

PacifiCorp - Stakeholder Feedback Form

2019 Integrated Resource Plan

PacifiCorp (the Company) requests that stakeholders provide feedback to the Company upon the conclusion of each public input meeting and/or stakeholder conference calls, as scheduled. PacifiCorp values the input of its active and engaged stakeholder group, and stakeholder feedback is critical to the IRP public input process. PacifiCorp requests that stakeholders provide comments using this form, which will allow the Company to more easily review and summarize comments by topic and to readily identify specific recommendations, if any, being provided. Information collected will be used to better inform issues included in the 2019 IRP, including, but not limited to the process, assumptions, and analysis. In order to maintain open communication and provide the broader Stakeholder community with useful information, the Company will generally post all appropriate feedback on the IRP website unless you request otherwise, below.

Date of Submittal 10/16/2018

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*Organization: Oregon Public Utility Commission Staff

Address: _____

City: _____

State: _____

Zip: _____

Public Meeting Date comments address: _____

Check here if not related to specific meeting

List additional organization attendees at cited meeting: _____

***IRP Topic(s) and/or Agenda Items:** List the specific topics that are being addressed in your comments.

Coal analysis requests from Staff to PacifiCorp

Check here if any of the following information being submitted is copyrighted or confidential.

Check here if you do **not** want your Stakeholder feedback and accompanying materials posted to the IRP website.

***Respondent Comment:** Please provide your feedback for each IRP topic listed above.

Please see Exhibit A.

Data Support: If applicable, provide any documents, hyper-links, etc. in support of comments. (i.e. gas forecast is too high - this forecast from EIA is more appropriate). If electronic attachments are provided with your comments, please list those attachment names here.

Recommendations: Provide any additional recommendations if not included above - specificity is greatly appreciated.

Please submit your completed Stakeholder Feedback Form via email to IRP@Pacifcorp.com

Thank you for participating.

* Required fields

**Public Utility Commission
of Oregon**

STAFF EXHIBIT A

**Requests for Coal Analysis in
PacifiCorp's 2019 Integrated
Resource Plan**

October 16, 2018

Process

1. Staff's understanding is that SCR investment is required by the EPA for Jim Bridger 1 and 2 in 2022 and 2021, respectively. However, in PacifiCorp's proposed coal analysis the assumption of SCR is only included in the coal study benchmark case, and not in any of the retirement cases C-02 through C-30. Staff is concerned that the analysis will not be as meaningful if the benchmark can't be compared to retirement cases on an apples-to-apples basis. Staff requests that:
 - (i) Unless there is reason to believe that PacifiCorp can completely avoid SCR investment at JB 1 and 2, the assumption of regional haze compliance through SCR installation on JB 1 and 2 should be assumed in every coal case (C-02-C-XX) as well as the benchmark case, with the exception of the early Bridger 1 & 2 retirement cases, (C-17 and C-18, respectively).
 - (ii) If there is reason to believe the Company can completely avoid SCRs on JB 1 and 2 under all cases, then neither the Base Case nor the retirement cases should include SCR investment.
2. Staff would like to better understand the Company's regional haze requirements for SCRs on Jim Bridger 1 and 2. Staff requests that any SCR costs for Jim Bridger 1 and 2 be separately identified for stakeholder review, with narrative responses providing:
 - (i) An explanation of the company's regional haze requirements for SCRs on Jim Bridger 1 and 2,
 - (ii) A full explanation of the company's current planning assumptions for SCRs on Jim Bridger 1 and 2, and
 - (iii) A narrative explanation of C-17 and C-18 specifically addressing how the SCR assumptions impact the Jim Bridger early retirement runs.
3. For any unit showing a benefit from retiring in 2022 in cases C-02 through C-23 compared to the benchmark, Staff requests PacifiCorp also analyze the other proposed years of 2025, 2028, and 2031 to find the optimal retirement year (based on economics) for each unit.
4. Staff requests that as part of compliance with Oregon Order No. 18-360 under LC 70, PacifiCorp provide the results (and Workpapers) for all cases run during the coal analysis. For example, if the Company finds that case C-30 results in a negative benefit and the Company chooses to try a different stack of units, Staff still requests the results of the first run of C-30. PacifiCorp does not need to include runs that are incomplete or the model could not execute.

Proposed Cases

5. Staff is interested in a scenario where beginning in 2030 no state is allocated more coal on a MW capacity basis than their current allocation (based on percent share of load). This implies a scenario where by 2030, Oregon is allocated no coal in order to meet SB 1547, but none of the other five states would take on more coal than is currently allocated to them under the current system cost allocation methodology. This should be done through retiring coal capacity by 2030 equivalent to Oregon's current allocation. To clarify, in this scenario, roughly 1,480 MW of coal operational today should be retired by 2030 (assuming Oregon has a roughly 25% allocation factor share of coal capacity).
6. See coal study case C-30 (two units with highest and second highest early retirement benefit/cost ratio are assumed to retire in the year where the unit-by-unit benefit cost ratio is highest). Staff requested in comment #3 above that the company find the optimal retirement year for all units shown to have a net benefit of retiring in 2022. Staff also requests that:
 - (i) The Company should include scenarios additional to C-30 where they continue to assume stacked retirement combinations using the optimal retirement year for each unit. The stacking should be done in the order of highest benefit/cost ratio to lowest until there is no longer a net benefit to the system.
 - (ii) The Company should also critically evaluate and include at least five other cases of stacked retirements that it believes could result in the greatest net benefit in terms of PVRR(d). Staff also requests a narrative explanation of why these stacked cases were selected. These could include cases that seek to avoid negative combinatorial effects. As an alternative to running the five additional portfolios, the Company could provide evidence that it has already found a global maximum of benefit in terms of PVRR(d).
7. Portfolio P-05, or 'Economic Retirement 1,' is described by PacifiCorp as follows: "Apply changes consistent with the coal study portfolio with lowest PVRR to either P-01, P-02, P-03, or P-04, based on which of these four portfolios has the lowest system PVRR." Staff requests that instead of applying the coal study portfolio with the lowest PVRR to only one of these four portfolios, the Company should apply changes consistent with the lowest PVRR coal study case to all four portfolios P-01 through P-04. This request should result in four additional portfolios instead of one. This would help provide a more thorough analysis that takes into account the possibility that applying "changes consistent with the coal study portfolio with the lowest PVRR" could have a different effect on each portfolio due to potential combinatorial effects.