Portland General Electric Company
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June 23, 2023

Via Electronic Filing

Public Utility Commission of Oregon
Attention: Filing Center
P.O. Box 1088
Salem, OR 97308-1088

Re: **UM 2033 – In the Matter of Portland General Electric Company, 2019 Transportation Electrification Plan**

Dear Filing Center:

Please find enclosed for filing in the above-captioned docket, Portland General Electric Company's Errata to PGE's 2023 Final Draft Transportation Electrification Plan originally filed on June 1, 2023. It came to our attention that we missed adding the identifiers of where confidential information began and ended in the original filed version. We are filing this errata to update those redacted pages in the June 1, 2023 filing to add the notation of the being and ending of the confidential information.

Thank you in advance for your assistance.

Sincerely,

Danielle McCain

Danielle McCain on behalf of
Brendan McCarthy
Assistant General Counsel III

Enclosure

Table 4. Residential EV Smart Charge Pilot Overview

Activity	Residential EV Smart Charge Pilot			
Strategic Alignment	Manage TE Load; Structure TE Rates/Tariff; Equity			
Description	• $300 rebate towards purchase and installation of qualified L2 at-home charger ($1,000 income-qualified rebate) • $50 rebate for Tesla drivers with non-qualified chargers			
What has changed	• Pilot extended; enrollment cap expanded • Charger incentive decreased from $500 to $300 • Creation of managed charging program			
Load management	• $25 seasonal incentive (six-month season; Oct-Mar, Apr-Sep) for allowing PGE to pause EV charging during peak loads			
Target market	• Residential EV drivers residing in single family homes			
Funding ($MM)	[BEGIN CONFIDENTIAL]	Previously approved[52]	Requested with 2023 TE Plan	Total
	[redacted]			
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]		[redacted]
	[redacted]			
	Total	2.42	4.08	6.5
	• 2022 MMC funds panel upgrade rebates and trade ally network development			

[END CONFIDENTIAL]

[52] The figures shown in this budget have been approved previously by the Commission through docketed proceedings, detailed in Appendix H.

Table 5. Public Charging – Electric Avenue and Municipal Charging Collaboration Overview

Activity	Public Charging – Electric Avenue and Municipal Charging Collaboration			
Strategic Alignment	Utility Infrastructure Role; Coordinate Load Siting; Manage TE Load; Structure TE Rates/Tariff; Equity; Coordination/ Partnership			
Description	• Collaborate with municipalities on equitable access to public L2 charging infrastructure in underserved communities • Deploy chargers more cost-efficiently via existing utility right-of-way assets. Informs potential private partnerships			
What has changed	• Refocus from broader ownership of L2 infrastructure to helping provide infrastructure in underserved communities • Remove DCFC ports			
Load management	• Schedule 50 rate, with time of use and +$0.19/ kWh at peak usage (3 to 8 PM weekdays, like TOD rate)			
Target market	• +80 L2 ports focused on underserved communities (additional to 60 and 100 ports in the 2022-3 MMC budgets) • Total 240 L2 ports =12 percent of the total public L2 ports TEINA3 indicates needed by 2025			
Funding ($MM)	**[BEGIN CONFIDENTIAL]**	Previously approved[53]	Requested with 2023 TE Plan	Total
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	Total	5.29	6.27	11.5

[END CONFIDENTIAL]

[53] The figures shown in this budget have been approved previously by the Commission through docketed proceedings, detailed in Appendix H.

Table 6. Business and Multi-family Make-ready Solutions Overview

Activity	Business and Multi-family Make-ready Solutions			
Strategic Alignment	Utility Infrastructure Role; Structure TE Rates/Tariff; Equity; Coordination/ Partnership			
Description	• Support EV ownership and charging access for business and multi-family properties • PGE constructs make-ready • Customer owns/maintains chargers and receives rebate on purchase of qualified chargers			
What has changed	• More support for EVSE deployment to the underserved MF segment • Reduced ports from +1,000 to 200 based on PGE and TEINA data showing that demand in underserved/low-to-medium income multi-family market is still developing • Focus on workplace, commercial, and multi-family segments (funded by 2023 MMC, with additional funding in this proposal for multi-family)			
Load management	• Chargers able to respond to pricing or DR signals, but not subject to Schedule 50 • Provides data on multi-family charging profiles to develop the appropriate rate or future load management offering			
Target market	• Workplace/commercial: 60 ports • Multi-family: 140 ports			
Funding ($MM)	[BEGIN CONFIDENTIAL]	Previously approved[54]	Requested with 2023 TE Plan	Total
	[redacted]	[redacted]		[redacted]
	[redacted]	[redacted]		[redacted]
	[redacted]			
	[redacted]		[redacted]	[redacted]
	Total	2.55	4.58	7.13

[END CONFIDENTIAL]

[54] The figures shown in this budget have been approved previously by the Commission through docketed proceedings, detailed in Appendix H.

Table 7. Fleet Partner Overview

Activity	Fleet Partner			
Strategic Alignment	Planning; Utility Infrastructure Role; Coordinate Load Siting; Manage TE Load; Structure TE Rates/Tariff; Coordination/ Partnership			
Description	• Provide free upfront planning and technical services to reduce the complexity of planning for fleet electrification • Provide custom incentives to help lower the costs of building electric fleet depots • Better understand how fleet size and load profiles impact the grid • Networked EV charging for future managed charging and demand response programs			
What has changed	• Reduce incentives by 50 percent, bringing the multiplier down from 15x to 7.5x in the following formula: *Year 5 usage x LEA x multiplier* • Lower maximum incentive cap from $750K to $400K • The above changes improve cost effectiveness and allow the pilot to reach more customers, sites, and ports while still providing an incentive to help overcome initial cost barriers faced by customers			
Load management	• Require installed chargers be qualified & networked, with ability to perform demand response • Participants expected to participate in future PGE demand response programs			
Target market	• Non-residential fleets, with ~450 ports (2021-24), an additional ~500 ports (2024-2025), for a total of ~950 make-ready ports[55]			
Funding ($MM)	**[BEGIN CONFIDENTIAL]**	Previously approved[56]	Requested with 2023 TE Plan	Total
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]		[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]			
	Total	8.65	9.47	18.12

[END CONFIDENTIAL]

[55] Port counts increasing due to decrease in incentive offered, allowing deployment to more sites.
[56] The figures shown in this budget have been approved previously by the Commission through docketed proceedings, detailed in Appendix H.

Table 21. Contracted Evaluation Costs by Pilot/Program and Year

Pilot/Program [BEGIN CONFIDENTIAL]	2023	2024	2025	Total
Business & Multi-Family Make-Ready Solutions	[redacted]	[redacted]	[redacted]	[redacted]
Business EV Charging	[redacted]	[redacted]		[redacted]
Fleet Partner	[redacted]	[redacted]	[redacted]	[redacted]
Public Charging - Municipal Charging Collaboration and Electric Ave	[redacted]	[redacted]	[redacted]	[redacted]
Residential Smart EV Charging	[redacted]	[redacted]	[redacted]	[redacted]
Drive Change Fund	[redacted]	[redacted]	[redacted]	[redacted]

[END CONFIDENTIAL]

5.3 Line Extension/Make-Ready

The Line Extension process is PGE's mechanism for providing additional utility infrastructure to meet a customer's request for new electric service. The Line Extension Allowance (LEA) is the part of this process which provides a discount to the customer on the upfront cost of the utility infrastructure, based on the forecasted energy consumption from the new electric service. It is PGE's responsibility to provide electric service to the service point at the location requested by the customer, which is where PGE places the meter. The customer is responsible for designing, constructing, and maintaining infrastructure "behind-the-meter". The following figure illustrates the delineations between these components when connecting an EV charger to PGE's distribution system:

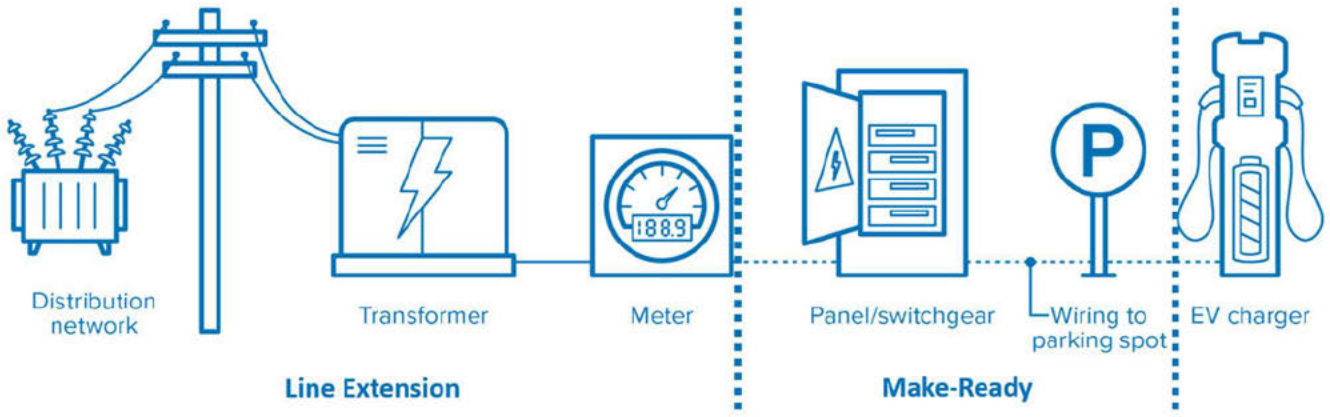

Figure 16. Delineations between Line Extension, Make-Ready, and EV Charger

Unfortunately, it is common for commercial customers to add new electrical load to their existing service without notifying PGE if the building capacity can support the additional charging load. In these cases, PGE has no visibility into what the new load is, when it was added, its power capacity, its typical operating hours, or the energy consumption of that individual load. This is how many EV

8.2 Expenditures

The following table presents existing approved budgets combined with a forecast for new programs of proposed operating and capital expenditures (OpEx and CapEx, respectively[219]). For a detailed breakout of existing and proposed budgets by activity, please see Appendices A-C.

Table 32. Program Operating and Capital Expenditures, 2023-2025[220]

Programs [BEGIN CONFIDENTIAL]	2023	2024	2025	2023-2025 Total
Business and Multi-family Make-ready Solutions[221]	$2,547,130	$2,144,739	$2,439,061	$7,130,930
CapEx	[redacted]	[redacted]	[redacted]	[redacted]
OpEx	[redacted]	[redacted]	[redacted]	[redacted]
Business EV Charging Rebates	$460,000	$2,328,728	-	$2,788,728
CapEx	[redacted]	[redacted]	[redacted]	[redacted]
OpEx	[redacted]	[redacted]	[redacted]	[redacted]
Clean Fuels Program[222]	$11,758,817	$11,569,165	$17,314,728	$40,642,710
CapEx	[redacted]	[redacted]	[redacted]	[redacted]
OpEx	[redacted]	[redacted]	[redacted]	[redacted]
EV Ready Affordable Housing Grants	$1,000,000	-	-	$1,000,000
CapEx	[redacted]	[redacted]	[redacted]	[redacted]
OpEx	[redacted]	[redacted]	[redacted]	[redacted]
Fleet Partner Pilot	$5,258,760	$6,415,740	$6,442,773	$18,117,273
CapEx	[redacted]	[redacted]	[redacted]	[redacted]
OpEx	[redacted]	[redacted]	[redacted]	[redacted]

[END CONFIDENTIAL]

[219] Operating expenditures are costs recovered in rates each year. Capital expenditures are costs recovered in rates over many years (the period varies with the life of the asset, which reduces impact on customer bills).
[220] Figures shown in this budget include those approved previously by the Commission through docketed proceedings, detailed in Appendix H.
[221] Clean Fuels Program is covering the costs of the Business and Multi-family Make-ready Solutions program in 2024 and 2025.
[222] Clean Fuels Program forecasted totals for 2024 and 2025 do not include the dollars which are allocated to fund Business and Multi-family Make-ready Solutions.

Programs [BEGIN CONFIDENTIAL]	2023	2024	2025	2023-2025 Total
Heavy Duty Charging Pilot	$1,997,290	$1,186,441	$436,723	$3,620,453
CapEx	[redacted]	[redacted]	[redacted]	[redacted]
OpEx	[redacted]	[redacted]	[redacted]	[redacted]
Public Charging – Municipal Charging Collaborations Pilot	$1,811,500	$587,500	$287,500	$2,686,500
CapEx	[redacted]	[redacted]	[redacted]	[redacted]
OpEx	[redacted]	[redacted]	[redacted]	[redacted]
Portfolio Support	$4,688,559	$3,284,688	$3,580,748	$11,553,995
CapEx	[redacted]	[redacted]	[redacted]	[redacted]
OpEx	[redacted]	[redacted]	[redacted]	[redacted]
Residential Smart EV Charging Pilot	$2,417,000	$1,945,313	$2,130,409	$6,492,722
CapEx	[redacted]	[redacted]	[redacted]	[redacted]
OpEx	[redacted]	[redacted]	[redacted]	[redacted]
Grand Total	$31,939,055	$29,462,312	$32,631,943	$94,033,310
Total CapEx	[redacted]	[redacted]	[redacted]	[redacted]
Total OpEx	[redacted]	[redacted]	[redacted]	[redacted]

[END CONFIDENTIAL]

Table 33. Detail on Program Operating and Capital Expenditures[223]

Programs [BEGIN CONFIDENTIAL]	2023	2024	2025	2023-2025 Total
Business & Multi-Family Make-Ready Solutions	$2,547,130	$2,144,739	$2,439,061	$7,130,930
CapEx	[redacted]	[redacted]	[redacted]	[redacted]
OpEx	[redacted]	[redacted]	[redacted]	[redacted]
Incentives	[redacted]	[redacted]	[redacted]	[redacted]
Program Operations	[redacted]	[redacted]	[redacted]	[redacted]
O&M on Investments	[redacted]	[redacted]	[redacted]	[redacted]
Evaluation Services	[redacted]	[redacted]	[redacted]	[redacted]
Outreach and Education Services	[redacted]	[redacted]	[redacted]	[redacted]
Infrastructure	[redacted]	[redacted]	[redacted]	[redacted]
Business EV Charging Rebates	$460,000	$2,328,728	-	$2,788,728
CapEx	[redacted]	[redacted]	[redacted]	[redacted]
OpEx	[redacted]	[redacted]	[redacted]	[redacted]
Incentives	[redacted]	[redacted]	[redacted]	[redacted]
Program Operations	[redacted]	[redacted]	[redacted]	[redacted]
O&M on Investments	[redacted]	[redacted]	[redacted]	[redacted]
Evaluation Services	[redacted]	[redacted]	[redacted]	[redacted]
Outreach and Education Services	[redacted]	[redacted]	[redacted]	[redacted]
Infrastructure	[redacted]	[redacted]	[redacted]	[redacted]
Clean Fuels Program[224]	$11,758,817	$11,569,165	$17,314,728	$40,642,710
CapEx	[redacted]	[redacted]	[redacted]	[redacted]
OpEx	[redacted]	[redacted]	[redacted]	[redacted]
Incentives	[redacted]	[redacted]	[redacted]	[redacted]
Program Operations	[redacted]	[redacted]	[redacted]	[redacted]
O&M on Investments	[redacted]			
Evaluation Services				
Outreach and Education Services				
Infrastructure				
EV Ready Affordable Housing Grants	$1,000,000	-	-	$1,000,000
CapEx	[redacted]			
OpEx				
Incentives				
Program Operations				
O&M on Investments				
Evaluation Services				

[END CONFIDENTIAL]

[223] For a detailed breakout of existing and proposed budgets by activity, please see Appendices A-C. Figures shown in this budget include those approved previously by the Commission through docketed proceedings, detailed in Appendix H.

[224] Operating expenditures are costs recovered in rates each year. Capital expenditures are costs recovered in rates over many years (the period varies with the life of the asset, which reduces impact on customer bills).

Programs [BEGIN CONFIDENTIAL]	2023	2024	2025	2023-2025 Total
Outreach and Education Services	[redacted]			
Infrastructure				
Fleet Partner Pilot	$5,258,760	$6,415,740	$6,442,773	$18,117,273
CapEx	[redacted]			
OpEx				
Incentives				
Program Operations				
O&M on Investments				
Evaluation Services				
Outreach and Education Services				
Infrastructure				
Heavy Duty Charging Pilot	$1,997,290	$1,186,441	$436,723	$3,620,453
CapEx	[redacted]			
OpEx				
Incentives				
Program Operations				
O&M on Investments				
Evaluation Services				
Outreach and Education Services				
Infrastructure				
Portfolio Support	$1,811,500	$587,500	$287,500	$2,686,500
CapEx	[redacted]			
OpEx				
Incentives				
Program Operations				
O&M on Investments				
Evaluation Services				
Outreach and Education Services				
Infrastructure				
Public Charging - Municipal Charging Collaboration and Electric Ave	$4,688,559	$3,284,688	$3,580,748	$11,553,995
CapEx	[redacted]			
OpEx				
Incentives				
Program Operations				
O&M on Investments - Electric Avenue				
O&M on Investments - Municipal Charging Collaboration				
Evaluation Services - Electric Avenue				

[END CONFIDENTIAL]

Programs [BEGIN CONFIDENTIAL]	2023	2024	2025	2023-2025 Total
Evaluation Services - Municipal Charging Collaboration	[redacted]			
Outreach and Education Services				
Infrastructure				
Residential Smart Charging Pilot	$2,417,000	$1,945,313	$2,130,409	$6,492,722
CapEx	[redacted]			
OpEx				
Incentives				
Program Operations				
O&M on Investments				
Evaluation Services				
Outreach and Education Services				
Infrastructure				
Grand Total	$31,939,055	$29,462,312	$32,631,943	$94,033,310
CapEx	[redacted]			
OpEx				
Incentives				
Program Operations				
O&M on Investments				
Evaluation Services				
Outreach and Education Services				
Infrastructure				

[END CONFIDENTIAL]

8.3 Funding Sources

The following table provides a forecast of all funding sources to be utilized in support of PGE's TE-related activities during the 2023-2025 planning cycle for both existing and new activities, by year. Due to regulatory and other priorities, the proposed values in the table below and throughout this section may be further refined.

Table 34. Summary of Funding Sources for TE-related Activities, Existing and New (2023-2025)[225]

[BEGIN CONFIDENTIAL]	2023	2024	2025	2023-2025 Total
Existing/Approved	$20,180,238	$7,187,215	$758,150	$28,125,603
Deferral	$2,646,059	$678,162	$305,747	$3,629,968
[redacted]				
[redacted]				
GRC/Base Rates	$9,005,180	$4,565,325	$452,403	$14,022,907
[redacted]				
[redacted]				
MMC	$8,529,000	$1,943,728	-	$10,472,728

[END CONFIDENTIAL]

[225] Figures shown in this budget include those approved previously by the Commission through docketed proceedings, detailed in Appendix H.

[BEGIN CONFIDENTIAL]	2023	2024	2025	2023-2025 Total
[redacted]				
PGE Clean Fuels Programs	$11,758,817	$13,713,904	$19,753,790	$45,226,510
[redacted]				
Incremental	-	$8,561,194	$12,120,003	$20,681,197
GRC/Base Rates	-	$3,336,856	$6,427,093	$9,763,949
[redacted]				
MMC	-	$5,224,338	$5,692,911	$10,917,249
[redacted]				
Grand Total	$31,939,055	$29,462,312	$32,631,943	$94,033,310
[redacted]				

[END CONFIDENTIAL]

All forecasts are inherently uncertain, so we reiterate that the dollar projections in the above table are based on the best information available to PGE at the time this plan was prepared. Actual revenue may–and likely will–vary from these estimates. For instance, PGE Clean Fuels program revenues are dependent on EV adoption rates, the rules and policies of the Oregon Department of Environmental Quality in issuing Clean Fuels credits, and market prices for the sale of Clean Fuels credits. Market prices in particular are subject to potential volatility during the three-year period of this plan and can be expected to fall short of or exceed current projections. Likewise, Monthly Meter Charge revenues are based on PGE's current base rates and projected retail power sales during the planning period. Should base rates change in a future General Rate Case or power sales exceed or fall short of projections, Monthly Meter Charge revenues will diverge from these estimates.

The revised Division 87 rules adopted by the Commission on September 6, 2022 require PGE to file an update to its TE Plan and Budget in the event that material changes occur during the period of the plan.[226] Material changes are new TE program or infrastructure measure applications, or program or infrastructure changes that require new incremental customer dollars. PGE will seek to manage within its overall TE budget to address variations in revenue from projections. PGE will file a budget update for Commission approval in the event that we determine significant shortfalls in non-ratepayer funding sources which should be backfilled with additional ratepayer funds to achieve essential TE portfolio objectives.

The two tables below provide additional transparency by listing funding sources for each program by year for both approved and incremental program spend. Note that the spend is a forecast and may extend beyond the year shown depending on customer interest and decision-making timeframes.

[226] OPUC Order No. 22-336, Appendix A, Page 5 of 14, available online at https://apps.puc.state.or.us/orders/2022ords/22-336.pdf.

Through expansion of this pilot, PGE aims to better serve underserved communities based on the findings from the evaluation survey. The evaluation will inform PGE's understanding of the following learning objectives:

- Can the incentive offered bridge the gap and encourage community electrification?
- Do underserved customers exhibit the same charging behavior as other participants?
- Is there anything unique about the way underserved customers participate in the program?

Additionally, the pilot will investigate:

- Which type of chargers are being purchased and if the proposed rebate amount is sufficient to incentivize customers to purchase a qualified charger.
- Where customers are charging their electric vehicles in the territory, supporting PGE's efforts to plan effectively for increased TE load.

A.1.5 Program and Infrastructure Costs

A.1.5.1 Estimated total costs, including incentives, program delivery, evaluation, marketing, and program operations costs

Table 48. Residential Smart EV Charging Budget: Forecasted Operating and Capital Expenditures[263]

Approved [BEGIN CONFIDENTIAL]	2023	2024	2025	2023-2025 Total
OpEx				
Incentives				
Program Ops				
O&M				
Evaluation				
Marketing				
CapEx				
Total	$2,417,000	$1,945,313	$2,130,409	$6,492,722

[END CONFIDENTIAL]

A.1.1.13 Estimated participant costs

Residential customers are billed on Schedule 7.

[263] Budget is based on forecasted enrollment numbers in Table 45. The forecasted enrollment numbers are higher than UM2003 deferral filing in February 2023 due to increased market interest shown since the end of 2022.

- Customer installs charger(s), EV drivers take service
- PGE receives charging session data that will help inform future grid planning

Education and Outreach

The transition from gasoline to electric "fuel" can be a complex and challenging process for fleet managers. Thus, effective education and outreach are crucial to achieve success with fleet electrification. PGE recognizes the importance of educating fleet managers about how fleet electrification can support their sustainability goals and while providing cost savings to encourage enrollment. This outreach supports PGE establishing our role in the market and clarifies the roles and scopes of both PGE and the customer.

Primary outreach strategies include direct customer outreach by PGE's Key Customer Managers and the Business Outreach Team, targeted LinkedIn ads, and presence at various events. PGE measures the success of its education and outreach efforts by the number of interested customers in the pipeline, quick allocation of incentive dollars, and overall adoption of fleet electrification. PGE anticipates low outreach costs due to the significant number of customers in the pipeline waiting to participate. Thus, PGE has allocated 1.2 percent of the Phase 2 budget towards outreach and education.

Program Timeline

PGE expects the Fleet Partner pilot to continue through to the 2025 TE Plan. We have seen very high demand, as well as higher than anticipated costs and incentives in the first year of the program. This growth is expected through 2025.

Table 52. Fleet Partner Historical and Forecasted Site Applications and Sites Completed

Year	2021	2022	2023	2024	2025	Total
Est. Site Applications	24	56	25	50	55	210
Est. Sites Completed	–	1	19	21	39	80

[BEGIN CONFIDENTIAL]

Table 53. Fleet Partner Historical and Forecasted Incentives

Year	2021	2022	2023	2024	2025	Total
Est. CapEx Incentives	[redacted]					

[END CONFIDENTIAL]

Expected Outcomes

- Better enable PGE to plan for, serve, and effectively manage fleet load to create grid benefits. As of April 2023, the program has received 90 site applications from 59 customers. Estimates indicate these sites could have a load potential of 44 MW

The following high-level metrics have been identified as indicators of success:

- Total make-ready ports installed & successful transfer of session data from EVSE to PGE
- Relationships with customers, as measured by customer engagement, satisfaction, and experience
- Analysis of incentive level data

To assess these indicators, PGE plans to engage third-party evaluators to evaluate and report on the pilots in 2023, 2025, and 2026. The results of these reports will assist PGE in better understanding and meeting the needs of customers and establishing optimal processes for building and maintaining make-ready infrastructure. Data on charging sessions will also help PGE assess fleet loads, peak loads, and the impacts on the grid to inform future rate designs and flexible load programs. PGE anticipates acquiring and utilizing charging session data for evaluation on a monthly basis. This data will be used to understand fleet loads and impacts to the grid, peak loads, future TOU, rates, and flex load programs, and make-ready infrastructure longevity and performance.

A.2.5 Program and Infrastructure Costs

A.2.5.1 Estimated total costs, including incentives, program delivery, evaluation, marketing, and program operational costs

PGE is on track to spend all capital funds for Phase 1 sites by mid-2024 and plans to continue to track and report on budgets and spend via annual reports. All Phase 1 funds have been reserved and will be disbursed gradually until site construction is complete by mid-2024. The rate of spend in Phase 2 is likely to mirror those in Phase 1, with inflationary costs potentially raising costs for equipment and construction in both 2024 and 2025. PGE plans to provide annual reports and acknowledges the potential for further adjustments. The following table reflects to costs for both Phase 1 and Phase 2:

Table 55. Fleet Partner Budget: Forecast of Operating and Capital Expenditures (2023-2025)

Total	2023	2024	2025	2023-2025 Total
OpEx	[redacted]			
Incentives				
Program Operations				
O&M on Investments				
Evaluation Services				
Marketing Services				
CapEx				
Total	$5,258,760	$6,415,740	$6,442,773	$18,117,273

A.2.5.2 Estimated participant costs

Estimated participation costs vary significantly across customer segments and site configurations. PGE proposes to recover the cost of these activities through subsequent general rate cases.

required for the power supply to the chargers. Estimated overall delivery timelines for these sites range from two to five years.

A.3.2 Budget

The Heavy-Duty overall spend was approved in 2021 and below shows the continued spend of this program within 2023-2025 for the first site. There may be a future site identified which would require an update to the plan of the forecasted spend depending on the site, site agreement reached, and timeline of implementation.

Table 59. Heavy Duty Charging Budget: Existing/Approved Operating and Capital Expenditures (2023-2025)[271]

Costs [BEGIN CONFIDENTIAL]	2023	2024	2025	2023-2025 Total
OpEx				
Evaluation Services				
Incentives				
Outreach and Education Services				
O&M on Investments				
Program Operations				
CapEx				
Total	$1,997,290	$1,186,441	$436,723	$3,620,453

[END CONFIDENTIAL]

A.3.3 Additional Scope/Scale

PGE's first foray into MHD charging was a partnership with Daimler Truck North America. PGE operates the site and manages the power billings for this project. PGE has learned many lessons around charging patterns, power usage, and site layouts. Key learnings follow:

- Grid Impacts: MHD vehicles can impart substantial electrical loading at a charging site. Over the four-month sample period, there were 28 charging session with a recorded energy delivery greater than 100 kWh. These instances made up only 1.5 percent of the total number of sessions but accounted for 18.4 percent of the total energy delivered to the site during this time period.

[271] The figures shown in this budget have been approved previously by the Commission through docketed proceedings, detailed in Appendix H.

B.1.2 Budget

Table 69. Business EV Charging Rebates Budget: Existing/Approved Operating and Capital Expenditures (2022-2025)[296]

Programs [BEGIN CONFIDENTIAL]	2023	2024	2025	2023-2025 Total
OpEx	[redacted]			
Evaluation Services				
Incentives				
Outreach and Education Services				
O&M on Investments				
Program Operations				
CapEx				
Total	$460,000	$2,328,728	-	$2,788,728

[END CONFIDENTIAL]

B.1.3 Additional Scope/Scale

Once the existing rebate budgets are exhausted, this program will sunset.

[296] The figures shown in this budget have been approved previously by the Commission through docketed proceedings, detailed in Appendix H.

B.2.1.3 Timeline

The program will launch in 2022 and is projected to extend as long as the allocated budget lasts. Over that timeframe, we project that the program will fund 360 EV-ready parking stalls at affordable housing developments in PGE's service area.

B.2.2 Budget

Table 71. Affordable Housing EV-Ready Funding Budget: Existing/Approved Operating and Capital Expenditures (2022-2025)[299]

Programs [BEGIN CONFIDENTIAL]	2023	2024	2025	2023-2025 Total
OpEx	[redacted]			
Evaluation Services				
Incentives				
Outreach and Education Services				
O&M on Investments				
Program Operations				
CapEx				
Total	$1,000,000	-	-	$1,000,000

[END CONFIDENTIAL]

B.2.3 Additional Scope/Scale

Once the existing budget is exhausted, this program will sunset.

[299] The figures shown in this budget have been approved previously by the Commission through docketed proceedings, detailed in Appendix H.

Table 76. Municipal Charging Collaboration 2023 TEP Budget: Forecast of Operating and Capital Expenditures (2023-2025)

Programs [BEGIN CONFIDENTIAL]	2023	2024	2025	2023–2025 Total
OpEx				
Incentives				
Program Ops				
O&M on Investments - Electric Avenue				
O&M on Investments - Municipal Charging Collaboration				
Evaluation Services - Electric Avenue				
Evaluation Services - Municipal Charging Collaboration				
Marketing				
Infrastructure				
CapEx				
Total	$4,688,559	$3,284,688	$3,580,748	$11,553,995

[END CONFIDENTIAL]

C.1.4.2 Estimated participant costs

PGE will design, own, operate and maintain charging infrastructure installed under this program. Residential customers will pay a Schedule 50 rate, priced as follows:

- Flat fee (all hours): $3 for 4 hours
- An additional peak-time fee of $0.19 per kWh will be assessed on weekdays between 3 PM and 8 PM.

Should PGE find a private market partner, we would expect the private market partner to use a Schedule 50 rate (or a new tariff introduced for this program).

C.1.5 Fit with Long-Term TE Strategy

As a public utility, PGE is obligated to ensure equitable and affordable access to electricity for all customers. PGE is further guided by legislation in HB 2165 to serve underserved communities. PGE is committed to meeting this obligation by ensuring that all communities have access to reliable and affordable charging infrastructure.

Through the Public Charging – Municipal Charging Collaboration program, PGE will determine if owning and operating chargers based on policy (HB 2165) is the right approach or if a potential private partnership would make more sense. PGE also intends to gain insights into the appropriate tariff rate for these chargers and whether Schedule 50, its current public charging rate, needs to be

If construction, material, or EVSE costs end up being higher than expected, PGE may consider increasing the costs for either the make-ready or equipment incentives. However, if PGE overestimates the required incentives, we will keep an eye on macro-economic conditions to determine if additional incentives are necessary to justify the capital requirement for both PGE and customers to add EV charging. If there is a significant difference in the required incentive compared to the costs, PGE may need to revisit the commission mid-cycle to adjust the incentives accordingly.

If there is significant deviation between anticipated costs, actual costs, and incentive amount PGE would request a mid-cycle allowance to adjust based on market conditions.

We may find that the port count, customer contribution, and overall demand is not compatible with the needs of the underserved Low/Medium Income MF market, in which case PGE would request a mid-cycle allowance to different demographics to get the desired learnings for program period.

Table 82. Business and Multi-family Make-ready: Forecast of Operating and Capital Expenditures (2023-2025)

Programs [BEGIN CONFIDENTIAL]	2023	2024	2025	2023-2025 Total
OpEx				
Incentives				
Program Ops				
O&M				
Evaluation				
Marketing				
CapEx				
Total	$2,547,130	$2,144,739	$2,439,061	$7,130,930

[END CONFIDENTIAL]

C.2.5.2 Estimated participant costs

Final costs to program participants are unknown and will vary by customer. Participants will be responsible for the costs associated with the following:

- Make-ready and line extension costs beyond that covered by PGE's Line Extension Allowance and the custom PGE capital contribution for this program
- Acquisition of EVSE, less rebate amount
- Installation and commissioning of EVSE
- Maintenance of EVSE, including data/software fees
- Energy and other costs via the PGE bill, for the meters serving the EVSE