

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON
UM 1790**

In the Matter of)	
)	
PACIFICORP, dba PACIFIC POWER,)	COMMENTS OF
)	NW ENERGY COALITION
2017-2021 Renewable Portfolio Standard)	
Implementation Plan.)	
_____)	

NW Energy Coalition appreciates the opportunity to comment on PacifiCorp’s Renewable Portfolio Standard Oregon Implementation Plan (“RPIP”), 2017 through 2021, submitted July 15, 2016 (“2017-2021 Plan”). The RPIP contains quality analysis regarding PacifiCorp’s options for RPS compliance. However, numerous aspects of the RPIP filing raise questions about the timing, scope and relationship of the RPIP’s to other processes such as the IRP and procurement actions. The comments herein raise critical issues intended to consider how to improve RPIP filings and make them more useful and relevant on a going forward basis.

Our review of the 2017-2021 Plan does not incorporate assessment of the redacted material in Confidential Appendix A and the Confidential Attachments, pending approval of our motion to intervene and consent for the protective order in this docket.

The 2017-2021 Plan Provides a Clear and Thorough Assessment

We commend the Company for a clear and comprehensive presentation and a reasonable level of detail in the 2017-2021 Plan and associated attachments, including among other aspects:

- Initial comparison of the context and proposed approaches under SB 838 and SB 1547, establishing and substantially modifying Oregon’s Renewable Portfolio Standard (RPS).
- Consequences of elimination by SB 1547 of the “first in-first out” requirement for renewable energy certificates (RECs).
- Alternative approaches to acquisition and use of “Golden RECs” under SB 1547, including cases when unbundled RECs would or would not qualify as Golden RECs (Figures A-17 and A-18).
- Discussion of the net benefits and tradeoffs for various acquisition levels of solar and wind under differing cost projections (JIT-1, JIT-2, JIT-3).

Issues for Consideration

1. Disconnect Between Recent RFP, Procurement Actions and the RPIP

In this RPIP, PacifiCorp clearly states that the five-year compliance strategy will consist of bundled RECs. In fact, the Company states, “the Plan does not currently assume that the Company will purchase unbundled RECs . . .” (2017-2021 Plan at 6). And yet, PacifiCorp issued an RFP for unbundled RECs and recently planned to acquire quantities of unbundled RECs as a result of that RFP process for the post-2021 timeframe. This RFP and procurement action seems unsubstantiated by this RPIP filing, the Company’s most recent IRP or any other plan or analysis filed with the Commission. The Coalition recommends that the Commission consider ways to ensure that the RPIP process and calculations are relevant to ongoing actual compliance plans and actions. If RPIPs are going to be utilized as the primary means to evaluate RPS compliance strategy, perhaps the RPIP process needs to become more dynamic to ensure updated, transparent decision-making.

2. Five-year timeframe focus of current RPIPs

The above observations regarding the disconnect between the Company’s recent RFP and the RPIP also raise questions about whether the current five-year focus is the right timeframe for RPIP analysis and planning. The Coalition encourages the Commission to consider a longer timeframe for analysis and planning under the RPIPs.

3. Relationship and Timing of RPIP and IRP Should Be Clarified and Synchronized

The rapid onset of events since the passage of SB 1547 early in 2016 highlights the important new opportunities provided by the law and has brought to the forefront new complexities in the relationship of different processes under PUC purview. In particular, it is important to address the proper relationship and timing of the RPIP process and Integrated Resource Planning.

While the RPIP in recent years has essentially been a filing update process, SB 1547 substantially changed the duration, magnitude and operating elements of the Oregon RPS. It is important that this be viewed in the broader context provided by the ongoing IRP process.

First, it is important to have thorough, clear and consistent assessment of Oregon RPS compliance, whether more of that occurs in the RPIP or IRP processes.

Second, significant changes to the timing, the new “Golden RECs,” the elimination of the prior “first in-first out” requirement for RECs and other aspects of RPS compliance should not be locked in ahead of or in isolation from the IRP, and the RPIP process should preserve the least cost/least risk perspective that is foundational to the IRP.

In addition, however, we recognize that the timing of the RPIP and IRP processes now creates some difficulty in proper sequencing. We hope the Commission will consider the need for better alignment going forward.

4. PacifiCorp's Approach to Unbundled RECs Should Be Clarified

The Company provides this explanation of its near term approach to unbundled RECs in the 2017-2021 Plan (at 16-17):

While PacifiCorp's 2017-2021 Plan does not include the use of unbundled RECs in the 2017-2021 period, the Company is currently evaluating RFP proposals, including bids for unbundled RECs that could qualify for Oregon RPS compliance. If the Company does choose to procure near-term unbundled or bundled RECs for Oregon RPS, consistent with the analysis presented in Confidential Appendix A, PacifiCorp will evaluate the tradeoffs between acquiring bankable RECs early as a means to mitigate potentially higher cost long-term compliance alternatives.

This will balance risks and expected costs as required by the IRP guidelines in 1.b. and c. of Commission Order No. 07-047 and subsequent guidelines related to implementation plans set forth by the Commission.

However, it is evident from the recent discussion before the Commission about PacifiCorp's anticipated request for proposals (RFP) for RECs that the Company prefers unbundled RECs over new energy resources and bundled RPS acquisitions over the longer run. We believe this merits additional review for the broader RPS compliance strategy in the IRP process. In our view, the unbundled REC market is not sufficiently stable or predictable in the longer run to assure that it can be relied on to the exclusion of new bundled RECs.

5. Incremental Cost Calculations

The Coalition compliments the thorough and transparent incremental cost calculations conducted by PacifiCorp in this RPIP. We are encouraged that the projected incremental costs for PacifiCorp's RPS compliance will not even come close to the 4% cost cap. However, we point out that the incremental cost calculations do not reflect the actions resulting from PacifiCorp's most recent RFP and are, therefore, already outdated.

6. Cost Projections for Wind and Solar Resources Should Be Re-Examined

While our further assessment must await access to the redacted data in the Confidential Attachments, we have concerns about some of the assumptions proposed.

For example, in Confidential Attachment A (at 5), the Company states:

It is assumed that wind costs grow at an annual inflation rate of 2.3% per year. Considering that solar PV costs have been declining more steeply than wind resource costs, it is assumed that technological advancements in solar PV projects offset inflation, but that O&M costs grow with inflation over time.

Furthermore, in Table A-3, the Company projects no cost reduction for solar after 2025 in any of the cost sensitivities. In fact, experience shows that cost declines do not cease with

technologies until they are fully mature, which does not seem likely with solar PV given its small market penetration and the extensive potential for technological, production and supply chain improvements.

The Company appears to be relying on global data provided by IRENA in making this and subsequent statements. However, data and assessments that are more relevant to renewable development conditions in the PacifiCorp footprint are available, for example the Northwest Power and Conservation Council's 7th Plan¹ and the NREL annual Tracking the Sun reports.²

In addition, the long-term prospects for continuous decline in solar costs are good. For example, the MIT solar study notes:

A number of emerging thin-film technologies that are in the research stage today use novel material systems and device structures and have the potential to provide superior performance with lower manufacturing complexity and module cost. Several of these technologies use Earth-abundant materials (even silicon in some cases). Other properties of some new thin-film technologies, such as low weight and compatibility with installation in flexible formats, offer promise for enabling reductions in BOS costs along with lower module costs."³

Extensive additional analysis in the MIT study demonstrates that long-term cost reductions in solar are well within reach.

These inputs could potentially change the outcome of analysis weighing REC strategies versus physical compliance. This specific issue highlights one example of how the opportunity for the Commission and stakeholders to review and provide input for compliance plans prior to undertaking compliance actions is critically important.

Conclusion

PacifiCorp presents a thorough and compelling analysis of potential RPS compliance options that make a compelling case for the value of near-term compliance actions. Disappointingly, the analysis is outdated and does not reflect the Company's recent RFP or its associated procurement actions. For the RPIP to be a relevant process that provides strategic and transparent analysis of RPS compliance options, it needs to be tied to utility actions related to RPS compliance. The purpose and function of the RPIP in relation to the IRP should also be examined and the Commission should issue guidance about the expectations for each with regard to analyzing RPS compliance strategies.

¹ Northwest Power and Conservation Council, Seventh Northwest Conservation and Electric Power Plan, Appendix H, Generating Resources, <http://www.nwcouncil.org/energy/powerplan/7/plan/>.

² Tracking the Sun IX: The Installed Price of Residential and Non-Residential Photovoltaic Systems in the United States, Lawrence Berkeley National Laboratory, <https://emp.lbl.gov/publications/tracking-sun-ix-installed-price>.

³ The Future of Solar Energy: An Interdisciplinary MIT Study (Massachusetts Institute of Technology, 2015), <http://energy.mit.edu/research/future-solar-energy/>, at xiv.

Respectfully submitted this 9th day of September 2016.

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