

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

**LC 62**

In the Matter of	)	
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PACIFICORP, dba PACIFIC POWER's	)	RENEWABLE ENERGY COALITION
	)	FINAL COMMENTS
2015 Integrated Resource Plan.	)	
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**I. INTRODUCTION**

The Renewable Energy Coalition (REC) submits the following final comments regarding PacifiCorp's (or the Company) 2015 integrated resource plan (IRP). John Lowe and Dr. Nancy Esteb, a former Manager of PacifiCorp's IRP, drafted these final comments responding to the opening comments of Staff and intervenors, and the reply comments of PacifiCorp. REC represents the interests of non-intermittent QFs in Oregon, Idaho, Washington, Utah, and Wyoming in regulatory and contractual matters.

REC's primary substantive recommendation is that the Commission should not acknowledge the Company's proposed date for when its next thermal resource acquisition would be acquired (2028) because it is outside the action plan period and is poorly supported. The 2028 alleged year of deficiency is unreliable, given the large uncertainties in the planning horizon. These uncertainties include compliance with the Environmental Protection Agency's (EPA) proposed 111(d) rules, success with demand-side programs, wholesale power prices, wholesale power availability, and transmission availability.

REC's comments also serve to illustrate that the IRP and the avoided cost filing should occur at the same time to facilitate review of each, since avoided costs now depend so heavily on the inputs and results of the IRP. We recognize that this issue more properly belongs in UM 1610, but we take advantage of this opportunity to raise the point again in the context of a specific IRP.

## II. COMMENTS

### 1. **Different Environmental Compliance Requirements Will Change the Date for Acquiring a New Thermal Resource**

Staff's opening comments noted a concern with the Company's compliance with 111(d) rules, which were drafted when the 2015 plan was under development. The Oregon Department of Energy (ODOE) also raised this issue, urging the Commission to direct the Company to constrain modeling runs in the 2017 IRP to comply with the final 111(d) rules. Even the Company admits that changed assumptions in its environmental compliance requirements could result in the Company needing to build or acquire a new gas plant before 2028. For example, the Company's own analysis shows that changed assumptions regarding how the 111(d) rules will be complied with could result in the need to "retire Chehalis at the end of 2019" which would result in "a 2020 west side natural gas peaking resource." PacifiCorp 2015 IRP at 207.

Sierra Club and their contractor, Synapse, have performed a valuable service for the Commission and all of the parties to LC 62, by running the PacifiCorp System Optimizer model and identifying issues that merit more attention. They alert the Commission and parties that this model "... allows layers of constraints to dictate outcomes. PacifiCorp's use of the System Optimizer model layers in multiple overlapping constraints, some of which are not readily apparent." Any model has both

inputs and outputs. Some issues can be addressed by forcing certain values into the model as inputs, varying those values, and seeing the impact. Other issues can be addressed by allowing the model to derive a value that is consistent with all of the other model inputs.

Synapse found that the Company “. . . chose to hard-code all power plant retirements into the System Optimizer model. . .”; in other words, the Company forced certain values (coal plant retirements) into the model as inputs under four regional haze compliant scenarios. And in two of its cases, the Company restricted the model from retiring any coal units. This is not the way to develop a least-cost plan. If, instead, the model had been allowed to do the selections of when particular coal plants would be retired, Synapse suggests that there may easily have been more retirements, which would not have been strategically advantageous to PacifiCorp. More coal plant retirements would bring the deficit year closer. Sierra Club’s comments noted that the Company’s coal plants “. . . face a variety of new environmental regulations that impose costs and operating restrictions.” And “. . . the company’s continued reliance on coal-fired power is increasingly risky and expensive.”

Renewable Northwest was also critical of the Company’s planned compliance approach to 111(d), arguing that it was a high-risk strategy. A more reasonable strategy would likely involve more and earlier coal plant retirements. All of these points raise the issue of the uncertainty of a deficit year since compliance with the final Clean Power Plan may easily change the Company’s resource plans and continued operation of its existing coal units.

**2. Failure to Achieve Aggressive Demand Response Could Change the Date for Acquiring a New Thermal Resource**

Staff's opening comments also noted weak support of demand response initiatives. Customer response to demand-side programs may also change the deficit year, for if the response is significantly less than the Company anticipates, it could easily bring the deficit year forward. This is another source of uncertainty regarding any delineation of sufficiency/insufficiency for avoided costs.

**3. PacifiCorp May Have Under Estimated Wholesale Market Prices, Which Could Change the Date for Acquiring a New Thermal Resource**

Staff's opening comments further questioned the wholesale price curve assumptions used by the Company. The ODOE comments raised the possibility of 111(d) compliance causing wholesale prices to increase, arguing that the base case wholesale price forecast is not likely to be an accurate prediction of future values. We agree there are good reasons to question the reliability of any assumption about forward wholesale prices, which calls into question the reliability of any assumption about the cost effectiveness of the wholesale market in the out years.

**4. PacifiCorp Failed to Adequately Analyze the Western Wholesale Market Liquidity, Which Could Change the Date for Acquiring a New Thermal Resource**

Staff also questioned the availability of sufficient wholesale power to meet the Company's projected needs. ODOE acknowledged the likelihood of restrictions on the western power grid that could decrease availability. The Company's response is basically that they know the market and know the power will be there. In its reply comments, PacifiCorp disputes REC's assertion that the Company does not adequately

analyze market liquidity and depth. This is another reason to question the purported year of deficiency.

REC agrees that PacifiCorp's IRP Appendix J includes a cursory comparison of its planning margins and the resource adequacy assessments of the Western Electricity Coordinating Council and the Pacific Northwest Resource Adequacy Forum. This analysis is inadequate. REC does not believe that it is appropriate to only compare the Company's reserve margins with reserve margins of other organizations (which may or may not use consistent methodologies). For example, PSE is conducting its own resource adequacy studies, with different sensitivity cases based on different assumptions regarding the operation of new and existing thermal generation, and California imports.<sup>1</sup> PacifiCorp should be required to perform a more robust analysis of market availability.

**5. Failure to Plan for Adequate Transmission Could Change the Date for Acquiring a New Thermal Resource**

Staff's opening comments questioned the Company's transmission plans, which is an essential element in its ability to meet both its summer and winter peaks. ICNU raised a related issue: potentially inadequate planning for a western winter peak, which may not be resolved by existing or planned transmission of power from the eastern control area. The NW Energy Coalition also raised this concern. Any restrictions on anticipated transmission capacity could easily cause a summer or winter deficit to occur earlier, moving the deficit year forward, and again calling into question the delineation of sufficiency/insufficiency for avoided costs.

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<sup>1</sup> PSE 2015 Draft IRP, Appendix F. Available at: [http://pse.com/aboutpse/EnergySupply/Documents/DRAFT\\_IRP\\_2015\\_AppF.pdf](http://pse.com/aboutpse/EnergySupply/Documents/DRAFT_IRP_2015_AppF.pdf)

### III. CONCLUSION

PacifiCorp's 2015 IRP includes a myriad of potentially inaccurate assumptions to justify its reliance upon the wholesale market to meet its resource needs for almost the next fifteen years. These include failing to accurately model compliance with 111(d) rules, aggressive demand response assumptions, assumptions regarding wholesale market prices and depth, and transmission planning. While most of these factors have little impact on the Company's immediate resource decisions, all of these factors could significantly change the date when the Company's next thermal resources. The Company admits that changed assumptions in the 111(d) rules by themselves could move this date up by eight years (2028 to 2020). Therefore, the Commission should not acknowledge the Company's proposed date for its next thermal resource acquisition because it is outside the action plan period and is highly speculative.

Respectfully submitted this 15th day of October 2015.

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