PACIFIC POWER
A DIVISION OF PACIFICORP

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April 1, 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 Closing Comments**

PacifiCorp d/b/a Pacific Power ("Company") encloses for filing its Closing 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 /ca

Andrea L. Kelly
Vice President, Regulation

Enclosure

cc: Service List – UM 1461

<u>CERTIFICATE OF SERVICE</u>

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 addressed to said person(s) at his or her last-known address(es) indicated below:

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Dated: April 1, 2011

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**BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON**

**UM 1461**

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| In the Matter of<br><br>PUBLIC UTILITY COMMISSION OF OREGON<br><br>Investigation of matters related to electric vehicle charging. | **Pacific Power's Closing Comments** |

PacifiCorp d/b/a Pacific Power ("Pacific Power" or "Company") submits the following closing comments in this proceeding. As required by the June 1, 2010 Prehearing Conference Memorandum, the Company includes a summary of its final position on issues to be addressed in this proceeding.

## I. Introduction

Electric vehicles ("EVs") are at an exciting early stage of development and adoption in Oregon. This proceeding has been valuable for bringing awareness of issues and concerns about this emerging technology. It has also been important to identify and address barriers that could compromise or hinder the adoption of EVs and in particular the ECOtality/eTec EV Project ("EV Project") in Oregon. Based on opening comments and discussions at the workshops, the current regulatory framework, including current Commission rules and electric utility tariffs, is capable of accommodating the EV Project and the adoption of EV and related infrastructure more generally, without substantive modifications at this time.

The need for flexibility at this early stage of market development has been underscored by all parties in this proceeding. While there are numerous projections and estimates for deployment of electric vehicle service equipment ("EVSEs"), penetration of EVs around the state, and charging patterns, the penetration and load impacts can vary across a utility's service area, with very modest impacts expected for Pacific Power in the near term. However, the potential future impacts and the changing state of technology remain uncertain. All parties recognize that the near term impacts are minimal and that information gathering and planning are necessary to efficiently and effectively accommodate EV load in the future. The data and experience gained from the EV Project will be crucial to better understand these impacts and how the utility can plan for and manage EV load.

Given the nascent state of the EV market, the outcome of this proceeding should emphasize the fact that there are, at most, limited barriers to EV market development under the existing regulatory structure and that there is a need for on-going study of market development and impacts on the electric utilities and customers. However, Pacific Power is concerned that the excitement surrounding EVs and the EV Project has led to a premature emphasis on policies that would be better served by experience, rather than projections and speculation, and such policies may actually impede EV deployment. As discussed below, parties' recommendations for study and reporting by the utilities at this time should be balanced with the near term value, cost and resource commitments that such reporting requirements would entail. Accordingly, Pacific Power recommends that the Commission reevaluate any guidelines or policies adopted in the proceeding in two to three years.

## II. Summary of Final Position on Issues

### 1. Goals

Pacific Power supports the goals identified in Staff's July 2010 straw proposal that emphasize flexibility as the EV market matures, encourage charging at off peak periods and minimal cost shifting onto non-participating customers. From Pacific Power's perspective, additional data and experience that will be developed in the next few years will be important to better understand the impacts of EVs on the Company's system, including the validation or refinement of the projections of deployment and information about charging behavior. This knowledge is crucial for the development of effective policies.

### 2. Utility Ownership of EVSE Guideline

Pacific Power does not support the pre-determination of rate treatment for electric utility ownership or operation of EVSEs at this time. Such a determination is inconsistent with the need for flexibility at this early stage of market development for EV infrastructure. As the market develops, under certain circumstances, inclusion of EVSE costs in rates may be determined to be justified; therefore, the Commission should not preclude a utility from bringing forth a proposal or otherwise prejudge rate treatment through guidelines at this stage.[1] The Company clarifies that its hypothetical role at this time would be likely be limited to the provision of EVSEs to a customer, such as a municipality, at their request (which is analgous to street lighting) and would not entail the provision of charging services to individual EV users.

[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.

**3. Distribution System Upgrades Guideline**

Under existing tariffs and rules, Pacific Power accommodates new connections, system improvements and upgrades. Accordingly, a new tariff or guideline for distribution system upgrades related to EVs is unnecessary at this time. Moreover, in many circumstances a guideline specifically related to EVs would be problematic because the utility may not be aware of the specific instances when a customer makes changes to an existing facility that results in the need for system upgrades. To the extent that a customer requires a new connection or line extension, the Company would be aware of the distribution upgrade needs and assign costs pursuant to the Company's line extension tariff, Rule 13.

**4. Rate Design Guideline**

The Company does not support mandatory rate requirements for electric vehicle customers. Such requirements could potentially discourage electric vehicle adoption, and the requirements may be in conflict with current laws and rules concerning portfolio options, direct access and customer choice.[2] Ownership of an electric vehicle should not place customers in a different rate class any more than would customer ownership of any other electric appliance. Moreover, mandatory end use rates, which may be in conflict with existing rules and laws, may also create issues around enforcement and rate discrimination.

No compelling case exists to propose that power delivered to level 2 or higher EV charging stations be required to be separately metered nor that they be required to be

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[2] For example, ORS 757.601(2) states that "Residential electricity consumers shall be allowed to purchase electricity from among a portfolio of rate options as described in ORS 757.603…." ORS 757.603 speaks to a "portfolio of rate options" for residential electricity consumers. Today, residential and nonresidential customers have rate options, including base supply service, time of use, renewable usage and habitat, and, of course, direct access. Mandatory rate requirements for EVs may be in conflict with these concepts.

charged seasonal or time of use rates. Level 2 charging is similar to service to other types of residential loads. This requirement is overly restrictive and premature. Higher voltage (Level 3) charging stations may be separately metered if a customer desires, but a requirement should not exist that would single out this end use for separate metering.

In the Staff Response to Commission Bench Request dated February 10, 2011, Staff argued at p. 13-14:

> Without a separate EV rate, public charging stations would likely be on an existing commercial or industrial rate. These rates have demand charges that can unduly distort the electric rates paid by the EVSP host. A separate EV rate can ensure that utilities do not make one-time negotiations with some EVSE providers or sell power at favorable rates to their own unregulated activities.

Pacific Power disagrees with Staff's rationale for a separate EV rate. All rates that the Company charges are based on cost of service and are approved by the Commission through utility tariff filings. The Company's rates are publicly available. By law, electric utilities may not charge rates other than those approved by the Commission. Accordingly, the Company cannot negotiate rates with some EVSE providers or sell power at other favorable rates to an unregulated affiliate as Staff suggests. Demand charges are charged to all loads in excess of 15 kW. They are cost-based, appropriate and a well-accepted rate design methodology to reflect the costs for capacity requirements. Demand charges are an integral part of electric rates and do not distort electric rates. The Company's current rates are transparent and fair. There is currently no definitive data to support a new separate cost-based rate for an EV customer class.

Staff and Ecotality further argue that it is preferable to implement a separate rate at this time so that EV customers will make more informed buying decisions knowing what the rate structure will be. This argument is specious since it assumes that the appropriate rate structure can be known at this time. Given the lack of actual EV usage data at this time to support a cost-based rate schedule for EVs, any new rate structure would be speculative and would likely change in the future once EV data become available. For the near term, the current cost of service-based rates are the best indicator for customers of the potential costs of charging an electric vehicle in Pacific Power's service area. The Company supports encouraging electric vehicle customers to utilize existing time of use rate options under the current portfolio and direct access options available to customers. As the adoption of electric vehicles grows, additional options may be appropriate; however, in the near term, the existing options will be suitable.

**5. Smart Charging / Demand Response Proposals**

In response to the question concerning whether a discounted rate class should be created for EV charging in exchange for interruptibility during on-peak periods, Oregon rules and laws are clear that rates should be based on cost (OAR 860 Division 38). If an interruptible option were cost effective for the customer and for the utility (including administrative costs) then such an option should be offered to all customers, not only EV customers. Staff states in its February 10, 2011 Response to Commission Bench Request that it is concerned that "the opportunity to implement a well designed smart charging program may be missed if nothing is done until grid impacts are apparent." However, Staff also states:

> The consistent message from stakeholders was that EV adoption will happen slowly enough to avoid adverse grid impacts until probably 2020, even at the local distribution level. This is why staff, in its opening comments, did not propose smart charging right away. Instead, staff proposed that utilities assess the cost to implement smart charging, and report back to the Commission.

Similarly, the Citizens' Utility Board of Oregon ("CUB") recommends that the utilities investigate "intelligent charging" to offset the impact of intermittent wind and excess wind generation. CUB recommends that the utilities file a report within six months of closure of the docket on what would be required to implement such a system in their Oregon service areas.

As previously noted, at this time there is insufficient data to support the development or to plan for the development of EV-based demand response type programs. Penetration levels of EVs are highly speculative. The establishment of reporting and planning requirements will increase costs and require a commitment of additional resources. In light of other cost pressures on rates, Pacific Power questions if this is the highest and best use of resources at this time when all parties agree that the near term impacts of EVs are minimal. Pacific Power recommends that the establishment of reporting and planning guidelines be examined only after results from the EV Project can be compiled and projections refined.

**6. IRP Flexible Resources Guideline**

As Pacific Power discussed in its previously submitted comments, it is premature to adopt new specific IRP guidelines to address the potential for ancillary services from EVs in this proceeding. The expected penetration of EVs will create minimal impacts for system planning for Pacific Power in the near term. Such steps as assessing EV adoption rates on a localized basis, evaluating distribution system impacts, gauging rate impacts and alternative supporting rate designs, and conducting load monitoring, are necessary prerequisites for developing a meaningful forecasting and scenario evaluation capability. Creating a guideline for a technology that is not only emerging, but would have minimal impact for system planning for at least the next 10 years, places a significant administrative burden on the utility with very little value to the analytical process.

Pacific Power recommends that the Commission address the study of the potential for ancillary services from EVs through the IRP public process, and as an evolving investigation that accounts for each utility's own planning environment and modeling framework. Lastly, to the extent that these new proposed guidelines are intended to inform the development of demand response programs more generally, the Commission should open an investigation to re-evaluate the IRP guidelines related to demand response rather than adopting such guidelines in a EV-related proceeding.

**7. Other Reporting Requirements**

In its February 11, 2011 comments, CUB recommends quarterly reporting by each utility detailing "the number of registered EVs in the service territory, the number of customers on each available rate plan, and the average electricity consumption by entire household and/or vehicle (the the extent that vehicle-level data is available."

Additionally, CUB recommends a more detailed annual report with usage patterns, system impacts and any use of EVs as a load-balancing resource. Detailed reporting by the utilities on EVs is inappropriate at this time. The Company cannot and will not know the exact number of registered EVs in its service territory. Moreover, in the Company's experience, quarterly reporting is burdensome and not readily utilized by parties. The EV Projects reporting requirements that should be available by the Idaho National Laboratory with information on EV adoption, charging station use and EV owners' charging habits should be sufficient in the near term.

## III. Conclusion

Pacific Power appreciates the opportunity to provide these comments and looks forward to working with the Commission, its staff and stakeholders to address issues as the EV industry develops. At a minimum, the Company recommends that the Commission re-evaluate the need for guidelines around EVs in the next two to three years, after the issues can be more effectively shaped by experience.

DATED: April 1, 2011.

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