BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

LC 67

In the Matter of PACIFICORP, dba PACIFIC POWER, 2017 Integrated Resource Plan	**SIERRA CLUB'S COMMENTS ON STAFF'S RECOMMENDATIONS**

Sierra Club appreciates the opportunity to provide a response to Staff's recommendations on PacifiCorp's 2017 Integrated Resource Plan (IRP). Sierra Club prepared these comments with the expert assistance of Dr. Jeremy Fisher of Synapse Resource Economics. In their recommendations, Staff made the critical point that an IRP is meant to treat all resources on a level playing field:

> If economic opportunities are under consideration in the IRP process, then the Commission should make clear that all potential economic opportunities should be explored. A comprehensive review of all opportunities, including those that may not be advantageous to the electric company's shareholders, such as a greater reliance on distributed generation or third parties as resource providers, should be completed. In order to complete this review and make a recommendation to the Commission, Staff and stakeholders must have greater access to relevant data, models, and alternatives. Additionally, this review must examine resource retirements. If retirements are potentially economic, then they must be considered alongside the preferred economic opportunity. Failing to review these retirements could result in unnecessarily higher costs for customers.[1]

Staff's recommendations and data requests remind us that analyzing and disclosing least-cost, least-risk planning is the whole point of this proceeding in the first instance. Specifically, an IRP is the primary mechanism by which potential resources – both new and existing – are assessed. In Oregon, the IRP is the singular mechanism by which the utilities receive feedback on planned resource actions prior to undertaking large-scale or long-lived commitments. As such, it is critical that an IRP not exclude the consideration of key resources in long-range electric system planning.

[1] Staff Final Comments, page 29.

The problem is over the course of recent IRP cycles, PacifiCorp has moved away from basic planning principles, so that now the Company's 2017 IRP appears as little more than a resource plan designed to enhance capital investments while protecting rate-based resources, with only a thin veneer of ratepayer consideration.

In the stakeholder process leading up to this IRP, Sierra Club repeatedly emphasized, in our initial and reply comments, the importance of an economic analysis of PacifiCorp's coal units. We presented evidence that such an analysis would likely yield a substantially different least-cost / least-risk plan, and provided options that would allow the Company to produce a rapid assessment of its coal fleet before the closure of these IRP comments. Our initial comments in this matter were submitted four months ago, in June 2017. PacifiCorp's response sought to dismiss Sierra Club's concerns, stating that "Sierra Club is the only party that challenges PacifiCorp's coal resource modeling," thereby aiming to marginalize our recommendations as outliers.[2]

Yet, in reply comments, NW Energy Coalition,[3] Oregon Department of Energy,[4] and Renewable Northwest[5] all clearly identified concerns that the current IRP failed to assess the economic viability of the Company's coal fleet, and in a September 13th data request, Staff asked PacifiCorp to perform "an economic analysis of its coal units," providing specific instruction to the Company.[6] We assume Staff also wanted to learn whether the continued use and operation of PacifiCorp's numerous coal units was consistent with a least-cost / least-risk portfolio. PacifiCorp objected in an embarrassingly legalistic and cramped fashion, stating in part that the request was "not reasonably calculated to lead to the discovery of admissible evidence." The Company also complained that the analysis would "require establishing as many as 24 unique data sets to reflect specific cost assumptions associated with each hypothetical coal-unit retirement scenario," and that it "would take several months to develop the required data sets for each scenario and to apply those data sets to new System Optimizer model runs." PacifiCorp offered, instead, to schedule workshops in early 2018 to help inform the 2019 IRP process, scheduled to begin June 2018.

[2] PacifiCorp Reply Comments, page 38.

[3] "We have little doubt that a truly consistent and thorough assessment would support downward dispatch and earlier retirement of significant parts of the coal fleet. Indeed, the Sierra Club demonstrated exactly that result using the Company's own model during the deliberations over the 2015 IRP." NWEC Response Comments. August 24, 2017. Page 3.

[4] "ODOE also appreciates stakeholders raising these types of questions and agrees that it is important for PacifiCorp to develop a transparent stakeholder process to consider a more comprehensive coal transition plan." ODOE Response Comments. August 24, 2017. Page 6.

[5] "Whether as a result of this IRP or of one in the near-future, PacifiCorp's coal fleet will come under increasing economic pressure from, among other things, low-cost renewable resources and increasing environmental regulation as a result of state and federal policies." RNW Response Comments. August 24, 2017. Page 7.

[6] Staff DR 65 RA. September 13, 2017.

First, PacifiCorp's reliance on litigation tactics to object to Staff's request for information violates this Commission's long-standing custom of encouraging the open exchange of information. Sierra Club provided ample evidence – based on data provided by PacifiCorp itself, and not contested by the Company – that over 30% of PacifiCorp's coal fleet is non-economic and should reasonably be retired in a forward-looking planning process.[7] An analysis, performed by PacifiCorp as part of the IRP process establishing the extent of the net liability status of its coal fleet, would provide critical data to the evidentiary record for this and future IRPs.

Secondly, PacifiCorp's response that running Staff's data request would require "several months to develop the required data sets" is similarly inconsistent with the Company's own explanation of its ability to develop and promulgate analyses upon which it relies. The Company's movement to include nearly $3 billion in wind and transmission investments in the IRP in the last three months of the 2017 IRP analysis and finalization schedule belies the Company's complaint that it is unable to move quickly on analyses when required. In addition, one would assume the Company closely tracks the economic strength of its various generation assets for incremental investment, regulatory risk, and fuel procurement purposes.

According to PacifiCorp's reply comments, it took less than three months – from December 2016 to March 1st 2017 – to generate, finalize, and share its assessment of the wind repowering project, a unique opportunity not already built into the IRP framework:

> In December 2016, PacifiCorp concluded that repowering wind units could generate cost savings… PacifiCorp completed its additional review and expanded economic analysis of wind repowering in early 2017, toward the end of the IRP's pre-filing process. In February 2017, PacifiCorp finalized its IRP analysis of wind repowering. PacifiCorp incorporated repowering into the IRP process as the portfolio option referred to as OP-REP. PacifiCorp rescheduled the February 2017 public input meeting to the first of March to enable the company to complete and share its wind repowering analysis.[8]

The Company's plan to spend nearly $2 billion on wind and transmission projects was developed and rolled out yet more expediently, taking just a few weeks according to PacifiCorp's comments:

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[7] To the extent that the Company complained about Sierra Club's assessment, it focused on two hypothetical issues: if a unit-by-unit analysis could assess the interactive impacts of multiple unit retirements, and if operations would be impaired by "retiring so many coal units." (PacifiCorp Reply Comments, page 38). PacifiCorp did not contest the source of the data, the use of the data, the comparative metrics, the resulting economic outcomes, or the scale of the outcome. Sierra Club agrees that individual retirements could impact other retirement decisions, and that retirement decisions would have to be assessed against operational impacts, but asserts that these considerations are part of an economic analysis that is – at its core – missing from PacifiCorp's IRP.

[8] PacifiCorp Reply Comments, page 12.

> 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 [2nd and 3rd] 2017 public input meeting, PacifiCorp presented this analysis to stakeholders, along with next steps that communicated PacifiCorp's intention to further refine key assumptions for this sensitivity case.[9]

Clearly, when motivated, the Company can perform modeling quickly. In contrast, PacifiCorp asserts that it will be ready to **begin** the process of an evaluation in March of 2018, a year and a half after Sierra Club and other intervenors made clear the importance of evaluating the economics of the coal fleet early in the stakeholder process, a year after the IRP was finalized, and five months after a limited, discrete request from Staff.

Sierra Club requests that the Commission reject PacifiCorp's position to begin a separate stakeholder process on the coal units in March 2018, and require it to commence an expedited analysis by mid-November 2017, to inform Staff's Public Meeting Memo, parties' comments on that memorandum, and this Commission's final decision on the 2017 IRP. The requested information is critical to this IRP. A finding that a substantial amount of existing capacity is non-economic would require a substantial re-consideration of many of the assumptions underlying the IRP: does a least-cost / least-risk planning framework require the expedited retirement of non-economic units, and what timeframe is otherwise reasonable? What resources should be considered for replacement, and how does that impact the Company's assessment of need or economic viability for the new wind and transmission projects? Should capital be allocated to replacement resources, storage, and reinforcing transmission or grid services around retiring units? While we understand that all of these questions cannot be answered by December, it is critical that this Commission has sufficient information prior to its final order on the requested action items to guide PacifiCorp's next steps – and those next steps should not be a return to the approach PacifiCorp has carried out for the last four years of a vague promise to assess coal plants at yet a still further future date.

Importantly, PacifiCorp's proposal does not simply kick the can down the road to March 2018, it kicks it to mid-2019. If we assume that PacifiCorp runs a stakeholder process in March 2018 to "inform" the June 2018 kickoff of the IRP process, the Commission will not have a formal review process until April or May 2019. Even if the Commission calls for a coal retirement analysis in the off-year IRP update process, the Commission has historically not relied upon the IRP update process for the purposes of setting rates or acknowledging specific plans.

[9] PacifiCorp Reply Comments, page 13.

The question then remains: does a 24-unit coal retirement analysis require "several months to develop?" It does not. PacifiCorp's insistence on the multi-month development of a perfect data set is antithetical to a useful planning process. Like PacifiCorp's modeling and assessments elsewhere, the purpose of Staff's data request was to create enough information to provide directional guidance, not make absolute decisions. For example, in this IRP, PacifiCorp describes that initial "modeling of four Energy Gateway transmission sensitivities indicated there were potential benefits to including the Aeolus-to-Bridger/Anticline line in the portfolio,"[10] followed by more substantial modeling used to support the preapproval processes in Utah and Wyoming. We would fully expect the same process – if not even more layered and nuanced – with respect to the Company's coal plants.

The first step is an assessment of whether Sierra Club's contentions – and many other groups' expressed concerns – are real: Is 30-50% of PacifiCorp's coal fleet non-economic today? If so, then an analysis would be refined to answer a number of additional, complicated fleet questions: (a) What is the best schedule of retirement that preserves reliability, reduces cost, and provides reasonable optionality? (b) What are the impacts of any given coal unit's retirement on other system resources? (c) What is the best portfolio of resources to meet system needs while reducing costs? (d) How should the commission treat remaining plant balance? (e) What impacts would Oregon's findings have on the multi-state process, or in PacifiCorp's other states? These are highly complex questions, and do not need to be answered in the single first sweep. However, the Commission does need the appropriate starting point, and that can be provided from the Company's modeling information expediently.

Technically, under System Optimizer, the required runs are straightforward. On a gross level, each run simply requires PacifiCorp to identify a December 2022 retirement date for each unit, and re-run the analysis. Setting the retirement date is a simple toggle, and running the analysis takes between 30 minutes and two hours. PacifiCorp's computational power is well in excess of that available to Sierra Club or its consultants, and each run likely is faster and available on parallel computers.

Would the System Optimizer data set need to be changed substantially? No. Fuel, variable O&M, and potential replacement resources are established in the model. While an argument can be made that fixed O&M costs should decline more rapidly in a near-term retirement (a situation that would require a data set change), this first-pass modeling does not strictly require that change – and it can be accounted for in post-processing if required. PacifiCorp holds few coal contracts with liquidated damages past 2022, and every type of replacement resource is available by that date. The most complicated factor in assessing an early retirement date is the recovery of capital incurred after 2017. However, in both the 2015 and

[10] PacifiCorp Reply Comments, page 13.

2017 IRPs, PacifiCorp created a modeling framework to recover future stranded assets in any given year, a cost which PacifiCorp ties into the decommissioning cost. All in all, the framework is well structured for this type of impromptu analysis.

Finally, it is notable that stakeholders in PacifiCorp's other jurisdictions are equally concerned about PacifiCorp's actions with respect to coal economics in this IRP. In Utah, multiple intervenors encouraged the Utah Public Service Commission to reject the insufficient coal analysis components of the IRP, including the Utah Association of Energy Users (the industrial customers),[11] Utah Clean Energy,[12] and National Parks Conservation Association.[13] The requirement that PacifiCorp expediently conduct and present a reasonable and transparent coal plant economic analysis will have value across PacifiCorp's territory.

For the above policy and technical reasons, Sierra Club respectfully requests that the Commission support Staff's request for a system-wide coal plant economic analysis immediately.

Dated: October 30, 2017

Respectfully submitted,

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[11] "The process used by PacifiCorp to create and evaluate the Preferred Portfolio as least cost/least risk was flawed and incomplete. The sequence of coal plant retirement modeling done early in the process did not allow coal plant retirements to be considered as an alternative to new transmission." Utah Docket 17-035-16. UAE, October 24, 2017. Page 5.

[12] "The requirements of integrated resource planning are straightforward: compare resources – existing and new – on a consistent and comparable basis to find the least cost, least risk mix... The 2017 IRP did not do this with its coal units. Prior to modeling eligible core cases, PacifiCorp ran "Regional Haze" screening scenarios, which created seven different coal plant retirement schedules. In all subsequent capacity expansion modeling, coal resource retirement assumptions were locked in, as dictated by specific Regional Haze scenarios." Utah Docket 17-035-16. UCE, October 24, 2017. Page 2.

[13] "PacifiCorp Failed to Reasonably Evaluate the Economics of Its Existing Coal Fleet in its 2017 IRP: In order to identify a least cost plan for reliably meeting customers' needs, a utility must not only evaluate options for new energy resources to be added to its portfolio. It must also carefully assess the economics of its existing generating units… Unfortunately, PacifiCorp's 2017 IRP fails to present such an evaluation." Utah Docket 17-035-16. NPCA, October 24, 2017. Page 3.