



March 27, 2020

Docket No. UM 2056

-Via Electronic Filing-

Oregon Public Utilities Commission

High St SE #100,

Salem, OR 97301

RE: Comments of Greenlots on PacifiCorp Transportation Electrification Plan

Greenlots submits these comments to the Oregon Public Utilities Commission ("the Commission") in response to its March 2, 2020 Disposition adopting a procedural schedule in the above referenced docket and inviting written comments on PacifiCorp's ("PacifiCorp" or "the Company") Transportation Electrification Plan ("TE Plan"), filed into the same docket on February 3, 2020.

Greenlots is a leading provider of electric vehicle ("EV") charging software and services committed to accelerating transportation electrification in Oregon. The Greenlots network supports a significant percentage of the DC fast charging infrastructure in North America, and an increasing amount of Level 2 infrastructure. Greenlots' smart charging solutions are built around an open standards-based focus on future-proofing while helping site hosts, utilities, and grid operators manage dynamic EV charging loads and respond to local and system conditions.

Greenlots has reviewed PacifiCorp's inaugural TE Plan and commends the Company on developing a thorough and well researched document that will serve as an important foundation for its future activity in transportation electrification ("TE"). In outlining PacifiCorp's role, history and plans for empowering and accelerating its customers' transition to electric transportation, and describing Oregon's policy environment that has guided the Company's activity in this space, the Company has detailed a solid foundation for the development of future work that creates value through transportation electrification for all PacifiCorp customers, and supports environmental and related policy goals.

Electric transportation is a climate and environmental imperative, and with Oregon's aggressive goals in these areas, similarly aggressive utility involvement in accelerating this transformation is likely necessary, and should be a strong benefit to all of its customers. Current market conditions and barriers to transportation electrification, which PacifiCorp describes and Greenlots can attest to, necessitate bold action on the part of the state's utilities, which stand in a unique and powerful position to support and accelerate this transformation. Both in Oregon and across the country, the leadership of utilities in this space has also resulted in a strong positive impact and business opportunities for the private charging market, supporting competition and market development. A strong and active utility role is needed for attainment of these goals, and delivering the significant benefits associated with transportation electrification while supporting the growth and development of the broader market and industry.

Greenlots notes that in addition to the supportive policy landscape and legislative direction for activity in this space, PacifiCorp also has the support and direction of this Commission. As articulated in relation to an amended stipulation related to Portland General Electric's ("PGE") TE pilot programs, "...we note that we have issued no order or guidance suggesting that PGE's future program proposals could not be larger in scale. Nor have we prevented PGE from proposing new or expanded programs in response to evolution in the transportation electrification market. In fact, we have encouraged consideration of the broad scope of the legislative goals and directives..."<sup>1</sup> It adds, "...we expect that the framework provided by PGE's transportation electrification plan will give us the opportunity to review and consider the costs and benefits of larger and more ambitious program proposals...timely leadership from electric utilities and the Commission is needed to achieve the legislature's vision for expanded transportation electrification that delivers robust system and customer benefits."<sup>2</sup>

While the Commission has not had the opportunity to articulate its specific sentiments towards PacifiCorp's TE efforts recently, it can clearly be inferred that it would expect and encourage of PacifiCorp similarly broad and bold planning and programs that are appropriate to its service territory and customers. If anything, extra focus and increasingly supportive programs are required given the predominantly rural service territory of PacifiCorp, and the unique challenges of less urban electrification, in order to provide for equitable access to transportation electrification across all of Oregon.

The state through SB 1044 set a goal of having 250,000 EVs on Oregon's roads by 2025, accounting for around 15% of total vehicle registrations, and leading to 25% of registered vehicles and 50% of new sales being electric by 2030, and 90% of sales being electric by 2035. Greenlots believes there is an opportunity and need for PacifiCorp through its planning efforts to set goals for itself to support attainment of these targets, drawing a more direct linkage between its actions and reasonably expected results. These will need to be ambitious and commensurate with the scale of the broader environmental and climate challenges the state has recognized and resolved itself to address. For example, considering the Company's largely rural service area, where extra focus will be required to achieve SB 1044 goals, PacifiCorp setting a goal for itself of supporting an environment where 50% of new light duty vehicle sales, and 30% of medium and heavy-duty sales are electric by 2025, would set a path for reasonably being able to achieve the SB 1044 goals state-wide, while clearly identifying the scale of the challenge that PacifiCorp's TE programs should be designed for and calibrated around. This may seem aggressive, but it is in-line with the scale of the challenge that Oregon has taken on, and on par with other local and regional targets.

---

<sup>1</sup> Order 19-385 in Docket UM 1811. November 7, 2019. At 4.

<sup>2</sup> I.d.

With these high-level comments providing context and perspective, Greenlots believes there are several specific areas where the forward planning as articulated in the TE plan can and should be strengthened:

- Medium, heavy-duty and fleet programs represent areas that can achieve environmental and climate benefits of greater magnitude, in addition to often more directly addressing equity and environmental justice considerations. And as the TE Plan recognizes, there is a wave of such vehicles coming to market,<sup>3</sup> and this will put heightened pressure on the infrastructure programs needed to support their proliferation and adoption. Fleet and transit agencies and their electrification efforts in particular comprise an important component of this critical market segment. Considering this, Greenlots encourages exploration of a greater near-term focus in this area. For comparison, in California, of the nearly \$1 billion in utility transportation electrification program expenditures that have been approved, the majority has been for medium and heavy-duty-focused programs.
- Single family residential programs represent a particularly well-suited market segment to innovate in program design and load management offerings to create greater grid benefits and explore more compelling customer offerings, compared to simply providing rebates. While the Company's plan contemplates direct load control and the need for specific technology and functionality to facilitate this powerful form of load management,<sup>4</sup> the rebate-only, minimum requirement type of residential programs contemplated present challenges to achieving and unlocking this greater load management value.<sup>5</sup> Greenlots strongly encourages utilizing any single-family residential program as a test bed and pilot program for innovation in this regard, both in terms of load management, and also in term of how chargers are financed and provided (see final recommendation below for additional perspective and suggestions related to this). As the Company's TE Plan states, "...creative program design today will lead to minimization of lost opportunity when building out TE infrastructure."<sup>6</sup> Greenlots agrees and encourages a greater focus towards this ambition. Innovation and learnings in this regard from its work in Oregon could also be of significant value to the Company's TE efforts in its service territories in Washington and California.
- Multi-unit dwellings represent a particularly difficult market to address, and the clear experience from more mature programs targeting this segment is that utility-run, turn-key programs are needed to best address underserved markets such as these.<sup>7</sup> In comparison, rebate-only or make-ready programs leave many challenges unaddressed,

---

<sup>3</sup> At 20.

<sup>4</sup> At 30-31.

<sup>5</sup> Short-term residential program design as discussed at p. 45 and 47-48 of TE plan.

<sup>6</sup> At 30.

<sup>7</sup> For example, in California, SCE's "Phase 2" of its Charge Ready program, filed on June 26, 2018 included turn-key utility ownership for its MUD offering, mirroring SDG&E's "Power Your Drive" pilot, which originated with this approach and experienced greater success in enrolling MUD customers.

including the significant administrative burden (e.g., purchasing and acquiring the Electric Vehicle Supply Equipment, hiring and managing installation contractors), ongoing equipment and maintenance costs and challenges, while all too often leaving technology-facilitated load management value on the table. For these reasons, Greenlots encourages PacifiCorp to consider a more supportive and robust offering for addressing this critical market segment utilizing a deeper utility role, drawing from such lessons learned from other jurisdictions. The rebate-only approach contemplated in the plan is not likely to be sufficient to adequately address this market segment.

- Expansion and scaling of existing, successful programs is also an area where the TE Plan could be strengthened going forward. For example, what mechanism and criteria will PacifiCorp use to ensure that successful pilots are built out into programs that can create greater impact? Greenlots is a strong supporter of scaling the market for electric vehicles and electric vehicle charging products and services as quickly as possible, and frequently comments that it's time to move beyond pilots to scaled programs. Given Oregon's aggressive goals, and the fact that it was a relatively early mover in addressing transportation electrification, there is no jurisdiction where this is more relevant. This is critical to avoid slowdowns or gaps in funding or programs, in addition to meeting the state's aggressive goals. Accordingly, Greenlots encourages a heightened focus on this important planning consideration.
- Advancing/accelerating new pilots and programs also appears to be an area where there could be greater alignment with the scale of the challenge and the aggressiveness of the state's goals. As mentioned above, accelerating and building out pilots and broader adoption of smart charging and related technology-forward load management solutions also represents a prime, high-value area for greater, accelerated activity. While Greenlots recognizes that resources can constrain raw ambitions, there is also a strong case in Oregon, as discussed, for increasing capacity and accelerating such programs and planning.

While Greenlots is encouraged by many aspects of the Company's TE plan, we also express concern over a vision for the utility's role that with respect to the development of charging infrastructure, appears to prioritize a rebate-check cutting and grant-administering role that while impactful, would seem to leave a number of clear gaps. As discussed above, more can and should be done. Utilities stand in a powerful position that in Greenlots' view gives them the responsibility to go further, for the benefit of the grid they manage and the ratepayers they serve.

We provide these comments and suggestions with the goal of making the TE Plan stronger, and supporting the Company's current and future efforts in these areas. The state's leadership and aggressive goals provide strong demand and justification for expanded utility involvement, which Greenlots encourages and will support moving forward. As the Commission stated earlier this year, "[t]he legislature's vision for transportation electrification is expansive. We expect the

planning efforts of the electric companies to take this vision into account. Programing should be developed that seeks to achieve these legislative goals.”<sup>8</sup> Greenlots agrees, and our comments offered here are with this specific direction in mind.

Greenlots appreciates the opportunity to provide these comments and the Commission’s and the Company’s consideration of them. Greenlots looks forward to continuing to support PacifiCorp and Oregon’s transportation electrification and related efforts.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Thomas Ashley', with a stylized, cursive script.

Thomas Ashley  
VP, Policy

---

<sup>8</sup> Order No. 19-134, in docket AR 609, 4/16/19