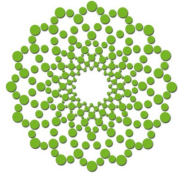




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September 29, 2023

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RE: UM 2033 - Comments on Staff Report regarding Portland General Electric's 2023 Transportation Electrification Plan

CUB, GEI, and Verde are grateful for the opportunity to provide these comments on Portland General Electric Company's (PGE or the Company) 2023 – 2025 Transportation Electrification Plan (TEP) filed on August 25, 2023.¹ Although we write jointly, at times, these comments reflect independent discussions with PGE or specific recommendations that one of our organizations made in prior proceedings or in this docket. Therefore, some of our discussions of past activities apply only to one of our organizations.

CUB, GEI, and Verde reserve the right to provide additional comments throughout the UM 2033 docket. We generally support transportation electrification and many aspects of PGE's TEP. In these comments, we reflect on the information provided by Public Utility Commission Staff, PGE, and stakeholders. First, CUB finds that following a significant level of engagement with the PGE, the company put forward an acceptable compromise based on CUB's concerns regarding at-home charging near multi-family housing. However, as detailed in these comments, some concerns remain, and we will continue to track program outcomes.

Second, we join Staff in support of PGE's proposal for Schedule 50 charging rates at chargers owned by PGE. Third, we advocate for a uniform uptime standard across the State of Oregon which PGE appears to support. We will continue to monitor changes to the company's uptime standard. Fourth, we discuss the changes to the company's micromobility concept and

¹ UM 2033, PGE 2023 Transportation Electrification Plan (Final) 133 (Aug. 25, 2023), <https://edocs.puc.state.or.us/efdocs/HAH/um2033hah15818.pdf> (hereinafter PGE, Final 2023 TEP)

identify potential resources for the company to assess as it begins to explore the micromobility space. Finally, we note that we appreciate the early modeling of the company’s EV charging data and look forward to future more detailed assessment of this unique data set.

A. An Assessment of PGE’s Approach to At-home Charging for Residents of Multi-family Housing2

 a. Guidance for TE Planning from HB 21652

 b. CUB’s Focus on L2 Charging Near Multi-family Housing.....3

 c. Utility-ownership versus Third-party Ownership of EV Chargers3

 d. Reaching a Compromise5

 e. Looking Forward at the Utility’s Role in the TE Sector7

B. Schedule 50 EV Charging Rates7

C. The Need for a Uniform Uptime Standard for Investor-Owned Utilities.....7

D. Micromobility8

E. EV Load and PGE’s data on EV Charging9

A. An Assessment of PGE’s Approach to At-home Charging for Residents of Multi-family Housing

a. Guidance for TE Planning from HB 2165

HB 2165 provides legislative guidance and mandates for utility TE spending. Its passage signaled a shift in Oregon TE planning, from a broad focus on accelerating the development of TE services to a more targeted focus on supporting EV adoption for underserved communities. HB 2165 mandates that at least half of the funds collected by electric utilities through the Monthly Meter Charge for TE investments support transportation electrification in underserved communities.²

This year, throughout the collaborative planning processes for PacifiCorp’s and PGE’s TEPs, CUB examined TEP program design choices with an eye for how well they enacted the direction of HB 2165. Programs contemplated in these TEPs include a wide range of TE infrastructure and services, including direct current fast-chargers (DCFC), Level 2 chargers (L2, sometimes referred to as “slow-chargers”), and charging at different locations, such as at home, the workplace, and commercial sites. CUB determined that optimizing TE investments to equitably serve underserved communities requires first determining the needs of underserved communities and then matching those needs with appropriate infrastructure and an appropriate TEP program design to build and manage that infrastructure. Ultimately, this approach led CUB to focus significantly on at-home, L2 charging for residents of multi-family housing.

² H.B. 2165 §2(6) (2021)
<https://olis.oregonlegislature.gov/liz/2021R1/Downloads/MeasureDocument/HB2165/Enrolled>.

b. CUB's Focus on L2 Charging Near Multi-family Housing

CUB's focus is warranted for several reasons. HB 2165 identifies residents of multi-family housing and renters as underserved communities. Currently, residents of multi-family housing are much less likely to own EVs relative to homeowners. PGE found that "only 3 percent of current EV owners surveyed lived in multi-family housing (compared to 22 percent of all respondents).³ Further, HB 2165 identified low-income communities as underserved communities. Since renters and multi-family housing residents tend to have lower incomes than homeowners, CUB argues that residents of low- and moderate-income multi-family housing offer a readily identifiable and geographically targetable priority for TE support.

Furthermore, CUB found that residents of multi-family housing are more reliant on the utility's TE programming than single-family homeowners. Evidence suggests that at-home charging is very important to EV owners. According to the U.S. Department of Energy, 80% of charging occurs at home because it is the most convenient and low-cost option.⁴ While single-family homeowners can acquire at-home charging themselves by installing an L2 charger in their garage, which utility and state programs subsidize, this option is either much less feasible or impossible for renters and residents of multi-family housing. Essentially, these communities are reliant on other actors, such as the electric utilities, to support their access to essential at-home charging.

Furthermore, not only is at-home L2 charging essential to consumers, but it is also advantageous from a utility load management perspective. At-home L2 charging enables load management schemes like managed charging and time-of-use tariffs, which could shift EV charging load to off-peak hours during the night. Thus, robust information-gathering and planning for at-home charging for residents of multi-family housing should be a significant TE planning focus for the Oregon electric utilities, particularly PGE, which has a more urban territory and more multi-family housing.

CUB is satisfied that PGE also recognized the importance of L2 charging near multi-family housing and the need for PGE to address this use-case in their territory. Where CUB and PGE differed in the planning process was how best to meet the needs of this underserved community.

c. Utility-ownership versus Third-party Ownership of EV Chargers

³ PGE, Final 2023 TEP, *supra* note 1 at 67.

⁴ Michael Blonsky, et al., *Incorporating Residential Smart Electric Vehicle Charging in Home Energy Management Systems*, NREL 1 (2021), <https://www.nrel.gov/docs/fy21osti/78540.pdf>.

PacifiCorp’s Public Utility-Owned Infrastructure Pilot Program (henceforth shortened to PacifiCorp’s Utility-Ownership Program) and PGE’s Business and Multi-family Solutions Program offer contrasting approaches for providing access to EV charging at multi-family housing. Namely, PacifiCorp’s Program results in utility ownership of the chargers near multi-family housing, whereas PGE’s Program results in third-party ownership of the chargers. In PGE’s Business and Multi-family Solutions Program, “site hosts” own the chargers, which has significant ramifications for customers. It became clear during this proceeding that Commission oversight of charging rates and uptime standards is only possible through utility ownership of the chargers. Put differently, third-party ownership of the chargers nullifies a significant portion of the Commission’s oversight of the utility investment.

As such, third-party ownership of chargers near multi-family housing presents a significant equity issue between single-family homeowners and residents of multi-family housing. Homeowners are entitled to the regulated utility residential electricity rate for EV charging. In contrast, residents of multi-family housing do not benefit from the Commission’s oversight of rates; they receive a charging rate determined by unregulated third parties.

Other interested parties in the TEP proceedings this year have suggested that Commission oversight of charging rates and uptime was unnecessary because market competition would compel third-party charger owners to keep charging rates low and the chargers well-maintained. CUB remains unconvinced by this argument for at-home charging specifically. The Department of Energy’s research shows that EV owners rely heavily on at-home charging⁵ and if site hosts realize their customers are a captive or semi-captive clientele, then price gouging could ensue. The risk of this is especially unacceptable for investments specifically intended to establish equitable service for underserved communities under HB 2165.

Further, even if the potential for price gouging is ignored, CUB found that site hosts seeking only cost recovery would be hard-pressed to do so in underserved communities with a charging rate comparable to what single-family homeowners pay. Since it is generally understood that charging service providers are operating at a loss even in areas with higher EV adoption,⁶ we can only expect a more difficult challenge for cost recovery in areas with low EV adoption. Thus, underserved communities, which currently have very low EV adoption, present an especially difficult challenge for cost recovery. A site host seeking cost recovery would be pressured to raise rates to compensate for low charger utilization. This dynamic does not support equitable access to affordable charging.

It is not unreasonable for a third-party site host, which bears no obligations to enact the direction of HB 2165, to maximize cost recovery from these chargers. However, the Commission

⁵ *Id.*

⁶ See UM 2056, Staff Report for PacifiCorp 2023 Transportation Electrification Plan (May 30, 2023), <https://edocs.puc.state.or.us/efdocs/HAU/um2056hau94747.pdf>.

and the electric utilities *are* beholden to the direction of HB 2165. Achieving equitable service for underserved communities may require an approach that the Commission is empowered to oversee, such as a portfolio approach to cost recovery that reduces the burden on underserved communities. Indeed, PacifiCorp’s Utility-Ownership Program includes provisions to provide low-income charging rates for qualifying customers. Third-party charger ownership would disqualify this option and create a reliance on other agencies and yet-unplanned systems to provide a comparable equity outcome.

With regard to the ratepayer investment required to fund chargers through utility-ownership and third-party ownership programs, CUB did not find that the investment-per-charger in PGE’s Business and Multi-family Solutions Program was less than the investment per charger in Oregon TE programs with utility-ownership of chargers, including PGE’s Public Charging – Municipal Charging Collaboration Program.⁷ This assessment was a challenging comparison, but nevertheless, CUB believes that PGE’s Business and Multi-family Solutions Program design does not result in demonstrably lower investment per charger largely because the program not only funds the make-ready infrastructure but it also heavily subsidizes charger installation and the chargers themselves. Put differently, in this program, utility ratepayers fund the lion’s share of the total investment required, even though the utility does not own the chargers or enable Commission oversight of them.

Finally, an important component of setting the stage for underserved communities to adopt EVs is establishing visible proof that affordable and reliable charging services are available to them and that charging rates are fair relative to homeowners’ charging rates. If third-party charger owners set rates too high or the chargers are poorly maintained, this could have a chilling effect on EV adoption for underserved communities.

d. Reaching a Compromise

Based on these concerns, CUB concluded that PGE’s Business and Multi-family Solutions Program created unnecessary and unacceptable risks for customers at multi-family housing relative to PacifiCorp’s Utility-Ownership Program. Further, PGE’s Business and Multi-family Solutions Program did not appear to reduce the utility investment per charger required to establish the TE service. CUB presented these findings to PGE throughout the planning process and in greatest detail in CUB’s comments for PGE’s Draft TEP. In the comments, CUB proposed two options to address our concerns:

1. For multi-family sites currently in PGE’s Business and Multi-family Solutions Program, PGE should instead use a utility-ownership model similar to PacifiCorp’s Commission-approved Utility-Ownership Program.

⁷ This analysis was informed by budget figures from PGE’s 2023 Draft TEP.

or

2. PGE should reallocate resources earmarked for multi-family sites in the Business and Multi-family Solutions Program to its Public Charging – Municipal Charging Collaboration Program, which could establish similar charging access near multi-family housing with utility-owned pole chargers in the right-of-way.

In response to CUB's Draft TEP comments, PGE met with CUB several times to discuss a resolution. PGE's final TEP offers a compromise. From the Draft to the Final TEP, funding for the Business and Multi-family Solutions Program decreased from \$7.3 million to \$2.5 million. PGE reallocated the difference to its Public Charging – Municipal Charging Collaboration Program, which will now provide more utility-owned pole and pedestal chargers near multi-family housing. This generally aligns with CUB's option two above. PGE reduced the number of chargers in the Business and Multi-family Solutions Program from 200 to 100 and the expected number of sites to 10. Additionally, PGE integrated a \$1,300 rebate for site hosts at multifamily sites if, after five years, the site host maintains a charging rate within 10% of Schedule 50 (i.e. the rate provided at comparable PGE-owned chargers).

The compromise does not fully address CUB's concerns; there will still be a small handful of third-party owned chargers at multi-family sites in PGE's Business and Multi-family Solutions Program funded through the Monthly Meter Charge. CUB's proposal requested that all multi-family sites be removed from the Business and Multi-family Solutions Program, leaving only business sites in that program. CUB is unsure how effective the Company's \$1,300 incentive to site hosts for a 5-year non-binding commitment will be for controlling charging rates at multi-family sites. However, CUB understands the value of exploring several program designs and information-gathering at this formative stage of TE planning. CUB recognizes that no exploratory program is without some risks. Thus, CUB joins Staff and GEI in support of this compromise. We appreciate PGE's willingness to integrate stakeholder feedback and make meaningful changes to its TEP.

CUB, GEI, and Verde retain a concern that the change in the programming did not result in an overall lower TEP budget. We understand that pole chargers are considerably less expensive than banks of four or more L2 chargers in a parking lot, which is the charger configuration in PGE's Business and Multi-family Solutions Program. We expect a lower budgetary requirement if PGE supports more pole chargers and fewer charger banks. However, we understand there may be nuance unexplored in the TEP— particularly given PGE's need to make changes in a short timeframe— and are content that this inquiry can be satisfied in a future rate case.

e. Looking Forward at the Utility's Role in the TE Sector

CUB, GEI, and Verde intend to track the program outcomes of PacifiCorp's and PGE's TEP programs, and in particular, track any differences in outcomes as it relates to at-home charging near multi-family housing. It is important to note that CUB never intended for this TEP proceeding to involve a comprehensive and conclusive investigation into what long-term oversight will be necessary for at-home charging near multi-family sites and what oversight entity should bear that responsibility. Instead, CUB sought to examine what TE programming and oversight was justified and appropriate for current utility investments. Commission oversight of rates and service quality is *the standard* for utility investments.

We believe this oversight should not be discarded lightly, especially under circumstances where it may be needed to ensure a fair and equitable outcome. If other systems for providing oversight of equitable at-home charging near multi-family sites in Oregon emerge in the future, and this oversight can be relied upon to oversee utility TE investments, so be it. Until that time, we believe the Commission should be wary of allowing unique exceptions to its well-established standards for rate and service quality oversight of utility infrastructure investments.

B. Schedule 50 EV Charging Rates

We join Staff in support of PGE's proposal for Schedule 50 charging rates at chargers owned by PGE. PGE's proposal sets the L2 charging rate at the residential electricity rate, and bases DCFC rates primarily on mid-market rates. Consistent with CUB's comments throughout both utilities' TEP processes, we are primarily concerned with fair access to at-home charging and rate parity between homeowners and multi-family housing residents. By giving renters and multi-family residents access to the same charging rate at PGE chargers that homeowners with a driveway have, equity is addressed in the TE charging space. We believe this concept enacts the guidance of HB 2165.

As for rates at DCFCs, we consider DCFCs to provide a distinct service relative to at-home L2 charging and that this service is generally more compatible with pricing based on an increasingly competitive marketplace. As such, we are generally not opposed to integrating market-based price indicators into DCFC charging rates and possibly increasing cost recovery from these assets. We intend to track the impacts of PGE's DCFC pricing method.

C. The Need for a Uniform Uptime Standard for Investor-Owned Utilities

PGE has committed to a target uptime of 97% for PGE-owned and customer-owned chargers, consistent with the NEVI standard.⁸ GEI supports this uptime target and appreciates

⁸ 87 FR 3762-37280 (June 22, 2022) (to be codified at 23 CFR § 680.116(b)), <https://www.federalregister.gov/documents/2022/06/22/2022-12704/national-electric-vehicle-infrastructure-formula-program>; PGE, Final 2023 TEP *supra* note 1 at 72.

the company providing uptime information for its Electric Avenue locations and workplace charges (where data was available) for 2022.⁹

We support this target and advocate for a uniform uptime standard across the State of Oregon.¹⁰ Since PGE’s draft TEP, the company appears to be open to a uniform uptime standard.¹¹ In its final TEP, PGE states, “PGE will work with our charging vendors in the coming months to bring our uptime reports in line with those of other regional utilities.”¹² Establishing a transparent and uniform uptime standard across the state is essential for EV drivers to experience similar and comparable charging outcomes, regardless of their utility provider. A uniform uptime standard will also ensure that the Commission, staff, and stakeholders are comparing apples to apples.

PGE explains that most chargers in its service area are owned by its customers or third parties, and therefore PGE lacks knowledge about the “reliability and usage” of charging infrastructure in its service area. PGE notes that it seeks to gain additional learnings through various programs and will share this data in its next TE Plan Report.¹³ In PGE’s Responses to stakeholder comments, PGE explains that “PGE does not propose to enforce charger uptime for customer-owned chargers” but plans to “rely on requirements that customers keep chargers operational or risk forfeiting the utility-provided incentives.” We seek further clarification on these requirements, i.e., will this requirement be in the terms and conditions of PGE’s contractual agreements with customers who own their chargers? CUB, GEI, and Verde look forward to continued dialogue on the uptime standard to ensure customers’ experiences are positive and functional chargers support continued EV adoption in the state.

D. Micromobility

GEI’s Reply comments requested more information on how PGE plans to ensure that Oregon Clean Fuel funds support safe micromobility products. In the Final TEP, PGE included the following statement: “We will . . . work to define a micromobility strategy for the company’s activities which aligns with the utility’s role to determine if a future [micromobility] program would be needed. As in all PGE programs, safety is a foundational value. The market assessment and strategy will include evaluating risks and safety concerns.”¹⁴

⁹ PGE, Final 2023 TEP *supra* note 1 at 74.

¹⁰ See UM 2056, GEI & NW Energy Coalition, Comments on UM 2056 – PacifiCorp’s Transportation Electrification Plan 5 (June 16, 2023), <https://edocs.puc.state.or.us/efdocs/HAC/um2056hac16308.pdf>.

¹¹ UM 2033, Portland General Electric, 2023 Draft Transportation Electrification Plan 134 (June 1, 2023), <https://edocs.puc.state.or.us/efdocs/HAH/um2033hah151814.pdf> (“To adopt common formulas for calculating uptime, PGE will look to industry standards developed by NEVI and other rulemaking processes, industry experts such as EPRI, or multi-stakeholder standards such as the EV Charging Use Data Specification.”)

¹² <https://edocs.puc.state.or.us/efdocs/HAH/um2033hah151818.pdf>

¹³ PGE, Final 2023 TEP *supra* note 1 at 72.

¹⁴ PGE, Final 2023 TEP *supra* note 1 at 116.

We appreciate PGE’s acknowledgment of the need for safe investments in micromobility. We wish to share several resources that may be beneficial to PGE as it initiates its assessment.

1. The Portland Clean Energy Community Benefits Fund (PCEF) Climate Investment Plan requires that “rebates for new e-bikes and cargo e-bikes purchases are redeemed at local bike retailers.”¹⁵ Local retailers must qualify through an application process to participate in the program and commit to providing ongoing maintenance and repair services for e-bikes sold. E-bikes purchased through local retailers will be built and tested by professional mechanics who can validate the safety of batteries and other electronic components and advise consumers on safe practices.
2. Denver, Colorado’s Electric Bikes Redemption program provides rebates for qualified e-bikes, which must be redeemed at a local bike retailer.¹⁶
3. New York City, New York adopted Local Law 39 (2023) requires that e-bike electrical systems have been “certified by an accredited testing laboratory for compliance with Underwriters Laboratories (UL) standards 2849, or such other safety standard as the department [authorizes].”¹⁷ The law adopts additional aligned safety standards.
4. Additional efforts are being made to support access to safe e-bikes, such as a trade-in program and special e-bike pricing for delivery workers.¹⁸

Our research shows that the micromobility space is evolving, and we look forward to PGE’s assessment of its role in supporting micromobility.

E. EV Load and PGE’s data on EV Charging

GEI’s reply comments requested that PGE present the average observed load from EV charging compared to the total load from other electric household appliances and equipment based on its real-world charging data, and that PGE provide load-shape data for its utility-owned infrastructure. PGE stated in reply comments that at the time of filing the draft TEP, its Residential Smart EV Charging pilot evaluation was beginning, and findings were not yet available, and will share that information upon completion of the pilot.

However, PGE was able to provide an average observed load shape from its Residential Smart EV Charging Pilot (schedule 8), including for participants who use EVPlus in the

¹⁵ Portland Clean Energy Community Benefits Fund (PCEF) Climate Investment Plan 36 (2023) <https://www.portland.gov/bps/cleanenergy/climate-investment/documents/pcef-climate-investment-plan-full-draft/download>.

¹⁶ Electric Bikes (E-bikes). Denver.gov <https://www.denvergov.org/Government/Agencies-Departments-Offices/Agencies-Departments-Offices-Directory/Climate-Action-Sustainability-Resiliency/Sustainable-Transportation/Electric-Bikes-E-Bikes-Rebates#section-2> (last visited Sept. 29, 2023).

¹⁷ Local Law of the City of New York, No. 39 (2023), <https://nyc.legistar1.com/nyc/attachments/a7625a13-3aaa-4db1-a1ea-b7b00bfd3b95.pdf>.

¹⁸ The Equitable Commute Project, <https://www.equitablecommute.org/tradein> (last visited Sept. 29, 2023).

program. The data shows an interesting distinction between those who use the EVPlus and those who do not for a portion of the charging period. We appreciate PGE providing this information, and we look forward to a more complete assessment that provides insight into what causes this distinction and other general takeaways from the charging pilot.

Respectfully submitted,

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