Stakeholder Comments Template

Subject: Regional Resource Adequacy Initiative

Submitted by	Company	Date Submitted
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It is important that the California Independent System Operator's (ISO) tariff be structured to enable load serving entities (LSEs) that participate in an expanded regional organization to continue their use of existing resource planning practices with minimal disruption or incursion of unnecessary costs and that the local regulatory authorities (LRAs) of LSEs maintain their role in establishing resource planning guidelines and processes. The following comments are provided on the Regional Resource Adequacy (RA) Second Revised Straw Proposal:

1. Resource Adequacy Unit Outage Substitution Rules for Internal and External Resources

In its previous comments, PacifiCorp raised the issue of internal versus external unit substitution due to the fact that PacifiCorp's existing Balancing Authority Areas (BAAs) are located in areas that utilize third-party transmission to dynamically import physical resources. The ISOs current policy on unit substitution, in order to avoid unit availability penalties, is overly restrictive and only allows internal resources to be substituted for either an external or an internal resource, even pseudo-tied dynamically scheduled resources that operationally are no different than an internal resource. The ISO has proposed to allow an external resource to substitute for an internal resource that is on a forced or planned outage as long as the substitution meets the following conditions:

- 1. External resource has similar operating characteristics of the outage resource;
- 2. External resource/entity has sufficient Maximum Import Capability (MIC) allocation to be used for substitution; and
- 3. External resource has the capability to fulfill the RA must-offer obligation of the outage resource (for example, if the internal RA resource has a 24x7 must-offer obligation, then the substitute resource allocation on the required interties would be required to fulfill a 24x7 must-offer obligation).

While PacifiCorp appreciates the ISO's willingness to consider this issue and make modifications, the ISO should also consider the ability of the LSE to substitute external resources for external resources in its proposal, as these are currently also not acceptable in the substitution rules. PacifiCorp would like more clarity from the ISO on its proposal that specifically focuses

on the reliability implications of its substitution rules. Please also clarify what would be considered "similar operating characteristics" of the outage resource.

PacifiCorp's current reliably operated system utilizes almost 2,000 megawatts of pseudo-tied capacity that the ISO considers to be external, but is scheduled and operated no differently than any other internal resource in PacifiCorp's BAAs. In addition, PacifiCorp, like many other western LSE's, utilizes its ability to access liquid market hubs in the Pacific Northwest and other inter-ties to economically serve its customers through energy transactions. PacifiCorp's current ability to reliably serve its customers utilizing a least-cost approach would be unduly burdened by the ISOs current unit substitution rules. PacifiCorp is supportive of the ISO increasing the scope of the Regional RA initiative to further examine its unit substitution rules and looks forward to working with the ISO and other stakeholders on this issue.

PacifiCorp is in support of the ISO revising its tariff language to remove barriers associated with unit substitution. In addition, PacifiCorp agrees that there would need to be similar must-offer obligation considerations in the ISO's proposal, but the obligation should also take into consideration the penalty construct of the resource availability incentive mechanism. For example, if the unit on outage was a system RA resource that faced unit availability penalties only during specific times of the day, the substituting resource should technically only need to serve the needs of the ISO for the same period of time as the original resource. Requiring an LSE to procure capacity or energy in other hours could impose a greater cost on the LSE than necessary for system reliability purposes.

2. Import Resources that Qualify for Resource Adequacy Purposes

The ISO is giving additional consideration to import resources and the appropriate requirements of these resources for reliability purposes. Currently, an LSE can meet RA system capacity requirements using imported resources, including pseudo-tied resources, energy contracts and RA capacity contracts as long as there is sufficient MIC to deliver the energy to the ISO BAA.

PacifiCorp is in support of the ISO gaining greater clarity on the topic of an external resource and its obligations in the RA construct. As stated in the ISO's Second Revised Straw Proposal, current RA system showings represent power sales contracts in addition to firm capacity contracts. The market in which PacifiCorp currently operates more commonly utilizes power sales contracts, versus capacity contracts. PacifiCorp is able to procure power sales contracts years to days in advance of the operating day. PacifiCorp determines its need for these power sales contracts based on reliability requirements and a least cost/least risk approach that is approved and reviewed by its state regulatory agencies.

PacifiCorp supports the current construct of the RA tariff that allows an LSE to procure an import resource with available MIC utilizing an unspecified source without a need to show the terms or requirements associated with the resource. The ISO's current RA construct includes both a bidding requirement, either through self-schedule or economic bid, in the integrated forward market (IFM) and an availability penalty if the resource or contract is unavailable or not made available in the IFM. If an LSE does not submit a bid for its RA resource, including a non-dynamic non-specific system resource, the ISO will submit a bid on its behalf. The ISO's current penalty construct incents the LSE to meets its RA requirements due to the risks of

imposed penalties or procurement costs that are higher than the bid submitted by the ISO. PacifiCorp appreciates the opportunity to discuss this topic with the ISO and other stakeholders and looks forward to understanding and reviewing all of the parties' comments.

3. Load Forecasting

The ISO proposes that the coincident system load forecast for an expanded BAA would be created each year by the ISO based on the hourly load forecast data created and submitted by each LSE. The ISO has stated that it will utilize the hourly forecast provided by each LSE and simply add up each forecast to determine the coincident peak. This proposed methodology will be discussed further in a load forecast development working group.

In addition, the ISO has proposed the potential for monthly load forecast adjustments that take into consideration quantifiable load migration that has occurred, such as impacts from direct access programs. The ISO has proposed to establish criteria that would trigger a review of individual LSE forecasts and potentially direct the LSE to adjust the load forecast if, after review and discussion with the LSE, the load forecast is found to be unrealistic or unreasonable.

PacifiCorp is concerned with the new direction that the ISO has proposed in its coincident load forecast approach for the combined BAA. Each hourly load forecast that is submitted by an LSE, if it has the current capability to do so, will likely have two contributing technical factors; monthly energy and peak forecast. The likely result of this approach is that the hour that happens to be the coincident peak will be composed of an hourly value that was not specifically forecast by each LSE and will have an error factor that is higher than the peak forecast or the energy forecast that was specifically calculated by the LSE. By utilizing an hour that has an inherently greater likelihood of error than the actual forecast peak, may result in a much larger compound error than utilizing the coincidence factor methodology that was previously proposed.

PacifiCorp supports the ISOs previous proposal to develop a coincidence factor for determination of the coincident load to each LSE. Consistent with its previous comments, PacifiCorp believes the coincident factor approach will need to look at historical periods that represent the potential for future coincidence of peak load in the expanded BAA.

PacifiCorp supports the ISO's proposal of a forecast review process and monthly adjustments that are quantifiable and based on actual load migration. PacifiCorp looks forward to working more closely in the future with the ISO and stakeholders on this proposal.

4. Maximum Import Capability Methodology

The ISO proposes to revise the existing methodology used to calculate the MIC megawatt values to reflect different peak time periods in which non-coincident peaking areas without commonly known simultaneous import constraints experience their own maximum simultaneous imports. In addition, the ISO now proposes to limit the initial allocations of MIC capability to those sub-regions of the ISO that are defined by the regional Transmission Access Charge (TAC) sub-regions.

PacifiCorp supports the ISO's proposal to allocate MIC based on different peak time periods and align the MIC calculation by sub-region consistent with the TAC proposal. However, PacifiCorp

is concerned with the lack of clarity on the potential for internal transfer constraints that have been identified by the ISO. PacifiCorp believes that it is appropriate for the ISO to ensure that any constraints that may potentially limit the transfers of RA resources between major internal areas of an expanded BAA need to be identified and respected in the RA process. It is also unclear how the additional MIC allocation steps will conform to the ISO's new proposal, such as step 11, where unallocated MIC will be made available to other parties.

The ISO is proposing to monitor the zonal needs of an expanded BAA and evaluate the level of procurement in locational areas. With the limited transmission capability between the ISO and PacifiCorp's West BAA, as well as limited transmission between PacifiCorp's West BAA and PacifiCorp's East BAA, PacifiCorp is concerned that the ISOs proposal won't reveal issues with RA capacity until after an LSE has already procured the capacity or entered into a contract. From a planning perspective, the ISO's proposal to monitor and not identify deliverability issues until after the initial showing by each LSE may introduce additional costs and risk to the LSE in its procurement process.

5. Allocation of RA Requirements to LRAs/LSEs

The ISO tariff currently requires the ISO to allocate local and flexible capacity requirements to LRAs. The ISO now solicits stakeholder feedback on one of two options to address the question of how to allocate the RA requirements of multi-jurisdictional LSEs:

- Option 1, ISO allocates all RA requirements directly to multi-jurisdictional LSEs.
- Option 2, ISO provides each LRA the opportunity to allocate RA requirements to every LSE under its jurisdiction, even if some of those LSEs are subject to the jurisdiction of multiple LRAs.

PacifiCorp supports Option 1 of the ISO's proposal. The current RA process of allowing an LRA to allocate RA requirements to its jurisdictional LSEs did not contemplate a multi-state construct. The ISO has not identified how it might support Option 2 of its proposal, and has admitted that it is currently unclear on how it would actually go about splitting RA requirements by state.

6. Reliability Assessment

To ensure reliable operation of the BAA, each month the ISO will conduct a reliability assessment for the upcoming month using the information submitted by LSEs in RA showings and generators in supply plans.

a. Planning Reserve Margin for Reliability Assessment

To ensure reliable operation of the BAA, each month the ISO will conduct a reliability assessment for the upcoming month using the information submitted by LSEs in RA showings and generators in their supply plans. The assessment will consider system, local and flexible RA requirements and the RA capacity that has been provided to the ISO by LSEs for each RA requirement. To do the reliability assessment, the ISO proposes to use a system Planning Reserve Margin (PRM) that would be established through a study conducted pursuant to a stakeholder process, with the study updated when significant changes occur to the ISO's BAA. The ISO has provided additional detail on its proposal to use either a probabilistic approach (stochastic) or a

deterministic approach (building block) and continues to seek comment on the final methodology.

PacifiCorp is supportive of and understands the need to establish a minimum PRM for an expanded BAA as a means to ensure reliable operation. PacifiCorp further supports developing a minimum PRM through a transparent stakeholder process; however, PacifiCorp continues to recommend that the ISO consider adopting basic principles that will define the scope of this effort. One of these principles should be a commitment to establish a PRM that considers the incremental cost of achieving incremental improvements in reliability. A cost criterion has not yet been proposed or discussed in the ISO's discussion of a PRM methodology. PacifiCorp would like further clarification from the ISO on how it will take into consideration the cost aspect of reliability in its PRM methodology.

In developing this analysis, the ISO should also identify the types of reliability measures it will report and use to inform selection of a PRM level (i.e., expected unserved energy, loss of load hours, loss of load events, etc.), the types of uncertainties the method will consider (i.e., unforced outages, load, generation from variable energy resources, hydro generation levels, etc.), and how it will develop resource portfolios for different PRM levels. PacifiCorp supports the use of a single annual PRM level that will be calculated for a given year and applied to all months. Lastly, PacifiCorp believes it is important to understand how costs associated with a PRM may disproportionately affect each LSE within the ISO BAA depending on the contribution to coincident system peak.

PacifiCorp continues to have a concern that if the ISO establishes a PRM that creates a "shortfall" for an LSE that is inconsistent with the direction that it has received from its LRA, the LSE could be placed in the position of having to procure additional capacity that may not receive positive regulatory treatment for cost recovery. The ISO's previous response to this concern did not take into consideration the fact that costs imposed by the ISO to PacifiCorp are not automatically recoverable and must be approved by each of its state regulatory authorities.

b. Resource Counting Methodologies for Reliability Assessment

The ISO proposes to develop consistent counting methodologies for the amount of capacity that each type of resource can contribute toward meeting RA requirements. The resulting level of capacity would be used in the reliability assessment to assess how the resources used for RA meet reliability needs established by the ISO.

A consistent counting methodology would need to take into consideration established resource planning principles of new entrants. For instance, in its IRP, PacifiCorp considers the capacity contribution from short-term firm market purchases procured at market hubs outside of the BAA. A standardized approach would also need to be based on industry best practices while considering that LRAs have jurisdiction over LSEs and that the LRAs may require specific approaches for establishing resource counting criteria, particularly for intermittent resources. LRAs across PacifiCorp's jurisdictions have and continue to explore preferred methods for establishing capacity contribution values for intermittent renewable resources. A regional organization must be flexible and allow LSEs to incorporate any changes acknowledged or approved by an LRA in the RA plans for new entrants. Moreover, it is critical that any counting

methodology adopted by the ISO be consistent with the capacity contribution values used to develop a minimum PRM.

c. ISO Backstop Procurement Authority for Reliability Assessment

If the ISO identifies any shortfalls after considering all of the RA capacity provided, the ISO will provide LSEs an opportunity to cure the shortfall. If a shortfall still remains after the opportunity to cure has passed, the ISO would have the ability to procure backstop capacity if needed and allocate costs to LSEs that are short.

Please refer to above comments regarding concerns that backstop procurement based on the ISO's PRM or resource counting methodology may be inconsistent with the PRM or resource counting methodology of LSEs as determined in resource planning processes.