ITEM NO. RA1

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: November 17, 2020

REGULAR __X__ CONSENT ____ EFFECTIVE DATE ___November 18, 2020___

DATE: November 9, 2020

TO: Public Utility Commission

FROM: Eric Shierman

THROUGH: Bryan Conway, JP Batmale, and Sarah Hall **SIGNED**

SUBJECT: PACIFIC POWER:
(Docket No. ADV 1148/Advice No. 20-009)
Updates to Rule 13 – Line Extension Allowance for Non-Residential Transportation Electrification Customers.

STAFF RECOMMENDATION:

The Public Utility Commission of Oregon (OPUC or Commission) should approve Pacific Power's (PacifiCorp or Company) Advice No. 20-009.

DISCUSSION:

Issue

Whether the Commission should approve Advice No. 20-009, PacifiCorp's proposal to revise the Company's Rule 13 to grant a larger allowance to non-residential transportation electrification customers.

Applicable Rule

Under ORS 757.205(1):

> Every public utility shall file with the Public Utility Commission, within a time to be fixed by the commission, schedules which shall be open to public inspection, showing all rates, tolls and charges which it has established and which are in force at the time for any service performed by it within the state, or for any

> service in connection therewith or performed by any public utility controlled or operated by it.

The Commission may approve tariff changes if they are deemed to be fair, just, and reasonable. ORS 757.210. Tariff revisions may be made by filing revised sheets with the information required under the Commission's administrative rules, including OAR 860-022-0025. OAR 860-022-0025(2) specifically requires that each energy utility changing existing tariffs or schedules must include in its filing a statement plainly indicating the increase, decrease, or other change made with the filing, the number of customers affected by the proposed change and the resulting change in annual revenue; and the reasons or grounds relied upon in support of the proposed change.

Filings that propose any change in rates, tolls, charges, rules, or regulations must be filed with the Commission at least 30 days before the effective date of the change. ORS 757.220; OAR 860-022-0015. Tariff filings to be effective on less than 30 days following notice of the change may be authorized with a waiver of less than statutory notice pursuant to ORS 757.220 and OAR 860-022-0020.

OAR 860-022-0030(1) further requires that for tariff or schedule filings proposing increased rates, the utility must for each separate schedule, identify the total number of customers affected, the total annual revenue derived under the existing schedule, and the amount of estimated revenue which will be derived from applying the proposed schedule, the average monthly use and resulting bills under both the existing rates and the proposed rates that will fairly represent the application of the proposed tariff or schedules, and the reasons or grounds relied upon in support of the proposed increase.

OAR 860-021-0045(1) requires that an electric company shall furnish service connections to the customer's service entrance for the connection of its distribution system to the customer's premises.

Through SB 1547, the legislature supported electric company investment and participation in the electric vehicle marketplace through infrastructure investments and programs that accelerate transportation electrification and create access to electric vehicles for customers.

Executive Order 20-04 establishes Governor Brown's new greenhouse gas emissions goals for the State of Oregon, and directs state agencies to identify and prioritize actions to meet those goals. Section 5.4(B) of the Executive Order directs the Public Utility Commission to "[e]ncourage electric companies to support transportation electrification infrastructure that: supports GHG reductions, helps achieve the transportation electrification goals set forth in Senate Bill 1044 (2019), and is reasonably expected to result in long-term benefit to customers."

The Commission adopted Staff's recommendation to modify Pacific Power's line extension allowance under Rule 13 in Advice No. 14-010 on August 5, 2014.

Analysis

Background

On July 13, 2020, PacifiCorp filed Advice No. 20-009, a proposal for a new line extension allowance for non-residential customers focused on transportation electrification. These customers are businesses that plan to own and/or operate new electric vehicle service equipment (EVSE) and where eighty percent or more of the electricity will be used to service transportation load.[1] In its filing, PacifiCorp refers to these businesses as transportation electrification customers.

Transportation electrification customers in Pacific Power's service territory can *already* utilize a line extension allowance under Rule 13. The current nonresidential line extension allowance is set to one year of expected new annual revenue. In this filing, PacifiCorp proposes doubling that allowance to two years of revenue for non-residential line extensions related to commercial customers servicing as transportation electrification load.[2] PacifiCorp filed this update to Rule 13 in support of the Governor's Executive Orders 17-21 and 20-04 to decarbonize the economy through the electrification of the transportation sector.[3]

This proposal was not filed as a transportation electrification program in accordance with OAR 860-087-0030. For this reason, Staff weighs the merit of PacifiCorp's proposal under the principles of a line extension allowance, not as a program for accelerating transportation electrification.

The fundamental principle applied in the past to line extension allowances was to promote the growth of new load without increasing costs for other ratepayers. A line extension allowance is the amount of money ratepayers pay for a construction project that requires incremental distribution system investments. Incremental growth in demand for electricity can lower rates if the revenues received from new customers are greater than the costs incurred to serve the new customers. A line extension allowance

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[1] *See* Docket No. ADV 1148, Pacific Power, Advice No. 20-009 Rule 13 – Line Extension Allowance for Non-Residential Transportation Electrification Customers, July 13, 2020, p. 2.
[2] Ibid, p. 6.
[3] Ibid, p. 1.

uses a portion of the monetary benefit coming from the incremental increase in load to provide an allowance for the construction costs required.

The intent of both the Governor's Executive Order 20-04 Section 5.4(B) and SB 1547 make clear that the electric utilities should be encouraged to increase the access to the use of electricity as a transportation fuel. Prior to this filing, an electric company had not requested a line extension allowance to increase transportation electrification infrastructure. Therefore, Staff is balancing the past principles applied to line extension allowances with the intent of the Executive Order and the legislature in this filing. Here, Staff attempts to balance the value of incenting new load while avoiding excessive distortion of price signals in order to determine whether these charges are fair, just, and reasonable.[4]

As Staff wrote in its Public Meeting Memo recommending the Commission approve PacifiCorp's last Rule 13 modification: "Without an appropriate price signal customers may ask the Company to invest in distribution facilities when in fact there is no economic benefit for the investment."[5] To use a colloquial financial phrase, a line extension allowance should generally ensure the new customers have some "skin in the game" of the new distributions system investment.

Eighty Percent Threshold

PacifiCorp included an important distinction for what constitutes a transportation electrification company. To qualify for this line extension allowance, at least 80 percent of the customer's estimated annual load must be dedicated to serving transportation charging infrastructure. At a public workshop on July 31, 2020, the Company described this language as avoiding a problem where a data center is built with some EVSE in its parking lot to qualify the entire project for a transportation electrification line extension allowance. Staff finds this provision reasonable as it avoids incenting business to abuse this higher allocation of ratepayer funds. This provision will help the Company avoid paying the higher allowance for non-transportation purposes.

The Breakeven Point

A metric PacifiCorp puts forth to help determine the reasonableness of line extension allowances for their system is a breakeven point between expenditures on the new project and the benefit the new load will provide to existing ratepayers. In Attachment A on the second to last page of PacifiCorp's Advice No. 20-009 filing, the Company shows, on line 8, the breakeven point to be 3.3 years of expected annual revenue.[6]

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[4] *See* ORS 757.210.
[5] *See* Advice No. 14-010, OPUC Staff, Staff Report, July 29, 2014, p. 3.
[6] *See* Docket No. ADV 1148, Pacific Power, Advice No. 20-009 Rule 13 – Line Extension Allowance for Non-Residential Transportation Electrification Customers, July 13, 2020, p. 13.

Line No.	Description	Source	Units	Value
1	Revenue from Non-Residential Schedules 23, 28, 30 and 48	Table A from UE 352 (Rates Eff. 10/1/2019)	($000)	650,310
2	Marginal Cost to Serve Commercial Load from Resource Value of Solar Model		($/MWh)	50.31
3	Energy from Non-Residential Schedules 23, 28, 30 and 48	Table A from UE 352 (Rates Eff. 10/1/2019)	MWh	7,660,867
4	Marginal Cost to Serve Commercial Load from Resource Value of Solar Model	Line 2 * Line 3 / 1,000	($000)	385,418
5	Net Margin from Non-Residential Schedules 23, 28, 30 and 48	Line 1 - Line 4	($000)	264,892
6	Annualization Factor	Use of Facilities for Incremental Dist. Investment		12.2%
7	Investment Supported by Revenue	Line 5 / Line 6	($000)	2,165,918
8	Supportable Non-Residential Transportation Line Extension Allowance	Line 7 / Line 1	Revenue Multiplier	3.3

Together these eight steps form the following equation.

$$Breakeven\ Point = \frac{Revenue - Marginal\ Cost\ to\ Serve\ Load * Energy\ Sales}{Annualization\ Factor} * \frac{1}{Revenue}$$

Because the revenue multiplier is derived from aggregate data, individual projects will vary. PacifiCorp's current practice of paying out one year of revenue to nonresidential customers' line extension allowances sends a price signal that limits cost shifting and mitigates the risk an individual project's allowance will exceed the benefit to ratepayers.

Staff finds this breakeven framework reasonable for PacifiCorp. By designing a transportation line extension allowance of two years of revenue or two-thirds of the breakeven point, PacifiCorp still *retains* a buffer between the proposed allowance and the expected breakeven point, although it does shift more risk to other ratepayers.

Appropriate Load Data

While Staff and the Company arrived at an early agreement regarding the framework PacifiCorp had proposed, Staff had questions about the data used to find the breakeven point. PacifiCorp had originally proposed using the load profile of a typical commercial customer. Staff requested that PacifiCorp use the load profile from known transportation electrification customers, rather than an aggregated class of nonresidential customers. Staff asked for this as it better reflected the revenue, cost, and energy delivery data of these specific customers. PacifiCorp was very amenable to Staff's suggestion and collected and aggregated EVSE customer data. This allowed for a more granular level of analysis overall.

Marginal Cost of Service Discovery through the RVOS Model

Staff was also initially skeptical of the Company's use of the Resource Value of Solar (RVOS) model to determine the marginal cost to serve EVSE customers. PacifiCorp argued that this model was best suited to estimate the marginal cost of specific customers in specific locations. Upon review, Staff confirmed that the RVOS data and methodology used in this filing matched the system inputs with what PacifiCorp last filed in UM 1910.

By applying the RVOS model to the more accurate transportation electrification customer load shape, PacifiCorp's marginal cost of service increased in line with Staff's expectations for nonresidential customers with very low load factors. Such customers have greater need for both generation and distribution system capacity. While Staff remains somewhat skeptical of scaling the use of RVOS to find the marginal cost of service for more customers types, the limited application here to transportation electrification customers proved reasonable and streamlined the process. Upon final review, Staff has reasonable confidence that the RVOS model has provided a relatively accurate measure of transportation electrification customers' higher marginal costs.

Stakeholder Comments

The Oregon Solar Energy Industries Association (OSEIA) expressed concerns about the use of the RVOS model, given the fact that it has not been fully approved by the Commission and its use might establish a precedent. OSEIA does not necessarily oppose this transportation line extension allowance but requests the Company hold a public workshop to discuss any updates to this line extension allowance. Staff recommends this use of RVOS not be seen as setting a precedent for its future use and will look to work with PacifiCorp and stakeholders in the future to consider use of another method to establish the marginal cost to serve transportation electrification customers when Rule 13 is next updated.

Results

The combination of the more granular load shape and RVOS showed the Company's proposed increase in line extension allowance was reasonable for transportation electrification customers.[7] Substituting the higher, updated value of \$83.42/MWh as the marginal cost to serve transportation electrification customers for the originally proposed \$50.31/MWh yielded the following result:

[7] See Attachment A – TE Specific Customers.xlsx.

$$Breakeven\ Point = \frac{\$312{,}000 - \$83.42 * 2{,}157}{12.2\%} * \frac{1}{\$312{,}000} = 3.5$$

As shown above, the new analysis found that, at $83.42/MWh, EVSE customers have a significantly higher marginal cost to serve than the previous $50.31/MWh average for commercial customers. However, the greater gross revenue from Schedule 45's rate design captures those costs with sufficient free cash flow to support a multiplier of two years of forecasted revenue. Additionally, the breakeven point slightly increased to 3.5, offering an even slightly higher buffer for the Company to pay out two years of expected revenue as an allowance and still be reasonably expected to provide long-term benefit to all customers.

Conclusion

PacifiCorp deserves credit for being the first electric company in Oregon to file a transportation line extension allowance. The Company was helpful in quickly responding to Staff's information requests. After completing EVSE-specific analysis, the Company has demonstrated to Staff that its transportation line extension allowance is reasonable, and EVSE projects receiving this allowance will not be funded beyond the point at which the allowance breaks even with ratepayer benefit. Staff also finds the use of RVOS to establish marginal costs reasonable for this Rule 13 update, non-precedential overall, and will work with PacifiCorp and stakeholders to consider other methods to establish the marginal cost of service for transportation electrification customers when the rule is next updated.

PROPOSED COMMISSION MOTION:

Approve Advice No. 20-009, PacifiCorp's proposal to revise the Company's Rule 13 to grant a larger allowance to non-residential transportation electrification customers.