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201 South Main, Suite 2300
Salt Lake City, Utah 84111

August 14, 2015

VIA OVERNIGHT DELIVERY

Jean D. Jewell
Commission Secretary
Idaho Public Utilities Commission
472 W. Washington
Boise, ID 83702

**Re: Case No. PAC-E-15-04
IN THE MATTER OF PACIFICORP DBA ROCKY MOUNTAIN POWER'S 2015
INTEGRATED RESOURCE PLAN**

Dear Ms. Jewell:

Enclosed for filing in the above referenced matter are an original and seven (7) copies of Rocky Mountain Power's reply comments.

Informal inquiries may be directed to Ted Weston, Idaho Regulatory Manager at (801) 220-2963.

Very truly yours,

A handwritten signature in blue ink that reads "Jeffrey K. Larsen /cm".

Jeffrey K. Larsen
Vice President, Regulation

Enclosures

Cc: Service List

CERTIFICATE OF SERVICE

I hereby certify that on this 14th of August, 2015, I caused to be served, via e-mail, a true and correct copy of Rocky Mountain Power's Reply Comments in PAC-E-15-04 to the following:

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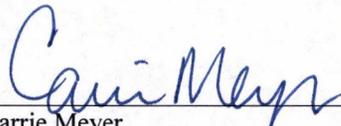
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Carrie Meyer
Supervisor, Regulatory Operations

In response to the Parties comments, PacifiCorp respectfully submits the following reply comments for consideration. Following the Summary and Recommendations section, the Company replies to specific comments provided by the Parties. These replies are organized by responding party.

SUMMARY AND RECOMMENDATIONS

In general the Parties providing comments are satisfied with PacifiCorp's 2015 IRP. There are some concerns raised with respect to PacifiCorp's modeling approach to the EPA's draft Clean Power Plan ("CPP") section 111(d) rule and how these perceived shortcomings could presumably bias the outcome of resource selection, particularly with respect to identification and analysis of environmental compliance costs. There is discussion of the amount of Class 2 demand-side management ("DSM") resources in the preferred portfolio.

In these comments, the Company provides clarification to support its modeling assumptions and resource strategy conclusions. The Company also attempts to correct some Parties' misconceptions with some of the information presented in the 2015 IRP.

REPLY TO STAFF'S COMMENTS

Staff comments include a detailed summary of PacifiCorp's 2015 IRP. There are several suggestions for discussion items to include in future IRPs. Staff raises concerns with some areas of the IRP. The Company hopes to alleviate these concerns through clarification, discussed below. Finally, Staff recommends the Commission acknowledge PacifiCorp's 2015 IRP, which the Company supports.

Staff raises a concern with the level of Front Office Transaction ("FOTs") available in comparison to the Company's capacity need. Staff's Table 1 and Table 2 appear to show capacity deficits that cannot be met with available FOTs. Table 1 is at a system level, while

Table 2 is PacifiCorp's east balancing area. In reply, the Company clarifies that the values in Staff's tables come from Table 5.14 in the 2015 IRP. This table is used to show capacity need before any incremental resource additions, and does not include any Class 2 DSM. Table 8.8 in the IRP shows the final position capacity position for the front 10 years of the planning horizon inclusive of new resource additions from the preferred portfolio. Table 8.8 demonstrates PacifiCorp's system capacity needs are met with planned additions of DSM resources, FOTs, and system transfers. In this table, both east and west balancing areas have reserve margins at or above the target planning reserve margin of 13 percent. As seen in Table 8.7 in the IRP the first deferrable resource is a thermal unit added in 2028, which is technically the first year the Company is capacity deficit.

Class 2 Demand-Side Management

Staff's load and resource balance comments focus on DSM, where they note that by 2024, the 2015 IRP preferred portfolio includes roughly one GW of DSM peak capacity reductions as compared to roughly 110 MW from "existing programs". The Company agrees that the cited values match those presented in Table 8.8 of the IRP, but provides two clarifications to ensure the numbers are interpreted correctly:

- 1) Table 8.8 values are cumulative, not incremental, thus, capacity impacts for 2024 represent the impact in 2024 from 10 years of DSM acquisitions over the period 2015-2024.
- 2) Existing DSM in Table 8.8 represent only impacts from 2014 as discussed further on page 79 of the 2015 IRP. Earlier DSM impacts are embedded in the load forecast and classified as existing resources.

When the information above is taken into consideration, it is not surprising that 2024 impacts are nine times “existing resource” as the former represents 10 years of accumulated DSM acquisition, whereas the latter is from a single year.

Staff also believes the Company used an accelerated Class 2 DSM acquisition scenario that “exceeded energy savings estimates in its 2013 IRP by 59%.” The Company clarifies that the 2015 IRP preferred portfolio is not based on an accelerated DSM scenario. Accelerated DSM was modeled in cases C11-1 and C11-2, but the resource portfolios from these cases were not selected as the preferred portfolio. Although the preferred portfolio used “base case” Class 2 DSM supply curve assumptions, the Company agrees that the targets are aggressive based on the use of the 85 percent achievability assumptions and when viewed relative to historical DSM acquisition levels. The Company plans to pursue the targets identified in the 2015 IRP action plan and will reassess the available potential based on current market conditions for the 2017 IRP.

The increase in DSM selections relative to the 2013 IRP is primarily driven by higher levels of potential identified in the Company’s 2015 DSM potential study¹ as compared to the 2013 study. Both studies relied on the best information available at the time of the analysis. Changes in codes and standards, equipment efficiency and cost, emerging technologies, and other factors can lead to large changes in potential between studies. An analysis of differences in identified potential between the two studies is set forth in Chapter 5 of Volume 2 of the 2015 DSM potential study.

Staff perceives inconsistencies in DSM “between some of the text, tables, and figures used to discuss DSM related capacity reductions.” The Company does report both nameplate and peak capacity for selected DSM resource within the IRP. This information is used for different

¹Demand-Side Resource Potential Assessment for 2015-2034: <http://www.pacificorp.com/es/dsm.html>.

purposes within the resource planning framework. For consistency with supply-side alternatives, Class 2 DSM resources summarized in Table 8.7 (PacifiCorp's 2015 IRP Preferred Portfolio) are reported on a "nameplate" basis and are not necessarily coincident with the Company's system peak periods. Class 2 DSM impacts during system peak periods are provided in Table 8.8 (Preferred Portfolio Capacity Load and Resource Balance). Further details, including state-level coincident-peak values can be found in the data disks provided with the Company's 2015 IRP filing. For the purpose of valuing capacity deferral benefits of Class 2 DSM, only impacts during system peak periods are considered.

Staff requests that the next IRP include additional information on planned DSM acquisitions and how these align with the IRP's DSM selections in terms of energy and capacity. The 2015 IRP Action Plan identifies the planned DSM energy acquisitions; the 2015 IRP Update, and 2017 IRP will report on progress toward achieving these targets. Appendix D of the 2015 IRP includes preliminary acquisition budget estimates, state-specific implementation plans, and a comprehensive DSM Communications and Outreach Plan to provide additional detail on how the Company plans to acquire the identified resources. Each year, in each of its jurisdictions, the Company creates an annual report presenting the prior year's DSM achievements. Each report contains actual energy achievements and estimates of capacity impacts for DSM resources. These reports are all published on the Company's website at state-specific links here: <http://www.pacificorp.com/es/dsm.html>. Given the level of detail provided in the current IRP and the state-specific reports on energy and capacity acquisitions that are already being provided, the Company does not believe any modification to content for the next IRP is required.

Solar Integration Study

Staff suggests the need to include a solar integration study in the 2017 IRP citing an increased reliance on solar resources. Specifically Staff states, “Over the next two years, the Company plans to double the amount of energy that it obtains from solar power, from 3% to about 6% of its system load.” PacifiCorp is unsure about the source of these values. While the Company is indeed seeing increasing amounts of solar generation, it does not rise to 6% of system load. The energy mix increases from 54 GWh in 2015 to 1,460 GWh in 2017. The amount of energy from solar in 2017 is approximately 2% of the Company’s projected load, not 6%.

PacifiCorp will evaluate solar integration costs as operational data is accumulated. Considering that many of the solar resource additions are not anticipated to come on-line until the end of 2016, the data may not be available to inform a solar integration study in the 2017 IRP. PacifiCorp will consider performing indicative solar integration analyses during the 2017 IRP process recognizing that the analysis would be based on a limited data set.

Transmission

Staff suggests the Company compare its transmission plan with those developed by regional groups. As noted in Staff’s comments, PacifiCorp participates in regional and interregional transmission planning efforts with the Northern Tier Transmission Group (“NTTG”), the Western Electricity Coordination Council (“WECC”), and the FERC Order 1000 Interregional Coordination Group. The Energy Gateway projects are considered in these planning efforts as part of PacifiCorp’s input into the regional plan. PacifiCorp is obligated under its Open Access Transmission Tariff and local Attachment K process to develop and maintain a reliable transmission system that meets customers’ needs and that is in compliance with

reliability standard requirements, as described in data responses submitted in this case. The regional transmission plan under FERC Order 1000 has different requirements to qualify which projects get included and their timing; this approach may not be an exact match to local transmission planning requirements.

SNAKE RIVER ALLIANCE

SRA, similar to Staff, offers a summary of PacifiCorp's 2015 IRP. SRA points to highlights in the IRP, such as the declining use of coal through the 20-year planning horizon. They also correctly note that the details around compliance with draft section 111(d) rules are still developing stating, "PacifiCorp considered various Rule 111(d) strategies as comprehensively as practical."

SRA comments that while there is a declining use of coal, relying on coal for "roughly one-third of its generation in 2034" could be risky. PacifiCorp selected its preferred portfolio based on comprehensive cost and risk analysis. This analysis is well documented in Chapter 8 of the Company's 2015 IRP, which supports the preferred portfolio as the least cost, accounting for risk resource plan based on the current planning environment. PacifiCorp will continue to update modeling consistent with state plans for 111(d) as well as regional haze compliance outcomes. Confidential Volume III analysis will continue to examine near-term compliance alternatives to meet emission requirements for coal units.

IDAHO CONSERVATION LEAGUE

ICL commends PacifiCorp for its approach to DSM along with the results of the Wind Integration Study ("WIS") included with the 2015 IRP. The Company appreciates the recognition provided to the 2015 IRP approach to modeling DSM. ICL also praises the results of

the WIS based on comments filed by Renewable Northwest before the Washington Utilities and Transportation Commission (“WUTC”) in PacifiCorp’s 2015 IRP in that state.

In arguing that PacifiCorp’s modeling of EPA’s draft CPP section 111(d) rule is insufficient, ICL used the comments that Sierra Club (“SC”) submitted to the WUTC, with a few minor nits, and submits them here as its own. For this reason, PacifiCorp is compelled to respond to both ICL and SC even though the comments were not submitted as joint comments. The Company strongly disagrees with the ICL/SC characterization of perceived modeling ‘errors’ in the 2015 IRP. PacifiCorp does not believe the SC comments “accurately and clearly explain the issue”, as ICL states. In fact, many of the comments submitted by SC to the WUTC are based on erroneous interpretation of data and analysis performed by the Company in its 2015 IRP.

EPA’s draft section 111(d) rule was discussed at many, if not all, of the IRP public meetings. In turn many stakeholders provided comments on their interpretation of the rule and concerns regarding how the Company may meet draft compliance requirements. Additionally there were two workshops, one in Salt Lake City, and one in Portland, devoted to discussion of the modeling tools developed to study EPA’s draft section 111(d) rule in the 2015 IRP. Throughout this process, the Company made stakeholders aware that the section 111(d) modeling would need to be updated when a final rule is issued (which occurred August 3, 2015). Going forward, modeling will reflect the state implementation plans as they are developed.

ICL/SC’s first issue concerns PacifiCorp’s use of an emission-rate based approach to meeting EPA’s draft section 111(d) rules. The emissions rate-based approach sets a maximum emission rate target (expressed as pounds of CO₂ per MWh) consistent with EPA’s draft proposal. While ICL/SC may believe a mass-based approach is a preferable modeling approach to studying EPA’s draft 111(d) rule, there was very little guidance in the draft rule indicating

how states would develop and adopt mass-based targets, let alone information to suggest that such an approach would be adopted by all states. The Company in fact looked at both emissions rate-based and mass-based approaches in the 2015 IRP despite erroneous claims from ICL/SC to the contrary. The following is not an exclusive list of ICL/SC's failure to accurately represent what was included in PacifiCorp's 2015 IRP:

- 1) "PacifiCorp's review of a single interpretation of the CPP may [produce] poor planning results."
- 2) "PacifiCorp's failure to model mass-based CPP compliance..."
- 3) "PacifiCorp neither modeled a mass-based approach..."
- 4) "PacifiCorp's exclusive choice of a rate-based approach..."

Page 143 of the 2015 IRP describes different section 111(d) scenarios studied. Figure 7.4 on page 144 of the document demonstrates the actual mass-cap limits the company modeled. Table 7.3 lists the core case definitions, including those for cases, C12-1, C12-2, C13-1, and C13-2 that did in fact examine mass-based scenarios, despite statements to the contrary by ICL/SC. Results of these portfolios are discussed throughout Chapter 8.

Additionally, as part of the portfolio selection process, the Company performed a deterministic risk analysis examining portfolio performance under different section 111(d) assumptions. This risk analysis looked at how the top performing portfolios, developed with emission-based regulations would perform under a mass-cap regime. The converse was examined as well, as set forth on page 182 of the 2015 IRP. In short, Case C05a-3 (a portfolio developed with rate-based assumptions) outperformed Case C13-1 (a portfolio developed with mass-based assumptions) under both regulatory approaches.

ICL/SC statement that rate-based modeling will "...leave PacifiCorp's customers vulnerable to contrary state and federal decisions" is without merit. Examination of the resource portfolios selected by the case relying on mass-based assumptions shows a very similar resource mix to the preferred portfolio, especially in the first two to four years of the planning horizon. The results of the portfolios do not support ICL/SC statements.

Similarly, comments suggesting PacifiCorp is using this IRP to direct the form of compliance that individual states will be able to use are vastly exaggerated and in direct conflict with standard regulatory processes. The IRP does not set public policy as ICL/SC imply. The IRP establishes a plan accounting for known and potential public policy developments. Volume II, Appendix B details exactly how the 2015 IRP meets state IRP guidelines. The Company will follow all regulations that are developed to meet state implementation plans for section 111(d) compliance, in addition to any other IRP requirements.

ICL/SC also comments that the emission rate-based approach "undervalues coal conversion and retirement." This statement is untrue and fails to recognize that PacifiCorp does not establish policy but develops plans to meet policy requirements. EPA's draft section 111(d) rule sets rate-based targets and PacifiCorp developed a range of different resource portfolios to meet these targets under different compliance strategies and considering alternative coal unit retirement assumptions. Based on the robust analysis performed in the 2015 IRP, compliance strategies that have incremental coal unit retirements above those already assumed in the preferred portfolio were higher cost.

ICL/SC further raise concerns that portfolio modeling does not allow for endogenous determination of early retirement dates for coal plants. Use of this modeling option would be problematic as there are many details to consider when assessing the cost for early retirement.

Coal contract constraints, fixed costs, impacts on fixed and operating costs of other coal units at multi-unit plants, and other variables influence the economics of early retirement decisions. Resource expansion and dispatch models are not able to dynamically reflect changes to these important cost variables when endogenously calculating early retirement alternatives. PacifiCorp's current approach, which analyzes alternative coal unit retirement scenarios, is more robust because the impact of early retirements on other units and system fixed costs is explicitly captured.

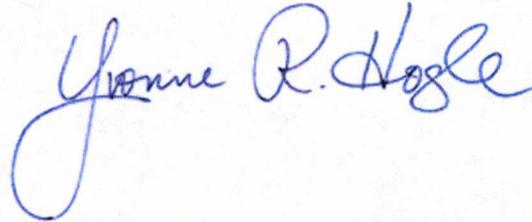
In short, the concerns raised by ICL/SC should be paid little heed. There are many errors of fact; the most glaring is the oft repeated claim that PacifiCorp did not model mass-based cap compliance with EPA's draft section 111(d) rule when in fact it did. The Company took a reasonable approach to modeling compliance with EPA's draft 111(d) rule and developed portfolios across a range of policy and compliance scenarios that were informed by the input of stakeholders choosing to actively participate in the 2015 IRP public process.

CONCLUSION

PacifiCorp's 2015 IRP complies with the Commission Order No. 22299, reflects a balanced consideration of customer interests, and is well-supported by portfolio modeling and reasonable planning assumptions. PacifiCorp appreciates the comments received, and continues to urge stakeholder participation throughout the IRP development process to foster constructive debate throughout it. PacifiCorp, like Staff, recommends Commission acknowledgment of the Company's 2015 IRP. The Company will gladly participate in a hearing should the Commission believe one is necessary, however none of the commenting parties requested such.

DATED this August 14, 2015.

RESPECTFULLY SUBMITTED,
ROCKY MOUNTAIN POWER



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Attorney for Rocky Mountain Power