PACIFIC POWER
A DIVISION OF PACIFICORP

825 NE Multnomah, Suite 2000
Portland, Oregon 97232

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VIA ELECTRONIC FILING

Public Utility Commission of Oregon
Attn: Filing Center
201 High Street SE, Suite 100
Salem, OR 97301-3398

RE: UM 2165—PacifiCorp's Comments on Workshop Questions

I. INTRODUCTION

PacifiCorp d/b/a Pacific Power (PacifiCorp or Company) appreciates the opportunity to provide the Public Utility Commission of Oregon (Commission) its comments on the questions posed at the end of the Commission's June 30, 2021 workshop in UM 2165 – Investigation of Transportation Electrification (TE) Investment Framework. PacifiCorp is committed to promoting TE and believes its role is fundamental in the transition towards TE. The Company supports the establishment of a framework for evaluating utility investments in TE programs in support of legislative goals. In developing a new TE investment framework, PacifiCorp offers the following comments.

II. COMMENTS

1. How should the Commission use benefit/cost frameworks to evaluate TE?

A benefit/cost framework to evaluate TE should adhere to the following principles:

- Market transformation is a primary objective until such time as maturity of the market has been reached;[1]
- TE investments are not in lieu of other investments and should be assessed based on their ability to further TE market transformation goals in Oregon;
- Environmental impacts such as reduction to greenhouse gas emissions should be included in the assessment of TE benefits;
- Benefits and costs analysis should consider the timing of TE benefits; and
- Benefits analysis should include consideration of the equitable distribution of TE market transformation.

Development of a benefit/cost framework is critical as the Commission oversees the expansion of TE investment. This framework should be used by the Commission to ensure TE market transformation occurs equitably for all Oregonians and that utility investment results in the most transformation outcomes. A benefit/cost framework also provides guidance to the utilities and to stakeholders regarding future assessment of TE programs.

[1] PacifiCorp does not set forth a specific metric for determining market maturity.

TE policy is driven by traditional utility economics, unique customer and system benefits, and a need to reduce greenhouse gas emissions from the transportation sector.[2] Benefit/cost frameworks provide a systematic approach to assess a fundamental question concerning the merit of an investment: which investments have benefits that exceed costs on behalf of achieving designated policy outcomes?[3] Workshop two provided an overview of fundamental principles for cost-effectiveness, one of which was to "Align primary test with jurisdiction's applicable policy goals". The jurisdiction-specific test referenced in the workshop may conceptually be best suited to incorporate the unique benefits and costs associated with electrifying the transportation sector in Oregon. For questions pertaining to effects on rates, PacifiCorp agrees with the presenters that rate impacts should be conducted separately from benefit/cost analysis.

TE is, at its core, about market transformation. As a result, benefit/cost frameworks evaluating TE investments from the perspective of market transformation will provide a more holistic view of costs and benefits. Frameworks evaluating market transformation commonly assess costs and benefits on a portfolio basis, acknowledging that a complementary collection of strategies and approaches is needed to achieve market transformation and realize benefits. Current research suggests that there are multiple persistent market barriers towards adoption of electric vehicles (EV). Market transformation depends on program strategies that reinforce one another and systematically alleviate market barriers. Flexibility offered by a portfolio analysis helps support partnerships that are responsive to individual community needs and specific market barriers. Furthermore, EVs, particularly those in PacifiCorp's service area, are still early in the adoption curve, and annual assessments of cost-benefit analysis, while informative, may not fully capture benefits associated with transforming the market over a longer period. The presentation by the Regulatory Assistance Project identified performance versus target tests being used in California and Colorado. PacifiCorp believes these frameworks may be more attuned to programs directed towards achieving market transformation and warrant further consideration.

Finally, there are numerous investments that can be made in support of TE. The rationale for these investments, however, can differ considerably. Investments encouraging the adoption of EVs and investments that support the infrastructure required to integrate new loads have different rationale supporting their justification. While not wholly separate, investments in grid infrastructure may be required for a host of reasons, a portion of which may be anticipated load from EVs. Distribution system planning in Oregon illustrates the complexities of determining when, where, and to what extent upgrades are required to maintain an effective distribution system. Applying TE benefit/cost frameworks to grid infrastructure investments risks arbitrarily limiting the evaluation of those investments from the perspective of TE. PacifiCorp believes these investments are more appropriate to be evaluated through planning processes such as distribution system planning and the utility's integrated resource plans.

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[2] Docket No. UM 2165, presentation for Public Workshop 2. June 30, 2021, at slide 50, available at: https://edocs.puc.state.or.us/efdocs/HAH/um2165hah12128.pdf.
[3] *Id* at slide 34.

2. Have existing benefit/cost frameworks used by the Commission overlooked any costs and benefits that are reasonably associated with transportation electrification? Please explain.

Often energy efficiency benefit/cost frameworks are viewed as starting point for TE investments. Existing energy efficiency benefit/cost frameworks in Oregon are inadequate for evaluating TE investments. Energy efficiency tests in Oregon determine the level of investment in energy efficiency as compared to supply side resources. In contrast, TE investments do not require comparison to supply side resources. Furthermore, utilities have already been legislated to make a minimum investment in TE. Therefore, TE benefit/cost frameworks should be designed to address which TE investments will be most beneficial in meeting stated policy goals.

A major component of TE has been benefits associated with reducing carbon emissions from the transportation sector. To date, benefits from net carbon reductions in the transportation sector have not been broadly included in traditional cost-effectiveness tests. Oregon currently monetizes carbon reductions from the transportation sector via the Department of Environmental Quality Clean Fuels credits market. Consideration of the monetization of net carbon reductions resulting from EV adoption will be an important factor for evaluating TE investments. While certain benefits such as carbon may be readily quantifiable and monetizable, there may be benefits that are found to be non-quantifiable or non-monetizable. In these instances, it may still be worthwhile to identify and report on the non-quantifiable benefits to demonstrate qualitative values associated with TE investments.

Traditional benefit/cost frameworks have historically done a poor job accounting for equity in their calculations. Some of these frameworks, such as the ratepayer impact test, rely on expected future utility revenues as the primary basis for benefits. Future utility revenues are an informative benefit for TE investment but provide a narrow perspective. PacifiCorp is concerned that lagging markets may be at risk of being chronically underinvested if the sole basis of benefits are future utility revenues. However, as a principal benefit, it may fail to recognize that areas with lower levels of EV adoption may require higher levels of investment to stimulate markets. The recently adopted House Bill 2165, prioritizes specific communities[4] that are likely in the early stages of market adoption. Any framework relying on future utility revenues as the primary benefit, may underinvest in communities where adoption levels are low and market barriers persist.

Finally, traditional benefit/cost frameworks have mostly been used for relatively mature, well-developed markets. Careful consideration should be given as to whether traditional benefit/cost frameworks are appropriate for markets in the stages of early adoption. In the context of energy efficiency, the Commission has acknowledged that cost-effectiveness may not be appropriate for markets in the early adoption phase and allows for an exception from benefit/cost analysis if "Inclusion of the measure will increase market acceptance and is expected to lead to reduced cost of the measure."[5] While exceptions do not apply to an energy efficiency portfolio, they do allow

[4] House Bill 2165 (2021), Relating to alternative fuel transportation. Transportation Electrification, Section 2, subsection b. https://olis.oregonlegislature.gov/liz/2021R1/Downloads/MeasureDocument/HB2165/Enrolled
[5] Docket No. UM 551, Order No. 94-590, April 6, 1994.

for flexibility for markets that are in the early stage of adoption. As development of a benefit/cost framework progresses, it may be beneficial to consider a mechanism to allow for exceptions when certain market segments, such as low-income customers, require higher levels of investment towards adoption of an electric vehicle.

3. As Staff plans additional workshops this summer, what additional topics would you recommend, and why?

PacifiCorp is interested in understanding to what extent outcomes from this workshop will be integrated into other rulemakings and planning processes. Existing OPUC dockets such as UM 1893, investigating avoided costs used in energy efficiency cost-effectiveness, and UM 2005, investigating distribution system planning have elements related to benefit/cost analysis for transportation electrification. In some instances, these proceedings may provide inputs to benefit/cost analysis; in other instances, that analysis may be used to as the basis for inputs in other proceedings. Additionally, PacifiCorp anticipates filing an updated TE plan in 2022 and would welcome guidance regarding how outcomes from UM 2165 should be used for the upcoming TE plan. Presently, it's unclear how these proceedings may inform an investment framework for TE and vice versa. This question may not necessitate an entire workshop, but PacifiCorp would welcome insight into this topic.

III. CONCLUSION

PacifiCorp appreciates the opportunity to provide comments and looks forward to working with the Commission and parties going forward.

Sincerely,

Etta Lockey
Vice President, Regulation