

June 16, 2023

Oregon Public Utility Commission

201 High Street SE, Suite 100

Salem, OR 97301-3398

Delivered via email to: puc.filingcenter@puc.oregon.gov

RE: Comments on UM 2056 – PacifiCorp’s Transportation Electrification Plan

The Green Energy Institute at Lewis & Clark Law School (GEI) is a nonprofit energy and climate law and policy institute within Lewis & Clark Law School’s top-ranked environmental, natural resources, and energy law program. The NW Energy Coalition (NWECC) is a public interest nonprofit that focuses on clean energy issues in the Northwest. GEI and NWECC have provided comments throughout PacifiCorp’s (or “the company”) engagement with stakeholders. We appreciate the opportunity to provide feedback on PacifiCorp’s final Transportation Electrification Plan (TEP) for Oregon, filed on May 19, 2023.¹

As stated in our prior comments filed on April 7, 2023, we generally support PacifiCorp’s TEP and find that it offers a useful portfolio of programs to aid transportation electrification investments in Oregon. Further, the company addressed several of NWECC and GEI’s specific recommendations from our April 7, 2023 comments,² and we appreciate the company’s efforts to respond to stakeholder feedback in its reply comments filed on May 5, 2023.³ We are also grateful for the outreach conducted by the company’s TEP team in preparation for its filing of the draft TEP.

We submit the following comments and requests on the company’s final 2023 TEP filed on May 19, 2023. We reserve the right to provide additional comments during the Public Utility Commission’s public hearing to consider whether to accept the company’s TEP.

¹ *In the Matter of PacifiCorp, dba Pacific Power*, 2023 Oregon Transportation Electrification Plan (May 19, 2023), available at: <https://edocs.puc.state.or.us/efdocs/HAH/um2056hah104112.pdf> [hereinafter PacifiCorp, Final 2023 TEP].

² GEI and Verde, Comments on UM 2056 - Pacific Power Transportation Electrification Plan (April 7, 2023), available at: <https://edocs.puc.state.or.us/efdocs/HAC/um2056hac17542.pdf>; NW Energy Coalition, NW Energy Coalition’s comments in Docket UM 2056, PacifiCorp’s Draft 2023 Oregon Transportation Electrification Plan (April 7, 2023), available at: <https://edocs.puc.state.or.us/efdocs/HAC/um2056hac162559.pdf>.

³ PacifiCorp, UM 2056 - PacifiCorp’s Reply Comments (May 5, 2023), available at: <https://edocs.puc.state.or.us/efdocs/HAC/um2056hac151515.pdf>.

I. General Comments on the Revised PacifiCorp's TEP

A. *PacifiCorp's Uptime Standard*

First, in Section 3.3 Infrastructure performance, including changing adequacy, reliability, and accessibility of the company's draft TEP, the company stated the following about the Federal Highway Administration's National Electric Vehicle Infrastructure (NEVI) uptime formula:⁴

PacifiCorp plans to follow the standards adopted by the state while the NEVI standards are implemented. Currently, NEVI guidance suggests the following uptime requirements, which PacifiCorp plans to adopt for utility-owned and supported stations (DCFC and Level 2). PacifiCorp would not make this different by use case and would require 97% uptime for all use cases for publicly available stations.

Minimum Uptime. States must ensure that all charging ports have an average annual uptime of greater than 97%.

1. A charging port is considered "up" when its hardware and software are both online and available for use, or in use, and the charging port successfully dispenses electricity as expected.
2. Charging port uptime must be calculated on a quarterly basis for the previous 12 months.
3. Charging port uptime percentage must be calculated using the following equation:

$$\mu = ((8760 - T_{\text{outage}} - T_{\text{excluded}}))/8760 \times 100$$

where:

μ = port uptime percentage

T_{outage} = total hours of outage in previous year, and

T_{excluded} = total hours of outage in previous year for reasons outside the charging station operator's control, such as electric utility service interruptions, internet or cellular service provider interruptions, and outages caused by the vehicles, provided that the Charging Station Operator can

⁴ 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-vehicleinfrastructure-formula-program> [hereinafter Proposed NEVI standards § 680.116(b)]. Specifically, the T_{excluded} is defined as: total hours of outage in previous year for reasons outside the charging station operator's control, such as electric utility service interruptions, internet or cellular service provider interruptions, and outages caused by the vehicles, provided that the Charging Station Operator can demonstrate that the charging port would otherwise be operational.

demonstrate that the charging port would otherwise be operational, and vandalism, defined as cut cables.⁵

However, in the final TEP, the company made the following general changes:

1. The section refers to “program participants” rather than the company itself.
2. The T_excluded was revised to state: T_excluded: Electric utility service interruption, Failure to Charge (due to fault of the vehicle), Scheduled Maintenance, Vandalism, Natural Disasters, Hours of Operation (N/A: 24/7 operation), and Force Majeure events.⁶

Based on the changes observed in the final TEP, it is unclear whether utility-owned infrastructure will be required to meet the NEVI formula’s 97% uptime. **GEI and NWEAC request that the company clarifies its utility-owned charging infrastructure will abide by the NEVI 97% uptime standard.**

Second, in the company’s response to GEI’s previous request for a consistent NEVI formula, it stated that it would provide greater details in Appendix J of the final TEP. However, Appendix J does not discuss the NEVI formula as detailed in Section 3.3 of the company’s draft TEP or Section 3.3 of the final TEP. PUC staff also commented on the absence of the NEVI formula in Appendix J.⁷ **Therefore, we recommend the NEVI formula and PacifiCorp’s additions should be contained in Appendix J, too. In the alternative, as we recognize that duplication of the same information in the TEP can cause inconsistencies, we recommend Appendix J cite Section 3.3 of the TEP so that readers know where to look for relevant uptime information.**

Third, inconsistencies between the draft and final TEP definition of T_excluded should be addressed. In section 8.2, “Uptime and Reliability” of the draft TEP, T_excluded included “total hours of outage in previous year for reasons outside the charging station operator’s control, such as electric utility service interruptions, internet or cellular service provider interruptions and outages caused by the vehicles, provided that the Charging Station Operator can demonstrate that the charging port would otherwise be operational, and vandalism, defined as cut cables or cracked screen.”⁸

⁵ PacifiCorp., Draft 2023 Oregon Transportation Electrification Plan 53 (Feb.14, 2023), available at <https://edocs.puc.state.or.us/efdocs/HAQ/um2056haq174652.pdf> [hereinafter PacifiCorp, Draft 2023 TEP].

⁶ PacifiCorp, Final 2023 TEP at 55.

⁷ In the Staff Report, Staff stated, “In reply comments, Pacific Power pledge to address this in a new Appendix J. Staff confirms the addition of the new appendix, but we don’t see this issue addressed in the detailed manor GEI and Verde requested.” Eric Shierman, Staff Report: Pacific Power: (Docket No. UM 2056) Acceptance of Transportation Electrification Plan 16 (May 30, 2023), <https://edocs.puc.state.or.us/efdocs/HAU/um2056hau94747.pdf>.

⁸ PacifiCorp, Draft 2023 TEP at 30.

However, Section 3.3 of the final TEP states “Vandalism” without reference to cable cutting, leaves out “internet or cellular service provider interruptions,” and the TEP doesn’t mention the requirement for the Charging Station Operator to demonstrate that charging would otherwise be operational, which is an important and required component of the federal NEVI formula definition.⁹ **We recommend moving forward with the formula detailed in the final TEP Section 3.3, but request that (1) each type of T_excluded is broken down into subcategories, where appropriate, and (2) the federal NEVI formula language is retained, where appropriate.** For example, there are likely several types of vandalism, such as cable cutting or cracked screens or other components, that should be noted as a subcategory. We request this subcategorization because it is important to understand what scenarios and problematic occurrences cause EV chargers to be non-functional and to address those scenarios if possible.

If the company feels that subcategorization is appropriate later, **we request the company provide this information in a table in the company’s annual TE report. We also request that any categories in addition to the NEVI formula be noted as such, as it is helpful to discern which components result from the federal standard and which components have been added by the company (or by stakeholder request).**

B. The PUC should establish a consistent uptime standard across the State of Oregon

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 and stakeholders are comparing apples to apples. **For this reason, the Commission’s evaluation of the company’s uptime standard should be assessed as a potential state-wide standard and applied to Portland General Electric (PGE),** which filed its TEP on June 1, 2023, when it seeks acceptance of its TEP later this year.

Based on PGE’s June 1, 2023 TEP filing, PGE appears open and willing to meet a uniform uptime formula.¹⁰ Specifically, PGE states: “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.”¹¹ GEI anticipates requesting PGE utilize PacifiCorp’s uptime formula, perhaps with additional categorization, so that PUC staff and stakeholders can compare uptime percentages across the state.

⁹ PacifiCorp, Final 2023 TEP at 55.

¹⁰ *In the Matter of* Portland General Electric Company, 2023 Transportation Electrification Plan 134 (June 1, 2023), available at: <https://edocs.puc.state.or.us/efdocs/HAH/um2033hah151814.pdf>.

¹¹ *Id.*

However, should the two utilities seek divergent paths on establishing uptime, even within the parameters of the federal formula, we request that the Commission address this issue in a narrow policy docket, where utilities subject to TEPs and stakeholders can come to a consensus on an appropriate uptime formula to apply across the state. Moreover, as the company gains more information during this TEP cycle that can contribute to a more detailed formula, the uptime standard may need to be reevaluated. To support this assessment, the company (and PGE) should be transparent about subcategories created in its TE annual report **so that PUC staff and stakeholders can assess and replicate the formula, if necessary.**¹²

II. Public Utility-Owned Infrastructure Pilot Program

As GEI and NWECA's April 7, 2023 comments explained, we generally support the company's public utility-owned infrastructure pilot program. Specifically, we support the company's investment in charging infrastructure because the PUC regulates the rates the company charges customers for using its charging infrastructure, which can result in a specific rate design. This pilot can also support charging access to charging where costs are reduced due to company ownership of the land. Further, utility-owned charging infrastructure will likely play a key role in providing low-income persons and residents of multi-family housing access to consistent and affordable charging. This remains our position.

Staff's findings regarding the Company's Public Utility-Owned Infrastructure Pilot Program and impacts on the competitive market are reasonable. In this matter, GEI and NWECA agree with CUB's comments. Electric utilities and the Commission play an essential role in transportation electrification. It is critically important that utility investments are in the public interest and that programs result in an equitable distribution of benefits. The company's modest TE portfolio is consistent with this, and we believe the company will continue to play a role in providing reliable and affordable transportation electrification services.

A. DCFC Infrastructure

The company proposes to build a mix of Level 2, right-of-way pole charging, and DCFC pods.¹³ In our April 7, 2023 comments, we asked the company to elaborate on why DCFCs may be a good option for some communities experiencing low incomes in lieu of or in addition to L2 chargers. We appreciated the company's response, included in the final TEP, which referenced information from the Clean Cities Coalition Network on EV charging at multi-family housing:

¹² For example: Under the category of Vandalism, subcategories would include (1) cable cutting and (2) cracked screen.

¹³ PacifiCorp, Final 2023 TEP, Public Utility-Owned Infrastructure Pilot Application at 7.

Another potential solution is off-site DC fast charging located near MFH. A project tested this in an area with 10 MFH buildings nearby. The site offered both DC fast charging and Level 2. MFH residents were four times more likely to use DC fast charging.¹⁴

While we recognize that the Clean Cities Coalition is a reputable organization, we combed the cited website and reached out to contacts on the website to gain more details about this finding. When given a website to look into by said contacts, we examined those, too.¹⁵ However, we have been unable to find information related to the study or studies that produced this finding. Questions remain: Where residents of the multi-family housing experiencing lower incomes? Was charging at a DCFC priced at a comparable rate? How did the study's administrators determine that they were MFH residents and not others who used the DCFC?

We do not doubt the results are accurate. Still, we wish that more details could illuminate the study so that appropriate parallels or comparisons can be made with the company's service territory. Although we support charging infrastructure that has proven successful, we are hesitant to fully support DCFC here without more substantive information, especially since DCFCs can be much costlier than L2 chargers. We would like to have more robust data supporting this strategy before we can fully support this investment.

B. County-level Mapping

In the draft TEP, the company prepared a set of underserved community maps granting equal weight to each population characteristic included in HB 2165 Sec. 2(6).¹⁶ In GEI's April 7, 2023 comments on the draft TEP, it requested, along with CUB, additional mapping that assigns double weight to census blocks containing communities experiencing lower incomes and multi-family housing in one of the other listed population characteristics.¹⁷

¹⁴ *Id.* at 18-19.

¹⁵ Specifically, we combed the Clean Cities Coalition Network website, <https://cleancities.energy.gov/project-lessons-multifamily-housing/>, and searched the site for studies that would likely include this finding; however, we were unable to find such studies. Next, we contacted NW Regional Manager Daniel Nardoizzi whose contact is on the Clean Cities Coalition website, and asked for more information on this finding. Mr. Nardoizzi responded that he did "not have any specific reports to the referenced [study]" but provided a website covering several funded projects' efforts. Mr. Nardoizzi suggested that GEI contact individual project entities listed for more supporting information. GEI did not connect with these entities as it was unclear which would be applicable contacts. Mr. Nardoizzi also provided DOE's Vehicle Office page, <https://www.energy.gov/eere/vehicles/vehicle-technologies-office>, for references and reports and the Oregon Clean Cities Coalition, <https://www.cwcleancities.org/>. After following the links, a relevant study still could not be found. Finally, we submitted a contact request on the Clean Cities Coalition Network website but did not receive a response. Email correspondence with Mr. Nardoizzi is on file with GEI.

¹⁶ PacifiCorp, Draft 2023 TEP, Public Utility-Owned Infrastructure Pilot Application at 42.

¹⁷ GEI and Verde, Comments on UM 2056 - Pacific Power Transportation Electrification Plan 6 (April 7, 2023, available at: <https://edocs.puc.state.or.us/efdocs/HAC/um2056hac17542.pdf>).

The company's reply comments stated it would create new maps in response to our request. Appendix A of the Public Infrastructure Utility-Owned pilot proposal reflects these amended maps.¹⁸ We appreciate the company's inclusion of the new maps in the final TEP. The maps in Appendix A show that when double weight is assigned to census blocks containing communities experiencing lower incomes and multi-family housing, additional rural and suburban areas fall into the highest degree of underserved communities with low EVSEs (darkest purple). Thus, it is especially important that the company engage in robust community engagement in these areas.

Specifically, our analysis identified that out of twenty-nine counties, eighteen experienced additional census blocks falling into the highest degree of underserved communities with low EVSE (darkest purple). Further, Table 3 in the pilot program application shows that the adjusted weighting resulted in a modified ranking.¹⁹ Specifically, out of the initial top five ranked counties, four remained in the top five when census blocks containing communities experiencing lower incomes and multi-family housing were given double weight. However, three counties in the initial ranking did not remain ranked under the new map rankings. In sum, the new maps reveal that the double weight had some effect on which counties made the top ten list, especially in the second half of that set. **We support this revised ranking as a place to start siting discussions and outreach because it elevates communities experiencing low income and prioritizes areas with multi-family housing. Those are the areas that should benefit from the pilot program.**

The charging industry is also in a state of flux. The distinction between non-Tesla EVSEs and Tesla EVSEs will likely become less important over time. In May 2023, Ford and GM announced they would license Tesla's charging technology.²⁰ Tesla said it would open up its 7,500 chargers to non-Tesla vehicles by the end of 2024.²¹ Tesla has also developed an adaptor to allow EVs equipped with the Combined Charging System (CCS) to charge at Tesla's charging stations.²² Future Ford and GM vehicles will use Tesla's charging port, called the North American Charging Standard (NACS).²³ Regarding the company's maps, since non-Tesla customers can access the Tesla chargers and Tesla customers already can charge at third-party

¹⁸ PacifiCorp, Final 2023 TEP, Public Utility-Owned Infrastructure Pilot Application, Appendix A at 52.

¹⁹ PacifiCorp, Final 2023 TEP, Public Utility-Owned Infrastructure Pilot Application at 17.

²⁰ Ford, *Ford EV Customers to Gain Access to 12,000 Tesla Superchargers; Company to Add North American Charging Standard Port in Future EVs* (May 25, 2023), <https://media.ford.com/content/fordmedia/fna/us/en/news/2023/05/25/ford-ev-customers-to-gain-access-to-12-000-tesla-superchargers--.html>, <https://www.cnn.com/2023/06/08/cars/gm-tesla-charging/index.html>.

²¹ Jon Linkov, et al., *How Well Do Tesla Superchargers Work for Non-Tesla EVs?* *Consumer Reports* (March 17, 2023), <https://www.consumerreports.org/cars/ev-chargers/how-well-do-tesla-superchargers-work-for-non-tesla-evs-a4713673565/>.

²² *Id.*

²³ Samantha Delouya, *GM wants to adopt Tesla's charging network as 'the standard'*, CNN Business (June 8, 2023, 5:56 PM EDT), <https://www.cnn.com/2023/06/08/cars/gm-tesla-charging/index.html>

charging stations with adapters,²⁴ a distinction between the two charging types may become less useful.

C. L2 Chargers

In stakeholder meetings, the company indicated it was planning on working with municipalities to identify locations for siting L2 chargers on utility poles. In our April 7, 2023 comments, we recommended the company identify siting based on local community input, referencing Seattle City Light’s “opt-in process.” In response, the company said it would investigate how to execute a similar process to Seattle City Light’s opt-in process. The company noted this as an additional site selection strategy in the final TEP.²⁵ We appreciate this addition and encourage the company to develop equitable evaluation criteria with stakeholders and the appropriate advisory groups (e.g., the Community Benefits and Impacts Advisory Group). GEI and NWEA look forward to opportunities to weigh in on the final outreach strategy.

III. Residential Managed Charging Pilot Program

We appreciate the company clarifying the details of the residential managed charging pilot program. **We recommended in our April 7, 2023 comments that the company uses its underserved community maps to guide its marketing efforts. We also recommended sharing supporting data in the company’s annual TE reports.** In its response comments, the company “envision[s] using the Pilot to explore how to reach underserved or disadvantaged communities” and cited several provisions in its TEP that it plans to follow. We look forward to reviewing progress updates in the company’s annual TE report and outcomes presented through the distribution system impacts and grid integration benefits metrics.

IV. Municipal & Community Grant Program

The company proposes providing community grants for school districts to purchase electric school buses and micro-mobility through e-bikes and e-scooters with Clean Fuel Program credit sales. In its April 7, 2023 comments, GEI shared feedback it had received from Idaho Power on its experience with representatives seeking to support school bus electrification. GEI’s April 7, 2023 comments advised the company that temporary funds for a school district representative to champion school bus electrification would be helpful. In its response comments and the final TEP, the company stated it would provide an optional \$30,000 per project for a project “champion.”²⁶ We appreciate these funds and hope they result in school bus electrification projects in the company’s service territory. **We request that the company**

²⁴ Tesla, *Support*, <https://www.tesla.com/support/charging> (last visited June 16, 2023).

²⁵ PacifiCorp, Final 2023 TEP, Municipal & Community Grant Program at 18.

²⁶ *Id.* at 9.

discuss whether and to what degree these funds are influential in supporting school bus electrification in its annual TE report.

V. Miscellaneous

To support a TEP that is easy to navigate and analyze, we request that the company submit its future TEPs as original PDFs, not scanned versions, and that the company provides a bookmarked table of contents. For example, there was a marked difference in analyzing the new county maps, which were PDFs, against the initial county maps, which were scanned versions.

VI. Conclusion

GEI and NWECA appreciate the opportunity to comment on PacifiCorp's final TEP. We believe several components of the company's TEP are designed in a manner to distribute benefits to customers. We recommend the Commission accept PacifiCorp's 2023–2025 Transportation Electrification Plan with the condition that the company retains the federal NEVI formula and report on each type of T_excluded subcategory. GEI and NWECA plan to attend the July 11, 2023, public hearing and can respond to any questions on these comments at that time.

Respectfully submitted,

/s/ Caroline A. Cilek

Caroline A. Cilek, Staff Attorney

/s/ Jenna Ayers

Jenna Ayers, Law Clerk

Green Energy Institute at Lewis & Clark Law School

/s/ Annabel Drayton

Annabel Drayton, Senior Policy Associate

NW Energy Coalition