BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON
LC 67

In the Matter of	)	COMMENTS ON STAFF REPORT
PACIFICORP, dba PACIFIC POWER,	)	OF THE NW ENERGY COALITION
2017 Integrated Resource Plan.	)	
	)	

I. Introduction

NW Energy Coalition ("NWEC") appreciates the opportunity to provide these comments in response to the Staff Report of November 21, 2017 regarding Commission acknowledgement of the Pacific Power ("PacifiCorp" or "Company") 2017 Integrated Resource Plan.

We support many of the Staff recommendations but continue to strongly support the Company's proposed Action Plan items 1a and 1b to repower existing wind and acquire new wind resources. We support acknowledgement of these items and do not support the underlying rationale of "economic opportunity" that forms the basis of the Staffs alternative approach with regard to those action items. NWEC does not object to the Commission providing guidance to the Company regarding the appropriate balance between customer and shareholder risk in the context of the IRP acknowledgement order, but it is our view that the Staff recommendations take this a step to far.

We also continue to propose that the Commission defer acknowledgement of Action Plan item 2a to construct a new 500 kV transmission line in central Wyoming pending an expanded assessment of non-transmission alternatives. We strongly support the Staff's proposal that the Company provide a comprehensive reassessment of coal resources by March 30, 2018, alongside the enhanced transmission assessment. And we further highlight the importance of maintaining balanced progress across all states on Class 2 DSM (energy efficiency). We continue to recommend non-acknowledgement of this item due to the numerous issues raised by us and other interveners in this docket (staff, Sierra Club) that point out considerable deficiencies and inconsistencies in the Company's Class 2 DSM analysis, most significantly the concern that Oregon is subsidizing customers in other states with its DSM achievements relative to other state jurisdictions. We do support Staff' s specific recommendations for Class 2 DSM action items, but suggest that these actions be executed prior to acknowledgement of these IRP components.

Wind Repowering and New Wind

As in our October 30 comments, we continue to support PacifiCorp's plan to enhance its existing wind fleet and acquire new wind resources. This is a significant and timely step for the Company. It will capture a time-limited federal tax credit opportunity that will benefit customers and capture wind resources that will be needed to achieve the SB 1547 renewable portfolio requirements.

While strongly supporting the proposals for Repowering and the New Wind RFP, we also underscore the importance of taking these steps in harmony with enhanced development of energy efficiency, flexible demand resources and distributed generation; a balanced approach to development of grid-connected renewable resources; more optimized operation of the Company's resources; thorough and balanced reassessment, phasedown and retirement of the coal fleet; and development of new transmission only on a conclusive showing of need, including full consideration of non-wires alternatives.

NWEC continues to agree with Staff that there is an immediate need for a more consistent, collaborative and transparent effort in the IRP analysis in order to devise a comprehensive clean energy strategy that is consistent with the least cost/least risk framework. We reaffirm that the IRP Guidelines provide comprehensive and flexible direction for that process.

Staff correctly notes the requirement in the Commission's IRP Guidelines, 4(c),

> *c. For electric utilities, a determination of the levels of peaking capacity and energy capability expected for each year of the plan, given existing resources; identification of capacity and energy needed to bridge the gap between expected loads and resources; modeling of all existing transmission rights, as well as future transmission additions associated with the resource portfolios tested;*

Order 07-002 at 31.

However, treating this item in isolation could leave a misleading impression. Additional elements of Guideline 4 make it clear that the "identification of capacity and energy needed" is part of a broader process aimed at identifying the least cost, least-risk approach to total system value over time. Specifically, additional elements of Guideline 4 provide as follows:

> *h. Construction of a representative set of resource portfolios to test various operating characteristics, resource types, fuels and sources, technologies, lead times, in-service dates, durations and general locations – system-wide or delivered to a specific portion of the system;*
>
> *i. Evaluation of the performance of the candidate portfolios over the range of identified risks and uncertainties;*
>
> *j. Results of testing and rank ordering of the portfolios by cost and risk metric, and interpretation of those results;*
>
> *k. Analysis of the uncertainties associated with each portfolio evaluated;*
>
> *l. Selection of a portfolio that represents the best combination of cost and risk for the utility and its customers; [...]*

Order 07-002 at 31-32.

The integrated resource planning process is not restricted to assessment of incremental resource need. While that is rightly a focus of great interest, we stated in our Reply Comments of August 24, 2017, quoting the Commission's original IRP guidelines, "The result of the process is the selection of that mix of options which yields, for society over the long run, the best combination of expected costs and variance of costs." Order 89-507 at 2.

Notably at that time, consideration of the retirement of PGE's Trojan nuclear plant was an active issue before the Commission. It would have made no sense to construct the IRP process for the limited purpose of incremental resource need while setting aside that question.

Then, as now, consideration of changing circumstances for the entire system, not merely the marginal load/resource balance, warrants comprehensive examination of whether new resources should replace existing ones, including those owned by the utility, acquired by contract or from the market.

Indeed, Staff explains that "early coal retirement or changes to coal plant operations are valid resource choices that should be considered as part of the least-cost, least-risk plan to meet system needs." Staff Report at 41.

In an ever more dynamic situation, with dramatic changes in load structure, the availability of more diverse and flexible supply and demand resources, and new market opportunities, the importance of examining the mix of options yielding the best combination for customers over the long run is even greater today and into the future. The IRP process, if not artificially constrained, is fully capable of addressing that challenge.

With regard to the current PacifiCorp IRP process, Staff expresses concern regarding the "evolving" context provided by PacifiCorp for its preferred resource mix, focusing in particular on changes in the capacity analysis, including one assessment not incorporating front office transactions (FOTs). Staff Report at 16-19.

However, the five changes in capacity numbers that Staff refers to are all essentially measures of different aspects of capacity, not actually values that are inconsistent with each other. This is a necessary result of responsiveness of the analysis in the context of considering multiple issues and addressing numerous concerns from Staff and participating stakeholders.

We would be concerned if the Company was resistant to expanding upon its assessment, artificially constraining model runs or otherwise limiting progress. The IRP process benefits from an evolving record that responds to Staff and stakeholder concerns and input and presents the Commission with the best and most current available analysis.

PacifiCorp has amply demonstrated the potential net benefit from the wind repowering and new wind components, not as an "economic opportunity", but rather as a least cost/least risk strategy for meeting system needs. As demonstrated by the Company and reinforced in comments by Renewable Northwest and others, these new resources will provide energy and capacity value, as well as market risk reduction benefits by reducing the need for FOTs. That is reflected in the net PVRR benefits shown in most of the modeled scenarios.

Concerning FOTs, as with any market purchases there are significant price and potential availability risks. The question is not whether FOTs can be acquired, but their price and risk are outweighed by the prospective value of new renewable resources. Even without tax credits, new wind and solar may already be cost-competitive in the Company's service territory, and are resoundingly so with the credits. We disagree with staff that "resource need" should be defined as "post-FOT residual resource need." Staff Report at 24. The Company routinely considers the cost and risk of FOTs in its IRPs, as evidenced by the continual fluctuations between Class 2 DSM targets and FOTs in recent IRPs. Historically, FOTs fluctuate in response to cost-effective Class 2 DSM in IRP scenarios depending upon economic factors in order to fulfill the Company's resource needs.

To be sure, there are still significant risks with the repowering and new wind proposals. Some are within reach of the Company, such as completion time and cost, but probably more significant is the prospect for a change in federal tax policy affecting corporate tax rates and/or the Production Tax Credit for wind power.

Consequently, while we cannot agree with the underlying "economic opportunity" rationale provided by Staff for their alternate recommendations for acknowledgement, NWEC does support the Commission providing guidance to the Company in the IRP acknowledgement order regarding their perspective of the overall cost and risk balance to customers and shareholders with regard to the specific action items acknowledged in this IRP. CUB asserts that the benefits to Company shareholders appear significantly larger than to customers. That said, we believe the benefits to customers are likely understated; and further, the importance of achieving Oregon's energy goals must also be given priority, a key substantive element in the IRP Guidelines. Order 07-002 at 2.

In that regard, while we continue to believe that the Company's proposal is not merely an "economic opportunity," Staff's comments on potential points that could be applied going forward make sense: (1) consideration of other opportunities, including further reliance on distributed generation and third-party resources; (2) review potential retirement of older resources that are poor economic performers and/or subject to emission and environmental compliance risks; (3) regulatory compliance including longer term decarbonization strategy; and, potentially, (4) a clear statement of direction that the Commission intends to mitigate customer risk. Staff Report at 23.

We also agree with Staff that two additional elements could be considered for the Company's Action Plan: (1) full consideration of the risk and value of acquiring benchmark resources versus long term power purchase agreements (PPAs) and (2) fully building in consideration of early retirement of facilities modeled to be uneconomic, which would boost the value of the proposed new renewables by increasing net need and improve total system benefits. Staff Report at 24.

We do not support the specific Pre-COD and Post-COD protections recommended by Staff. Staff Report at 27-28. First, as we have stated above, the underlying rationale of the "economic opportunity" for these recommendations is entirely without merit. Furthermore, these protections seem overly prescriptive for an IRP acknowledgement process.

New Transmission

In line with NWEC's October 30 comments, we continue to recommend that the Commission defer acknowledgement of Action Plan item 2a, the proposed new 500 kV Aeolus-to-Bridger/Anticline transmission line and associated 230-kV Network Upgrades ("Subsegment D2"), pending a more complete assessment incorporating non-wires alternatives.

As we noted, the Company has provided cogent reasons for addressing limitations in the transmission network in central Wyoming. Not only would this be necessary to accommodate additional wind energy from repowering and the new wind RFP, but there are existing "weak grid" issues. Even after recent equipment upgrades, curtailment of existing wind resources continues to occur, so this is not simply an issue arising from potential additional wind in the area.

However, PacifiCorp has not yet shown that Subsegment D2 is the only method or the least cost and least risk approach to addressing both the existing and potential transmission need. As we suggested, a full analysis of non-wires alternatives is required, including downward dispatch and/or early retirement of nearby coal units, additional equipment to manage voltage problems, and taking advantage of the ancillary service capabilities of current wind turbine converters.

It is especially important to accomplish this broader assessment given that Subsegment D2 is just one part of the Gateway West portion of PacifiCorp's Energy Gateway transmission package. A recent presentation by a Company executive now puts a public cost figure on the table of $4.3 billion for Gateway West as a whole, of which Subsegment D2 is about $679 million.[1] The need

[1] "Managing Change in the Western Power Market," Cindy Crane, President and CEO, Rocky Mountain Power, October 24, 2017, Western Power Summit, https://www.dropbox.com/sh/evfcowobg24gdzy/AAD1qGyLyjLmFBaJhWIxgEBNa/Day%201-1%20Managing%20Change.pdf?dl=0 The stated costs are $2.2 billion for Segment D (of which $679 million is for Subsegment D2), and $2.1 billion for Segment E. Of this combined amount, $128 million has already been spent

for each portion of the Energy Gateway package must be carefully assessed against non-wires alternatives and the changing load structure and resource mix.

In our October 30 comments, we provided specific details on a workable approach to non-wires assessment in three phases: (1) identification of non-transmission alternatives; (2) net system value estimation; and (3) proposing a revised transmission solution. These elements could be blended in to the Company's proposed Action Plan item 2d for additional transmission studies. We propose that this work be accomplished by the same March 30, 2018 deadline proposed by Staff for the coal reanalysis.

II. Coal Reanalysis

NWEC supports the Staff recommendations concerning a comprehensive reanalysis of coal resources: (1) perform a base case and 24 System Optimizer runs, one for each coal unit; (2) provide the results to parties in LC 67 by March 30, 2018, along with an itemized list of cost assumptions; (3) provide a list of coal units that would free up transmission capacity for proposed new wind in Wyoming; and (4) summarize the results and a table of differences in PVRR resulting from the early retirement of each unit. Staff Report at 42.

Many parties have indicated strong support for an enhanced and comprehensive coal reassessment, and the Staff recommendation would provide actionable information by the end of March 2018. However, NWEC again highlights that the proposed enhanced analysis should not be the end but rather the starting point of a broader assessment aimed toward developing a full clean energy and decarbonization strategy for the Company. This will necessarily take more time and also run in parallel with other efforts outside the IRP process, particularly the ongoing work to revise the Multi-State Protocol.

III. Maintaining and Enhancing DSM

Class 1 DSM

In our October 30 comments and previously, NWEC suggested acceleration of Class 1 DSM (demand response), noting the importance of moving more rapidly from initial analysis and early

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https://www.dropbox.com/sh/evfcowobg24gdzy/AAD1qGyLyjLmFBaJhWIxgEBNa/Day%201-1%20Managing%20Change.pdf?dl=0 The stated costs are $2.2 billion for Segment D (of which $679 million is for Subsegment D2), and $2.1 billion for Segment E. Of this combined amount, $128 million has already been spent for planning, engineering, siting and regulatory review.

pilots to full-scale programmatic efforts, especially considering the possibility and desirability of early coal retirement and other system changes where Class I DSM will provide substantial value. While Staff does not provide a specific recommendation for Class I DSM, we encourage the Commission to address this important but underdeveloped element of the 2017 IRP. In addition, we support the Staff's related recommendations to advance distributed resource forecasting and inclusion in the IRP process, and to develop a proposal to open a distribution system planning investigation. Staff Report at 47.

Class II DSM

We have previously described our concerns with the Company's Class II DSM analysis and targets and do not repeat ourselves here except to emphasize that we continue to recommend non-acknowledgement of this action item until steps are taken to improve and align the analysis and targets for both Oregon and other states. We support Staff's recommendations regarding Energy Efficiency/Class 2 DSM as outlined on page 37 of the Staff report. We want to emphasize, however, that it is important that both processes recommended by Staff be open to active participation and review by interested stakeholders.

Summary of NW Energy Coalition Recommendations

RENEWABLE ACTION ITEMS

1a -Wind Repowering - Repower over 900MW of existing wind resources.
Recommendation: Acknowledge

1b - New Wind - Issue an RFP for up to 1,270 MW of new wind resources.
Recommendation: Acknowledge

1c - RFP for RECs - Issue an RFP for RECs to meet state RPS compliance requirements as needed.
Recommendation: Acknowledge

1d - REC Optimization - Re-allocate and sell RECs as appropriate for compliance purposes.
Recommendation: Acknowledge

TRANSMISSION ACTION ITEMS

2a – Aeolus to Bridger/Anticline (Gateway Subsegment D2) - Build a 140-mile 500 kV transmission line from the Aeolus substation to the Anticline substation.

Recommendation: Defer acknowledgement pending completion of a study of non-wires alternatives.
2b - Energy Gateway Permitting - Continue efforts to permit and implement the Energy Gateway transmission plan.
Recommendation: Acknowledge

3c - Wallula to McNary Construction - Complete the Wallula to McNary project construction, with a 2018 expected in-service date.
Recommendation: Acknowledge

4d - Planning Studies - Complete planning studies, including for proposed coal unit retirement assumptions.
Recommendation: Acknowledge, consistent with Staff recommendation and proposed deadline.

FIRM MARKET PURCHASES

3a - Front Office Transactions - Acquire economic short-term firm market purchases for on-peak summer deliveries from 2017 to 2019.
Recommendation: Acknowledge, including Staff recommendations for in-depth studies.

DEMAND SIDE MANAGEMENT

4a - Class 2 DSM - Acquire cost-effective Class 2 DSM (energy efficiency).
Recommendation: Not acknowledge, adopt Staff recommendations for independent review and multi-state workshops and ensure that the review and workshops are open to interested stakeholders.

Class 1 DSM
Recommendation: Direct PacifiCorp to conduct additional workshops to provide in-depth assessment of Class 1 demand response opportunities.

COAL RESOURCE ACTIONS

5a through 5h - Complete economic analysis subject to litigation outcomes, regional haze analysis, natural gas conversion analysis, and review of other actions.
Recommendation: Acknowledge subject to the modifications recommended by Staff:
a) Perform 25 System Optimizer (SO) runs - one for each coal unit and a base case.
b) Provide the results of the SO runs to parties in LC 67 by March 30, 2018.
c) Provide a summary report resulting from the early retirement of each unit.

NEW ACTION ITEM FOR NEXT IRP (PAC SUGGESTED)

Additional Statistical Analysis
Recommendation: Acknowledge subject to the Staff recommended modification to explain the reasons for the (sometimes) low correlations in the short-term forecast.

Flexible Reserve Analysis
Recommendation: Acknowledge

ADDITIONAL RECOMMENDATIONS (STAFF SUGGESTED)

SmartGrid Report - Work with Staff and other parties to explore the use of AMI data in its integrated resource planning in future IRPs.
Recommendation: Acknowledge

Compliance with Order 16-174, UM 1610 - Either comply with Order or explain why the Company cannot.
Recommendation: Acknowledge

Respectfully submitted this 28th day of November 2017,

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