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Novemeber 3, 2011

VIA ELECTRONIC FILING
AND OVERNIGHT DELIVERY

Oregon Public Utility Commission
550 Capitol Street NE, Ste 215
Salem, OR 97301-2551

Attn: Filing Center

RE: LC 52 – PacifiCorp's Reply to Staff's Final Comments

Pursuant to the administrative law judge's ruling on September 12, 2011 modifying the schedule, PacifiCorp d/b/a Pacific Power ("Company") encloses for filing its Reply to Staff's Final Comments on PacifiCorp's 2011 Integrated Resource Plan.

Please contact Joelle Steward, Regulatory Manager, at (503) 813-5542, for questions on this matter.

Sincerely,

Andrea L. Kelly
Vice President, Regulation

Enclosure

cc: Service List – LC 52

CERTIFICATE OF SERVICE

I hereby certify that I served a true and correct copy of the foregoing document, on the date indicated below by email and/or US Mail, addressed to said parties at his or her last-known address(es) indicated below.

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Dated: November 3, 2011

Ariel Son
Coordinator, Regulatory Operations

Reply to the Oregon Staff Final Comments on PacifiCorp's 2011 Integrated Resource Plan

Docket LC 52

1. INTRODUCTION

PacifiCorp filed its 2011 Integrated Resource Plan (IRP) with the Public Utility Commission of Oregon (Commission) on March 31, 2011 in accordance with the terms of Order No. 10-066 and 2008 IRP acknowledgment order requirements. As part of the IRP acknowledgment schedule, Public Utility Commission of Oregon staff (Staff) provided final comments and recommendations on the IRP (Staff Final Comments), along with its proposed acknowledgment order, on October 13, 2011. Staff recommendations included adding 11 new action items to the Company's original action plan, significantly modifying seven action items, and proposing non-substantive changes to two other action items. Most significantly, Staff recommended acknowledgment of the IRP predicated on replacement of the Company's preferred portfolio with Staff's own portfolio and the cancellation of the Company's all source request for proposals for 2016 resources (All Source RFP), to be issued in January 2012. The comments also addressed concerns raised by the intervenors[1] in their comments filed on August 26, 2011, and PacifiCorp's response to intervenor comments filed with the Commission on September 21, 2011.

In addressing the Staff Final Comments, this document responds to each of the action item revisions and additions in the order listed on pages 1 through 8 of the Comments. Because the proposed order is not substantively different than the Staff Final Comments, separate comments on the proposed order are not provided.

2. COMMENTS SUMMARY AND RECOMMENDATIONS

The major issues addressed in Staff's comments include the sufficiency of PacifiCorp's analysis of coal plant replacement in lieu of incremental pollution control investment, and replacement of the 2016 combined-cycle combustion turbine (CCCT) in the preferred portfolio with demand-side management (DSM) and market resources.

The Company appreciates Staff's commendation on analytical advancements reflected in the Supplemental Coal Replacement Study filed with PacifiCorp's September 21, 2011 reply comments and Staff's conclusion that the supplemental study "sufficiently solidifies the basis of the IRP". However, the Company objects to Staff's recommendation to replace the preferred portfolio with its own alternate preferred portfolio and cancel the Company's All Source RFP.

[1] In addition to Staff, the other parties who filed comments on the IRP include: Citizens' Utility Board (CUB), the Northwest Energy Coalition (NWEC), the Renewable Northwest Project (RNP), Oregon Department of Energy (ODOE), Industrial Customers of Northwest Utilities (ICNU), and Sierra Club.

The Commission has made it clear in the past that it does not intend to usurp the role of the utility decision-maker. Staff's proposals to change the preferred portfolio and cancel the All Source RFP do just that.

Staff's alternate portfolio is problematic for several reasons, which are summarized below and discussed in detail later in this document. The Company understands and appreciates Staff's interest in aggressive pursuit of DSM resources and in fact, the Company's preferred portfolio reflects a significant increase in energy efficiency relative to prior IRPs. The Company is committed to pursuing least-cost and least-risk resource options for customers. This commitment is embodied in the 2011 IRP, which balances considerations of cost, risk, uncertainty, supply reliability/deliverability, and long-run public policy goals, all of which were vetted through a public stakeholder process. The overarching concern for the Company with Staff's alternative portfolio and related revised action items is that is fails to properly balance all of these considerations, which ultimately results in an increased risk to reliably serve customers.

The Company is facing a significant near-term resource need that is driven by the expiration of long-term term purchase power contracts over the next few years and load growth. The Company will continue to pursue all cost-effective DSM in its states, in conjunction and consultation with the regulatory stakeholders and processes in each state. However, Staff's proposed approach to have the Company file an IRP Update to justify acquiring supply-side resources after demonstrating diligent pursuit of Staff's alternate portfolio fails to take into consideration the lead time to acquire supply-side resources as well as the acquisition and implementation risks of the demand-side resources envisioned by Staff. Accordingly, the Company recommends that the Commission acknowledge the Company's preferred portfolio and action plan. The basis for this request, including an explanation of the problematic aspects of Staff's portfolio recommendation, is outlined below:

- Staff's justification for its alternate portfolio dismisses significant acquisition risks for speculative new DSM programs and market purchases that Staff depends on to fully replace a large gas resource by 2016.
- Cancelling the All Source RFP represents an irreversible decision to forego acquisition within a reasonable timeframe of a suitably reliable and cost-effective resource supported by the Company's extensive IRP process, and therefore places customers at risk of electricity shortages or higher-cost electricity supplies, particularly if load growth exceeds current expectations. The draft All Source RFP process should proceed with the schedule proposed by Staff in UM 1540.
- Cancelling the All Source RFP does not account for multi-state regulatory ramifications in light of other commission IRP acknowledgements and support for the All Source RFP.
- Staff is inappropriately replacing its own judgment for the Company's role of system resource planner, which is inconsistent with the Commission's IRP Guidelines.
- Staff's proposed alternate preferred portfolio, if acknowledged by the Commission, puts the Company in the untenable situation of having two preferred portfolios acknowledged by different state commissions.
- Staff's alternate preferred portfolio has not undergone the due diligence expected of utilities for their IRPs, including public review and comment on a system-wide basis.

- Staff's recommendations do not address various concerns raised by the Company regarding the use of inappropriate resource-specific modeling assumptions in developing its alternate preferred portfolio.

PacifiCorp's recommendations on Staff's other key action plan changes include the following:

Wind Acquisition Planning and Geothermal Resource Risks: The Company agrees to evaluate portfolios with and without geothermal resources in light of dry hole risk, but recommends wording changes to Staff's revised action item to avoid interpretation as a new and permanent IRP guideline.

Flexibility Requirements in Support of Variable Energy Resources: Staff proposes expanding the scope of the Company's energy storage study to include assessment of grid flexibility requirements and opportunities to support variable energy resource (VER) integration. PacifiCorp agrees that such a study is useful, but proposes a separate study with scope and schedule to be defined after receiving public input.

Renewable Portfolio Standard and Renewable Energy Credit Compliance: Staff proposes a new action item calling for discussion of renewable portfolio standard (RPS) compliance strategies and the role of renewable energy credit (REC) sales and purchases in PacifiCorp's next IRP. PacifiCorp agrees with the proposed action item language.

Class 2 DSM Targets, Acquisition Ramp Rates, and Supply Curve Specification: Staff proposes substituting PacifiCorp's Class 2 DSM target with its own target, and recommends analysis of alternate acquisition ramping assumptions and supply curve specification. PacifiCorp responds to Staff's substitute Class 2 DSM target by correcting unsupported and inaccurate observations made by Staff concerning specification and model selection of Class 2 DSM resources.

Staffing Levels for Class 2 DSM Program Support: Staff believes that staffing levels at PacifiCorp is limiting DSM acquisition and recommends an analysis of those levels be performed. PacifiCorp objects to this new action item because this is a program delivery rather than resource planning issue, and evidence shows that the Company has met its resource targets.

Conservation Voltage Reduction (CVR) Resource Acquisition: Staff's modified action item includes language committing PacifiCorp to complete CVR implementation in Washington by 2018, and CVR implementation across its entire service territory by 2022. PacifiCorp disagrees with the action item modifications that specify implementation completion dates, and provides several reasons why dictating fixed target dates is premature. An alternate CVR action item is proposed.

Class 3 DSM Targets: Staff states that PacifiCorp's reluctance to implement Class 3 DSM unnecessarily raises cost and/or risk for Oregon customers, and specifies an action item with Class 3 DSM targets to support Staff's alternate preferred portfolio. The Company disagrees with Staff's conclusion that customer cost and risk is increased by not implementing mandatory Class 3 DSM programs. Staff does not provide supporting evidence for this claim, while Staff's mandatory Class 3 DSM targets ignore the hurdles for obtaining timely program approvals in other states. The Company recommends a scaled-back action item for Oregon-only time-varying rates tied to IRP relevancy and progress in implementing UM 1415 procedural steps.

Update to the Supplemental Coal Replacement Study: Staff proposes a new action item requiring an updated Coal Replacement Study for the 2011 IRP Update that addresses emerging environmental regulatory flexibility that might allow compliance cost avoidance through early shutdown of coal units. The Company agrees with the proposed action item, but does not agree with Staff that handling of remaining depreciation expense after 2030 needs correcting. PacifiCorp points out that the use of the real levelized revenue requirements methodology appropriately addresses cost comparisons of assets with economic lives that extend past the analysis period.

Technical Review Committee for Wind Integration Studies: Staff proposes modifications to the action item language pertaining to a Technical Review Committee (TRC) for the Company's next wind integration study by imposing a 30-day deadline for TRC formation and the study schedule. While the Company is agreeable to Staff's deadline, the Commission should be mindful of the IRP schedule risk associated with an expanded public input process.

Planning Reserve Margin: Staff proposes that PacifiCorp apply a 12-percent capacity planning reserve margin (PRM) for the 2011 IRP Update unless a marginal cost study supports an alternate PRM. PacifiCorp explains why marginal cost studies can inform PRM selection, but should not be used as the sole means to justify a PRM level. Additionally, because the IRP Update is tied to the Company's business planning process which is nearing completion, there is not sufficient time for this portfolio modeling to be completed for the 2011 IRP Update. Nevertheless, the Company is agreeable to performing this analysis for the next IRP.

Cost-Benefit Analysis for the Wallula-McNary and Sigurd-Red Butte Transmission Projects: Staff recommends that the Commission not acknowledge the Wallula to McNary and Sigurd to Red Butte projects until the Company demonstrates that the projects are cost-effective (i.e., a benefit-cost ratio of at least one, with non-economic project benefits quantified as necessary to help achieve this ratio.) PacifiCorp cites reasons why singular focus on benefit-cost ratios is not appropriate for certain transmission projects due to load service and reliability obligations.

3. REPLY COMMENTS

Action Item 1 - Renewable/Distributed Generation

Capacity Contribution of Wind Resources

Staff notes that some of PacifiCorp's wind resources have only been in operation since 2010, providing little data, and proposes the following new action item pertaining to the calculation of wind capacity contributions using the Peak Load Carrying Capability (PLCC) method:

> *In the next IRP, PacifiCorp will track and report the statistics used to calculate capacity contribution from its wind resources as a means of testing the validity of the PLCC method.*

PacifiCorp acknowledges the difficulty of determining performance characteristics of the newer wind resources with little or no operational history, and agrees to share data used to calculate its wind capacity contribution values. The Company recommends that this new item be moved to Action Item 8, "Planning and Modeling Process Improvements" since it is not a resource acquisition related activity.

Wind Acquisition Planning and Geothermal Resource Risks

Staff does not believe that PacifiCorp's wind acquisition plan needs to be changed, and believes that deferring wind is consistent with the possibility of acquiring cost-effective geothermal in the near term. Staff proposes the following new action item:

> *Future IRP cycles will include a projection for wind acquisition with and without geothermal until a clearer picture emerges regarding dry hole risk.*

PacifiCorp is pleased with Staff's conclusion that the wind acquisition plan is reasonable given the Company's resource planning assumptions and policy risk assessment. The Company intends to turn to renewable resource modeling assumptions earlier in the next IRP development process to enable a more thorough vetting of assumptions prior to model input lock-down.

The Company also agrees with Staff's recommendation to evaluate portfolios with and without geothermal resources in light of development risks, and intends to do this as part of its acquisition path analysis if agreeable with other parties. The Company recommends the following changes to Staff's action item to avoid interpretation of this action item as a new IRP guideline:

> *The next ~~Future~~ IRP cycle~~s~~ will include a projection for wind acquisition with and without geothermal in light of dry hole and other resource development risks. ~~until a clearer picture emerges regarding dry hole risk~~. The Company will continue to assess dry hole and other resource development risks as part of its evaluation of resource opportunities.*

Geothermal Resource Procurement

Staff disagrees with RNP and ODOE that a geothermal-only RFP is needed. However, it recommends that future all-source RFPs explicitly invite geothermal developers to bid, and proposes the following one-word change to the action item:

> *The Company identified over 100 MW of geothermal resources as part of a least cost resource portfolio. Continue to refine resource potential estimates and update resource costs in 2011-2012 for further economic evaluation of resource opportunities. Continue to, explicitly, include geothermal projects as eligible resources in future all-source RFPs.*

PacifiCorp has no issue with the word change, and intends to include a statement in future all-source RFPs that encourages submission of geothermal resource bids. Accordingly, the

Company added this provision to the final draft All Source RFP, filed on October 27, 2011 in UM 1540.

Flexibility Requirements in Support of Variable Energy Resources (VERs)

Staff recommends that PacifiCorp look at storage "within the broader context of flexibility needs, sources and adequacy and to consider how this emerging need, driven largely by the rapid introduction of variable energy resources (VERs), fits within the overall analytical framework of system planning." It proposes to expand the scope of PacifiCorp's energy storage study in the following manner:

> *Initiate a consultant study in 2011 or 2012 on incremental capacity value and ancillary service benefits of energy storage. The study will include the following elements:*
> *1) Definition of and suggest metrics by which to measure flexibility (applicable to all flexibility resources including: thermal, demand response (DR), and storage)*
> *2) An inventory of existing flexibility needs and the adequacy or capability of existing assets to meet them*
> *3) A projection of flexibility needs in the IRP timeframe to successfully integrate projected VER additions*
> *4) A comparison of benefits and costs of obtaining flexibility from the range of flexible resources (conventional thermal, DR, storage, etc.)*

PacifiCorp agrees that a study on grid flexibility to support integration of VERs would be useful information, and supports conducting analysis along the lines recommended by Staff. However, a study independent of the consultant energy storage study is necessary because a study focusing only on energy storage technologies is already near completion. Also, the Company questions whether a comparison of benefits and costs associated with different flexible resource types can be reasonably accommodated in the next IRP cycle given the dependence on numerous simulations using the Planning and Risk (PaR) production cost model, if Staff's intent is to go that route with the analysis.

The Company recommends the following proposed language as part of Action Item 8 to provide sufficient study design and schedule flexibility:

> *Conduct a study of grid flexibility for accommodating variable energy resources (VERs) in the IRP timeframe. The study scope and schedule will be defined after obtaining public participant input at a future IRP public meeting. At a minimum, the study will include an assessment of existing and projected future flexibility for VER penetration scenarios.*

Renewable Portfolio Standard and Renewable Energy Credit Compliance

In comments on the IRP, ODOE recommended discussion of RPS compliance strategies and the role of REC sales and purchases in PacifiCorp's next IRP. Staff agrees, and proposes the following new action item:

> *PacifiCorp will expand the next IRP to include discussion of RPS compliance strategies and the role of REC sales and purchases. The Company will be selective in its discussion to avoid conflict between the IRP, RPS Implementation Plan, and RPS Compliance Report.*

The Company supports Staff's proposed new action item, and recommends no changes to the text.

Action Item 2 - Intermediate/Baseload Thermal Supply-side Resources

Staff's Substitute Preferred Portfolio

Staff believes it has "identified significant uncaptured resources" that could indefinitely postpone construction of the proposed 2016 CCCT resource, and that its alternative portfolio (consisting of additional front office transactions, Class 3 DSM, and conservation voltage reduction in lieu of the 2016 CCCT) could be implemented with a similar cost and risk as the Company's preferred portfolio, but "without the irreversible cost commitment that could prove burdensome in the event that load/price forecasts are not accurate." Staff thus recommends the following action item change:

> *Recognizing the complexity of implementing DSM Classes 1, 2 and 3, and CVR programs across its service territory, and the need to rely more upon market purchases to meet loads, PacifiCorp will pursue implementing the Staff alternative portfolio shown in Attachment 1in lieu of the preferred portfolio. If, after demonstrating it diligently pursued implementation of the Staff alternative portfolio, PacifiCorp finds the resulting demand-side resources and market purchases insufficient to meet the need, it may file an IRP Update to justify acquiring supply-side resources to fulfill the remaining need.*
> ~~*• Issue an all-source RFP in late 2011 or early 2012 for acquisition of peaking/intermediate/baseload resources by the summer of 2016.*~~
> ~~*– This acquisition corresponds to the 597 MW 2016 CCCT proxy resource (F Class 2x1).*~~

The Company does not agree with Staff's recommendation to replace the preferred portfolio with Staff's alternate portfolio, and thereby eliminate the Company's All Source RFP. Staff fails to provide any documentation that would suggest that its alternate portfolio is achievable or would rigorously meet the Commission's IRP Guidelines and planning principles as required of PacifiCorp. The Commission should therefore reject Staff's proposal and acknowledge the Company's IRP with the modified action items that the Company has agreed to in this proceeding. The Company's numerous concerns with Staff's proposed action item are described below.

First, Staff's alternate portfolio strategy is based on an asymmetric perception of resource requirement and availability risk: only risk factors that support alternatives to a major gas resource, along with a smaller resource need, are considered. This asymmetric treatment does not take into account the potential overall reliability impact to the system due to reliance on large quantities of speculative resources. Staff's portfolio does not consider what will happen if the portfolio is proven to be unachievable—which the Company believes to be likely—and also does not address the possibility that load growth may exceed current expectations. While the Company can postpone the All Source RFP or scale back the RFP's resource requirement as needed[2], cancelling the RFP creates an irreversible decision to forego acquisition of suitably reliable and cost-effective resources supported by the Company's extensive IRP process, and which requires a 36 to 48 month lead time if construction of new assets is required. Staff's proposal to allow PacifiCorp to file an IRP Update to support pursuit of supply-side resources if it "finds the resulting demand-side resources and market purchases insufficient to meet the need" is ineffectual because it will be far too late to acquire the supply-side resources to meet that need. Accordingly, the approval of the draft All Source RFP should proceed with the schedule agreed to by Staff in UM 1540. As in past RFPs, the Company will continue to evaluate the resource needs and market conditions through the RFP process before committing to any resource acquisitions.

Second, by replacing the Company's preferred portfolio, which is based on months of Company and stakeholder analysis and review, Staff is inappropriately substituting its judgment for the Company's. However, in the event that Staff's portfolio proves inadequate, Staff will not be held accountable to the Commission or customers. The Company cites below the Commission's statement on respective roles of the Commission and utilities for resource planning in Order No. 89-507:

> The establishment of Least-Cost Planning in Oregon is not intended to alter the basic roles of the Commission and the utility in the regulatory process. The Commission does not intend to usurp the role of utility decision-maker. Utility management will retain full responsibility for making decisions and for accepting the consequences of the decisions. Thus, the utilities will retain their autonomy while having the benefit of the information and opinion contributed by the public and the Commission.[3]

Third, Staff's proposed action item puts the Company in the untenable situation of having two preferred portfolios acknowledged by different state commissions. Staff does not appear to have considered the problems their recommendation would cause for various regulatory proceedings and the viability of multi-state integrated resource planning. Staff also does not address the multi-state regulatory ramifications of cancelling the All Source RFP in light of other commission IRP acknowledgements and support for the RFP.

Fourth, the IRP is the product of an extensive, multi-state public process where numerous portfolio development scenarios had the benefit of scrutiny by all stakeholders. In adopting its alternate preferred portfolio, Staff has not applied the same due diligence expected of utilities for their IRPs, or followed a number of the key planning principles expressed in the IRP Guidelines.

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[2] Note that the final draft All Source RFP makes provision for potential updates to resource need given load growth uncertainty or market conditions. It includes the following statement: "If assumption updates are made prior to the receipt of Bidders' best and final pricing that affect the timing and/or size of the resource need, the portfolio may be revised accordingly." (*See* Final draft All Source RFP, Docket UM 1540 (October 27, 2011) at p. 54.)

[3] *Re: In the Matter of the Investigation into Least-Cost Planning for Resource Acquisitions by Energy Utilities in Oregon*, Order No. 89-507 at p. 6.

For example, on the public involvement and multi-state system planning fronts, Staff did not solicit system-wide stakeholder input for validating its resource assumptions and portfolio development specifications, or present its portfolio for public review and comment. In fact, the portfolio was the outcome of a Staff data request involving limited portfolio modeling and a desire to achieve a single end result through multiple attempts to avoid a high-cost or capacity-short portfolio when preventing System Optimizer from selecting a second CCCT prior to 2021. This is a critical process deficiency given the dependency on other states for resource/program approvals, including the situs DSM programs and rate designs that Staff's portfolio relies on heavily.

Finally, Staff believes that its portfolio is least-cost/least-risk, but provides no risk assessment and justification of its alternate portfolio in light of the Company's significant concerns raised with Staff regarding its use of the Company's portfolio sensitivity study assumptions. For example, in responding to Staff's portfolio development data request, the Company stated that the CVR resource cost used for developing Staff's portfolio was based on a preliminary consultant estimate for just 10 feeders in Washington, and was provided with the understanding that it would be used for model testing purposes. It does not capture higher costs associated with the larger capacity penetration assumed by Staff. These important caveats were not publicized along with Staff's comparison of portfolio costs.[4] In a similar fashion, Staff did not address the risk associated with assuming that all west-side states would approve a mandatory irrigation time-of-use rate program, and that the Company could implement them in time to help defer the 2016 CCCT resource.

Combined-cycle versus Simple-Cycle Combustion Turbines for Meeting Capacity Needs

Staff questions whether selecting a CCCT to fulfill a capacity need is the least-cost alternative to a SCCT, and therefore recommends the following action item change:

> *PacifiCorp will reexamine the timing and type of post-2014 gas resources and other resource changes as part of the 2011 business planning process and preparation of the 2011 IRP Update. The reexamination will include documentation of capital cost/operating cost tradeoffs between resource types.*

The Company agrees to provide updated "Supply-side Resource Options" tables in the 2011 IRP Update, which will incorporate resource-specific cost and performance attributes used in the Update's portfolio modeling. The new action item wording does not specify details concerning what is meant by "tradeoffs" between resource types. PacifiCorp notes that its IRP models explicitly account for cost/performance tradeoffs for meeting system capacity and energy needs.

[4] Staff Final Comments, p. 30.

Action Item 6 – Class 2 DSM

Energy Efficiency Acquisition

Staff believes the Company is underestimating the amount and speed of energy efficiency that can be achieved in states other than Oregon. Staff compares the amount of DSM capacity selected as a percent of load for Oregon and Washington, and notes that Washington's share is much lower than Oregon's. Staff also notes that System Optimizer selected all of the Oregon energy efficiency available, but not for other states. Staff proposes the following action item modifications:

> *Acquire up to ~~1,200~~ 1,800 MW of cost-effective Class 2 programs by 2020, including 1,200 MW in the eastern supply territory equivalent to about 4,533 GWh. This includes programs in Oregon acquired through the Energy Trust of Oregon.*

The Company disagrees with Staff's assertions regarding the amount and speed of energy efficiency that can be achieved in states other than Oregon, and opposes the revised action item. The Company contracted with a third-party evaluation and analysis vendor to update the Company's 2007 DSM potential study in 2011. The data from the updated assessment of demand-side resource potential was the basis for the development of the resource supply curves used in the development of the 2011 IRP. The technical potential (universe of opportunity) was screened for what portion was realistically achievable to acquire (through utility programs) using the higher Northwest Power and Conservation Council (NWPCC) assumption of 85 percent (which doesn't suggest all the savings would be achievable through programs, but also includes codes and standards and naturally occurring conservation). This higher percentage screen is significantly higher than the vendor's suggested achievable screen of less than 60 percent, an achievability percentage that was based on customer surveys and national utility program performance results.

In regard to Staff's observation that Oregon has a much higher capacity contribution than Washington as a percent of load, the Company's response is that this comparison is inaccurate. The anomaly observed is the result of inaccuracies in the data provided by the Energy Trust of Oregon (ETO) used by the Company in the development of the 2011 IRP. In late July 2011, the ETO notified the Company that the energy efficiency resource data provided assumed an over-reliance on resources to be acquired from the residential sector (by 53 percent) and an under-reliance from the commercial sector (79 percent). The effect of this error was an overstatement of the overall quantity of resources by 10 percent, and, more importantly, a skewing of the shape of the resources that resulted in an overstatement of capacity contribution per kWh of energy efficiency resource acquired. The Company will work with the ETO to correct this situation in upcoming resource planning updates. The reduction in residential resources and increase in commercial resources, when corrected, will more closely align Oregon's capacity contribution to kWh saved with that of Washington and PacifiCorp's other states.

Finally, with respect to Staff's last point—that the System Optimizer model selected all of the energy efficiency resources available in Oregon but not in PacifiCorp's other states—the Company concurs with Staff's observation but not their explanation. For Oregon, energy efficiency resources were pre-screened for economic potential before they were provided to the model for economic screening. The ETO provided all resources with costs at or under $0.11 per kWh. As a result, the System Optimizer found all of the resources offered cost-effective. Had the Company taken resources from the ETO above $0.11 kWh, they too would have been screened out as non-economic as was the case in PacifiCorp's other states. For 2013 IRP modeling consistency, the Company intends to request that the ETO provide supply curve data at graduating cost points beyond what is likely to be cost-effective, thereby allowing System Optimizer to perform the economic screen for all states. However, for the 2011 IRP, these modeling differences were immaterial in regards to resource selections. For the preferred portfolio, only in Washington did the System Optimizer select energy efficiency resources beyond the $0.11 kWh price bundle, and this didn't occur until the year 2027.

Class 2 DSM Ramp Rates

Staff claims that it is likely that cost-effective Class 2 DSM is being missed by applying ramp rate assumptions to the Cadmus energy efficiency supply curves. Staff equates supply-side resource acquisition lead-time with DSM program implementation lead-time, and thus proposes the following new action item:

> *In the next IRP, the Company will evaluate alternatives for ramping up DSM 2 in a way that is equal to supply side resource development and procurement.*

The Company disagrees with Staff's assertion about the use of ramp rates and their effect on resource acquisitions, and opposes this new action item. The use of supply-side ramp rates for energy efficiency resource acquisition ramp rates is inappropriate for a number of reasons. The Company explained the application of ramp rates on page 142 in the 2011 IRP. Unlike supply-side resources that require procurement and/or construction, but are under the direct control of the utility, utilities can influence but not control customer participation in utility energy efficiency programs. Factors like the economy, advancements in codes and standards, the maturity of energy efficiency technologies, and market infrastructure, all influence the speed at which energy efficiency resources can be acquired. Furthermore, the absence of energy efficiency resource ramp rates, ignoring these factors, exposes the Company resource plan to acquisition risk, as was the case in prior IRPs. As noted on page 142, the use of ramp rates is an improvement over prior modeling efforts and is consistent with regional planning assumptions in the Northwest, such as those used in the development of the NWPPC's 6th Power Plan and other major utility integrated resource planning efforts.

The Company would be happy to discuss Class 2 DSM ramp rate assumptions with Staff as part of the next IRP process, but does not believe that committing the Company to evaluate a modeling practice that conflicts with standard industry practice is reasonable.

Class 2 DSM Supply Curves

Regarding PacifiCorp's modeling of Class 2 DSM resources, Staff believes that bundling similar energy efficiency measures into one large bundle is causing the model to exclude many measures that would otherwise be cost effective, particularly at the low end of costs. Staff also believes this bundling method is "unnecessarily arbitrary and confusing." Staff thus proposes the following new action item:

> *In the next IRP, the Company will provide an analysis of alternatives to the current bundling method for modeling and evaluating energy efficiency measure supply curves.*

PacifiCorp believes this proposed action item is unnecessary. The Company revisits the construction of measure bundles in consultation with its consultant for each DSM potential study performed. There is judgment involved in defining the bundles given that there are over 18,000 individual measures (accounting for measure type, facility type, and location) that need to be collapsed into a manageable number of bundles for modeling purposes. PacifiCorp's supply bundle definitions are far from arbitrary; they were informed by experience in modeling the supply curves, and were designed to account for the likelihood of uneconomic measures being selected by the model as well as economic measures being excluded by the model. Staff is also incorrect in claiming that the System Optimizer model excludes energy efficiency measures in the lowest-cost supply bundle ($0/kWh to $0.07/kWh). Table 1 below shows preferred portfolio Class 2 DSM resource selection for the lowest-cost supply bundle in relation to the amount available by year. As indicated, the model selected virtually all of the Class 2 DSM resource available.

<u>Demand-side Management Department Staffing Levels</u>

Staff believes that staffing levels at PacifiCorp is limiting DSM acquisition, and compares DSM department full-time equivalent employees (FTEs) with the ETO, Idaho Power, and Puget Sound Energy. Staff proposes the following new action item:

> *In the Company's next IRP, it will provide an analysis of the sufficiency of current staffing levels to achieve programmatic cost effective energy efficiency targets established in this plan.*

The Company objects to a requirement to produce a staffing sufficiency study as part of the resource planning process, and requests that this action item be removed from the draft acknowledgment order. There is no evidence that the Company's staffing level is negatively impacting the quantity of demand side resources selected by the System Optimizer model or planned for acquisition in the 2011 IRP. PacifiCorp's energy efficiency resource selections/quantities are consistent with best-in-class utilities, with forecasted acquisitions averaging 0.8% of the Company's forecasted retail sales over each of the next 10-years. Staff sufficiency is a delivery issue, not a planning issue. As evidence of PacifiCorp's staffing sufficiency, PacifiCorp has consistently met its resource acquisition targets as identified in prior IRPs in all cases except where economic changes between planning periods have resulted in a delayed need for the resources planned. Furthermore, such a study would require extensive benchmarking and relationship mapping work to compare different utility delivery models, and the development and agreement on standard staffing sufficiency metrics that don't exist in the market today.

Table 1 - Class 2 DSM Resource Selection for the Lowest-Cost Supply Bundle, 2011 IRP Preferred Portfolio

Potential (MW)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
CA	0.4	0.5	0.6	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.3	1.5	1.6	1.7	1.6	1.7	1.5	1.6	1.4	23.3
OR	42.9	43.2	45.6	50.0	49.5	48.3	47.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	34.7	30.5	30.5	30.5	806.6
WA	4.8	5.0	6.5	6.5	6.5	6.1	6.1	6.0	6.2	6.3	7.3	8.2	8.0	8.3	8.6	6.9	6.0	6.3	6.3	6.6	132.6
ID	0.9	1.1	1.3	1.9	2.2	2.5	2.6	2.7	2.7	2.9	3.5	3.9	4.6	5.0	5.3	5.0	5.3	5.1	5.1	4.8	68.3
UT	20.7	24.0	33.8	35.1	36.4	38.7	39.9	40.8	42.5	44.7	47.7	50.7	47.3	49.0	48.8	53.1	48.4	50.9	50.1	52.4	855.1
WY	2.8	3.6	4.5	5.5	5.6	6.3	6.9	7.6	7.6	8.1	9.6	10.4	11.9	14.7	15.7	20.3	21.7	25.4	31.7	33.7	253.5
Grand Total	**72.4**	**77.4**	**92.3**	**99.7**	**101.2**	**102.8**	**103.8**	**97.5**	**99.2**	**102.3**	**108.6**	**113.7**	**112.6**	**118.0**	**119.3**	**126.2**	**117.7**	**119.7**	**125.3**	**129.5**	**2,139.3**

Selected MW	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
CA	0.4	0.5	0.6	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.3	1.5	1.6	1.7	1.6	1.7	1.5	1.6	1.4	23.3
OR	42.9	43.2	45.6	50.0	49.5	48.3	47.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	39.3	34.7	30.5	30.5	30.5	806.6
WA	4.8	5.0	6.5	6.5	6.5	6.1	6.1	6.0	6.2	6.3	7.3	8.2	8.0	8.3	8.6	6.9	6.0	6.3	6.3	6.6	132.6
ID	0.9	1.1	1.3	1.9	2.2	2.5	2.6	2.7	2.7	2.9	3.5	3.9	4.6	5.0	5.3	5.0	5.3	5.1	5.1	4.8	68.3
UT	20.7	24.0	33.8	35.1	36.4	38.7	39.9	40.8	42.5	44.7	47.7	50.7	47.3	49.0	48.8	53.1	48.4	50.9	50.1	52.4	855.0
WY	2.8	3.6	4.5	5.5	5.6	6.3	6.9	7.6	7.6	8.1	9.6	10.4	11.9	14.7	15.6	20.3	21.6	25.4	31.6	33.7	253.1
Grand Total	**72.4**	**77.4**	**92.3**	**99.7**	**101.2**	**102.8**	**103.8**	**97.5**	**99.2**	**102.3**	**108.6**	**113.7**	**112.6**	**117.9**	**119.3**	**126.1**	**117.7**	**119.7**	**125.2**	**129.5**	**2,138.9**

Percent Selected	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
CA	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
OR	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
WA	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
ID	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
UT	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
WY	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.5%	99.7%	99.6%	99.8%	100.0%	99.7%	99.9%	99.9%
Grand Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**99.9%**	**100.0%**	**99.9%**	**100.0%**	**100.0%**	**99.9%**	**100.0%**	**100.0%**

Conservation Voltage Reduction (CVR) Resources

Staff refutes PacifiCorp's Oregon party reply comments pertaining to CVR analysis and acquisition, and references studies that document estimated CVR energy savings and costs. Staff recommends the following action item changes that are believed to be responsive "to the needs of PacifiCorp customers":

- *A conservation voltage reduction (CVR) acquisition project in PacifiCorp's Washington service area will begin in 2012 and end no later than 2018.*
- *The next filed PacifiCorp IRP will include an action plan item to acquire all of the available cost-effective CVR throughout its service area by 2022. This action item will be based primarily on information from Yakima and Walla Walla service areas. Cost-effectiveness analyses will use the same methodology as the modeling approach used in the Class 2 DSM decrement assessment in the 2011 IRP Addendum. ~~Leverage the distribution energy efficiency analysis of 19 distribution feeders in Washington (conducted for PacifiCorp by Commonwealth Associates, Inc.) for analysis of potential distribution energy efficiency in other areas of PacifiCorp's system. (The Washington distribution energy efficiency study final report is scheduled for completion by the end of May 2011.)~~*

The Company objects to Staff's revisions to this action item. The CVR study is currently being reviewed by the Washington Utilities and Transportation Commission (WUTC) as part of the Company's Initiative-937 conservation compliance filing. By the Oregon Commission dictating new timelines and requirements, it circumvents the regulatory process in another state and arguably inappropriately expands this Commission's jurisdiction. This would be tantamount to the WUTC mandating different goals for the ETO. Moreover, the science and understanding on this topic is still evolving, and the cost-effectiveness of Washington CVR is still being evaluated—not just by PacifiCorp, but by others, such as the NWPCC's Regional Technical Forum. PacifiCorp will learn more about CVR applications in the coming years. The Company should have the flexibility to fine-tune its conservation resource forecast and implementation plans with the WUTC, which is a legal mandate for the state.

The Company also objects to Staff's proposed requirement to include an action plan item in the next IRP to acquire all of the available cost-effective CVR throughout its service area by 2022 based primarily on the Washington feeder study. Ongoing evaluation of the Washington system indicates that the Company's existing practices generally provide most of the energy savings achievable from reduced voltage. Further study to identify those areas where additional savings is both available and cost-effective in PacifiCorp's service territory is expected to provide rapidly diminishing returns, and will depend on regulatory and stakeholder support from multiple states. The Company thus believes that committing to any implementation deadline at this point is not appropriate or needed. As mentioned in the Company's September 21, 2011 response to comments in this proceeding, the Company is willing to work with Staff on developing an action item that demonstrates progress in CVR resource evaluation and implementation appropriate for the near-term focus of the IRP action plan. For example, the Company offers for consideration the following proposed action item language to replace Staff's two proposed items:

- *At a public meeting for the next IRP cycle, the Company will report progress on its Washington CVR implementation plan and findings regarding expected scalability of Washington CVR projects to other parts of the Company's service territory. The next filed IRP will include an action plan item specifying a CVR resource evaluation plan that considers implementation prospects on a system-wide basis.* ~~*experience to acquire all of the available cost-effective CVR throughout its service area by 2022. This action item will be based primarily on information from Yakima and Walla Walla service areas. Cost-effectiveness analyses will use the same methodology as the modeling approach used in the Class 2 DSM decrement assessment in the 2011 IRP Addendum. Leverage the distribution energy efficiency analysis of 19 distribution feeders in Washington (conducted for PacifiCorp by Commonwealth Associates, Inc.) for analysis of potential distribution energy efficiency in other areas of PacifiCorp's system. (The Washington distribution energy efficiency study final report is scheduled for completion by the end of May 2011.)*~~

Regarding the applicability of other organization's CVR potential analysis to PacifiCorp's service territory, the Northwest Energy Efficiency Alliance (NEEA), Electric Power Research Institute, and the Pacific Northwest National Laboratory, make several pivotal assumptions in their analyses that yield conclusions appropriate for systems with existing high voltage. Idaho Power's Boise Substation (3 transformers, 9 feeders) was studied in the NEEA pilot and had existing voltage settings of 123 volts. Such a setting would be abnormally high in the Pacific Power distribution system. Staff has tried to extrapolate the preliminary numbers in the Commonwealth report. The Company's engineering due diligence is ongoing, and the third edition of the report is expected in early November 2011. Staff's extrapolations appear to have grabbed the easy numbers and ignored much of the underlying information in the report. Hopefully, the Commission can appreciate the fact that roughly 2,500 man-hours of contractor study and analysis and roughly 2,000 man-hours of internal labor went into identifying the circuits in the seven-year distribution capital budget, currently expected to yield less than one average MW of savings, and the analysis is still ongoing. It is not appropriate to base a future six-state effort through 2022 on the intensely focused effort made in the last 18 months.

Action Item 7 – Class 3 DSM

<u>Class 3 DSM Targets</u>

Staff believes PacifiCorp's reluctance to implement Class 3 DSM unnecessarily raises cost and/or risk for Oregon customers. Staff notes that Idaho Power has successfully implemented DSM programs similar to PacifiCorp's Class 1 and Class 3 programs since early 2003, "boasting nearly 250 MW peak savings in 2010 in its irrigation sector demand response alone." Staff then uses the Company's Class 3 DSM sensitivity analysis as the basis for substituting preferred portfolio resources. Staff proposes the following modified action item:

> ~~*Continue to evaluate Class 3 DSM program opportunities.*~~ *By 2020 PacifiCorp will implement 262 MW of Class 1 and Class 3 DSM on the East side and 131 MW of Class 1 and Class 3 DSM on the West side using a combination of programs (TOU irrigation, Direct Load Control (DLC) Residential, Real-time*

> *pricing-Commercial & Industrial, Demand buy back, Critical Peak Pricing, etc.) as demonstrated in its sensitivity analysis, Case Study 31.*[5]

The Company disagrees with 1) Staff's characterization that not implementing Class 3 DSM unnecessarily raises cost and/or risk for Oregon customers, 2) the assertion that the Company is reluctant to implement Class 3 DSM, 3) Staff's use of the Company's Class 3 DSM sensitivity analysis as the basis for substituting preferred portfolio resources, and 4) imposition of mandatory Class 3 DSM resource targets because they are not realistic or supported with Staff's own analysis. (Also refer to the Company's response to Staff's recommendation to replace the preferred portfolio with its own portfolio.)

The Company objects to Staff setting resource targets for time-varying rate programs in other states that depend on approval and policies by the respective utility commission in each state. PacifiCorp notes that Staff presents no evidence that failure to implement mandatory Class 3 DSM raises costs and risks for Oregon customers. Retail tariffs in each of the six states served by the Company are subject to approval by the respective state commission. In each state Class 3 DSM program opportunities will be subject to the particular policies and opportunities in that state and subject to the sole jurisdiction of the Commission in that state. For example, in Oregon, Docket UM 1415 is investigating factors for analyzing mandatory time-varying rates and will be issuing a straw proposal and adopting procedural steps in that docket.

Regarding claims that the Company is "reluctant to implement Class 3 DSM", PacifiCorp stresses that time-varying rates have already been implemented in Oregon and other states. For example, in Idaho, the Company serves over 15,000 residential customers on a time-of-use rate and has over 280 MW of load under management as of 2011. The Company has another 230 MW of interruptible load under contract with large industrial customers in Utah and Idaho, over 110,000 customers/124 MW of controllable load participating in the Utah Cool Keeper air conditioner program, and another 50 MW of Utah irrigation load under management.

The Company believes that an appropriate substitute for Staff's proposed action item is something like the following, which is suitably tied to time-varying rate opportunities in Oregon:

> *For the next IRP cycle, PacifiCorp will coordinate IRP preparation with ongoing activities under Docket UM 1415 if applicable.*

<u>Reporting on the Cost-effectiveness and Acquisition Status of Class 1 and Class 3 DSM</u>

Staff proposes the following action item modification:

> *In its next filed IRP PacifiCorp will report on the cost-effectiveness and status of its acquisition and implementation of Class 1 and Class 3 DSM. ~~Evaluate program specification and cost-effectiveness in the context of IRP portfolio modeling and monitor market changes that may remove the voluntary nature of Class 3 pricing products.~~*

[5] 2011 IRP, Appendix D, p. 129.

PacifiCorp already summarizes individual action item status in the Action Plan chapter of each IRP, so Staff's proposed action item modification is unnecessary. The Company also believes that the IRP is not the appropriate venue for discussing cost-effectiveness of implemented programs, as this is handled through various program reporting requirements in each state.

Action Item 8 - Planning and Modeling Process Improvements

Update to PacifiCorp's Supplemental Coal Replacement Study

Staff proposes to include the following additional action item in the Action Plan regarding follow-up analysis associated with the Company's Supplemental Coal Replacement Study:

> *PacifiCorp is required to file its next IRP Update in March 2012. The IRP Update will include a revised Supplemental Coal Replacement Study. The Company will investigate whether there is flexibility in the emerging environmental regulations that would allow the Company to avoid early compliance costs by offering to shut down individual units prior to the end of their useful lives. The Company will also conduct further plant specific analysis to determine whether this tradeoff would be in the ratepayers' interest. In these additional analyses the Company will correct, as appropriate, its treatment of depreciation for the period after 2030.*

Staff also believes that there is inconsistent treatment of coal plant depreciation expense beyond the end of planning period; i.e., inappropriately excluded the Net Present Value (NPV) of this expense from the cost stream associated with pollution control investment and continued operation of the plant. Staff is concerned this may bias the results in favor of continued operation of the plants.

The Company agrees with the commitment to provide the proposed revised Supplemental Coal Replacement Study for the 2011 IRP Update. However, PacifiCorp disagrees with the assertion that its treatment of depreciation is flawed and needs correcting, and recommends that the last sentence of the proposed action item be removed. PacifiCorp's treatment of depreciation is consistent with the real levelized revenue requirements methodology that has been used by the Company for many years. The real levelized revenue requirements methodology is intended to address cost comparisons of assets with economic lives that extend past the analysis period. In calling out depreciation for pollution control investments beyond the end of the simulation period, Staff does not account for the inclusion of the operating expenses of any replacement resources in the portfolios.

Technical Review Committee for Wind Integration Studies

Staff provided the following revised action item pertaining to formation of a Technical Review Committee:

> Continue to refine the wind integration modeling approach; establish a technical review committee *(TRC)* and a schedule and project plan for the next wind integration study. *The TRC will be formed and identify its members within 30 days*

> *of the effective date of the IRP Order. Within 30 days of the effective date of the IRP Order, a schedule for the study will be established, including full opportunity for stakeholder involvement and progress reviews by the TRC that will allow the final study to be submitted with the next IRP.*

PacifiCorp agrees with the proposed change to include a 30-day deadline to establish the TRC and schedule. While the Company intends to provide opportunity for stakeholder involvement as it did with the 2011 wind integration study, it is nevertheless concerned about the scope of that involvement in light of the technical role of the TRC and ability to accommodate an expanded public input process given a strict IRP filing deadline. (As mentioned in the Company's Oregon party reply comments, PacifiCorp is mandated by commission orders in other states to file the IRP within two years of the last filed IRP.) The Company expects to address schedule risks and impacts to the IRP as part of its wind integration study schedule submission.

Planning Reserve Margin

Staff states that 13 or 12 percent is not a "major concern" because of the "conservative assumptions built into the Company's formulation of its PRM and partly because Staff found no difference in the date when the Company becomes capacity deficient and relatively little difference in the magnitude of the deficiency." However, Staff continues to believe that the Loss of Load Probability (LOLP) study that supports the 13 percent PRM is not convincing and wants economic justification for the PRM level selected. It therefore proposes the following additional action item:

> *PacifiCorp will develop its 2011 IRP Update based on a 12 percent planning reserve margin, unless a different PRM is justified by a marginal cost study comparing costs of portfolios that are optimized for achieving the various PRMs, and including estimates of the marginal benefits from a greater PRM. The study will use loss-of-load hours and unserved energy as the dependent variables.*

PacifiCorp does not agree with the addition of this action item. While the Company does not object to performing economic analysis of different PRM levels for the next IRP, it points out that such studies yield indeterminate conclusions because the *value* that is assigned to avoiding capacity shortages is subjective and depends on parties' risk aversion. For example, customers in parts of PacifiCorp's service territory distinguished by relatively high peak loads, high load growth, and significant transmission constraints would place a higher value on capacity reserves than areas not distinguished by these characteristics. Consequently, the Company believes that while PRM economic studies can inform the selection of a PRM level, they should not be used as the sole determinant as Staff recommends. Finally, the 2011 IRP Update will be based on the Company's 2012 business plan, which is targeted for approval in December 2011. Therefore, the Company is not able to conduct such a study and implement findings for the 2011 IRP Update, since portfolio modeling has already been completed using a 13 percent PRM.

Transmission Action Plan

Cost-Benefit Analysis for the Wallula-McNary and Sigurd-Red Butte Transmission Projects

Staff proposes the following two additional action items pertaining to the Wallula-McNary and Sigurd-Red Butte Energy Gateway transmission projects:

> *PacifiCorp will provide, for the Wallula to McNary project (Energy Gateway Segment A), prior to seeking regulatory acknowledgement of this project:*
>
> *1. An analysis showing that another wind project will be developed in the Wallula area, resulting in more revenues to achieve a benefit-cost ratio equal to, or at least, one; and*
>
> *2. An analysis quantifying other non-economic benefits. (e.g. the project is necessary as a contingency for addressing abnormal operating conditions)*
>
> *PacifiCorp will provide, for the Sigurd to Red Butte project (Energy Gateway Segment G), prior to seeking regulatory acknowledgement of this project:*
>
> *1. An analysis including other economic benefits and quantifying other noneconomic benefits to achieve a benefit-cost ratio equal to, or at least, one.*
>
> *2. An analysis (e.g. the project's Investment Appraisal Document) demonstrating that the alternative chosen is the most cost-effective alternative.*

PacifiCorp appreciates Staff's review and feedback on the Company's proposed Mona-Oquirrh/Oquirrh-Terminal, Wallula-McNary and Sigurd-Red Butte transmission projects. The Company also appreciates Staff's recommendation that the Mona to Terminal segment be acknowledged in the 2011 IRP, and the recommended action items to support acknowledgment of the Wallula-McNary and Sigurd-Red Butte projects in future IRPs.

Staff recommends that acknowledgement of the Wallula to McNary and Sigurd to Red Butte projects should depend upon the Company's ability to demonstrate a benefit-cost ratio of at least one, and suggests quantifying non-economic project benefits to help achieve this ratio. While the Company understands Staff's focus on economic drivers for acknowledgement, the Company must also meet its obligation, per its federal tariff, to expand its transmission system to: (a) facilitate generator interconnections and transmission service requests, as with the Wallula to McNary project; and (b) maintain system reliability in meeting growing customer loads, which is the primary driver for the Sigurd to Red Butte project.

Transmission projects may be justified by a range of benefits in addition to economics, and Commission acknowledgement criteria for such projects should not overlook or undervalue the Company's reliability and tariff obligations. Further, the Commission's acknowledgement criteria should recognize that transmission infrastructure is a long-term investment, providing benefits over many decades. While the Company cannot provide demonstrable evidence at this time that another wind project will be developed in the Wallula area—as Staff suggested in order to achieve a benefit-cost ratio of at least one for the Wallula to McNary project—it does note that the project is located in the middle of some of Oregon and Washington's greatest wind-energy potential (see the Western Renewable Energy Zone map, provided as Figure C.1 in the 2011 IRP

Appendices[6]). This resource-rich location coupled with the additional transmission capacity provided by the Wallula to McNary project supports a reasonable expectation that additional wind projects would be developed in the area. Many wind developers cannot achieve project financing without firm transmission capability. Once the line and firm capacity is constructed, opportunities for additional wind development increase significantly.

Additionally, while the Company appreciates Staff's suggestion that reliability and other non-economic benefits can and should be quantified, this presents a significant challenge for the Company. Even the most rigorously tested and verifiable data and modeling assumptions can be a subject of contention among stakeholders in the regulatory process. In order for quantification of non-economic benefits to stand up to regulatory scrutiny, appropriate methodologies must be developed, thoroughly vetted and supported by regulators and other stakeholders. The Company's concurrent implementation of Federal Energy Regulatory Commission Order No. 1000 will complement such an effort. PacifiCorp looks forward to working with Staff to develop reasonable, justifiable metrics for non-economic benefits in order to further demonstrate proposed transmission projects' long-term value to customers.

Alignment of Transmission Scenario Analysis and Project Acknowledgment Requests

Staff proposes including the following new action item:

> *In future IRPs, the Company will include in its portfolio scenario any transmission project for which acknowledgment is requested, regardless of its size or scope.*

PacifiCorp is concerned that Staff's action item recommendation effectively represents a new IRP guideline because it is proposed as a requirement for all future IRPs. PacifiCorp does not believe that is the Commission's intent. The Company therefore recommends that this action item be removed from the proposed acknowledgment order. The evaluation criteria to apply to specific transmission project acknowledge requests can be addressed on a case by case basis with Staff and other parties as part of the scenario definition phase of the IRP process.

Adherence of the Plan to Integrated Resource Planning Guidelines

Staff states on page 45 of their final comments that PacifiCorp did not comply with Guideline 4a, which requires an explanation of how the utility met each substantive and procedural requirement.

PacifiCorp provided an explanation of how requirements were met in Appendix B, "IRP Regulatory Compliance" (Tables B.2 and B.3).

[6] 2011 IRP Appendices available at http://www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/Integrated_Resource_Plan/2011IRP/2011IRP-Appendices_Vol2-FINAL.pdf

4. CONCLUSION

PacifiCorp appreciates the opportunity to respond to Staff's Final Comments. While the Company finds areas of agreement on several of Staff's conclusions and recommendations—such as a revised Supplemental Coal Replacement Study, a study on grid flexibility to support variable energy resources, Renewable Portfolio Standard and Renewable Energy Credit Compliance reporting, and expedited formation of a Technical Review Committee for the next wind integration study—the Company objects to Staff's recommendations to replace the preferred portfolio with its own portfolio and cancel the All Source RFP.

The Company is concerned that Staff is taking on the role of system resource planner without the accountability, and with little regard for real risks to customers as well as inter-state regulatory and policy implications—a position that the Company believes is counter to the Commission's own IRP Guidelines. Commission acceptance of these Staff recommendations would harm the integrity of PacifiCorp's multi-state resource planning and procurement processes, increase resource acquisition risks and costs for customers rather than decrease them, and result in conflicting preferred portfolios acknowledged by state commissions. Staff's recommendation also raises significant legal and policy questions regarding the scope of this Commission's jurisdiction to mandate actions paid solely by customers in a different state. The Commission should therefore reject Staff's alternate portfolio and associated resource acquisition targets, and acknowledge the Company's preferred portfolio and action plan.