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February 10, 2011

***VIA ELECTRONIC FILING
AND OVERNIGHT DELIVERY***

Oregon Public Utility Commission
550 Capitol Street NE, Ste 215
Salem, OR 97301-2551

Attn: Filing Center

RE: UM 1461 – Pacific Power’s Response to Bench Request and Opening Comments

PacifiCorp d/b/a Pacific Power (“Company”) encloses for filing its Response to Bench Request and Opening Comments in the above-referenced proceeding. As indicated on the attached service list, a copy of this filing is being served to all parties on the service list.

Please contact Joelle Steward, Regulatory Manager, at (503) 813-5542, for questions on this matter.

Sincerely,

Andrea L. Kelly
Vice President, Regulation

Enclosure

cc: Service List – UM 1461

CERTIFICATE OF SERVICE

I hereby certify that I served a true and correct copy of the foregoing document in Docket No. UM-1461 on the following named person(s) below by e-mail and first-class mail addressed to said person(s) at his or her last-known address(es) indicated below:

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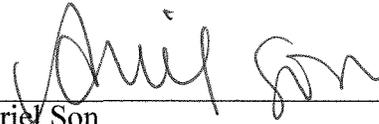
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Dated: February 10, 2011

A handwritten signature in black ink, appearing to read "Ariel Son", written over a horizontal line.

Ariel Son
Coordinator, Regulatory Operations

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UM 1461

In the Matter of

PUBLIC UTILITY COMMISSION OF
OREGON

Investigation of matters related to electric
vehicle charging.

**Pacific Power’s Response to Bench
Request and Opening Comments**

1 PacifiCorp d/b/a Pacific Power (“Pacific Power” or “Company”) submits the
2 following responses to the Bench Request issued by the Public Utility Commission of
3 Oregon (“Commission”) on November 15, 2010. The Company also responds to opening
4 comments on the straw proposal filed by parties on August 27, 2010.

5 **I. Introduction**

6 In Opening Comments, Pacific Power asserted that the primary role of the
7 Commission and electric utilities at this time is to identify and address barriers that could
8 compromise or hinder the adoption of electric vehicles (“EVs”) and in particular the
9 ECOTality/eTec EV Project (“EV Project”) in Oregon. Based on opening comments and
10 discussions at the September 9, 2010 workshop, the current regulatory framework,
11 including current Commission rules and electric utility tariffs, is capable of
12 accommodating the EV Project and the adoption of EV and related infrastructure more
13 generally, without substantive modifications at this time. While EV penetration rates are
14 expected to grow, the penetration and load impacts can vary widely from one utility to
15 the next with very modest impacts expected for the Company in the near term. Given the
16 nascent state of the EV market, Pacific Power recommends that the Commission adopt a

1 flexible approach to any EV-related policies at this time. The outcome of this proceeding
2 should emphasize the need for on-going study of market development, its needs and the
3 impact on the electric utilities and its customers.

4 **II. Response to Bench Request**

5 **1. Utility Ownership of Electric Vehicle Service Equipment (“EVSE”)**

6 **Guideline**

7 In the Bench Request, the Commission asks parties to discuss implications, if any,
8 of the used and useful standard (ORS 757.355) for utility investment in EVSE stations
9 and what standards of review the Commission should use to determine when recovery of
10 utility investment in public EVSE stations is warranted, if the Commission permits
11 utilities to own such stations.

12 As discussed in the Company’s Opening Comments, Pacific Power does not
13 support the pre-determination of rate treatment for electric utility ownership or operation
14 of EVSEs at this time. Such a determination is inconsistent with goal No.1 in the straw
15 proposal, which recognizes that flexibility is necessary at this early stage of market
16 development for EV infrastructure. As the market develops, under certain circumstances,
17 inclusion of EVSE costs in rates may not be justified, therefore, the Commission should
18 not preclude a utility from bringing forth a proposal.¹

19 ORS 757.355 should not be interpreted to impact, the recovery of costs associated
20 with the design, installation, operation and maintenance of publicly available EVSE
21 stations. The Commission has a degree of flexibility to interpret ORS 757.355 in a
22 manner analogous to the recovery of costs associated with street lighting. Pacific Power

¹ The Company understands that this policy is not intended to apply to a utility’s decision regarding the adoption of EVs for its fleet.

1 owns and maintains street lighting systems at the request of many local communities
2 around the state of Oregon. Street lighting systems are provided for the public benefit and
3 the costs associated with these services are recoverable through tariff rates. The
4 provision of publicly available EVSE stations – if requested by local communities and
5 not otherwise available through market forces – is comparable to street lighting with
6 respect to the overriding public benefit derived from these services. Accordingly, the
7 Commission’s treatment of ORS 757.355 should support the recovery of prudently-
8 incurred costs associated with publicly available EVSE stations.

9 As to the standard of review to be implemented by the Commission for cost
10 recovery purposes, Pacific Power recommends that the Commission allow recovery for
11 costs that are prudently incurred. This standard of review is well-documented, familiar to
12 all stakeholders and appropriate in the context of cost recovery for the design,
13 installation, operation and maintenance of publicly available EVSE stations.

14 **2. Distribution System Upgrades Guideline**

15 The Commission asks parties to respond to the following questions related to the
16 proposed guideline concerning cost allocation of distribution system upgrades: 1) Will it
17 be possible to assign responsibility for a utility’s need to make significant distribution
18 system upgrades to one or a limited number of “last to the system” EV customers? 2) If
19 so, should the last to the system EV customer(s) be burdened with the full cost of the
20 distribution system upgrade? 3) If not, what are the reasonable rate alternatives to
21 assigning full cost responsibility to the last to the system EV customer(s)?

22 Regarding the first question, it is currently not possible for Pacific Power to
23 assign responsibility for upgrades to EV customers in all instances because the Company

1 is unaware in many situations when a customer makes changes to an existing facility that
2 results in the need for system upgrades. To the extent that a customer requires a line
3 extension, the Company would be aware of the distribution upgrade needs and assign
4 costs pursuant to the Company's line extension tariff, Rule 13. For example, customers
5 may install appliances with similar loads as EVSE such as heat pumps, air conditioning
6 units, plasma TVs, and clothes dryers, without knowledge by the Company but which
7 may contribute to the need to make system upgrades to the circuit. The costs for these
8 system upgrades are recovered through general rates. Pacific Power has considered and
9 is aware that other utilities may have tried to assess and predict the clustering effect of
10 EVs on existing distribution circuits, starting with affluent neighborhoods that were
11 initially predicted to be early adopters of EVs. However, the uncertainty surrounding the
12 EV market penetration has made this a challenging proposition. The potential to invest
13 and upgrade these electrical circuits in preparation for "build it and they will come" raises
14 concerns with shifting of EV-related costs to non-participating customers and questions
15 related to the used and useful standard.

16 Because of the challenges of currently identifying all instances where EVs
17 contribute to the need for distribution system upgrades, the Company does not agree that
18 the last to the system EV customer should be burdened with the full cost of the upgrade.
19 Systematically tracking and spreading costs among EVs that attach to any given network
20 circuit raises questions of fairness for the treatment of other similarly sized loads under
21 current tariffs.

22 In order to assign full responsibility, the Company would need other avenues to
23 make the Company aware of where an EVSE may be installed. We currently do not have

1 that capacity or authority, and we are not asking for it at this time. If it were deemed
2 important for those locations to be determined, a statutory change would likely be
3 required.

4 **3. Rate Design Guideline**

5 Regarding the proposed rate design guideline, the Commission asks parties to
6 discuss further whether separate metering and a seasonal/time-of-use rate schedule should
7 be created for EV charging versus requiring a home or business to be subject to current
8 time-of-use rates for the whole site. Additionally, the Commission asks parties to
9 comment on other discounted rates for EV charging, such as interruptible rates and the
10 role of customer education.

11 The Company believes there is not a compelling case to propose that power
12 delivered to level 2 or higher EV charging stations be required to be separately metered
13 nor that they be charged seasonal/time of use rates. Level 2 charging is similar to service
14 to other types of residential loads, such as residential electric clothes dryers. We believe
15 this requirement is overly restrictive and premature. Higher voltage (Level 3) charging
16 stations may be separately metered if a customer desires, but a requirement should not
17 exist that would single out this end use for separate metering.

18 The Company supports encouraging electric vehicle customers to utilize existing
19 time of use rate options under the current portfolio options available to customers.

20 Consumer education for electric vehicle owners would be useful and should be
21 encouraged, particularly at the time of purchase of the EV. During previous workshops
22 in this docket, parties noted that based on current Oregon rates, the cost of charging an
23 EV would be approximately \$20-\$25 per month. Switching to a TOU rate may save

1 \$7.50 per month under Oregon's current low rates. Customer education will assist
2 customer understanding of the total cost of EV ownership and will help customers choose
3 the best pricing for them. As the adoption of electric vehicles grows, additional options
4 may be appropriate; however, in the near term, the existing portfolio options will be
5 suitable.

6 The Company does not support mandatory rate requirements for electric vehicle
7 customers. Such requirements could potentially discourage electric vehicle adoption, and
8 the requirements would be in conflict with current laws and rules concerning portfolio
9 options, direct access and customer choice. A customer's ownership of an electric
10 vehicle should not place them in a different rate class any more than would the customer
11 ownership of any other electric appliance. Moreover, mandatory end use rates, while in
12 conflict with existing rules and laws, would also create issues around enforcement and
13 rate discrimination.

14 In response to the question concerning whether a discounted rate class should be
15 created for EV charging in exchange for interruptibility during on-peak periods, Oregon
16 rules and laws are clear that rates should be based on cost (OAR 860 Division 38). If an
17 interruptible option were cost effective for the customer and for the utility (including
18 administrative costs) then such an option should be offered to all customers, not only EV
19 customers.

20 In its Opening Comments, Staff issued a set of rate design principles for electric
21 vehicles.² Staff's principles contain both policy recommendations and specific proposed
22 rate values. None of Staff's recommendations is accompanied by any evidence or other
23 supporting data. In addition to the Company's discussion earlier concerning the lack of a

² See Staff's Opening Comments, Attachment A, Docket UM 1461, August 27, 2010.

1 compelling case for mandatory rates for electric vehicles and their conflict with existing
2 laws and rules, the Company believes that Staff's recommendations are premature and
3 inappropriate in this docket. Such rate design proposals should be handled in each
4 respective utility's general rate case where actual utility-specific costs are reviewed.

5 **4. IRP Flexible Resources Guideline**

6 In the Bench Request the Commission asks parties to comment on reasons to
7 either adopt or reject Staff's proposed integrated resource plan (IRP) guideline for
8 flexible resource planning.

9 As Pacific Power discussed in its Opening Comments, it is premature to adopt
10 new specific IRP guidelines to address the potential for ancillary services from EVs. The
11 penetration potential of EVs are expected to have minimal impacts for system planning
12 for Pacific Power in the near term. Such steps as assessing EV adoption rates on a
13 localized basis, evaluating distribution system impacts, gauging rate impacts and
14 alternative supporting rate designs, and conducting load monitoring, are necessary
15 prerequisites for developing a meaningful forecasting and scenario evaluation capability.
16 Moreover, as many commenters noted in the opening comments, the vehicle to grid
17 technology is emerging. Creating a guideline for a technology that is not only emerging,
18 but would have minimal impact for system planning for at least the next 10 years, places
19 a significant administrative burden on the utility with very little value to the analytical
20 process.

21 Additionally, Pacific Power needs to determine how EVs and the supporting
22 infrastructure is characterized from portfolio modeling and resource characterization
23 perspectives before EVs can be treated on a consistent and comparable basis with respect

1 to other resources. Pacific Power recommends that the Commission address the study of
2 the potential for ancillary services from EVs through the IRP public process, and as an
3 evolving investigation that accounts for each utility's own planning environment and
4 modeling framework.

5 Similarly, the Company does not support the recommendations of Staff and the
6 NW Energy Coalition in their opening comments that the utilities be required to assess
7 the costs of dispatchable charging now and, as the NW Energy Coalition suggests,
8 develop tariffs with discounts for such. Given the limitations for accurate assessments of
9 the penetration potential in Pacific Power's service area and resulting load impacts, the
10 Company does not believe that this would be a useful exercise at this time. Additional
11 experience and information is necessary before a reasonable assessment can be made for
12 the costs of benefits of dispatchable charging.

13 **5. Planning and Reporting Guideline**

14 The Commission asks parties to consider whether additional reporting or planning
15 guidelines are needed. The issues and analytical prerequisites mentioned for the IRP
16 flexible resource guideline apply equally for a planning and reporting guideline. The IRP
17 can be used as one setting for discussing the role of EV's in resource planning. Reporting
18 and planning guidelines should be considered on a year-to-year basis as parties acquire
19 greater understanding of the complex issues and as empirical data is gathered.

20 Licensing of EV vehicles and permitting requirements for connections to
21 electrical systems could also be utilized by commission and those interested parties to
22 stay informed of EV trends.

1 **III. Conclusion**

2 While the Company appreciates the Commission's efforts to identify issues
3 around EV charging for the electric utilities and try to get out ahead of potential load
4 impact problems, it is too early in the rollout of EVs to meaningfully develop substantive
5 guidelines on the matter. More experience and better data that is expected to come
6 through the EV Project is crucial to better understanding the potential impacts.
7 Therefore, the Company recommends that the Commission adopt a flexible approach for
8 EV-related policies at this time and revisit the subject after experience is gained through
9 the EV Project.

DATED: February 10, 2011.

PACIFICORP

A handwritten signature in cursive script that reads "Ryan Flynn" followed by a stylized flourish.

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