally, to help inform the price, we used survey results from the Minnesota EV subscription pilot that indicate customer willingness to participate in an off-peak home charging subscription. These survey results indicate step change reductions in customer willingness to participate as the price increases, particularly over $50. As such, we propose setting the monthly subscription service fee to $50.00 including both energy and charger rental costs, as shown below.

- Total Price: $50.00 per month ($36.71 per month for energy; $13.29 per month for equipment)
- Off-peak Rate (for any off-peak usage over monthly cap): Same as RE-TOU
- Mid-peak Rate: Same as RE-TOU
- On-peak Rate: Same as RE-TOU

Eligibility Requirements
For all of the managed charging program options (with some distinctions unique to each option), customers must meet the basic eligibility requirements outlined below. Upon enrollment in active control or passive control options, customers will execute a Customer Service Agreement. The agreement will further outline eligibility and terms and conditions that a participant must adhere to throughout their participation. These include requiring the participant to:

- Own or lease an EV;
- Have an active Public Service electric service account;
- Own or rent a single-family home, defined as a detached single-family home, townhome, row house, or duplex (note: the building owner must provide written consent for renters to participate);
- Enroll an eligible EV or charging equipment;
- For active control, the participant must have an eligible L2 charger, or L2 charger with eligible vehicle, installed at the participating premise;
- For both the passive and active control options, the eligible charging equipment may be furnished by the customer or by the Company through EVAAH;
- For the Off-Peak subscription option, the participant must enroll in the Company's EVAAH program;
- For the passive control option, the participant must be on the residential rate; and
- For the Off-Peak subscription option, the participant must be on the RE-TOU rate and not enrolled in the Company's Net Energy Metering tariff.

E. Commercial

Summary

The Commercial portfolio enables a variety of charging use-cases to advance adoption of EVs to support the goals of SB 19-077 by way of offering infrastructure services, charger rentals, and rebates to commercial customers. The existing portfolio of programs has been well-received and has allowed the Company to offer expert guidance and resources to customers. This experience has shown first-hand the difficulties customers face in implementing clean transportation initiatives and has highlighted the unique opportunity the Company has to offer further support. To build on the successes and learnings from the 2021-2023 TEP, Public Service is proposing an array of program modifications and several new additions to the Commercial portfolio that are designed to simplify the customer experience, remove barriers to adoption, and streamline equity-based projects.

For purposes of the TEP, the Company considers all non-residential customers as commercial, including examples such as fleet operators who are seeking to convert their fleets to electric, customers seeking to support employees with workplace charging, multifamily customers providing charging to residents, communities supporting charging hubs, government entities, and site hosts and developers for public charging.

Our commercial EV advisors, whose labor is accounted for in the program administration portion of the Commercial portfolio budget, have become an instrumental component of the Company's ability to support our commercial customers. This includes assistance regarding their plans for vehicle electrification, the associated charging infrastructure they are likely to need, and how the Company's TEP programs and commercial rate offerings can help. Our commercial advisors work with our commercial customers, including those going through the FEAP program, considering vehicle electrification, and planning charging to support an end-to-end solution for customers needing advice on what to electrify, how, and when. We will continue to offer this support for customers who are interested in EV charging infrastructure.

Budget and Assumed Participation

The Company proposes the following budget to support the Commercial portfolio:

Table 17: Commercial Portfolio Budget

Spend Type	Category	2024	2025	2026	2024-2026
Capital (excluding Rebates)		**$7.3**	**$29.1**	**$52.2**	**$88.5**
	EVSI	$5.1	$8.9	$13.6	$27.6
	EVSE	$0.11	$0.42	$0.77	$1.3
	BESS	$0	$3.8	$5.8	$9.6
	Grid	$2.0	$16.0	$32.0	$50.0
Capital (Rebates)		**$0.58**	**$1.0**	**$1.4**	**$3.0**
	Commercial Rebates	$0.54	$0.65	$0.77	$2.0
	New Construction	$0.05	$0.32	$0.67	$1.0
O&M Expenses		**$3.4**	**$5.6**	**$8.5**	**$17.5**
	Infrastructure Maintenance	$0.29	$0.35	$0.45	$1.1
	Program Administration	$3.1	$5.2	$8.1	$16.4
Total		**$11.2**	**$35.7**	**$62.1**	**$109.0**

Table 18: Commercial Portfolio Assumed Participation

Sub-Segment	Spend Type	Asset Category	Program Name	Participants 2024	Participants 2025	Participants 2026	Participants 2024-2026
Multi Family Housing	XE-Owned	EVSE	L2 Optional Charger Service	14	40	67	**121**
Multi Family Housing	XE-Owned	EVSI	Commercial EVSI	121	239	405	**765**
Various	XE-Owned	EVSE	L2 Optional Charger Service	11	55	109	**175**
Various	XE-Owned	EVSI	Commercial EVSI	184	292	423	**899**
BESS	XE-Owned	BESS	Customer-Sited BESS	0	8	12	**20**
Multi Family Housing	Rebate	EVSE	Commercial Charger Rebate	36	46	59	**141**
Various	Rebate	EVSE	Commercial Charger Rebate	142	167	190	**499**
New Construction	Rebate	EVSI	New Construction EVSI Rebate	36	230	485	**751**

In Table 18, units of measure for participants vary by asset category. Electric Vehicle Supply Equipment ("EVSE") and EVSI participants are measured based on port counts. Batteries (i.e., BESS) are measured using the number of batteries.

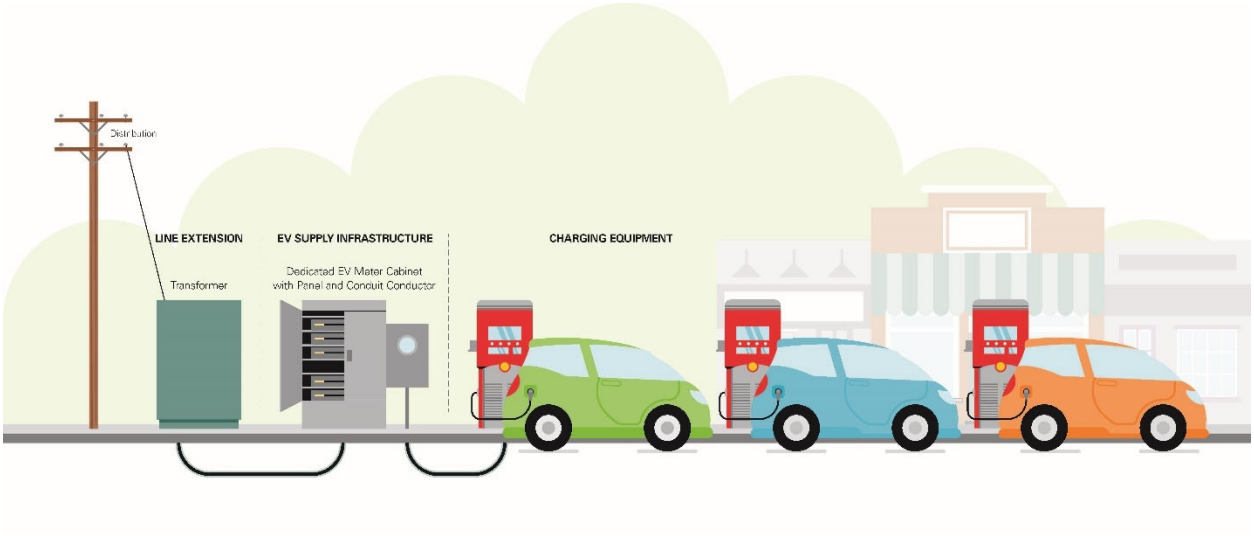
Program Modifications

i. Commercial EVSI

The Commercial EVSI program offers customers Company-owned, installed, and maintained infrastructure to support EV charging, including but not limited to new panels, conduit, and wiring up to the charger (illustrated in Figure 3 below). This work is completed by third-party contractors engaged by the Company.

EVSI does require a new electric service connection, for which the Company traditionally installs, owns, and maintains equipment. This service connection includes transformer upgrades, pads, poles, and new service conductors, as well as metering equipment for EV charging separate from the existing service at a given site. This work is done by the Company and is initiated under the Company's Electric Distribution Line Extension Policy. Customers may pay a contribution for this portion of the needed infrastructure after the Company provided construction allowance.

Figure 3: Diagram of Commercial EVSI



The table below summarizes the changes to the Commercial EVSI program. Each change is detailed in the sections that follow.

Table 19: Proposed Changes to Commercial EVSI Programs

Program	Current State	Proposed Changes
EVSI	Public Service provides EVSI through separate programs: Fleet and Workplace, MFH, Public Charging, Primary General Pilot, and Community Charging Hubs.	Consolidate programs for MFH, Fleet and Workplace, Public Charging, and Community Charging Hubs into single Commercial EVSI program and also include Primary General customers.
Small Business EVSI Rebate	The Company offers a $2,500 rebate per port for infrastructure installation costs incurred by small commercial customers that may not be able to participate in traditional EVSI programs due to port or capacity minimums required.	Enable small business participation under Commercial EVSI program by minimizing port requirements and capacity minimums, including: • Reduce four port minimum to two port minimum for L2 charging installations and no port minimum for DCFC. • Remove the 50-kW minimum equipment charging capacity requirement.
Curbside EVSI	There is no tailored option for EVSI in the public right-of-way.	Expand existing, approved program to include curbside capable EVSI equipment.
Future Proofing	Customers can only request EVSI to meet current needs.	Add future proofing option to EVSI program to provide certain future proofing to support future charging equipment needs.

a. Modification #1: Consolidate commercial EVSI offerings into one program; reduce port minimums; remove the minimum equipment charging capacity requirement; and include Primary General customers in program

The EVSI programs have experienced strong demand. While the applications for these programs vary widely, there are many similarities between the Company's existing EVSI programs. These similarities create an opportunity for the Company to consolidate its existing EVSI programs to achieve greater efficiency and promote greater customer clarity and understanding of the program offerings.

The Company proposes to consolidate the separate EVSI programs currently offered for MFH, Fleet and Workplace, Public, and Community Charging Hubs into a single "Commercial EVSI" program to simplify product offerings for customers and ease administrative burden. This program will be open to all eligible commercial customers and will have standardized eligibility requirements and enrollment processes. To ensure this consolidated program is accessible to small businesses, the Company is reducing port requirements from a four-port minimum to a two-port minimum for L2 chargers, adopting a no minimum requirement for DCFC, and removing the 50-kW minimum equipment charging capacity requirement. This

will eliminate the need to continue the separate Small Business Wiring rebate of $2,500 per port for infrastructure installation assistance originally designed to assist these customers when they were ineligible for the EVSI program.

In the inaugural TEP, a limited number of Primary General customers were able to participate in their respective EVSI program on a pilot basis. Based on customer feedback, the Company will continue to allow participation in EVSI for Primary General customers within the consolidated Commercial EVSI program, while also extending an opportunity to these customers the ability to obtain a rebate in lieu of EVSI, as described below. A rebate option for these customers may be appropriate due to the complexity of the projects to serve Primary General customers.

b. Modification #2: Expand existing approved program to include curbside capable EVSI equipment

EV drivers living in, or commuting to, densely populated urban areas may not have access to reliable EV charging. However, drivers may be able to use curbside chargers along streets. Cities have long been interested in developing this concept and a variety of charging solutions from streetlight-fed chargers to parking meter chargers have been identified as possible solutions. After review, the Company is proposing addressing the need for curbside-charging through installation of EVSI rather than through retrofitting streetlights.

Due to the complex nature of curbside projects in urban locations, the site selection process will demand significant consideration, including on forecasted street widening and redevelopment plans, community feedback, and coincident utility service work in the area. Collaboration among key stakeholders will be critical to minimizing disturbances to the EV service infrastructure and maximizing the potential for pairing project timelines with existing infrastructure upgrades being planned.

Public Service will work closely with cities interested in owning curbside L2 charging as well as community stakeholders and other utilities with right-of-way access to identify optimal locations for curbside EVSI installations.

c. Modification #3: Enhance EVSI program by providing certain future proofing

Customers participating in the Company's existing EVSI programs are currently eligible for installations sized to meet their needs at the time of application. Recognizing the steep growth rate of EVs expected in the coming years, customers often ask Company EV advisors for guidance or accommodations related to fulfilling future EVSI needs. Developing EV infrastructure in advance of anticipated demand is a trend being seen throughout the country through a variety of state and local building codes which require a combination of EV-installed, EV-ready, and EV-capable spaces. When installed during new construction, research has shown that future proofing EV electrical equipment can save up to four to six times the installation cost of charging stations when compared to retrofit costs.[35] In Colorado, precedent and support

[35]Southwest Energy Efficiency Project, EV Infrastructure Building Codes: Adoption Toolkit, available at: https://archive.swenergy.org/transportation/electric-vehicles/building-codes.

for future proofing has been set for a variety of use-cases within current building codes, state legislation,[36] and as required by state grant programs.

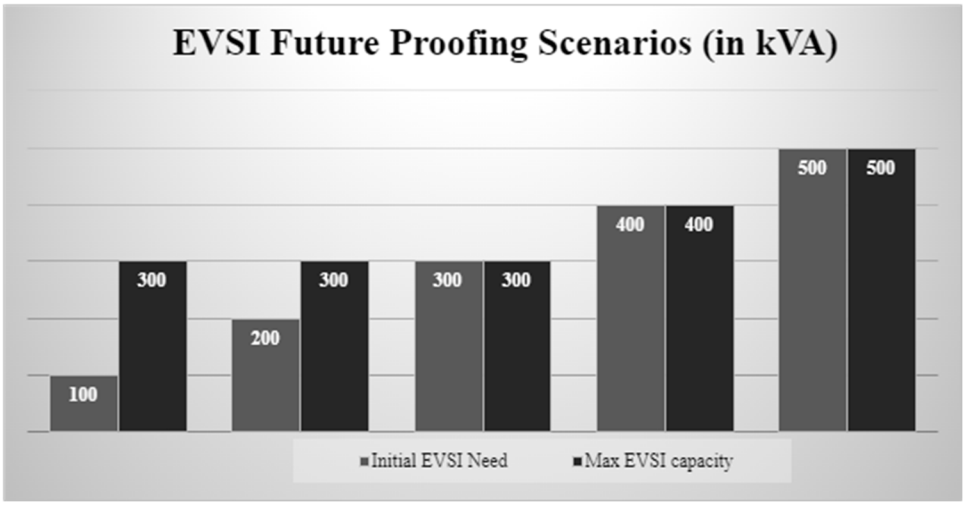
As with new construction, there is an opportunity for savings within EV projects by future proofing during the initial installation of EVSI at a customer site.[37] Additionally, future proofing designs would enhance the customer and user experience by limiting the amount of rework, charger downtime, and customer impacts required to initiate future EVSI installations at each site.

Proposal

The Company proposes to build certain EVSI capacity beyond what is needed to support the initial charging equipment installed, where appropriate, to accommodate customer plans (see Program Enrollment section below for more details). At this time, the Company has identified the need to limit the amount of future proofed capacity to an amount that the Company is confident the distribution grid can support without triggering a new capacity check. Public Service has determined that the appropriate upper limit for future proofing EVSI at this time is 300 kVA per site. The 300 kVA limit is inclusive of the initial charging equipment installed plus the future proofed EVSI capacity to support charging equipment that will be installed in the future.

The scope of future proofing work, as contemplated in this program will encompass upgrades to the conductor from the point of service to the EVSI cabinet (or equivalent), the electrical panel and associated components within the EVSI cabinet, as well as conduit for future branch circuits. Applications for EVSI that exceed the 300 kVA limit will not be eligible for future proofing but will still be eligible for EVSI to meet the capacity of the charging equipment installed. As depicted in the graph below, a project with 200 kVA of initial charging equipment demand can be future proofed up to 300 kVA of EVSI capacity, but a project with 500 kVA of initial charging equipment demand is limited to 500 kVA of EVSI capacity (i.e., no future proofed EVSI capacity), since 500kVA exceeds the 300kVA limit.

Figure 4: EVSI Future Proofing Scenarios



[36] HB 23-1233 as passed during the Colorado 2023 legislative session is still pending enactment.
[37] The International Council on Clean Transportation, Estimating electric vehicle charging infrastructure costs across major U.S. metropolitan areas, Aug. 2019, available at: https://theicct.org/sites/default/files/publications/ICCT_EV_Charging_Cost_20190813.pdf.

Program Enrollment
Customer enrollments for future proofing will utilize the Company's existing Commercial EV advisory process with some anticipated updates. The Company intends to capture the initial charging equipment needed and the future charging equipment anticipated in the EVSI application. The Company's EV advisors will also proactively ask the customer about future EV charging plans to ensure that EVSI future proofing is considered for the project. The EV advisor will work with the customer to determine the appropriate level of charging equipment to be installed now and if applicable the amount of EVSI future proofing to support future charging equipment.

To avoid service disruptions, customer contracts or extension agreements will be updated to include language requiring that customers inform the Company prior to installing additional chargers that will utilize the future proofed EVSI capacity. Public Service anticipates that charging equipment installed utilizing future proofed EVSI capacity will require on-site assistance from the Company.

Eligibility
To be eligible to receive Company-provided EVSI through any of the programs in our Commercial portfolio, the Customer must:

- Qualify as a commercial customer within the Company's electric service territory;
- Own, lease, or operate a site that provides EV or electric mobility (ebikes/scooters) charging;
- If participant is not the owner of the premises at which the EVSI is to be installed, participant must obtain express written consent from the property owner, in a form acceptable to the Company;
- Commit to installing a minimum of two L2 ports or one DCFC port per site;
- Provide the Company with any required license agreements, permits, or easements to install, own, and maintain the EVSI;
- Agree that all charging station load will be separately metered from any other load served at the premise;
- Provide acceptable proof that they have purchased charging stations for the number of EV-ready spaces being installed at first in-servicing, as well as dates for expected arrival of these charging stations prior to the Company beginning deployment of EVSI; and
- Contact Public Service to request and confirm approval prior to installing chargers on-site at future proofed EVSI sites to ensure no additional capacity upgrades are required.

ii. Primary General and Transmission General Wiring Rebate

Despite interest in the Commercial EVSI Primary General pilot program, the Company has received feedback from customers and internal stakeholders that the complexity of establishing a secondary service at these sites is limiting program participation. Public Service has determined that an alternative solution should be considered for Primary General ("PG") and Transmission General ("TG") customers to ensure our TEP programs are adequately positioned to support their unique circumstances. The Company is proposing a Commercial Wiring Rebate to be made available to all PG and TG commercial customers who are seeking to add EVSI to their sites. The proposed rebate will be $6,000 per port for L2 chargers and $7,000 per port for DCFC chargers. While the EVSI program will remain open to PG customers as well,

we anticipate the rebate option will be more widely implemented and anticipate this option will provide these customers with the flexibility they need to complete projects.

Eligibility

PG and TG customers looking to install L2 or DCFC charging infrastructure will be eligible for this rebate. Commercial EV advisors will continue to direct all commercial customers interested in EVSI to the Company-owned EVSI program. If it is determined through the advisory process that Company-owned EVSI is not appropriate for the customer's application, EV Advisors will direct these customers to apply for the wiring rebate.

iii. Commercial New Construction Wiring Rebate

Public Service introduced a MFH new construction rebate in 2021 for developers of MFH buildings that install wiring and related equipment to support EV charging above applicable code requirements. The rebate amount is based on the actual cost to install the wiring and equipment, up to $2,000 per parking space.

Installing wiring and equipment to support EV charging at the time of construction is more cost effective than installing EVSI in existing buildings. Specifically, it can be up to 75 percent more cost effective than retrofit EVSI applications based on the parking scenario.[38] By offering a rebate to cover the cost of this installation, Public Service seeks to promote cost efficiencies and remove a major barrier to installing charging equipment later as EV demand increases.

Participation within this rebate offering has been low since its inception. In discussions with developers, the Company has learned that interest in installing EVSI above local code requirements varies based on individual developer appetite, knowledge of the rebate, and the stringency of applicable EV codes. There is less interest in installing EVSI above code in jurisdictions with already stringent EV parking codes. The City and County of Denver, for example, requires that 100 percent of parking spaces include some form of EV-Capable, EV-Ready, or EVSE-Installed. Developers largely find Denver's code satisfactory to meet market demand and are generally not interested in going further.

In areas with less stringent code or no code at all, developers are more open to above-code EVSI at the time of construction, but cost, effort, and individual interest continue to be barriers to building out EVSI at the time of construction. As such, the Company's new construction wiring rebate can continue to play a positive role to further encourage EV charging availability and, by extension, drive EV adoption.

The Company is proposing two updates to the new construction wiring rebate to further encourage participation and expand charging infrastructure.

[38] Pacific Northwest National Laboratory, Electric Vehicle Charging for Residential and Commercial Energy Codes: Technical Brief, July 2021, available at: https://www.energycodes.gov/sites/default/files/2021-07/TechBrief_EV_Charging_July2021.pdf.

a. Modification #1: Expand eligibility from exclusively MFH to all new commercial construction

While MFH will remain likely the most common applicant for the rebate, we will expand eligibility to allow other building types to participate as well. As more municipalities adopt EV code for all commercial new construction, and more construction continues throughout the state, broadening rebate eligibility allows the Company to guide all customers towards easier and more cost-effective EV charging.

b. Modification #2: Set a prescriptive rebate amount

In talking with developers and the Company's energy modelers that work directly with developers within Public Service's Demand Side Management ("DSM") focused Energy Design Assistance ("EDA") program, the Company learned that developers have difficulty breaking out and providing an invoice for electrical equipment and installation costs specific to the EV infrastructure, as all electrical work is completed at the same time of construction. As such, Public Service is proposing moving to a set rebate amount per parking space, based on the equipment that is installed above code. This simplifies the application process for customers and provides an understanding of their total rebate amount during the design phase of the building construction, thereby providing a better customer experience. Rebate amounts are based on local and national studies of EV pre-wiring costs. The rebate amounts are designed to cover 100 percent of the average cost to install the EVSI. As such, it is not designed to cover 100 percent of the costs of large or more complicated projects. The table below shows the proposed incentive levels for installation-above-code scenarios.

Table 20: Proposed Incentives for Commercial New Construction Wiring Rebate

Incentive Per Parking Space		
Building Code Requirement	**Level of Installation Met**	**Rebate Amount**
No Requirement	EV Capable	$500
	EV Ready	$1,600
	EVSE Installed	N/A
EV Capable	EV Ready	$1,100
	EVSE Installed	N/A
EV Ready	EVSE Installed	N/A

In addition to these programmatic changes, the Company will also further refine advisory and outreach efforts to customers to maximize the reach of the program. This will include directing more focused outreach to certain jurisdictions and integrating outreach and education around this offering with advisory efforts for other new construction programs. While all new construction across the Company's service territory will be eligible for the rebate, the Company will target education and outreach to developers working in municipalities with less stringent or no EV codes, as we believe this rebate can help drive greater EVSI adoption in these areas. Additionally, the Company will further integrate advisory services for this offering with that already being directed to support the Company's existing programs for new construction developers.

Eligibility
Eligibility criteria will remain unchanged from the existing MFH New Construction Wiring Rebate, with the sole change of broadening participation outside of strictly MFH developments. Rebates are available to developers constructing all commercial buildings within the Company's service territory that:

- Provide a greater number of EV-Capable parking spaces (conduit for 240V circuit installed and panel capacity) or EV-Ready parking spaces (240V circuit installed) than required under the most stringent applicable state and local building code requirements;
- Take electric service from Public Service;
- Provide parking for residents, employees, or customers of the commercial building for such additional EV-Capable parking spaces or EV-Ready parking spaces;
- Will not receive, and has not received, any other program funding addressing the same costs addressed through the Company's Commercial New Construction Wiring Rebate Program; and
- Meet all other Commercial New Construction Wiring Rebate Rules and Requirements set forth in application terms.

Developers must apply for the rebate during the design phase of the project. This is to ensure that the rebate can impact their decision to install equipment above the local code requirements. The rebate will be released to the customer after construction is complete and the Company has verified that the equipment has been installed as stated within the application.

iv. L2 Charger Service

This program alleviates the upfront cost burden for commercial customers looking to electrify vehicles by providing them Company-owned L2 charging equipment for a monthly fee. This turn-key approach is often preferred by smaller businesses and companies without capital available for EV projects. In addition, customers who use this service rather than managing their own EVSE installations have reported shorter installation and inspection schedules, fewer hours of dedicated staff time per project, and a preference for the ease of billing and communications setup, which is included in the program software subscription. The fee is applied to the customer's monthly electricity bill and covers the cost of the charger, installation, and maintenance for a 10-year period. The tariff will consist of various pricing levels, based on the cost of the selected charger. Customers may participate in this program regardless of whether they have taken Company-owned EVSI.

Consistent with the proposed changes to the EVSI portfolio, the Company intends to expand eligibility for this program to all commercial customers.

The Company plans to issue an RFP in 2023 for L2 chargers that will inform the options available, the budget for these rental options, and the changes necessary to applicable monthly fees.

Eligibility
Commercial customers can learn about, and enroll in, this program through Xcel's Business EV Solutions webpage (https://co.my.xcelenergy.com/s/business/ev). Commercial EV advisors and FEAP will also direct customers to this offering and support in the enrollment process.

If wiring work is needed prior to charger installation, the customer may either participate in Company-owned EVSI or install their own wiring and submit documentation that demonstrates that a licensed master electrician performed the work (or other approved labor from section 40-5-107(3)(a), C.R.S.).

The Company will maintain a prequalified list of choices for customers to choose from based on competitive bids from vendors for L2 equipment. This structure enables customers to choose from a variety of price points and value propositions depending on their needs.

v. Commercial Equity L2 Charger Rebates

Public Service currently has separate programs to address the cost burdens and barriers associated with the purchase and installation of L2 EV chargers and DCFCs for equity-eligible commercial customers. To continue supporting these customers in transitioning to EVs, increase participation, and reduce administrative burden, the Company proposes several program modifications. These are summarized in the table below.

Table 21: Proposed Changes for Commercial Equity L2 Charger Rebates

Existing Program (s)	Current State	Proposed Change
Small Business Charger Rebate Available to installations qualifying as IQ or HEC	Up to $2,000/L2 port for 3 port maximum or $2,500/port	Create a Commercial Equity L2 Charger Rebate program to standardize L2 charging for equity-eligible commercial customers. No rebates offered for DCFC charging stations. Remove minimum port or charging capacity requirements. Update rebate amounts to a standard $2,500 per port, available for L2 chargers only Replace former IQ or HEC qualifications with new equity criteria For MFH IQ and NEEP participants, offer an additional $6,000 rebate for a total of $8,500
Community Charging Hub Charger Rebate Available to hubs qualifying as IQ or HEC	Up to $8,800 for four L2 charging or up to $40,000 for configurations with four L2 charging stations with four ports and a single port DCFC station	
Fleet & Workplace Charger Rebate Available to installations qualifying as IQ or HEC	Up to $2,200 per L2 Charger and DCFC equipment up to $45,000	
MFH Rebate Available to installations qualifying as IQ or HEC	Up to $8,500 per L2 Charger	

a. Modification #1: Standardize offerings by creating one Commercial Equity L2 Charger Rebate program

The Company proposes to consolidate these offerings into one Commercial Equity L2 Charger Rebate program targeted to L2 charging applications that includes a uniform rebate amount and eligibility requirements for all participants, with the exception of IQ MFH, which will maintain a higher rebate. For example, the Small Business Charger Rebate currently has a three port and 50 kW maximum, the Community Charging Hub Charger Rebate has a four-port minimum, and the Fleet and Workplace Charger Rebate has no port or charging capacity constraints. Consistent with the reductions in port and charging capacity requirements for other Commercial programs, the Company is removing any port or charging capacity requirements to standardize the Commercial charger rebate program, ensuring that the program is accessible to all commercial customers, is efficient, and is easy for customers to understand.

b. Modification #2: Update rebate amounts

The Company proposes to update rebate amounts to improve participation and account for inflation since 2020, when the rebate amounts were originally set. The proposed rebate amount is $2,500 per port for the purchase of an L2 charger. This rebate is intended to cover approximately 50 percent of the cost of a Wi-fi capable, networked, commercial-grade L2 charger.[39] The rebate amount is based on current market conditions and the Company will continue to assess the amount during implementation of the TEP.

The Company proposes to maintain the IQ MFH rebate level at $8,500 per port and include NEEP as an additional qualifying criterion. IQ MFH customers face unique challenges that differ from other commercial customers. This program seeks to alleviate barriers preventing residents of these MFH units from electrifying their vehicles, by enabling MFH property owners to install at-home L2 chargers for their residents. Due to capital expenditure restrictions based on the financing structure of IQ projects, these MFH customers typically need to have all costs for EV projects covered upfront, and they often involve site-specific costs for equipment that other residential or commercial chargers may not require, such as protective bollards, wheel stops, striping/signing, networking costs, repeaters for below grade parking, and other items necessary to properly install chargers specific to the needs of a municipal jurisdiction or housing provider.

The Company worked with stakeholders and issued a 60-Day Notice in November 2022 to increase the MFH shared parking charger rebate amount to up to $8,500 per port (up to $17,000 for a L2 dual-port charger), allowing the Company to reimburse applicants for up to the full cost of the installed charging equipment. In the same notice, the Company noted that few IQ and HEC MFH properties have assigned parking and, thus, proposed to collapse the two types of rebates included in the inaugural TEP into one rebate that provides support for upfront costs up to the stated maximum. These changes were filed in Proceeding No. 20A-0204E.[40]

[39] E Source, "Residential Level 2 EV Charger Costs."
[40] Xcel Energy, Summary of 60-Day Notice: Multifamily Housing (Income-Qualified/Higher Emissions Community) Charger Rebate Program - Program Adjustments, available at: https://www.xcelenergy.com/staticfiles/xe-responsive/Company/Rates%20&%20Regulations/Multifamily%20Housing%20Income-Qualified%20and%20Higher%20Emissions%20Community%20Charger%20Rebate%20Program%20Adjustments%2060-Day%20Notice.pdf.

c. Modification #3: Apply new Equity Eligibility Criteria

Currently, various commercial customers can qualify for enhanced rebates either through specific IQ measures or by being located in an HEC. Public Service is replacing the existing IQ and HEC criteria with new and broadened equity-eligibility criteria for the Commercial portfolio, which (among other things) recognizes IQ customers and DI communities. The revised criteria are discussed in Section 2.B. of this TEP, "**Equity Eligibility**."

Program Enrollment
Commercial customers can learn about the programs and enroll through the Company's Business EV Solutions webpage (https://co.my.xcelenergy.com/s/business/ev). Commercial advisors and FEAP will also direct customers to this offering and support the enrollment process. The customer can verify whether they meet the equity-eligibility criteria by consulting the Company's EV advisors or through publicly available online sources.

Customers may procure charging equipment on their own and may either participate in Commercial EVSI or install their own wiring and submit documentation to the Company that demonstrates a licensed master electrician performed the work (or other approved labor from section 40-5-107(3)(a), C.R.S.) and that the eligible EV charger has been installed. The Company will maintain a prequalified list of equipment choices for customers to choose from.

Eligibility
Rebates for this program are available to any Public Service customer who:

- Is a commercial customer located within the Public Service territory;
- Meets the new equity eligibility criteria;
- Takes electric service from the Company at the premises where the eligible EV charger is installed;
- Will not receive, and has not received, any other funding or rebates from the Company addressing the same costs addressed through this rebate program; and
- If the applicant is not the owner of the site at which the eligible EV charger is to be installed, the applicant must obtain express written consent from the property owner, in a form acceptable to the Company.

vi. No Regrets Investments - Distribution Grid Reinforcement

In anticipation of the rapid acceleration of EV adoption, consideration must be given to distribution capacity available on the electric grid. Traditional models of load forecasting that rely on historical load growth data are not sophisticated enough to adequately address beneficial electrification, including forecasting transportation electrification. Public Service has begun developing new models for load forecasting to inform more agile electrification planning efforts. The Company has retired its fixed growth rate methodology that was used in its legacy planning tool after adopting Integral Analytics' LoadSEER™ forecasting platform. Through LoadSEER™, the Company utilizes the Spatial Allocation functionality, which inputs system-level forecasts and allocates them throughout the distribution system. The use of this forecasting tool facilitates a more granular assessment of load impacts on the distribution system and has enabled the identification of both existing and forecasted vulnerabilities on the distribution system.

Within this TEP, Public Service introduces an opportunity to support the electric grid through certain proactive efforts, such as feeder and substation transformer upgrades, to address anticipated *future* capacity constraints resulting from non-residential EV load growth *now*, instead of reacting to them when they occur. This effort will fund the proactive grid reinforcement efforts found to be most urgently needed and address interim distribution projects necessary to support EV adoption, pending the identification of additional projects in future planning efforts such as upcoming Distribution System Plan filings.

Proposal
The Company proposes a three-year, $50 million dollar "No Regrets Investments" program to facilitate the analysis and distribution equipment upgrades needed to support the distribution grid in areas where capacity availability is already limited. Investments for this program would not be customer-specific but would instead be informed by data showing geographic forecasts for EVs in comparison to feeder loads. This approach to grid reinforcement allows the Company to prepare for increased levels of EV adoption and participation across all TEP portfolios but will be especially helpful in planning for widespread MHD EV adoption.[41]

vii. Customer Sited Battery Demonstration

The rapid expansion of DCFC availability for both public and private use cases is a critical component to EV adoption. Some common barriers that are often faced by customers considering the installation of DCFC are high bills with relatively low utilization, or lack of capacity availability at their site that necessitates upgrades to the distribution system that customers are financially responsible for. As a mechanism to seek to address these challenges, the Company will support the development of customer sited batteries via a demonstration project.

A BESS can potentially provide multiple benefits to customers with DCFC on site. It can be used in conjunction with the Company's commercial rate designs, specifically S-EV-CPP, to curtail high charging demands at peak times and seek to increase the financial viability of DCFC stations. In instances where capacity improvements are required, a BESS may provide the necessary capacity for DCFC installations on shorter timescales than traditional distribution upgrades. A third benefit provided by on-site batteries is resiliency for charging operations. During outages, batteries can be used to provide charging to the public and critical fleets such as first responders.

While BESS have the potential to lower costs and speed timelines for DCFC implementation, barriers remain that limit their deployment. High upfront battery costs and project complexity are the two primary barriers cited by customers when considering BESS installations. The Company seeks to alleviate these barriers by partnering with vendors in the space to identify customer needs, design solutions according to those needs and offering to build, own, and operate these systems on the customer's behalf. The Company will pay for all costs associated with the design, construction, and maintenance of the BESS, with costs being passed through to the customer through flat monthly bill payments over the lifetime of the asset. For this demonstration effort, a portion of these costs will be subsidized, as outlined below, in an effort to spur investment in this space and enable further DCFC deployment.

The Company is proposing to provide participants in the demonstration with a full turnkey solution for design, construction, operation, and decommissioning of a BESS, thus simplifying the project and reducing

[41] See ICCT White Paper, Near-Term Infrastructure Deployment to Support Zero-Emission Medium- and Heavy-Duty Vehicles in the United States, Pierre-Louis Ragon, Sara Kelly, Nicole Egerstrom, Jerold Brito, Ben Sharpe, Charlie Allcock, Ray Minjares, and Felipe Rodríguez (May, 2023), available at https://theicct.org/wp-content/uploads/2023/05/infrastructure-deployment-mhdv-may23.pdf.

the upfront capital costs of these systems. This option will operate similarly to the charger rental programs included in the TEP. However, the on-bill charges will vary by project due to differences between projects and procurement strategies, as outlined below.

Program Enrollment and Operations
The Company will work with a list of pre-qualified vendors that offer turnkey BESS solutions to provide full-service project delivery to customers. These vendors will be selected through an RFP process and scored according to their ability to deliver end-to-end BESS projects. If a vendor desires to participate in the demonstration program but is not on the Company's pre-qualified list, or a customer has a pre-selected vendor that is not pre-qualified, they can still participate but must undergo evaluation by the Company and prove capable of providing full turnkey services.

BESS installed through this demonstration will be constructed by a pre-approved vendor on the customer's premises behind a single meter. The customer will receive the benefits associated with the BESS and will be responsible for 80 percent of the cost of the asset. The BESS costs not paid for by the customer will be passed through to all customers. Specifically, the Company is proposing to pass through 20 percent of the capital costs of the projects.

An overview of how the customer charge will be calculated is as follows:

Customer Charge = (C – CIAC) x 0.8 x I / 12 + O&M

- C = Capital Cost of Company-owned BESS
- CIAC = Optional Contribution in Aid of Construction
- I = Annual Average Carrying Charges for the Company-owned BESS
- O&M = Monthly routine operations and maintenance expenses as defined in the Customer Service Agreement

As shown above, 80 percent of the capital cost of the system and 100 percent of the system O&M will be recovered from the individual customer. The customer will be given the option to make a down payment, referenced above as a CIAC. Any non-routine O&M such as unforeseen repairs or decommissioning will be passed through to the participating customer as one-time bill payments. Each customer will sign a Customer Service Agreement ("CSA") that will define customer and Company responsibilities, provide technical specifications and use cases of the BESS, and define vendor and Company O&M responsibilities. The CSA term will be 10 years to align with the useful life and depreciation schedule of the BESS. Upon termination of the CSA, the customer will have the option to have ownership of the asset transfer to them, have the Company and its vendor decommission the asset at the customer's expense, or to replace the BESS with a new system, which would necessitate the negotiation of a new CSA.

Eligibility
To be eligible to participate in the demonstration, customers must take commercial service from the Company and install the BESS in conjunction with DCFC deployment. Any customer participating in this demonstration must also be enrolled in the S-EV-CPP rate. The DCFC can be for public or private use. Any customer participating in the demonstration must be in good credit standing and willing to submit supporting financial information to the Company. The Company reserves the right to withhold this premium service from customers that are determined to be a high default risk, as it would place undue risk on non-participating customers. Vendors that wish to utilize this demonstration program must meet baseline vendor financial requirements and demonstrate the ability to provide full-service BESS solutions across the entire project lifetime.

Due to the novelty of this technology and the use cases referenced here, the Company will be capping the demonstration program budget at $10 million dollars with up to $2 million in funding available for a single project.

F. Innovation

Summary
Under its inaugural TEP, the Company proposed and implemented a portfolio of projects to increase and broaden access to electricity as a transportation fuel, minimize system costs, increase benefits of electric transportation, and inform future TEPs.[42] This portfolio was developed to stimulate innovation, consistent with SB 19-077, through projects resulting in both short and long-term benefits. The Company's goal was to develop partnerships, promote innovation, and engage in research around EVs and charging that could grow to support our TEP. Through this effort, now known as Innovation, the Company has pursued a series of projects, with broad stakeholder support. These projects are listed in the following table:

Table 22: TEP 2021-2023 Innovation Projects[43]

Project Name	Project Objectives
Electric Car Sharing for Underserved Communities Pilot	Providing funding and advisory for vehicles and infrastructure to support electrification of car share vehicles.
Electrify Paratransit Mobility Pilot	Providing funding and advisory for vehicles and infrastructure to support electrification of paratransit fleet vehicles.
Municipal Refuse Fleet Electrification Pilot	Providing funding and advisory for vehicles and infrastructure to support electrification of refuse fleet vehicles.
Residential Resiliency and Managed Charging Project	Developing a grid planning tool to enhance grid resiliency and mitigate impacts of EV charging.
V2X and Resilience Project	Conducting limited demonstrations using V2H, V2B, V2G, and V2X technologies.
DCFC Charging + Storage Demonstration Project	Demonstrating the use of stationary storage to mitigate grid impacts of DCFC.
EV Load Disaggregation Project	Developing tools to enable detection of EV loads using meter data.

Due to the rapidly evolving nature of the EV space, it is vital to continue investments in innovation. In the 2024-2026 TEP, the Innovation portfolio will continue to support the Company's vision to stimulate the innovation necessary to realize the next generation of EV technologies.

For the 2024-2026 TEP, the Company is proposing four projects within our Innovation portfolio:

(1) funding for the electrification of special application vehicles;
(2) continued investment in V2H, V2B, V2G, and other V2X applications;
(3) accelerated and scaled adoption of school bus electrification; and
(4) an open innovation pathway that extends and concludes current portfolio work from the 2021-2023 TEP and provides Company support for new EV innovation needs.

[42] This portfolio has been reported on to date as the Partnerships, Research and Innovation portfolio.
[43] The EV Load Disaggregation Project has not yet launched.

Budget and Assumed Participation

Table 23: Budget for Innovation Portfolio

Spend Type	Category	2024	2025	2026	2024-2026
Capital (excluding Rebates)		**$4.0**	**$5.9**	**$9.1**	**$19.0**
	EVSI	$0.78	$2.5	$4.1	$7.3
	EVSE	$0	$1.5	$2.8	$4.3
	BESS	$1.2	$0.87	$1.2	$3.3
	IT	$2.0	$1.0	$1.0	$4.1
Capital (Rebates)		**$0**	**$10.3**	**$15.3**	**$25.7**
	School Bus	$0	$5.6	$8.0	$13.6
	Special Application Vehicle Electrification	$0	$2.8	$4.6	$7.4
	Open Innovation & EVSI + EVSE	$0	$1.9	$2.7	$4.7
O&M Expenses		**$6.8**	**$5.9**	**$5.9**	**$18.6**
	Education and Awareness	$0.50	$0.35	$0.40	$1.3
	Infrastructure Maintenance	$0.10	$0.28	$0.48	$0.9
	Advisory	$0.33	$0.33	$0.33	$1.0
	IT	$0.10	$0.10	$0.10	$0.3
	Program Administration	$5.7	$4.9	$4.6	$15.2
Total		**$10.7**	**$22.1**	**$30.3**	**$63.2**

Table 24: Innovation Portfolio Assumed Participation

Spend Type	Asset Category	Program Name	Participants 2024	Participants 2025	Participants 2026	Participants 2024-2026
Rebate	Vehicles	School Bus Electrification	0	14	20	**34**
XE-Owned	EVSE	School Bus Electrification	0	15	23	**38**
XE-Owned	EVSI	School Bus Electrification	0	14	20	**34**
XE-Owned	Battery	School Bus Electrification	0	0	1	**1**
Rebate	Vehicles	Special Application Vehicle Electrification	0	5	8	**13**
Rebate	EVSE	Special Application Vehicle Electrification	0	5	8	**13**
Rebate	EVSI	Special Application Vehicle Electrification	0	5	8	**13**
Rebate	TBD	Open Innovation	TBD	TBD	TBD	**0**
XE-Owned	EVSI+BESS	DCFC + Storage	1	0	0	**1**
XE-Owned	IT	Load Detection & Disaggregation	1	0	0	**1**
XE-Owned	EVSE	V2X	0	8	12	**20**
XE-Owned	EVSI	V2X	0	8	12	**20**

Goals and Objectives

In certain industry segments such as trucking, agriculture, construction, mining, emergency services, and school transportation, EV adoption has been slow, due to significant hurdles, particularly for MHD vehicles.[44] In addition, new technologies such as V2G have the potential to be grid resources, but they are still not readily available in the market.

The Innovation portfolio can help address these issues, while promoting equitable access to the benefits of EVs for customers and communities in culturally, geographically, and socioeconomically diverse settings. Through targeted project and partner selection, the Company can substantially increase equitable access to EVs within the Company's service territory, test new technologies, and better serve a diverse set of

[44] Fuels Institute, The Easiest and Hardest Commercial Vehicles to Decarbonize, April 2022, available at: https://www.fuelsinstitute.org/research/reports/decarbonizing-medium-and-heavy-duty-vehicles.

customers. The Innovation portfolio reduces barriers to vehicle electrification including by providing funding through rebates or direct investment in EVs and charging infrastructure.

Project Descriptions
The four projects that will make up this portfolio in 2024-2026 are described below.

Table 25: Projects in Innovation Portfolio

Projects	Description
SAVE	This project aims to accelerate and promote adoption of HD EVs, in three sectors, with a focus on equitable access to the benefits of EVs where the vehicles operate. The three sectors are as follows: • Agriculture, Regional Trucking, Farming, and/or Ranching • Construction, Mining, and/or Long-Haul Trucking • Emergency Response
V2X Demonstrations	This project will continue to expand upon V2X demonstration projects initiated in the 2021-2023 TEP, including: • V2G Operation Tools • MHD V2G • V2B for Light-Duty Vehicles • V2G Residential • V2X Resilience
School Bus Electrification	This project will: • Research school bus fleet electrification at a larger scale • Research deployment of V2G capable fleet vehicles • Inform potential resilient charging hub deployment methodologies • Link to the V2X project for deploying at scale electrified fleets serving the public interest for emergency backup power response. Rebates for electric school buses are provided at a cost of approximately $400,000 per bus. EVSI and bi-directional EVSE are provided to enable V2G capabilities. A potential resilient charging hub may be developed, and insights about end of vehicle battery life may be studied.
Open Innovation	Through Open Innovation the Company will conclude two projects under development in the 2021-2023 TEP: • DCFC Charging + Storage • EV Load Detection and Disaggregation The Company will also identify new and additional projects in Open Innovation based on the needs of the EV ecosystem. The Company will advance these additional projects through the 60-Day Notice process.

i. SAVE

This project aims to accelerate and promote adoption of EVs, particularly trucks, and heavy equipment in three sectors: (1) agriculture, regional trucking, farming, and ranching; (2) construction, mining, or long-haul trucking; and (3) emergency response. Emissions from vehicles within these categories are often amongst the highest on a per vehicle basis, and these vehicles serve broader community and customer interests.[45] Fuel costs represent a high percentage of these vehicles' operating expenses due to long operating hours.[46] The Company will accelerate adoption of EVs in these sectors by providing upfront rebates to eligible participants along with funding for EV charging infrastructure and equipment. The project will demonstrate how the economic benefits of EVs can lower customer fuel bills, provide operation and maintenance cost savings, reduce emissions, and promote innovation among the communities served by these vehicles. Preference will be given to applicants in rural communities, as rural regions have low EV adoption rates compared to urban and metro settings.[47] The SAVE project is intended to save customers money on vehicle fuel and operation costs, promote the economic resiliency of rural and agricultural communities, promote EV infrastructure development, and lower greenhouse gas emissions.

ii. V2X Demonstrations

The Company launched several V2X demonstrations through the 2021-2023 TEP. This project will continue to expand upon the foundational V2H, V2B and V2G work the Company has undertaken and build upon its learnings. This Innovation initiative will also help inform the use of future V2X technologies for other TEP programs and the grid, such as the EVAAH backup power option described earlier. For 2024-2026, the Company will focus on the following aspects of V2X:

- **V2G Operation Tools.** The operation of EVs as grid assets in the future will require oversight and management by the Company's grid management systems. This portion of the project will fund development of tools and resources to effectively integrate EVs into the Company's greater strategy.

- **MHD V2G Applications.** Many OEMs are beginning to design their EVs with bi-directional capabilities. This project will explore how the Company can leverage MHD vehicles with large batteries to support the electrical grid. This work includes evaluation of vehicle usage patterns to determine their ability to contribute as a grid resource and investments in the infrastructure and charging equipment necessary to support V2G applications. Where possible, vehicles obtained through the SAVE project will be used.

- **V2B for Light-Duty Vehicles.** This project will expand upon an earlier residential-focused demonstration to include additional charger, vehicle, and customer types focusing on municipalities and businesses and their buildings. The project will evaluate how successfully customers are able to

[45] Fuels Institute, The Easiest and Hardest Commercial Vehicles to Decarbonize, April 2022, available at: https://www.fuelsinstitute.org/research/reports/decarbonizing-medium-and-heavy-duty-vehicles

[46] US Department of Energy, Research and Development Opportunities for Heafy Trucks, June 2009, available at: https://www1.eere.energy.gov/vehiclesandfuels/pdfs/truck_efficiency_paper_v2.pdf ; The International Council on Clean Transportation, How Much Does an Electric Semi Really Cost?, February 2022, available at: https://theicct.org/cost-electric-semi-feb22/

[47] Nebraska Public Media, The toughest stretch: Rural Colorado and the push to electrify roadways, Jan. 2023, available at: https://nebraskapublicmedia.org/en/news/news-articles/the-toughest-stretch-rural-colorado-and-the-push-to-electrify-roadways/; Environmental and Energy Study Institute, Beyond Cities: Breaking Through Barriers to Rural Electric Vehicle Adoption, Oct.2021, available at: https://www.eesi.org/articles/view/beyond-cities-breaking-through-barriers-to-rural-electric-vehicle-adoption.

implement this technology and their ability to participate in existing Demand Response ("DR") programs to provide greater benefit to customers and the electric grid.

- **V2G Residential.** OEMs have started offering systems that provide backup power for homes. Many are also considering V2G for their customers, and the Company believes there could be demonstration opportunities within the 2024-2026 timeframe. This project allocates funds to pilot a limited number of residential V2G installations when the technology has been approved for commercial deployment.

- **V2X Resilience.** Wildfires, floods, severe storms, and other disasters may force residents to evacuate their homes. In these situations, it is vital to provide emergency evacuation centers with access to power, food, shelter, heating, cooling, medical care, and communications. To improve the resilience of these designated sites, the Company can equip them with reliable back-up power systems. V2X has the potential to provide this service cost-effectively with low environmental impacts, including by potentially using electric school buses as emergency back-up power supplies. Bus manufacturers today are incorporating bi-directional capabilities into electric buses as a standard feature. Working with our school district and industry partners, the Company will develop an electric school bus back-up power solution to serve critical loads within a designated resiliency center. This design can be used as a blueprint to enable similar installations in other communities. Xcel Energy has applied for the Department of Energy's Grid Resilience and Innovation Partnerships grant opportunity to support this concept. Should the Company be a recipient, the grant funding will be leveraged to increase the impact of this project.

iii. School Bus Electrification

The 2021-2023 TEP offered a school bus electrification rebate program that covered the incremental cost between an ICE bus and a battery electric bus. Since the launch of the program, only three applications have been received, but no rebates have been distributed to customers. Prospective program customers have shared feedback on the current program, noting the following:

- First, fleet operators are often hesitant to invest in new technologies as integrating one or two electric buses into their larger fleets creates additional burdens. Difficulties include complications associated with vehicle procurement, EV charger and service infrastructure costs, the need for driver and mechanic training, fleet maintenance and operations re-tooling costs for new technologies, and administrative impacts to manage a small pilot vehicle deployment. These additional considerations make it challenging for fleet operators to adopt small scale deployments.

- Second, there is a lack of available funds to cover incremental costs associated with purchasing an electric bus, including non-vehicle costs such as the program administration, re-tooling for maintenance and operations, and driver and mechanic training of a new vehicle type.

- Third, there is a lack of desired vehicle models available due to OEM supply chain constraints and other factors.

- Fourth, dozens of Colorado school districts in the Company's service territory are waitlisted or applying for the Environmental Protection Agency's ("EPA") Clean School Bus Program Grants. While the Company's school bus electrification rebate is complementary to EPA funding, customers are not willing to move forward without knowing whether they will be awarded EPA funding.

Considering the significant environmental and public health benefits associated with school bus electrification for some of our most at-risk populations, Public Service proposes several enhancements to further explore the potential of utility support to materially advance this lagging area of transportation electrification. The enhanced project will offer rebates for the cost of electric school buses up to an anticipated $400,000 per bus. These rebates will be disbursed by targeting two to four fleet operators who seek to electrify at-scale, and each have the capacity to accept preferably a minimum of eight electric buses into their fleet. Preference will be given to fleet operators or school districts serving rural[48] and equity-eligible communities, as well as those who can bring matching funds from state and/or federal programs. Investment in over 30 buses is anticipated. Rebates will be contingent upon the fleet operator, school district, or vehicle owner agreeing to allow the Company to use these bi-directional, V2G-capable electric buses as grid resources. Specific parameters for how vehicles will be dispatched, allowed battery capacity to be used for grid services, the frequency that assets can be used, and other details will be determined through consultation with the fleet operators. The intention is to ensure that the electric buses are always available for their primary purpose: transportation. Availability for grid services is a secondary consideration. The Company will also invest in the service infrastructure and bi-directional charging equipment that will support future V2G exports. The Company will also investigate the possibility of the Company retaining battery ownership at end-of-vehicle-life to re-purpose as stationary energy storage assets.

The project will also aim to potentially deploy one Resilient Charging Hub ("RCH"). The RCH will serve to ensure continuity of charging operations for the district in the case of unintended grid interruption and inform the optimal design and deployment of such a hub concept for other commercial electric fleet operators in the future. The goal is to work with a school district or school bus fleet operator who currently has, or is willing to, install photovoltaic ("PV") solar energy generation at their site within the project timeline. The Company will pair this customer asset with BESS, switchgear, and controls to create the RCH. Approximately $2,120,000 is being held in reserve for the potential development of this concept. However, if necessary, these funds may be repurposed to offset unexpected increases in the procurement costs of electric buses and bi-directional charging equipment.

The project will also conduct research with entities like the Electric Power Research Institute ("EPRI"), the National Renewable Energy Laboratory ("NREL"), customers, and others to inform optimal pathways for achieving transportation electrification at scale. Insights from this work will be used to help develop the Innovation school bus project, and its intended outcomes.

iv. Open Innovation

Technology in the EV space is evolving rapidly, and the Innovation portfolio is a vehicle to support enhanced customer experiences, operational efficiencies, and grid benefits. The Open Innovation project is designed to act as a bridge for the current DCFC Charging + Storage project, and the EV Load Detection and Disaggregation project. Both projects need to extend their implementation into the 2024-2026 TEP because of deployment delays.

For the EV Load Detection and Disaggregation pilot, the Company plans to convert the pilot into a full program during this TEP, including with the option for the Company to use information gathered through load detection and disaggregation to engage in customer-facing marketing. The benefits of identifying EV load on our system for purposes of grid planning and marketing purposes are substantial. The Company

[48] The U.S. Census Bureau defines rural as territory and housing units not defined as urban. The Census Bureau defines an area as urban using criteria including total population thresholds, density, land use, and distance. More information on this definition is available at https://www.census.gov/content/dam/Census/library/publications/2016/acs/acsgeo-1.pdf

plans to complete all regulatory filing requirements necessary to roll out a full EV Load Detection and Disaggregation program during this TEP.

Open Innovation is also an opportunity to address rapidly evolving needs within the EV ecosystem in a more dynamic manner. Through Open Innovation, the Company will be able to respond to changing market conditions, customer needs, grid impacts, and equity considerations. Such projects could include demonstrations of high-powered charging systems, induction charging applications, or other solutions that could reduce costs or increase the benefits of EV charging.

Open Innovation can serve as a unique platform for stimulating innovation and cultivating partnerships with communities and businesses in our service territory. Through Open Innovation, the Company will engage stakeholders to consider innovative EV projects for proposals using the 60-Day Notice process. The Company will review opportunities based on viability, level of innovation, impact, equity considerations, and potential to scale. The opportunities best suited to Innovation's mission will be selected and implemented during the TEP.

Target Market and Qualifications
Innovation projects must include Public Service electric customers. Preference will be given to program applicants who, in addition to meeting the minimum requirements for each Innovation project, can also show:

- an equity component to the project (e.g., meeting the Company's equity criteria for commercial or residential applications); or
- an ability to obtain or provide supplemental funding to stretch and further the impact of the Company's investment.

The following table describes the target markets and expected eligibility standards for the four proposed Innovation projects. Eligibility standards have been designed to maximize the impact of the projects and are provided as preliminary guidelines. Due to uncertainties inherent to the nature of the portfolio, reasonable flexibility will be exercised.

Table 26: Target Markets and Customer Eligibility Requirements for Innovation Portfolio

Projects	Target Market	Eligibility
SAVE	Agriculture, Regional Trucking, Farming, Ranching	• Own or lease a farm, ranch, feedlot or other similar associated business within the Company's electric service territory and where agriculture is the primary source of income; or • Work closely with farmers and ranchers to support the agriculture industry (large animal veterinarians, farriers, suppliers, service providers, etc.); or • Regularly operate regional trucking in or through rural and agricultural communities and provide economic benefit to those communities. • Own, lease, or operate an eligible electric (including hydrogen fuel cell electric) vehicle that will operate in commercial and regular use as a part of the project.

	Construction, Mining, Long-Haul Trucking	• Construction, mining or heavy equipment fleet and site operators; or • Construction site owners or operators who can keep in place, following site development, the EVSE/EVSI to support fleet, workplace, or publicly accessible charging stations. • Long-haul truck fleet operators • Own, lease, or operate an eligible electric (including hydrogen fuel cell electric) vehicle that will operate in commercial and regular use as a part of the project.
	Emergency Response	• Fire truck fleet operators or contracted authorities for police and fire departments, public utility services, ambulances or municipalities who operate or contract with first responder fleets • Own, lease, or operate an eligible electric (including hydrogen fuel cell electric) vehicle that will operate in commercial and regular use as a part of the project.
V2X Demonstrations	V2G Operation Tools	• Informing potential DERMS developer and aggregator solutions for Company needs
	V2G for MHD EVs – Commercial customers with a focus on MHD fleets	• Customer is encouraged to participate in V2X-specific DR program • Customer pays the standard EVSE monthly rental fee • Customer will require dedicated meter and EVSI • Customer will need to either participate in Company EVSI program or install EVSI and receive a rebate
	V2B for light-duty vehicles – Commercial customers. Additional focus will be paid to MHD fleets	• Customer is required to participate in V2X-specific DR program • Customer pays the standard EVSE monthly rental fee • Customer will require dedicated meter and EVSI • Customer to participate in Company EVSI program or install EVSI and receive a rebate
	V2G for Residential EVs – Subset of participants within bi-directional charger rental demonstration	• Customer must participate in the Company's bi-directional charger rental offering • Customer is required to have a qualified EV • Customer must participate in the Company's managed charging program • Customer has the option to either get the EV Charger and Wiring Rebate by having a Company-contracted electrician perform the wiring work, or hire their own electrician to do the wiring and apply for the EV Charger/Wiring Rebate upon installation

	V2X Emergency Preparedness Resilience – Electric service residential and commercial customers. Additional focus will be on MHD fleets.	• Customers operating facilities within the Company's electric service territory • Large facilities capable of sheltering over 100 people in response to a disaster
School Bus Electrification	School bus fleet operators, school districts, and vehicle owners that are Public Service customers and operate in our service territory	• All buses in the program must be capable of V2B and V2G and be available for deployment in the Company's V2X Resilience pilot program.
Open Innovation	Company customers and EV partners	• Existing DCFC Charging + Storage project participant; and EV Load Detection and Disaggregation project prospective participants • Company electric customers for those Open Innovation projects approved through the 60-Day Notice process

Education, Outreach and Stakeholder Engagement

Through the Innovation portfolio, the Company is working to develop partnerships with local communities, non-profits who focus on addressing climate change and promoting equity and cultural diversity, EV charging vendors, innovative start-up companies, EV manufacturers, technology companies, automotive dealerships, academia, national laboratories, research organizations, and other stakeholders. In its Open Innovation project, the Company will consider stakeholder feedback about the new projects, such as those that may help reduce costs or increase benefits of EV adoption.

4. Plan Administration

A. Stakeholder Engagement and Reporting

The Company will continue to promote transparency in the functioning and operation of its programming through stakeholder and reporting processes. The Company will specifically complete the following:

- *Host quarterly stakeholder advisory group meetings.* The Company has successfully established a TEP stakeholder group that represents a diverse set of interests, government agencies, municipalities, consumer representatives, non-profit organizations, auto dealers, OEMs, EV charging companies, and utilities. We will continue to host quarterly meetings that foster discussion about programs in-market, gather ideas for continuing to improve the programs and portfolios, and discuss whether additional projects and programs are necessary to support transportation electrification in Colorado. The Company may use third party facilitators to support stakeholder meetings as needed. The Company will also continue to participate in other stakeholder processes, including the Colorado Electric Vehicle Coalition and Colorado Transportation Electrification Enterprises.
- *Submit annual compliance reports to the Commission on key metrics.* Throughout the TEP period, Public Service will provide updates on key metrics in annual TEP compliance reports filed by October 1 of each year starting in 2024. Additionally, the Company will include in its October 1 filing the prior program year's actual revenue requirement, which will be included in the true up adjustment to the upcoming year's revenue requirement. The Company will also file a budget and cost forecast to be collected through the TEPA for the upcoming year on October 1.

As the Company undertakes its stakeholder engagement and provides to the Commission its annual reports, the Company will provide reporting and conduct evaluations that will help deliver insights and key learnings on the following:

- the impact of advisory services on program participation rates;
- the impacts of programs and advisory services on customer attitudes about EVs;
- the actual costs of charging infrastructure installations for TEP programs;
- the impact of rates and managed charging programs on charging behavior and impact on peak demand;
- the impacts on carbon dioxide and nitrogen oxide ("NOx") emissions, including, to the extent possible, local impacts;
- the need for additional managed charging programs, including new potential optimization charging program and rate structures, that could be implemented in the future to serve EV customers;
- Innovation project descriptions, objectives, status, costs, and lessons learned; and
- potential enhancements and future design considerations.

Specific to the Company's annual report to the Commission, Public Service will share information and provide reporting on metrics as reasonably available, including:

- estimated number of EVs in service territory, by type (e.g., light-, medium-, heavy-duty), where possible
- estimated number and capacity of known charging stations and ports in service territory
- number of participants in TEP programs
- TEP spending, broken out by portfolio and program category
- TEP revenues for those captured in tariffs

- estimated consumption of electricity (in kilowatt-hours) by EVs
- estimated level of demand (in kilowatts) resulting from EVs
- estimates for the amount of energy sold to program participants during on-peak and off-peak time periods, where feasible
- average costs for charging installations, including EVSI and charging equipment
- geographical distribution of program participants and infrastructure investments
- total number of unique charging sessions, average charging session duration, average kWh used for charging sessions, average session costs billed to drivers, and average charger uptime for Company-owned Public Charging Acceleration Network DCFC stations.
- estimated reduction in carbon emissions resulting from EVs and TEP programs
- estimated reduction in NOx emissions resulting from EVs and TEP programs
- insights drawn from customer experience and program performance, including customer surveys
- a summary of ongoing EV pilots and programs from other Xcel Energy service territories
- specific rate schedules under which participating customers take service (aggregated at the program level)
- progress of EV sales toward meeting the State's EV goals and the proportion of the State's goal in the Company's service territory
- average cost of a line extension for Commercial portfolio
- average cost of a line extension for utility-owned DCFC hubs
- number and dollar amounts of rebates given by program, with equity rebates differentiated
- updates and progress made in quarterly stakeholder meetings
- aggregated and anonymized data via participating third parties for information on Commercial program participants detailing site-specific data (start and stop times of charging, peak kW per charging session, number of charging sessions daily, amount of time for each vehicle charge per session daily, whether station owner provides charging for free or if there are usage fees, operating costs, any technologies being used to manage demand)
- aggregated and anonymized data on energy sales during on-peak and off-peak periods and aggregated customer load profiles
- number of customer sites that apply for TEP programs but do not qualify for TEP programs
- information specific to the EV purchase and lease rebate program, including demographic data (aggregated income and zip codes for participants), make and model of EVs purchased, age of EVs purchased, purchase prices, whether EV rebate impacted the participants' decisions to purchase or lease an EV, and how customers heard about the rebate program

B. Third-Party Evaluation

In addition to its annual reporting, the Company will also engage a third-party evaluator on the Company's TEP programs and projects. The evaluator will provide information on certain metrics such as the customer experience and the impacts programs have on customer perceptions of EVs, EV adoption, and the grid.

The Company estimates costs for evaluation and stakeholder feedback for the TEP will be approximately $2,280,000 over the three-year plan.

C. Information Technology ("IT")

IT is necessary to support the TEP. IT expenses include both capital and O&M categories. Capital and O&M spending will contribute to customer enrollment journeys, charger and charging management

solutions, customer facing tools, integrations with existing systems, and solutions supporting data insights and reporting capabilities among other efforts.

- **Customer Enrollment Journeys:** IT support for customer enrollment journeys includes efforts to make the Company's offerings more easily navigable and attractive to potential participants. Examples of such efforts include technology for program enrollment, application, customer communication, intake, and identification of needs for advisory services. Enrollment journeys also provide customers with information about aspects of EV adoption, such as rate selection and available incentives. These efforts support all portfolios in the TEP.
- **Charger and Charging Management Solutions:** Charger and charging management solutions are efforts to provide customers options for charging optimization and to help provide transparency into charging behavior and clean transportation adoption.
- **System Integrations:** Integrations with existing systems are critical in creating a seamless customer experience. Billing system integrations support new and updated program options for various customer segments such as multifamily housing, fleets, and residential. Integrations also support internal processes that allow for more flexible offerings that help participants overcome difficult adoption barriers.
- **Data Insights and Reporting:** The Company plans to gain as much insight as possible into the pipeline of potential participants, current participants, and past participants in programs. IT costs associated with these efforts will support effective use of data, increased capabilities to report internally and externally and support grid reliability.

The Company expects more IT spend in 2025 than 2024 or 2026. However, the actual timing of IT-related spending will depend on program implementation.

Table 27: Budget for Plan Administration

Spend Type	Category	2024	2025	2026	2024-2026
Capital (excluding Rebates)		**$5.2**	**$17.2**	**$12.1**	**$34.5**
	IT	$5.2	$17.2	$12.1	$34.5
O&M Expenses		**$1.7**	**$5.7**	**$4.3**	**$11.7**
	IT	$1.4	$4.7	$3.3	$9.4
	Evaluation	$0.3	$1.0	$1.0	$2.3
Total		**$6.9**	**$22.9**	**$16.4**	**$46.2**