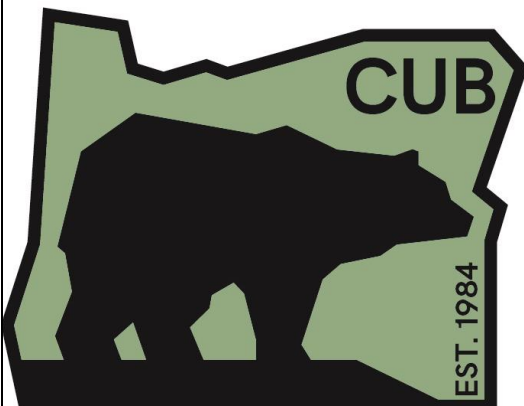


**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON
UM 1810**

In the Matter of)
)
PACIFICORP d/b/a PACIFIC POWER,)
)
Applications for Transportation)
Electrification Programs.)
_____)

**REPLY TESTIMONY
OF THE
OREGON CITIZENS' UTILITY BOARD**

October 25, 2017



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I. INTRODUCTION

1 My name is Bob Jenks, and my witness qualifications have been provided as CUB
2 Exhibit 101.

3 The Oregon Citizens' Utility Board ("CUB") was one of the parties that helped
4 negotiate the settlement in this docket. In addition to CUB, the settlement is supported
5 by Staff of the Public Utility Commission of Oregon ("Staff"), PacifiCorp, Industrial
6 Customers of Northwest Utilities ("ICNU"), Forth, Greenlots, and the Oregon
7 Department of Energy ("ODOE"). In this Reply Testimony, CUB responds to
8 ChargePoint's Response Testimony in Opposition to the Stipulation filed October 4,
9 2017,¹ the single party that is challenging the stipulation.

10 According to ChargePoint, the Stipulation is flawed because:

¹ See generally UM 1810 – Chargepoint/200/Packard.

- 1 • The public charging program fails to meet the statutory criteria for
2 transportation electrification (“TE”) programs established by SB 1547²;
3 and
4 • The public charging program pilot would “hamper rather than accelerate”
5 transportation electrification.³

6 CUB notes that two other electric vehicle supply equipment (“EVSE”)
7 manufacturers are parties to this docket—Siemens and Greenlots. As mentioned,
8 Greenlots was a signatory to the stipulation and settlement negotiation. Siemens
9 intervened in the docket on September 22, 2017, and recently filed Reply Testimony to
10 ChargePoint’s Response Testimony in Opposition to the Stipulation.⁴ There is clearly a
11 divergence of opinion within the EVSE industry regarding PacifiCorp’s public charging
12 program pilot.

13 While the carefully negotiated settlement also provided for PacifiCorp to invest
14 and proceed with an outreach and education pilot and a demonstration and development
15 pilot, ChargePoint focused the entirety of its objection on the public charging program
16 pilot. Instead of allowing PacifiCorp to invest \$1.85 million in a public charging station
17 pilot program, ChargePoint argues that the costs associated with charging stations should
18 be put in the demonstration and development pilot fund.⁵ Further, ChargePoint requests
19 the Commission to “provide guidance” to PacifiCorp on how to subsidize public
20 charging.⁶

² UM 1810 - ChargePoint/200 Packard/3-4.

³ UM 1810 - ChargePoint/200/Packard/4.

⁴ *See generally* UM 1810 – Siemens/100/King.

⁵ UM 1810 - ChargePoint/200/Packard/4.

⁶ UM 1810 - ChargePoint/200/Packard/4.

1 CUB's testimony is organized as follows:

- 2 • The public charging program pilot is reasonable and in the public interest
3 because it is cost limited, furthers the legislative goals of SB 1547, and
4 will accelerate transportation electrification in the state;
- 5 • The public charging program is prudent as a pilot program in that it offers
6 concrete takeaways that will benefit the utility's system; and
- 7 • ChargePoint is seeking ratepayer subsidies of privately-installed charging
8 stations.

9 **II. THE PUBLIC CHARGING PROGRAM PILOT IS COST LIMITED,**
10 **CONSISTENT WITH SB 1547, AND WILL ACCELERATE**
11 **TRANSPORTATION ELECTRIFICATION.**

12 **A. PacifiCorp's public charging investment is cost limited.**

13 The stipulation allows PacifiCorp to spend up to \$1.85 million on public charging
14 stations in its service territory.⁷ This amount will be reduced by revenue generated from
15 charging and income from the low carbon fuel credits.⁸ Therefore, customers will be
16 charged less than \$1.85 million. Let's put this relatively small investment into
17 perspective. Volkswagen, as part of its settlement for its diesel emissions scandal, plans
18 to invest more than 150 times this amount in charging infrastructure over the next two
19 years.⁹ Ecotality, which built much of Oregon's early charging network, received a

⁷ UM 1810 - Stipulation/Page 2.

⁸ UM 1810 – Stipulation/Page 2.

⁹ <https://www.bizjournals.com/portland/news/2017/04/21/volkswagen-taps-portland-seattle-for-bigelectric.html> (“Portland and Seattle are among 11 metropolitan areas named as priorities for investment from Electrify America, which will pour \$300 million over the next two years into increasing adoption of zero-emissions vehicles outside California.”).

1 federal grant of \$100 million.¹⁰ Calling PacifiCorp’s public charging program pilot
2 modest might be overly generous.

3 PacifiCorp’s Oregon service territory includes many mid-sized communities and a
4 great deal of smaller rural communities. Excluding Portland, there is only a single
5 location with a fast charger that is capable of charging any EV in PacifiCorp’s Oregon
6 service territory.¹¹ There is a need for public charging in PacifiCorp territory that is not
7 being met by the competitive market.

8 **B. The Public Charging Program Pilot is Consistent with SB 1547.**

9 CUB will appropriately discuss the legal issues related to the statutory
10 requirements of SB 1547 in briefing. CUB notes, however, that SB 1547 lists six criteria
11 that the Commission must consider, but the law does not state that every expenditure in a
12 TE program application must meet each of the six criteria.¹²

13 More importantly, the overriding concern in SB 1547’s TE section was to
14 “accelerate transportation electrification.”¹³ CUB participated in the negotiations of SB
15 1547, and CUB’s view is that this is a broad term. While some folks interpret it primarily
16 as increasing EV sales, CUB believes that the intention to accelerate transportation
17 electrification requires a broader scope. TE includes EVs, charging equipment, and
18 electric grid and utility system impacts. TE is the process of using electricity as an
19 alternative fuel. Accelerating transportation electrification involves more EVs, more
20 places to charge EVs, and ensuring that the electric grid can accommodate EVs.

¹⁰ https://www.greentechmedia.com/articles/read/ecotality-faces-bankruptcy-depsite-doe-grants#gs.wJr7_E4

¹¹ UM 1810/ Stipulating Parties/100 Morris-Klotz-Mullins-Jenks-Allen-Ashley-Avery/13

¹² SB 1547§ 20(4)(a) – (f).

¹³ SB 1547§ 3.

1 While ChargePoint’s focus is on the SB 1547 factor that relates to customer
2 choice in vehicle charging, it is important to recognize that other factors relate to the
3 interaction between PacifiCorp’s system and EVcharging:

- 4 (d) Are reasonably expected to enable the electric company to support the
5 electric company’s electrical system;
- 6 (e) Are reasonably expected to improve the electric company’s electrical
7 system efficiency and operational flexibility, including the ability of the
8 electric company to integrate variable generating resources¹⁴;

9 Currently, there is little information about how charging EVs affects the grid.

10 With little baseline data, it is difficult to design programs to meet these two factors. As
11 part of the stipulation, PacifiCorp will conduct a study concerning grid impacts of
12 residential home charging.¹⁵ But understanding the impacts of public charging –
13 particularly public fast charging – will be necessary to design programs and tariffs to
14 support broader public charging. Allowing the utility to operate some public charging
15 will allow the Company to gather the data that is necessary to design future public
16 charging programs/tariffs related to supporting the grid and improving system efficiency
17 and operational flexibility. This is exactly what a pilot is supposed to do.

18 ChargePoint claims the stipulation limits customer choices for charging
19 equipment and services.¹⁶ CUB disagrees.

20 ChargePoint identifies site hosts as the “customer:”

21 In my opinion, the “customer” intended by the statute is the entity that
22 hosts a charging station and allows drivers to charge their vehicles at the
23 station. I provided many examples of such customers in my Reply
24 Testimony, including big-box retailers, municipal governments,
25 convenience stores, employers, and the owners of multi-unit dwellings
26 (MUDs). These entities may offer a charging station to their shoppers,
27 their constituents, their employees, or their tenants, but they are the ones

¹⁴ SB 1547 §20(4)(d) and (e).

¹⁵ UM 1810 – Stipulation/Pages 8-9.

¹⁶ UM 1810 - ChargePoint/200 Packard/8.

1 paying the electric bill, so they are the customer-of-record. Because the
2 drivers that use a particular station are also the shoppers, constituents,
3 employees, or tenants of the site-host, site-hosts are in regular contact with
4 those drivers and are best equipped to understand their needs and
5 preferences.¹⁷

6 The problem with this argument is that these identified site hosts are not the
7 customer of record for PacifiCorp charging stations. In this particular pilot, PacifiCorp
8 will not be asking big-box retailers or owners of multi-unit dwellings to pay for the
9 electricity that flows through the charging pods. Those entities can ask for a PacifiCorp
10 grant under the demonstration and development pilot, where they likely would be the
11 customer for the electricity, but, under the public charging program pilot, site hosts are
12 not the customer.

13 CUB believes that the primary customers served by PacifiCorp charging stations
14 are electric customers who own EVs. The vast majority of these customers charge their
15 vehicles at home. Having additional charging stations within PacifiCorp's service
16 territory will give these customers more choices as to where they charge their vehicle.
17 This clearly increases customer choices for charging services and accelerates, rather than
18 hampers, transportation electrification.

19 III. THE ROLE OF PILOTS

20 ChargePoint is critical of the signatories of the stipulation, including CUB, for
21 agreeing to the public charging program as a pilot:

22 Frankly, I am disturbed that certain parties, particularly Pacific Power,
23 Staff, and CUB, would recommend that the Commission approve a
24 program that they acknowledge does not meet the statutory criteria that the
25 programs are supposed to meet. As I mentioned earlier, I am also surprised
26 that these parties would suggest to the Commission that it can and should
27 approve a program even if it finds that the program does not meet the

¹⁷ UM 1810 - ChargePoint/200 Packard/8.

1 relevant statutory criteria. I am also concerned that the Stipulating Parties
2 seem to believe that because the programs are “time-limited, cost-limited,
3 and require specific learnings,” that SB 1547’s criteria somehow do not
4 apply or are not relevant.¹⁸

5 First, it is incorrect to state that CUB and other parties acknowledge that the
6 programs “do not meet the statutory criteria that programs are supposed to meet.” In fact,
7 CUB believes that they *do* meet the statutory criteria.

8 CUB’s primary concern with PacifiCorp’s TE program applications and the
9 statutory criteria is the criteria that these programs be prudent. A prudency determination
10 normally includes a cost effectiveness test, and these programs – if they were not pilots --
11 would not pass a traditional cost effectiveness test. CUB believes, however, that by
12 recognizing these as time-limited pilots with concrete takeaways, the programs are
13 prudent, and can be considered cost effective. The reason is that part of what customers
14 are paying for with pilot programs is the knowledge and experience gained from these
15 pilots—specifically in a nascent industry such as TE. PacifiCorp will have thousands of
16 EVs in its system within a few years, and the Company needs to understand more about
17 how these vehicles impact the grid. Even though the revenue generated from these
18 programs will not equal their costs, the revenue generated plus the value of what is
19 learned from these pilots will be greater than their costs. From CUB’s perspective, this
20 makes the programs cost effective and prudent, and consistent with the statutory criteria.

21 The same is true for the criteria related to supporting the grid and integrating
22 variable resources. It is not clear that these programs, by themselves, support the grid or
23 integrate variable resources. But in order to support the grid and integrate variable
24 resources PacifiCorp and stakeholders have to understand how EV charging interacts

¹⁸ UM 1810 - ChargePoint/200 Packard/19-20.

1 with the grid. These pilots are designed to gain the information that will allow us to
2 appropriately design future programs. As pilots, part of what we are paying for is the
3 information we gain, and that information is the key to meeting the SB 1547 criteria.

4 **IV. CHARGEPOINT IS ASKING FOR CUSTOMER SUBSIDIES OF**
5 **PRIVATELY-INSTALLED CHARGING STATIONS**

6 ChargePoint is transparent in that they are really looking for an expansion of
7 PacifiCorp pilot that offers grants to support charging infrastructure.¹⁹ ChargePoint does
8 not say how much of the cost of charging stations that it believes the utility should cover.
9 However, ChargePoint does say that the site host should have “skin in the game”²⁰ and
10 that, under a grant program, PacifiCorp could leverage private money to support two or
11 three times the number of charging stations.²¹

12 However, under that model, the charging revenue would go to the site host, not to
13 offset the costs that customers paid for the charging station. More charging stations
14 would be built, but the program would also cost more. If PacifiCorp offered a rebate that
15 was half the cost of the charging equipment, and charging stations generate revenue that
16 covered 60% of its costs, then the program would double the number of charging stations,
17 but would cost customers 60% more than the current pilot. In addition, PacifiCorp’s
18 customers’ subsidies would fund a profitable business model for the site host. However,
19 beyond the contractual relationship around the subsidy, PacifiCorp and the Commission
20 would have no oversight over the charging station, its impact on the grid, its pricing, and

¹⁹ UM 1810 - ChargePoint/200 Packard/24.

²⁰ UM 1810 - ChargePoint/200 Packard/16.

²¹ UM 1810 - ChargePoint/200 Packard/24.

1 the information that was collected. This concerns CUB, and would run directly counter
2 to the spirit of the settlement to accelerate transportation electrification.

3 In addition, CUB would be concerned that developing a charging model that
4 requires a customer subsidy for private charging is neither affordable nor sustainable.

5 V. CONCLUSION

6 The larger stipulation reached by the parties includes pilots of both models:
7 utility-owned public charging stations and customer-subsidized privately owned charging
8 stations. Both models will be piloted and the results can be compared and contrasted,
9 and all parties can benefit from the takeaways.

10 CUB's primary concern is how electrification of transportation will affect the
11 grid. In our May 24th testimony, CUB discussed Rocky Mountain Institute's analysis of
12 EV's impacts on the grid. If done correctly, it can provide benefits and if done poorly, it
13 can cause harm.²² CUB believes that understanding the potential benefits and costs will
14 allow Oregon to develop cost-based programs. But there is not currently sufficient
15 information that would allow us to develop these programs.

16 Understanding the interaction of charging stations with the grid will be important
17 to developing cost-based programs to support charging stations. For example,
18 PacifiCorp might discover that the difference between on-peak and off-peak charging
19 allows it to offer a significant rebate to a site host who wants to install public charging
20 equipment that is tied to the site host offering a nighttime discount; or it might develop a
21 time-of-use tariff with no demand charges that allows it to recover its costs, is more
22 affordable for the site host, and promotes beneficial charging.

²² UM 1810 - CUB/100 Jenks/5.

1 Rather than developing models that require the utility to build uneconomic
2 charging stations or its customers to subsidize privately-owned charging stations, we
3 should be attempting to build models that incent charging that supports the grid and
4 reduces costs. The programs in this stipulation are small pilots designed to help us learn
5 about the impact of EV charging. These programs have a low cost.. But if we can learn
6 enough about the grid impacts of EV charging to develop a system where transportation
7 electrification has benefits for all customers, then utilities can spend more significant
8 amounts of customer money supporting electrification of transportation in order to create
9 these benefits.