



December 6, 2019

Docket No. UM 2033
-Via Electronic Filing-

Oregon Public Utilities Commission
High St SE #100,
Salem, OR 97301

RE: Comments of Greenlots on Portland General Electric's Transportation Electrification Plan

Greenlots submits these comments to the Oregon Public Utilities Commission ("the Commission") in response to its October 30, 2019 ruling adopting a procedural schedule in the above referenced docket and inviting written comments on Portland General Electric's ("PGE" or "the Company") Transportation Electrification Plan ("TE Plan"), filed into the same docket on September 30, 2019.

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 percentage of the 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 PGE's TE Plan and commends the Company on developing what is one of the most comprehensive and thorough documents of its kind that we have yet seen put forward by a utility. In outlining PGE'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, PGE has detailed a compelling vision for continuing to create value through transportation electrification for all PGE customers, and facilitating decarbonization of the transportation sector.

PGE describes electric transportation to be a climate and environmental imperative. In line with Oregon's particularly aggressive goals in these areas, similarly aggressive utility involvement in accelerating this transformation may be required, with the likelihood of being able to benefit all of its customers. Current market conditions and barriers to transportation electrification, which PGE 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. PGE's leadership role in this space has also resulted in a strong positive impact and business opportunities for the private charging market, supporting competition and market development. An early, active, and robust utility effort will significantly increase the likelihood that these goals will be realized, and the attendant significant benefits associated with transportation electrification will be maximized, 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, PGE also has the support and direction of this Commission. As articulated in its recent November 7, 2019 Order 19-385 in Docket UM 1811, "...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..."¹ 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."²

As described in the TE Plan, PGE was an early and bold mover amongst U.S. utilities in embracing its critical role in supporting and accelerating transportation electrification, and the Company deserves particular commendation for embracing this pioneering role. With this early action however, PGE stands at somewhat of a crossroads; with its initial pilots and programs largely under its belt or significantly underway, the imperative becomes a strategy to continue bold forward momentum through the scaling of successful programs, and the introduction of new programs. The magnitude of the challenge as expressed in state policy means that the state cannot afford any lull, recalibration, or anything other than strong and aggressive forward action that builds on its commendable accomplishments to date. PGE should not just be *a* national leader in this space, it can be *the* national leader, and it seems to have the needed support of the state to assume this role.

Through SB 1044 the state set a goal of having 250,000 EVs on Oregon's roads by 2025, accounting for around 15% of total vehicle registrations, 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 PGE through its planning efforts to set goals for itself to support attainment of these targets, drawing a more direct linkage between its actions and reasonable 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 that PGE's service area includes the state's major metropolitan area, where the SB 1044 goals will conceivably need to be exceeded for the state as a whole to achieve its goals, PGE setting a goal for itself of supporting an environment where for example, 75% of new light duty vehicle sales, and 50% of medium and heavy-duty sales are electric by 2025, would both set a path for reasonably being able to achieve the SB 1044 goals state-wide, while clearly identifying the scale of the challenge that PGE'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, such as

¹ At 4.

² I.d.

the City of Los Angeles' goal of having 25% of the total light duty vehicle fleet be zero emission by 2025.³

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 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,⁴ and this will put heightened pressure on the infrastructure programs needed to support their proliferation and adoption. 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.
- Multi-unit dwellings represent a particularly difficult market to address, and the clear experience from more mature pilots/programs targeting this segment is that utility-run, turn-key programs are an important tool to address underserved markets such as this.⁵ In comparison, rebate-only or make-ready programs leave many challenges unaddressed, including the significant administrative burden (e.g., purchasing and acquiring the electric vehicle supply equipment, hiring and managing installation contractors) and ongoing equipment and maintenance costs. For these reason, Greenlots encourages PGE to consider a more supportive and robust offering for addressing this critical market segment, drawing from such lessons learned in other jurisdictions.
- Expansion and scaling of existing, successful pilots is also an area where the TE Plan could be strengthened going forward. For example, what mechanism and criteria will PGE use to ensure that successful pilots (current or future) 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 to scaled programs. Given Oregon's aggressive goals, and the fact that it was a relatively early mover in addressing transportation electrification, scaling pilots into programs seems appropriate and essential. This is critical to avoid slowdowns or gaps in funding or programs, in addition to

³ See LA's Sustainability plan at p. 80, available here:

http://plan.lamayor.org/sites/default/files/pLAN_2019_final.pdf

⁴ At 62.

⁵ 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.

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. For example, charging as a service, integrated/bundled pricing, on-bill payments/subscriptions, and sub-metered billing programs are all listed as "long term considerations".⁶ Greenlots notes that utilities in jurisdictions with far less legislative and regulatory support are already making significant inroads in these areas.⁷ 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 practically constrain ambition, there is a strong case in Oregon, as discussed, for increasing capacity and accelerating programs and planning – which may necessarily require more robust resourcing.

Greenlots is encouraged by and impressed with the scope and scale of PGE's TE Plan, which represents one of, if not the most, encompassing and comprehensive efforts we've seen of its kind. We provide these comments and suggestions with the goal of making it stronger, and supporting PGE'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 will be excited to see and support moving forward. As the Commission stated earlier this year, "The 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..."⁸ 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 Oregon's transportation electrification efforts.

Respectfully submitted,



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⁶ Table 45 at p. 118.

⁷ For example, Xcel Energy in Minnesota has pilot programs in all these areas, and has filed for a permanent, scaled program that provides integrated bundled prices and on-bill payments for residential chargers.

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