

➤ **Summary of 60-Day Notice: Electrify Paratransit Mobility Pilot**

The following 60-Day Notice summarizes Public Service Company of Colorado’s (“Public Service” or “the Company”) action to update stakeholders of the Company’s development of the Electrify Paratransit Mobility Pilot (“Pilot”) within the Company’s 2021-2023 Transportation Electrification Plan (“TEP”). This 60-Day Notice is issued in compliance with Decision No. C21-0017 in Proceeding No. 20A-0204E.

A copy of this notice will be available on our website at:

https://www.xcelenergy.com/company/rates_and_regulations/filings/transportation_electrification_plan

Electrify Paratransit Mobility Pilot

In Decision No. C21-0017, the Colorado Public Utilities Commission (“Commission”) approved the Company’s proposed Partnerships, Research, and Innovation (“PRI”) portfolio. The objective of the PRI portfolio is to ease the process for customers to access electricity as a transportation fuel, minimize system costs, increase environmental benefits for charging, and help inform future Company TEPs. As a part of this portfolio, Public Service is proposing to direct a portion of the PRI budget to fund an Electrify Paratransit Mobility Pilot.

Through this 60-Day Notice, Public Service is providing a description of the electrify paratransit mobility pilot, the scoring considerations developed to review and evaluate submitted applications, and the metrics that Public Service will report on and provide to stakeholders through its semi-annual TEP reporting. To inform this proposal, the Company conducted several individual stakeholder meetings to present draft pilot designs and gather input.

➤ **Electrify Paratransit Mobility Pilot**

A. Project Description, Goals, and Key Outcomes

Description

The purpose of this pilot is to study how best to reduce the upfront and operational costs of electrifying medium-duty (“MD”) shuttle busses serving municipal and other paratransit operators. The Pilot will provide rebates for the purchase and/or lease of a total of between three to six electric paratransit busses to be placed within the fleets of various providers of paratransit services. It will also provide funding for necessary charging equipment and electric vehicle supply infrastructure (“EVSI”) to enable this pilot, if not supported by other approved TEP programs

Paratransit shuttle busses serve persons having a disability¹ who are typically not vehicle drivers. Electrifying paratransit shuttle busses and enabling them to operate reliably and cost effectively is intended to bring the benefits of transportation electrification to underserved community members and persons having a disability. See the “Equity” section of this notice for a definition of “Underserved” communities / populations. The pilot will help cover the upfront costs associated with the vehicles, the charging equipment, and infrastructure necessary to support their operation for at least the three-year TEP period. The electric vehicles (“EV”), charging equipment and infrastructure may be transferred to another entity and remain in place indefinitely following the initial pilot phase. Reporting on the pilot’s progress will be provided during the TEP’s semi-annual reporting cycles in April and October of each year.

Reducing upfront and operational costs will also help paratransit shuttle bus operators and communities to either initially electrify and/or expand the electrification of this important public transit option.

Costs eligible for this funding include the electric paratransit shuttle bus, charging equipment, and any necessary infrastructure upgrades. The program will cover up to 75 percent of eligible costs or \$350,000 per electric paratransit bus and \$10,500 per charging station, up to three chargers, and EVSI upgrades as necessary (one installation at the depot and other in-route charging stations if required). The number of vehicles for the pilot should not exceed a total of six, and ideally no more than two vehicles in any one route-defined area. This cap was determined based on anticipated upfront costs and operating expenses of both electric and gasoline powered hybrid electric vehicles. When accounting for the incremental cost of an EV, charging equipment, infrastructure upgrades, and lower operating costs, the Company believes these rebates per vehicle will provide the funding necessary to make electrified paratransit and/or the expansion of this kind of program accessible to multiple communities. Discussions with fleet operators confirmed that this is likely an acceptable dollar value to drive pilot program expansion and participation.

¹ The American with Disabilities Act (“ADA”) defines a person with a disability as a person who has a physical or mental impairment that substantially limits one or more major life activity.

Rebate levels and program design elements were determined based on similar bus electrification projects. Coordination and verification will also take place with organizations such as the Regional Air Quality Council (“RAQC”) and the Colorado Energy Office (“CEO”). Ongoing coordination between the Company, the RAQC, and CEO will be crucial to ensure effective customer education as well as efficient and equitable distribution of funds and vehicle(s).

Goals

The pilot has three main goals. The first relates to studying how best to electrify paratransit mobility services. This will consider the ideal vehicle specifications, optimal charging setup, dwelling locations, and the grid and service infrastructure needed to support the vehicles in an economic manner. Second, the project aims provide insights to inform possible future expansions of electrified paratransit operations by studying the operational characteristics and community needs of electrified paratransit when operating in diverse community, terrain, and geographic environments. This is intended to capture key insights about the performance of this MD class of vehicle that typically has a variable usage and charging patterns. The pilot will report on learnings to develop a knowledge base that can be used to more cost effectively expand and scale the electrification of paratransit more rapidly, sustainably, and with declining costs over time. Finally, the project aims to bring the real-world benefits of EVs to underserved customers and to the communities through which these customers travel. The goal is to ensure that they also benefit from the health, operational performance benefits, and cost savings of EVs.

In addition to these three primary objectives the project also serves the broader objectives of the TEP’s PRI portfolio. It will increase and broaden access to electricity as a transportation fuel for paratransit mobility services. It will consider where and how to minimize grid impacts when electrifying paratransit mobility across the charging garages/depots, routes, and neighborhoods these vehicles operate within. This will also contribute to the Company’s understanding of infrastructure planning needs for underserved areas. And the project will work to actively increase public outreach, awareness, and understanding around and support for electric transportation (“ET”). Paratransit service riders, operators, and the broader community will be targeted by outreach efforts.

Outcomes

The pilot is intended to have three key outcomes. First, it will produce a viable community needs assessment to ensure optimal placement of busses, charging equipment, and routes for the electrified paratransit shuttle busses for testing purposes. Second, it will provide valuable insights about how best to approach the electrification of these vehicles across varying locations. Third, the pilot will inform how best to conduct outreach to impacted riders and communities, as well as vehicle operators. The work should lead to increased awareness and community support for ET.

B. Estimated Costs, Benefits, Value to Customers

Estimated Costs

Xcel Energy Pilot Spend Assumptions	
Capital Costs (including Rebates)	
3 – 6 Electric MD Busses	\$2,000,000
3 –10 Charging Stations	\$200,000
EVSI (if not covered through a complimentary program)	\$200,000
O&M Expenses	
Community Needs Assessment	\$50,000
Outreach and Education	\$50,000
Labor	\$ 150,000
Estimated Total Project Cost	\$ 2,650,000

Benefits

The pilot will benefit communities by bringing the advantages of ET into those areas in which the vehicles operate. We expect persons having a disability / paratransit riders will benefit from the health and ride quality improvements from EVs, with transit operators becoming better informed about the most effective ways for reducing the operating costs of switching to EVs. And, the Company will be informed about optimal grid planning and system resiliency to ensure that this class, duty cycle and operation of the EV is best supported as it scales throughout the public transit mix.

C. Equity & Commercial Viability

This pilot is equity focused. It is intended to provide equal access to electrified mobility for underserved communities and persons having a disability. The intent is to create a pathway for equitable access to the growing zero-emission ET transition that is occurring throughout the broader economy.

The Pilot’s goal is to leverage pre-existing and newly commercially available EVs, charging technologies, and other associated infrastructure equipment, yet deploy these in areas and models that make them more economically feasible for promoting electrified mobility in underserved communities.

For purposes of the Pilot, underserved communities may:

- Have insufficient access to accessible transportation services or other affordable transportation options

- Meet the definition of a “disproportionately impacted community” as currently codified in Colorado state law.²
- Live in an income-qualified (“IQ”) or higher-emissions communities (“HEC”) as currently defined in the Company’s TEP programs

Within these underserved communities, the program also seeks to serve persons having a disability.³

D. Education and Outreach

The Company will focus on educating multiple audiences about the goals and benefits of this pilot. Education efforts will be directed at the community at large and include outreach to persons having a disability and underserved communities impacted by the equity benefits of this pilot.

Additional outreach efforts could include posting program information on the Company’s website, conducting digital and print campaigns, and producing case studies, technical white papers, videos, and other interactive media. The Company will host in-person or virtual events to allow the community to see the technologies and learn about their practical application.

E. Application, Process, and Scoring

The Company will work with paratransit mobility operators who currently demonstrate expertise in working with persons having a disability and underserved communities within Colorado.

Communities who wish to participate in the pilot to electrify their paratransit mobility vehicles and operations can apply through the Company’s open application process.

Potential communities / sites would be considered through evaluation and some combination of outputs from the Community Needs Assessment, interviews with communities, by using insights derived from the Company’s HEC identification methodology, and by cross-referencing with other resources including the equity map that CEO is developing.

Process and Scoring

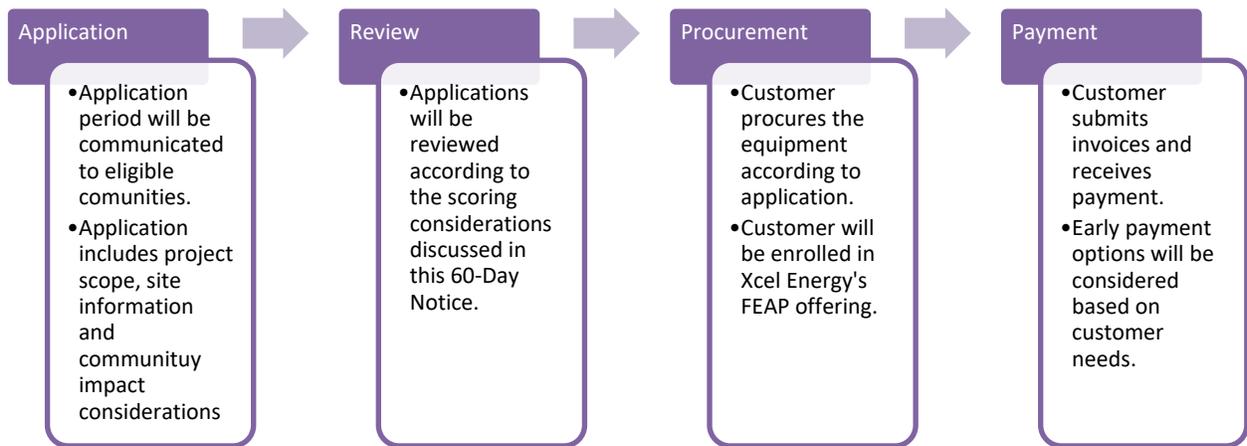
1. Communities will be asked to provide proposed siting / location information for the placement of the electrified paratransit vehicles and operations. Application assistance will be made available to customers through the Company’s outreach efforts described in the below section.
2. Scoring may include a combination of:

² See Colorado HB21-1266. Section 3 of the Act defines "disproportionately impacted community" (DIC) as “a community that is in a census block group where the proportion of households that are low income, that identify as minority, or that are housing cost-burdened is greater than 40%; or any other community as identified or approved by a state agency, if the community: Has a history of environmental racism perpetuated through redlining, anti-Indigenous, anti-immigrant, anti-Hispanic, or anti-Black laws; or is one where multiple factors may act cumulatively to affect health and the environment and contribute to persistent disparities.”

³ The American with Disabilities Act (“ADA”) defines a person with a disability as a person who has a physical or mental impairment that substantially limits one or more major life activity.

- a. Relevance to underserved based on income qualification, relevant location, high emissions impact
 - b. Neighborhood density / established need relevant to the study and impacting underserved communities in urban, metropolitan, rural, and/or mountainous areas
 - c. Existing public mobility options available in the areas including access to other paratransit mobility options
 - d. Proposed co-funding by the community making the request
 - e. Potential for relevant grid studies in the area
 - f. Availability of dwell space for vehicle charging both at the depot and in-route as needed
 - g. Amenities in or around the area that are best served by paratransit services
 - h. Siting opportunities that further inform this and other PRI studies
3. Successful applicants will be notified of their funding amount at which point they can proceed to work with the Company and/or the Company’s designated partners on their project.
 4. Upon approval, the community’s electric paratransit vehicle(s) will be enrolled in the Company’s Fleet Electrification Advisory Program (“FEAP”). Through FEAP, the project will receive advisory services including telematics data and reports such as vehicle miles traveled, state of charge, charging analysis and recommendations, Total Cost of Ownership (“TCO”), and greenhouse gas reduction calculations.
 5. In addition, through FEAP, participating customers will have quarterly project meetings with the Company’s staff to ensure that the project is meeting expectations once the community’s expanded electrified paratransit program is electrified and the vehicle(s) are in service.

Figure 1: Rebate Approval Process



Prior to launching the Pilot, the Company will release the application online, and host a webinar to allow applicants the opportunity to plan and develop the content needed for a successful award. During the Company-led webinar, the Company will walk prospective participants through the process for applying and reviewing applications and will explain the Company’s considerations for evaluating applications. The Company plans to record the webinar and make it available on its website.

Additionally, as part of the broader TEP implementation plan, the Company has created an Electric Vehicle Program Intake form for customers interested in EV programs, which is currently available on the Company's website. This intake form requests customers to provide the Company with contact information, project interests and what EV program the Customer has an interest in exploring. The intake form as submitted by the customer will be reviewed by Company staff, and a member of the team supporting the program identified by the customer will contact the customer to begin working through project ideas. The Electrify Paratransit Mobility Pilot will be one of the programs identified on the Electric Vehicle Program Intake form. The Electric Vehicle Program Intake form is designed to advance equitable opportunities regardless of customer resource availability by assigning a Company advisor early in the project.

F. Reporting, Measurement, and Evaluation

Reporting on the pilot progress will be conducted through the semi-annual TEP reporting process. The Company will include the following metrics in its semi-annual TEP reporting:

- Project costs
- Paratransit utilization rates
- Number of trips taken, and miles driven
- Comparison of the operating costs between the underserved communities chosen
- Vehicle miles traveled, per demonstration
- Estimated consumption of electricity (kilowatt hours) resulting from electrified paratransit busses
- Estimated level of demand (kilowatts) resulting from vehicle charging at Company-owned charging stations
- Geographic distribution of the program's participants

G. Partners

Partners will include charging equipment providers, those automotive original equipment manufacturers in development of electrified paratransit busses, communities, and other paratransit, public mobility, education, and ET ecosystem participants.

H. Stakeholder Involvement

During the development of the methodology and the identification of proposed Electrify Paratransit Mobility Pilot, the Company engaged numerous stakeholders to gather feedback and refine its approach. The table below summarizes stakeholder involvement:

Stakeholder Group	Meeting Date
Transportation Electrification Plan Stakeholder Group ⁴	9/29/2021
Environmental Justice Coalition ⁵ , Energy Outreach Colorado, Natural Resources Defense Council, Southwest Energy Efficiency Project, and Western Resource Advocates	10/12/2021
Commission Staff	10/14/2021

Stakeholders provided input on:

- Advocating for the electrification of paratransit mobility to support disabled and/or underserved community members, and bring the benefits of transportation electrification, and zero emissions transportation to these groups.
- Asked for consideration of including some combination of urban, metropolitan, rural, and mountainous communities to be considered as a part of this work.
- Noted the need for not only electrifying paratransit MD vehicles, but also making this project about assessing how to lower overall upfront and operational costs of these kinds of services including charging.
- Encouraging partnership with a non-profit, municipalities, and/or existing transit operators who have some level of current expertise for paratransit mobility.
- Agreement that this is an equity focused project, in the spirit and intent of what a one third portion of the PRI portfolio of the Company’s TEP is intended to achieve.

⁴ The TEP Stakeholder Group includes dozens of organizations spanning Colorado state government agencies, Colorado municipalities, environmental advocates, energy efficiency and electrification groups, other utilities, EV charging hardware and software providers, automobile manufacturers and dealerships, community groups, and many others. Nearly 100 people participated in the TEP Stakeholder Group meeting on September 29, 2021.

⁵ The Environmental Justice Coalition includes representatives from the Colorado Latino Forum, GreenLatinos, GRID Alternatives, and Vote Solar.