California ISO

Stakeholder Comments Template

Commitment Cost Enhancements (CCE) Tariff Clarifications

This template has been created for submission of stakeholder comments on the Straw Proposal for the CCE Tariff Clarifications initiative. The paper, stakeholder meeting presentation, and all information related to this initiative is located on the initiative webpage.

Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business **February 18, 2019.**

Submitted by	Organization	Date Submitted
Mohan Niroula 9165740712	*California Department of Water Resources (CDWR)*	*02/18/2020*

Please provide your organization's general comments on the following issues and answers to specific requests.

1. **Conditionally Available Resources**

   Please provide your organization's feedback on the Conditionally Available Resources (CAR) proposal. Please explain your rationale and include examples if applicable.

   The proposal states, "The ISO created conditionally available resources to fill a policy gap for certain resources that could not always operate at full operating range due to certain limitations that the ISO could not model and resolve through market optimization. If non-dispatchable resources, hydro, or pumping load face limitations that cannot be captured through the ISO's opportunity cost modeling, they can seek conditionally available resource status." CAR designated resources would be exempt from the 24x7 must offer requirement. While CAR status fits the operational characteristics of CDWR resources in water delivery system, these CDWR resources may not meet the criteria to qualify as CAR resource. For example, a participating load (PL) resource providing RA cannot offer non-spin without an underlying load schedule. As a use limited resource, its 24x7 MOO is dependent on the underlying load schedule. This unique situation is not included in the definition of CAR resource but has hour limitation tied to the load schedule. Specific hour limitations are coincident with hours when the load does not exist. Therefore, CDWR requests that CAISO make PL resources eligible for voluntary CAR designation.

2. **Run-of-River Hydro**

   Please provide your organization's feedback on the Run-of-River Hydro proposal. Please explain your rationale and include examples if applicable.

   CDWR continues to support the concept of a Run-of-the River (ROR) hydro resource exemption from resource adequacy availability incentive mechanism (RAAIM). However, ROR hydro resources should not be required to provide hourly forecast of generation similar to a VERS resource.

   Not all ROR resource capacity forecast based on historical values will be appropriate. State Water Project hydro resources that qualify as ROR hydro will need to create their own capacity forecast based on water delivery, current hydrology, and environmental constraints reflecting current conditions along the water delivery system. This approach recognizes that historical values do not represent a true net qualifying capacity. Currently, LRAs can establish their own counting criteria so that their specific operational limitations are represented in their capacity forecast. CAISO should continue this practice for integrated water and power delivery systems or at least reflect those criteria among its counting options for hydro resources.

3. **Hydro Resource Counting Rules**

   Please provide your organization's feedback on the Hydro Resource Counting Rules proposal. Please explain your rationale and include examples if applicable.

   CAISO proposal states, "Each hydro resource in California is unique. Some of these resources are relatively simple to model and some are incredibly complex. Complications may include downstream or upstream flow requirements, environmental standards, water rights considerations and linkages with other hydro resources. It follows that models used by scheduling coordinators to optimize these resources may also be complex to the point that it is unrealistic, or potentially impossible, for ISO pricing models to capture the actual requirements for these resources to run. Such resources may not fit a use limited model".

   An integrated water and power delivery system such as the State Water Project (SWP) has unique operational characteristics such that capacity counting based on historical data may not represent the true availability in an operating month. The SWP has its own capacity availability forecast based on water delivery needs, hydrology and several environmental constraints. The SWP's unique statutory and regulatory obligations are represented in CDWR's LRA resource counting criteria, as permitted under the CAISO Tariff. Where a unique resource system is not susceptible to CAISO modeling, the corresponding LRA should be allowed to continue using its own capacity counting method because complexities and uncertainties are inherent in determining a qualifying capacity (QC) forecast, especially since they must represent current conditions rather than historical values.

   CDWR continues to support the option to choose between the existing and the new method for counting hydro capacity under this initiative. This will address concerns arising from complications due to downstream or upstream flow requirements, environmental constraints, water rights considerations and linkages with other hydro resources, and uncertain hydrology. Under the existing method, an LRA for a unique integrated water and

power system should be allowed to use its own counting method to calculate QC that may have higher capacity values and maybe subject to RAAIM as considered by CAISO.

4. **Additional comments**

Please offer any other feedback your organization would like to provide from the straw proposal and topics discussed during the web meeting.

A) *Option for LRAs to maintain their counting criteria*:

The proposal states, "Southern California Edison (SCE) requested that the ISO review the counting methodology for hydro resources. Although this methodology is outside of ISO purview, the ISO discusses the possibility of supporting these changes at the California Public Utilities Commission (CPUC) where these rules are set." CDWR suggests that the counting methodology after the CPUC determination should be the applicable default CAISO tariff provision for LRAs that do not have their own counting methodology. LRAs that have their own counting criteria for their own resources should be allowed to continue using it.

B) *Modification of Run-of-the River hydro definition:*

For Run-of-River resources, CAISO states, "the common operator of the run-of-river and reservoir-backed hydro units may not always have control over when it must release water from the reservoir. Sometimes the operator may hold regulatory requirements to hold or release water from the reservoir. Also, it would not necessarily control the flow of water into the reservoir. If it must release water because there is too much water flowing into the reservoir from natural waterways, then the release of water that influenced the generating output on the run-of-river unit arguably is beyond the operator's control." (Page 15 of Commitment Cost Enhancements Tariff Clarifications)

i. When CAISO states "beyond the operator's control," it alludes to a resource that cannot set any points for its generation and its outputs whatever the resource is capable of at the time, such as wind or solar. Hydroelectric Generating Units should not be disqualified just because they are reservoir-backed because they can face a similar lack of control as non-reservoir-backed hydro resources. For example, Run-of-River would be appropriate to apply to a reservoir-backed hydroelectric generating resource when such resource can adjust the unit output, but that output is entirely dependent on factors, such as downstream demands that are outside of the operators' control and are unknown at the time of the generation. Would CAISO also see this as something "beyond the operator's control"?

ii. CAISO mentions that constraints primarily apply to upstream conditions. Will CAISO also take in consideration downstream conditions to qualify for Run-of-River? Excess water sent downstream can be a health and safety

concern during conditions like a drought year. Some hydro resources may be limited in how much or how little can be sent downstream due to regulatory conditions such as temperature control and oxygen quantity that has environmental impacts. The quantity of water delivered is dependent on these conditions as well as changes in downstream demands.

CDWR believes a hydro resource backed by a reservoir whose output is impacted by downstream constraints as described in i. and ii. above should be given similar treatment as proposed for a Run-of-River hydro without a reservoir. Accordingly, CDWR suggests following modification to the definition of Run-of-River hydro:

(a) A hydroelectric Generating Unit that has no physical ability to control or store its fuel source for generation beyond whatever pondage is necessary to maintain sufficient head pressure to operate the Generating Unit consistent with Good Utility Practice, or
(b) A Hydroelectric Generating Unit (with or without a reservoir) whose output is dependent on factors outside of its control such that it has no reason to control or store its fuel source for generation beyond what is necessary to maintain compliance with downstream demand, health, and safety requirements while maintaining Good Utility Practice.