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VIA ELECTRONIC FILING
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Mark L. Johnson
Executive Director and Secretary
Washington Utilities and Transportation Commission
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RE: Docket UE-160353—PacifiCorp's Response to the 2017 Integrated Resource Plan Acknowledgement Letter

Pacific Power & Light Company (Pacific Power), a division of PacifiCorp, submits the following response to the Washington Utilities and Transportation Commission's (Commission) acknowledgment letter for the 2017 Integrated Resource Plan (2017 IRP).

In its 2017 IRP acknowledgment letter, the Commission requested that the company provide an explanation for the timing of the IRP stakeholder communication regarding the new wind, new transmission and repowered wind (collectively, the Energy Vision 2020 projects) included in the 2017 IRP preferred portfolio. Pacific Power responds to this request herein. In addition, Pacific Power clarifies additional issues presented in the 2017 IRP acknowledgement letter attachment (Attachment).

I. Energy Vision 2020 Stakeholder Communications

The Protecting Americans from Tax Hikes Act of 2015 extended and phased out production tax credits (PTCs) for wind facilities that began construction before January 1, 2017. For wind facilities that began construction in 2017, the credit is reduced by 20 percent (*i.e.*, PTCs are 80 percent of the full PTC). For wind facilities that begin construction in 2018, the credit is reduced by 40 percent (*i.e.*, PTCs are 60 percent of the full PTC), and for wind facilities that begin construction in 2019, the credit is reduced by 60 percent (*i.e.*, PTCs are 40 percent of the full PTC). No PTC is available for wind facilities that begin construction after December 31, 2019.

IRS Notice 2013-29 provides a taxpayer with two methods to establish that construction of a wind facility has begun. First, the taxpayer can begin physical work of a significant nature. Physical work can include both on-site and off-site work, either performed by the taxpayer or by another entity subject to a binding contract. Second, the taxpayer can incur five percent or more of the eventual total cost of the qualified wind facility. This is known as the five-percent safe harbor. Under the five-percent safe harbor, the wind facility will qualify for PTCs if the taxpayer places the wind facility in service by the end of a calendar year that is not more than four years after the calendar year during which construction of the wind facility began. This approach to meeting the continuity-of-construction requirement is called the calendar safe harbor. Accordingly, if construction of a wind facility began in December 2016 via the five-percent safe harbor, the wind facility will meet the continuity-of-construction requirement via the calendar safe harbor as long as the facility is paced in service by December 31, 2020.

In December 2016, PacifiCorp acquired wind-turbine equipment that is sufficient to requalify its existing owned wind resources for the full value of PTCs under the five-percent safe harbor. Similarly, in December 2016, PacifiCorp acquired wind-turbine equipment that could be used to qualify new wind facilities for the full value of PTCs under the five-percent safe harbor. To preserve the option of requalifying existing wind facilities and qualifying new wind facilities for the full value of PTCs, these equipment purchases were made before completing a comprehensive economic analysis using IRP models. PacifiCorp did not inform its IRP stakeholders of these purchases in January because it had not yet completed its economic analysis to support a proposal to use this equipment as part of PacifiCorp's resource plan.

PacifiCorp completed its initial economic analysis of the wind repowering opportunity in late February 2017. PacifiCorp rescheduled the February 2017 public-input meeting to the first of March so that it could finalize presentation materials describing this economic analysis and to finalize presentation materials for other studies discussed with stakeholders in previous public-input meetings, including analysis of Energy Gateway transmission sensitivities. This March 1, 2017 meeting was the earliest that PacifiCorp had economic analysis available to present to stakeholders during the 2017 IRP public input process. In response to the December 2016 wind turbine equipment purchases, PacifiCorp expedited its analysis of wind repowering and new wind and transmission analyses to ensure its consideration in the 2017 IRP, even though this resource opportunity emerged just a few months before the filing deadline for the 2017 IRP. PacifiCorp informed its stakeholders of these developments as soon as its initial economic analysis was prepared and, as described more fully below, worked diligently throughout the 2017 IRP public input process to provide analysis as it was completed and respond to stakeholder questions regarding the Energy Vision 2020 projects.

Also in late 2016 and early 2017, PacifiCorp continued to study and refine a range of resource portfolios, all of which contained new Wyoming wind resources. In reviewing these resource portfolios, it became clear that the amount of Wyoming wind included in these resource portfolios were limited by transmission constraints. The presence of the Wyoming wind resources in these initial portfolios led PacifiCorp to assess whether additional wind resources enabled by sub-segments of Energy Gateway West would further lower system costs. Consequently, after the January 2017 public input meeting, PacifiCorp incorporated the Aeolus-to-Bridger/Anticline line as a specific sensitivity case in its broader Energy Gateway sensitivity analysis. In late February 2017, PacifiCorp's modeling of four Energy Gateway transmission sensitivities indicated there were potential benefits to including the Aeolus-to-Bridger/Anticline line in the portfolio. At the March 2017 public input meeting, PacifiCorp presented this analysis to stakeholders. PacifiCorp also communicated PacifiCorp's intention to further refine key assumptions for this sensitivity case. The study results and PacifiCorp's plans to further evaluate this opportunity were shared with IRP stakeholders as analyses were being developed in real time.

While the pre-filing stakeholder review process of Energy Vision 2020 projects was necessarily limited by the timing of PacifiCorp's analysis, it was in customers' interest to consider these resources in the 2017 IRP. Recognizing the need to be open and transparent, PacifiCorp explicitly chose to share the results of its analysis with stakeholders as they were being produced. Given the time-sensitivity of these resource opportunities, delaying the IRP to allow additional pre-filing review was not a viable option. Instead, PacifiCorp expeditiously completed the necessary analysis and shared it with IRP stakeholders as those analyses were prepared.

II. Energy Vision 2020 Analysis

Energy Vision 2020 is an unprecedented opportunity to deliver near- and long-term customer savings while reducing customer risk. PacifiCorp will take advantage of federal PTCs to invest in existing and new wind facilities and to invest in a new transmission that will relieve congestion and provide reliability benefits to PacifiCorp' system. Since the IRP was filed, PacifiCorp has updated its economic analysis of Energy Vision 2020 to reflect refinements to scope, to reflect updated cost estimates, and to reflect updated assumptions consistent with the current planning environment, including changes to federal tax rates applicable to corporations. With these updates, Energy Vision 2020 is expected to deliver hundreds of millions of dollars in present-value net customer benefits.

a. Repowered Wind

PacifiCorp analyzed and reported economic benefits from the wind repowering projects beyond the 20-year IRP planning time frame because there is a substantial increase in incremental energy output in a scenario with wind repowering relative to a scenario without wind repowering. Based on PacifiCorp's most current estimates, the incremental increase in energy from the repowered wind facilities is approximately 740 GWh per year through 2036. Beyond 2036, the incremental energy from the repowered wind facilities increases to approximately 3,500 GWh per year (an increase of over 470 percent). This substantial increase in energy output occurs just beyond 2036, the last year of IRP planning period. PacifiCorp recognizes that benefits associated with the incremental energy production over the long term are less certain; however, the substantial increase in incremental output just beyond the IRP planning horizon should not be ignored.

b. New Wind and Transmission

Energy Vision 2020 new wind projects are similar to any other resource need and investment identified in an IRP preferred portfolio. Specifically, the 2017 IRP preferred portfolio, representing PacifiCorp's least-cost, least-risk plan to reliably meet customer demand over a 20-year planning period includes 1,100 MW of new wind resources, enabled by the Aeolus-to-Bridger/Anticline transmission line, all located in Wyoming.

While the phase-out of PTCs creates an economic time-limited opportunity to procure the proposed new wind resources, these resources will also meet an immediate capacity need.
In fact, the 2017 IRP load-and-resource balance shows that with existing resources, PacifiCorp's capacity need is over 1,000 MW in 2021 (the first full year that the new wind resources will be operating) rising to over 4,000 MW in 2036. In short, the concepts of a time-limited economic opportunity and capacity need are not mutually exclusive.

Moreover, the benefits from the proposed wind and transmission investments are not marginal. PacifiCorp's most recent and conservative economic analysis shows that the proposed new wind and transmission investments are expected to generate present-value gross benefits that exceed $1.7 billion, which is $338 million higher than the present value of gross costs when assessed through 2036. When assessed through 2050, the present-value gross benefits exceed $2.2 billion, which is $174 million higher than the present value of gross costs. This most current economic analysis shows that the costs and risks of investing in new wind and transmission are lower than the costs and risks of a "do nothing" strategy.

III. Modeling Improvements

PacifiCorp appreciates the additional guidance provided by the Commission in the Attachment. PacifiCorp provides the following clarifying comments related to issues raised in the Commission's requested modeling improvements.

a. Colstrip and Jim Bridger

PacifiCorp clarifies that Oregon Senate Bill 1547 requires only that the costs and benefits associated with coal-fired generation be removed from rates by 2030. Senate Bill 1547 impacts cost recovery and cost allocation and does not require PacifiCorp to change the operation of its generation fleet. PacifiCorp also notes that discussions are currently underway amongst stakeholders in PacifiCorp's six-state service territory to address cost allocation issues associated with, among other things, state-specific policies such as Senate Bill 1547. PacifiCorp appreciates Commission staff's active participation in these discussions and is looking forward to continue working with staff to reach a beneficial outcome for Washington customers.

Finally, PacifiCorp notes that the Commission requested information regarding the Rosebud mine. However, the Rosebud mine does not provide coal to the Jim Bridger plant. PacifiCorp will provide the requested information for the Bridger mine, which does provide coal to the Jim Bridger plant.

Please direct questions to Ariel Son, Regulatory Affairs Manager, at (503) 813-5410.

Sincerely,

/s/

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