

## FlexCharging, Inc.

Restatement of Comments on Docket UE-180877: Puget Sound Energy's EV charging pilot projects

December 13, 2018

FlexCharging is supportive of PSE's EV pilot projects – they generally are well designed, but the may be implementation problems. I recommend the UTC approve these programs with these conditions

- 1) All public charging stations should be DC fast chargers or *High Amperage* L2 chargers.
- 2) Ensure the residential pilot project chargers will not be a downgrade for anyone. IE, at least one model of EVSE should be capable of charging at 11.5 kW.
- 3) Fast charger prices should be re-evaluated quarterly to keep up with market trends. Prices should be substantially lower than gasoline prices.
- 4) The residential charging program should differentiate between long-range vs. short range BEV's. To better understand long range BEV patterns, the program should consider more car-focused monitoring using vehicle telematics solutions, across all treatment groups.
- 5) PSE should add another treatment group to test adoption of Demand Flexibility solutions.
- 6) Encourage PSE to think about charging station interoperability for drivers like this:
  - a. Will charging stations have plugs compatible with most vehicles?
  - b. Will charging stations take a credit card and/or phone-based payments (Apple Pay, etc)?

Separately, the Utilities & Transportation Commission can play a direct role in market transformation:

- 1) Eliminate or drastically reduce demand charges for DC fast chargers. Any site-specific infrastructure upgrade charges may be reasonable. Any part of a demand charge designed to encourage shifting loads to off-peak hours doesn't fit with corridor charging.
  - a. Faster EV adoption could pay for infrastructure upgrades via increased revenue.
- 2) Allow EV charging network operators to bill based on energy delivered, without classifying them as a regulated utility. Gas stations aren't oil refineries; EV charging stations aren't power plants. All sell energy, but we don't regulate a gas station owner like oil drillers, pipelines, or refiners.

Details & rationale are in my previous comments in this docket. Thank you.

Brian Grunkemeyer

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