Posting Date: October 31, 2022

➢ Summary of 60-Day Notice: PRI Municipal Refuse Fleet Electrification Pilot – Program Adjustments

The following 60-Day Notice summarizes Public Service Company of Colorado's ("Public Service" or the "Company") action to update Parties on the Company's development of a plan to propose an adjustment to the Partnerships, Research, and Innovation ("PRI") Municipal Refuse Fleet Electrification Pilot. The PRI portfolio was set forth in 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

The Company is proposing a shift from leasing heavy-duty ("HD") electric refuse trucks to providing a rebate to participants for the purchase or lease of an HD electric refuse truck.

➢ Municipal Refuse Fleet Electrification Pilot – Program Adjustments

A. Description

The Municipal Refuse Fleet Electrification Pilot, as originally proposed, consisted of the Company or intermediary third-party leasing one to four heavy duty ("HD") electric refuse trucks through an original equipment manufacturer ("OEM") and deploying those trucks with selected waste management fleet operators for extended test drive demonstrations at no cost (except for electricity usage).

As the Company began its implementation of the pilot, it evaluated lease options including:

1) The Company could lease trucks from the OEM and then sublease the trucks to the waste management fleet partners;
2) The Company could conduct a bulk lease purchase with the OEM and the OEM could then handle the sublease and liability contracts with the waste management fleet partners directly; and
3) The Company could work with a vendor that leases trucks from the OEM on behalf of the waste management fleet partners.

During this process, the Company experienced issues with contracting between lessee and sublessee, which has prevented the successful use of a contract leasing program whereby the Company purchases and leases the vehicles, or funds the leasing through a third party. A central challenge is that refuse fleet operators each require unique specifications for the refuse vehicles they adopt into their fleets' operations. These specifications include (without limitation) considerations around configuration of the vehicle's chassis, varying battery sizes to meet duty cycle and associated route requirements, varying electronic controls, and the trash compacting mechanism ("body") that goes onto the vehicle chassis. Specifically, the vehicle's body specifications may include the body's ability to side load, front load, or rear load, and whether that body is hydraulically powered or electrically powered, which directly impacts the powertrain including the battery, and chassis requirements. All of these considerations impact whether an electric refuse truck can or cannot perform its duty cycle and route requirements. Also, the vehicle specifications and duty cycle inform the varying charging capacity requirements of the vehicle to support real world operation. Given these many unique specifications used by different fleet operators, and fleet operator desired choice of vehicle OEM, the Company encountered an inability to lease a limited number of demonstration vehicles to different participants, as the actual vehicles must be specifically selected and designed for use in individual fleet operations. Additionally, those same issues impeded the Company's ability to eventually transition the lease vehicles to the operators at the end of the study, which is an objective of the fleet electrification transition. Despite the Company's efforts, it has been unable to execute any leases to support the pilot. Because this project focuses on research and innovation, the Company and the selected refuse fleet operators who participate in the study need the ability to procure relevant vehicles to their fleet operations, that inform real pathways towards adoption, and that provide insightful study results benefiting

the broader fleet electrification market, participant customers, the Commission, and all interested stakeholders.

As a result of the lack of uptake for a direct leasing program, the Company is now proposing that this pilot shift its structure in a manner to support fleet operator participation. The Company proposes to no longer offer leases but instead to provide rebates direct to waste management fleet partners toward the costs of their purchasing or leasing refuse trucks. Specifically, the Company proposes to issue rebates to qualified participants for the purchase or lease of one to five HD electric refuse trucks through an OEM and/or dealer, and other eligible costs (which may include costs such as an interoperable vehicle charger not limited to a specific charging speed, associated equipment, as well as necessary infrastructure and installation costs) and deploying those trucks with selected waste management fleet partners for extended test drive demonstrations at a nominal cost (except for electricity usage). Overall, the budget will remain unchanged and the rebates for HD electric refuse trucks will likely cover 100 percent of between one to a two-year lease and approximately 50 percent[1] of the purchase price. Waste management fleet partners have indicated that being able to lease a vehicle that meets their exacting specifications makes it easier to fully acquire that vehicle at the end of the lease. Additionally, some waste management fleet partners may choose to simply use the rebate to make the full acquisition now and put the vehicle into operation.

The adjustment to a rebate being issued to a qualified participant(s) will provide an easier path for participants to contract and obtain an HD electric refuse truck that meet their individual specifications, which has been a central impediment to the Company's previous leasing proposals. This proposed change aligns with the Company's PRI Paratransit, Electric School Bus, and Car Share programs. All of these programs offer a rebate model, and partners and fleet operators have voiced to the Company that this is a workable model. The Company now proposes to employ that optimal model for the Municipal Refuse Fleet Electrification Pilot, promoting its success based on the lessons the Company has learned.

The Company asserts that a rebate will allow participants greater control and flexibility over vehicle specifications and provide a clearer path for the vehicles to remain in operation within the community at the conclusion of the pilot. This approach also aligns with stakeholder feedback that the Company should provide a path for the vehicles to remain in operation within the community and gives participants a greater incentive to continue commercial operation of the vehicles in Colorado.[2]

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[1] Electric refuse truck chassis, plus the trash compacting "body" average total costs, according to the manufacturers and dealers of these chassis and bodies, are around $700,000 and up to over $1,000,000 total per vehicle.

[2] The Company received written comments on the Municipal Refuse Fleet Electrification Pilot jointly from Western Resource Advocates, the Southwest Energy Efficiency Project, Conservation Colorado, and Energy Outreach Colorado encouraging the Company to help identify ways for the refuse trucks to remain in operation in the participant's fleet after the conclusion of the Pilot. These comments have been filed with the Company's 60-Day Notice Summary Report in Proceeding No. 20A-0204E.

The Company proposes to rely on a budget of similar, if not the same, magnitude as included in the original 60-Day Notice for this project. Some budget categories have been adjusted given the project's experience to date on recognizing the work required to educate potential applicants, execute contracts, and support the associated charging infrastructure. Given some of these cost adjustments, the Company believes it could support up to five refuse trucks under a rebate model rather than the four truck leases as originally estimated. The cost breakdown is as follows:

Table 1: Municipal Refuse Fleet Electrification Pilot Budget

	4 Electric Refuse Trucks (Original Notice – Jan, 2022)	**Up to 5 Electric Refuse Trucks** (Revised Notice – Oct 2022)
Electric Refuse Truck Leases / Rebates	$1,400,000	$1,750,000
50 kW Charger (including energization and digital services)	$1,400,000	$600,000 (including infrastructure and line extension incremental costs or cost support where Xcel Energy EVSI and other programs do not apply/adequately cover)
Education, Outreach, and Project Management	$50,000	$500,000
Total	**$2,850,000**	**$2,850,000**

B. Stakeholder Involvement

While determining the appropriate approach for Municipal Refuse Fleet Electrification Pilot's adjustment, the Company engaged its TEP stakeholders during its September quarterly meeting to gather feedback. The table below summarizes stakeholder involvement:

Table 2: Stakeholder Involvement

Stakeholder Group	**Meeting Date**
Transportation Electrification Plan Stakeholder Group[3]	9/22/2022

[3] 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 individuals participated in the TEP Stakeholder Group meeting on September 22, 2022.