

ENTERED SEP 28 2018

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

LC 70

In the Matter of

PACIFICORP, dba PACIFIC POWER,

2019 Integrated Resource Plan.

ORDER

DISPOSITION: STAFF'S RECOMMENDATION ADOPTED WITH GUIDANCE

This order memorializes our decision, made and effective at our September 25, 2018 Regular Public Meeting, to adopt Staff's recommendation in this matter with the following guidance:

1. PacifiCorp, dba Pacific Power, will circulate reports, completed analysis, and workpapers by filing the materials in docket LC 70 so that all stakeholders have access at the same time;
2. PacifiCorp, dba Pacific Power, will make reasonable efforts to file its workpapers on October 2, 2018, at the same time it files its report outlining the scope and major assumptions of the analysis, and responses to Commission Staff's fourteen bullet points;
3. PacifiCorp, dba Pacific Power, will make reasonable efforts to include in its October 4, 2018 presentation an example of the figures or tables it will use for displaying the updated coal analysis;
4. PacifiCorp, dba Pacific Power, will hold an Oregon-specific stakeholder meeting in early November to present the results of its updated coal analysis (in addition to the mid-November Public Meeting report);
5. PacifiCorp, dba Pacific Power's updated coal analysis will separate the intra-hour dispatch credit, and identify the impact of the credit when it is not separated; and

6. PacifiCorp, dba Pacific Power's updated coal analysis will also explain how the company proposes to apply key information learned from the coal analysis into the 2019 IRP so that coal retirement is fully explored as a resource option.

The Staff Report with the recommendation is attached as Appendix A.

Made, entered, and effective SEP 28 2018.

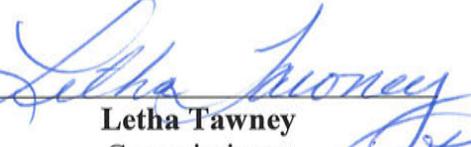


Megan W. Decker
Chair



Stephen M. Bloom
Commissioner





Letha Tawney
Commissioner

A party may request rehearing or reconsideration of this order under ORS 756.561. A request for rehearing or reconsideration must be filed with the Commission within 60 days of the date of service of this order. The request must comply with the requirements in OAR 860-001-0720. A copy of the request must also be served on each party to the proceedings as provided in OAR 860-001-0180(2). A party may appeal this order by filing a petition for review with the Circuit Court for Marion County in compliance with ORS 183.484.

**PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: September 25, 2018**

REGULAR CONSENT EFFECTIVE DATE _____ N/A

DATE: September 18, 2018

TO: Public Utility Commission

FROM: ^{RA} Rose Anderson and ^{LS} Lauren Slawsky

THROUGH: ^{JE} Jason Eisdorfer and ^{JPB} JP Batmale

SUBJECT: OREGON PUBLIC UTILITY COMMISSION STAFF: (Docket No. LC 70)
Integrated Resource Plan: Staff recommendation for next steps in
analyzing PacifiCorp's coal fleet.

STAFF RECOMMENDATION:

The Commission should approve Staff's proposed "Next Steps, Objectives, and Other Considerations for Coal Analysis for the 2019 IRP," including the proposed calendar of near-term events and the main objectives of stakeholder engagement, transparency, and achieving reasonable agreement about the usefulness and appropriateness of the analysis for planning least-cost, least-risk portfolios.

DISCUSSION:

Issue

Whether the Commission should direct PacifiCorp to continue its investigation into the economics of continued operation of its existing coal fleet for the 2019 IRP by conducting an updated study that will both clarify and build upon the June 2018 analysis through a collaborative process that allows for stakeholder input and feedback.

Applicable Rule or Law

In Order No. 07-002, the Commission adopted guidelines to govern the IRP process, and in Order No. 07-047 the Commission corrected the IRP guidelines.

The IRP guidelines require that all resources be evaluated on a consistent and comparable basis, that risk and uncertainty be considered, that the primary goal be the

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selection of a portfolio of resources with the best combination of expected costs and risks/uncertainties for the utility and its customers, and that the plan be consistent with the long-run public interest as expressed in Oregon and federal energy policies.¹

Additionally, the IRP guidelines require the "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," and the "selection of a portfolio that represents the best combination of cost and risk for the utility and its customers."²

OAR 860-027-0400 sets forth the requirements for filing an IRP with the Commission.

Analysis

Background

In PacifiCorp's 2017 IRP, Docket No. LC 67, Staff, Sierra Club, CUB, and ODOE requested further analysis on the economics of retirement of PacifiCorp's coal units. In the order acknowledging the 2017 IRP, the Commission directed PacifiCorp to perform a coal analysis in which the Company uses System Optimizer to consider individual scenarios and to report on the resulting Present Value Revenue Requirement (PVRR) difference from the base case.³ The Commission directed PacifiCorp to work with stakeholders and to hold a Commissioner workshop for discussion.

On August 14, 2018, PacifiCorp provided the results of the analysis of individual units in LC 70. The Commissioner workshop was held on August 28, 2018. The meeting agenda provided by the Commission stated that the objective was to fully engage with PacifiCorp and stakeholders on next steps for coal analysis for the 2019 IRP.⁴ PacifiCorp provided detailed descriptions of its coal analysis and the workshop concluded with a discussion of how the impacts of early retirement of individual units could be evaluated in the 2019 IRP. A number of stakeholders participated in the discussion including Staff, AWEC, NVEC, Sierra Club, and the Oregon Citizens' Utility Board. Suggestions for next steps from the Commission, Staff, and stakeholders were largely directed toward moving forward in a collaborative process that provides stakeholders with the opportunity to give feedback on early modeling proposals and results and to request changes or additional analysis. These changes or additional analysis include, but are not limited to, requests for the analysis of portfolios structured

¹ *In re Public Utility Commission of Oregon*, OPUC Docket No. UM 1056, Order No. 07-047 (Feb. 9, 2007).

² Order No. 07-047.

³ *In re PacifiCorp*, OPUC Docket No. LC 67, Order No. 18-138 at 13 (Apr. 27, 2018).

⁴ Notice of Commission Workshop. LC 70. August 7, 2018.

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around specific requested coal retirement dates. Participants had additional questions about the appropriateness and accuracy of the EIM credit applied to the coal units and incremental transmission costs and benefits as represented in scenarios.

At the workshop, the Commission expressed the expectation that early retirement would be considered as a resource strategy and that retirement dates in the IRP would be determined using thorough analysis that identifies which retirement dates provide optimal value to ratepayers. The collaborative approach recommended by Staff below is intended to support this process, with the goal of developing thorough analysis that can inform which portfolios are assessed in the 2019 IRP.

Based on input from Commissioners, PacifiCorp, and stakeholders at the Commissioner Workshop, Staff has developed proposed objectives, a proposed timeline of next steps, and additional considerations for PacifiCorp in working with stakeholders and Staff to include a thorough analysis of PacifiCorp's coal units in the upcoming IRP.

NEXT STEPS, OBJECTIVES, AND OTHER CONSIDERATIONS FOR COAL ANALYSIS FOR THE 2019 IRP

Objectives

The main goal of the process outlined in this memo is to achieve reasonable agreement among the Company, stakeholders, Staff, and the Commission that PacifiCorp's IRP methodology appropriately considers early retirements in planning for least-cost, least-risk portfolios. Transparency in the analysis of the economics of PacifiCorp's coal units is another important goal.

The outcome of the process should be the development of several portfolios in the IRP based upon the updated coal analysis.

The usefulness of the analysis will be in identifying the least-cost, least-risk portfolio that completely considers costs and benefits of early retirement of any of PacifiCorp's units that may not result in a net benefit to the utility and its ratepayers through continued operation.

Timeline of Next Steps

The proposed timeline allows opportunity for stakeholder input on PacifiCorp's proposed analysis and affords the Company enough time to consider feedback and run the analysis ahead of its internal 2019 IRP portfolio decision-making deadline. PacifiCorp should also have time to respond to stakeholder comments either by making changes to the analysis or providing an explanation of why a suggested change was not implemented.

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A summary of Staff's proposed timeline has been provided in Table 1 below.

October 4, 2018 – PacifiCorp to present its report to stakeholders which describes the scope of its proposed improved analysis.

The presentation should outline the scope and major assumptions of the analysis and clarify how this analysis will build on the previous coal analysis, including but not limited to:

- Detailed description of the base case, including why it was selected and the reasoning for divergence from the 2017 IRP update's preferred portfolio.
- Explanation of how each retirement case differs from the base case.
- Explanation of which retirement cases PacifiCorp believes could be realistically implemented if they were shown to benefit customers.
- How the units will be stacked to consider more than one retirement at a time.
- Retirement years and how they are selected.
- Regional haze requirements and assumptions.
- How transmission has been and will be considered moving forward.
- Assumptions impacting coal capacity factors such as must take contracts or EIM participation.
- How flexibility benefits and alternatives are accounted for and quantified.
- How ancillary services are valued.
- How decommissioning costs are included in the analysis.
- How stochastic variables have been considered in the analysis.
- How the format of reported study results will address stakeholder requests for itemization of costs and benefits.
- How the improved analysis will meet Commission objectives of better integrating evolving coal unit economics into the long term planning process.

At least two business days before the presentation, the Company should file a report with the Commission detailing the above.

Within two days of the presentation, PacifiCorp should also provide detailed supporting workpapers in LC 70 that include the following:

- The capacity factors of each coal unit by year. If any of the capacity factors are assumed, rather than generated endogenously by a model, PacifiCorp

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should include an explanation of any reasons for assuming the capacity factors.

- Operational constraints assumed of coal units, including any minimum run rates.
- The value of any EIM intra-hour dispatch credit.
- Workpapers showing how the EIM intra-hour dispatch credit was calculated for each unit. These need not contain actual EIM data, but must at least contain a realistic example demonstrating how the credit is calculated. Any acronyms should be defined clearly.
- If the EIM credit varies within a given year, workpapers demonstrating any variation of the EIM intra-hour dispatch credit.
- Any decommissioning costs broken out separately from other costs.
- Any discount rate(s) used in determining the time value of money and the depreciation discount rate.
- Any gas prices used as an input to the coal study and which market(s) the prices are from.

October 16, 2018 – Last day for comments before PacifiCorp shares updated study results.

Stakeholders have already been submitting comments through feedback forms since the August, 28, 2018 workshop, and this feedback should be considered in the analysis moving forward. Additionally, there will be a two week comment period after PacifiCorp's presentation for stakeholders to submit comments and suggestions on the methodology of the updated analysis, including comments and suggestions on its structure, inputs, and assumptions. Comments and suggestions may include, but are not limited to:

- Requests for portfolios structured around specific coal retirement dates,
- Requests for consideration of different capacity factors,
- Proposed changes to the base case,
- Proposed changes to SCR assumptions, and
- Proposed changes to assumptions influencing capacity factors, such as must take contracts and must run assumptions.

This deadline for stakeholder input and feedback will allow PacifiCorp enough time to review all input before presenting the results of the updated analysis. Staff proposes that, as an integral part of this process, PacifiCorp not only review the comments but implement the suggestions and feedback in its updated analysis to the extent possible.

Early November, 2018 – PacifiCorp to present updated study results

Presentation

Staff proposes that PacifiCorp present the results of the updated analysis to Staff and stakeholders at the Company's Public Input Meetings to be held on November 1 and 2, 2018. Alternatively, if the Company prefers to hold an Oregon-specific stakeholder meeting within a week of this time to present results, Staff is supportive of that plan as well.

The presentation will summarize the stakeholder feedback relevant to the retirement date analysis that was received by PacifiCorp after the August 28, 2018 Commission workshop and during the two week comment period. The presentation will also identify any changes made to the updated analysis in response to stakeholder feedback, and include an explanation of why the Company did or did not act on each comment.

If PacifiCorp has not incorporated all stakeholder requests into its updated analysis, Stakeholders may also use this meeting to consolidate requests for analysis into a more manageable number.

Workpapers

The study results and supporting workpapers, inputs, and assumptions will be provided to stakeholders at least two days in advance of the Public Input Meeting (or Oregon-specific stakeholder meeting). Updated workpapers should provide at least as much detail as those requested by Staff to accompany the October 4, 2018 presentation above. This will allow stakeholders an opportunity to understand the results ahead of the meeting in order to raise relevant questions.

Mid-November – Staff and PacifiCorp report to Commission.

Staff and PacifiCorp will report back to the Commission at a public meeting in mid-November on the results of the updated analysis and the degree to which stakeholders, Staff, and PacifiCorp are in agreement about the usefulness and appropriateness of the analysis. At this meeting the Commission may request additional steps for the analysis to inform the 2019 IRP, or request additional portfolios and retirement dates to be considered. PacifiCorp should be prepared to incorporate a reasonable number of specific additional portfolio requests into its 2019 IRP, as directed by the Commission at this meeting.

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A report to the Commission in mid-November should allow the Company enough time to incorporate the Commission’s feedback ahead of the Company’s internal goal to “lock in” specifically requested portfolios for the 2019 IRP by late fall or early winter. If there is an over-abundance of requests for various types of portfolio analysis from various parties at the time of this meeting, Staff, stakeholders, and the Commission may use the mid-November public meeting to consolidate various recommendations from parties into a manageable number of requests to be included in the 2019 IRP.

Table 1. Proposed Coal Analysis Timeline (October to Mid-November 2018)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	PacifiCorp analysis proposal presented 4	Open for Stakeholders to submit feedback 5	6
7	8	9	10	11	12	13
14	15	16	Stakeholder feedback deadline 17	PacifiCorp reviews & considers comments & runs analysis 18	19	20
21	22	23	24	25	26	27
28	29	30	31	PacifiCorp presents analysis within one week of Nov 1 1	2	3
4	5	6	7	8	Staff and PacifiCorp report in Mid-November 9	10

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11	12	13	14	15	16	17
18	19	20	21	22	23	24

Other Considerations

The proposed timeline allows enough time for stakeholder engagement and Company consideration of comments ahead of portfolio selection in the 2019 IRP. If the Company cannot show that it considered stakeholder input into the coal analysis, then Staff may later choose to argue that the Company did not take all steps necessary to meet the expectations of the Commission as outlined in this memo. This could potentially be considered as grounds for Staff to recommend the Commission not acknowledge the 2019 IRP.

According to the Company, the portfolios are expected to be “locked in” for modeling purposes by late fall or early winter. However, if the timeline is unforeseeably delayed by a few weeks and PacifiCorp is unable to finalize portfolios for the 2019 IRP until late December, this should not necessarily be seen as an unworkable delay.

Conclusion

The Commission should direct PacifiCorp to continue its analysis of the economics of its existing coal fleet consistent with Staff’s proposal as set forth in this memo. The proposed next steps for analysis will both clarify and build upon the June 2018 analysis through a collaborative process that allows for stakeholder input and feedback.

PROPOSED COMMISSION MOTION:

Direct PacifiCorp to undertake the actions and follow the timeline set forth in Staff’s memo including:

- Report back to stakeholders at an October 4, 2018 meeting with a scope consistent with the bulleted list proposed by Staff in this memo.

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- File workpapers in LC 70 consistent with the bulleted list and timeline proposed by Staff in this memo.
- Consider stakeholder input on assumptions and scenarios, including recommended portfolio design and retirement dates, provided to the Company by October 16, 2018.
- In early November, present to stakeholders the results of the updated analysis that includes stakeholder input.
- Work with Staff to report to the Commission in mid-November on the updated analysis and the extent to which stakeholders, Staff, and PacifiCorp are in agreement about the usefulness and appropriateness of the analysis.
- Share study results, and report on how the Company incorporated stakeholder feedback into analysis that goes into the IRP.
- Be prepared to incorporate additional stakeholder and Commissioner input on assumptions, inputs, and recommended retirement scenarios into additional portfolios to be included in the 2019 IRP.

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