



California ISO

CCE3 Draft Tariff and BPM Language

Jennie Sage, MQRI
Sidney Mannheim, Legal

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ISO PUBLIC

CCE3 Stakeholder Process Schedule

- 10/19/18: First round of BPMs/Tariff posted
- 11/2/18: Stakeholder comments due on first round of BPMs/Tariff
- 11/9/18: CCE3 BPM/Tariff Stakeholder call
- 11/16/18: ISO responds to comments
- 11/30/18: Second round of BPMs/Tariff posted
- 12/18/18: CCE3 BPM/Tariff Stakeholder call
- 2/1/19: File CCE3 Tariff with FERC, submit PRRs for BPMs
- 4/1/19: Effective date for CCE3

BPM Summary

- **Market Instruments, Attachment B Master File Update**
Procedures: Incorporates Use Limit Plan Data Template details
- **Market Instruments, Attachment D Default Energy Bids:**
Incorporates Opportunity Cost adder to default energy bids for eligible energy use limitations
- **Market Instruments, Attachment G: Maximum Start-up and Minimum Load Values:** Incorporates Opportunity Cost adder to minimum load costs for run hours use limitations for resources under the Proxy cost option and Opportunity Cost adder to start-up cost for start use limitations for resources under the Proxy cost option

BPM Summary

- **Market Instruments, Attachment H Transition Costs:** Incorporates Opportunity Cost adder to transition cost for start use limitations for resources under the Proxy cost option
- **Market Instruments Section 8.2.1.3 SIBR Generated Bid:** Opportunity cost adders will be not be included in the Generated Start-up Cost curve or the Generated Minimum Load Cost but will be included in Generated Energy Bid Curves.
- **Market Instruments, Attachment N Opportunity Cost Calculation for Use-Limited Resources:** New BPM section to describe the calculated Opportunity Cost calculation methodology
- **Market Operations Section 2.1.15 Use-Limited Resources:** Incorporates the new definition and attributes of Use-Limited Resources under the CCE3 initiative.

BPM Comments: Market Operations Section 2.1.15: Use Limited Resources

- BPM language on criterion 3 needs to match Tariff language on criterion 3.

BPM: The resource's ability to select hours of operation is not dependent on an energy source outside of the resource's control and the resource can ration the limitation in response to energy price signals.

Tariff: The resource's ability to select hours of operation is not dependent on an energy source outside of the resource's control being available during such hours but the resource's usage needs to be rationed.

- Agree, will align BPM

BPM Comments: Market Operations Section 2.1.15: Use Limited Resources

- Section 2.1.15.2 bullet 3 is an expansion of Tariff language: The resource is not able to operate continuously and consequently does not participate economically in the ISO energy market.
 - ISO is reviewing this
- Terms CAISO and ISO are used inconsistently
 - ISO will use CAISO
- In the first line of the second bullet, “cannot” should be “can” in order to be consistent with the lead-in reference to use limitations that are ineligible for registration under the criteria in Tariff Section 30.4.1.1.6.1.1.
 - Agree, should be “can”

BPM Comments: Market Instruments Attachment B: Master File Update Procedures

- Request clarification on what “resolution level” means in the Implied Starts registration
 - Details on MSGs with start limitations is in Market Operations BPM Section 2.1.15.5

BPM Comments: Market Instruments Attachment B: Master File Update Procedures

- Requests more explanation on what Implied Starts is used for.
 - Implied starts is only for the Opportunity Cost Calculation to account for starts on an MSG and will not be used in any other market optimization. This detail can be added in Market Operations BPM Section 2.1.15.5

BPM Comments: Market Instruments Attachment D: Default Energy Bids

- ISO should not remove references to an Independent Entity
- Heading for Section D.6.2 still refers to Independent Entity
 - Independent Entity needs to be removed from tariff and BPM as this referred to Potomac Economic per FERC crisis era directive
- Market Participants should not have to give up their negotiated DEB to see the results of a calculated opportunity cost
 - There is a considerable amount of work that is involved in determining a resource's use limitation and running the opportunity cost calculation.

BPM Comments: Market Instruments Attachment D: Default Energy Bids

- Example without GHG compliance obligation still has the components in the formula.
 - Agree, will update in next version
- ISO should limit how many different terms are used: Opportunity cost, Opportunity cost adder, Variable Energy Opportunity Cost, Variable Energy Opportunity Cost adder, Energy opportunity cost, Use-limitations based opportunity costs, negotiated opportunity cost, Negotiated Opportunity Cost adder(s).
 - Agree, we will review

BPM Comments: Market Instruments Attachment N: Opportunity Cost Calculation for Use-Limited Resources

- An equation multiplies two decision variables
 - This is a standard formulation for a unit commitment problem in market optimizations.
- Request to update to Attachment N to show the full mathematical model.
 - Objective cost function shown is intended to capture a profit maximization. The ISO cannot show the full mathematical model since this was implemented by an external vendor

Tariff Comments: Section 30.4.1.1.6.1 The Six Cities

- The Six Cities proposes moving the phrase “on an annual basis,” as where it is currently located creates ambiguity.
- Proposes to make clear that the phrase applies to the registration and validation process rather than the temporal scope of the use limits.
 - Agree, will revise

Tariff Comments: Section 30.4.1.1.6.1 Proposed Edits by The Six Cities

A Scheduling Coordinator seeking to obtain Use-Limited Resource status for resource(s) will follow the registration and validation process set forth in this CAISO Tariff and the Business Practice Manual. The registration and validation process requires each Scheduling Coordinator to demonstrate on an annual basis that the resources has one or more limits that meet the Use-Limited Resource criteria ~~on an annual basis~~ as set forth in Section 30.4.1.1.6.1.1 and the Business Practice Manual, and allows each Scheduling Coordinator to seek to recover Opportunity Costs for Use-Limited Resources by making the demonstration set forth in Section 30.4.1.1.6.1.2.

Tariff Comments: Section 30.4.1.1.6.1.1 PG&E

- PG&E suggests changing the effective date of the following language: “Effective ~~November 1, 2021~~April 1, 2022, no contractual limitations will constitute qualifying contractual limitations that satisfy the requirements of this Section.”
- PG&E states that resources using this condition should be allowed to use an Opportunity Cost reflecting one year of operations until that time.
 - Agree that date needs to be changed

Tariff Comments: Section 30.4.1.1.6.1.2

- The Six Cities proposes moving the phrase “on an annual basis,” as where currently located creates ambiguity.
- Proposed to make clear that the phrase applies to the registration and validation process rather than the temporal scope of the use limits.
 - Agree, will change

Tariff Comments: Section 30.4.1.1.6.1.2 Proposed Edits by The Six Cities

A Scheduling Coordinator may submit documentation, either to establish a new limitation or to modify an existing limitation, in which case the Scheduling Coordinator can request reconsideration that may result in a new formula rate. In addition, Scheduling Coordinators must demonstrate on an annual basis that the resource has one or more limits that meet the Use-Limited Resource criteria on an annual basis as required pursuant to Section 30.4.1.1.6.1. In accordance with Section 39.7.1.3.2.2, the CAISO will make informational filings with FERC of any new, modified, or terminated Opportunity Cost formula rate developed pursuant to Section 30.4.1.1.6.2 or negotiated pursuant to Section 30.4.1.1.6.3.

Tariff Comments: Section 30.4.1.1.6.2.1 PG&E

- PG&E states that language was removed allowing for opportunity costs to be updated more frequently than a monthly granularity.
- PG&E feels that this language should remain, given the opportunity costs for some resources could change substantially within a month.
- PG&E states that market participants should have the ability to request an update mid-month.
 - ISO has no functionality to update mid-month

Tariff Comments: Section 40.6.8(e) PG&E

- PG&E requests clarification as to how “resource that is unable to be continuously operated” to the bid insertion exemptions, will be implemented.
- PG&E asks if there will be a field in the Master File to document this constraint.
 - ISO will perform impact assessment on final set of tariff clarifications

Tariff Comments: Section 40.9.2 PG&E

- PG&E disagrees with the modification to the Capacity Exempt from RAAIM exemption, which removed the text “including resources subject to.”
- PG&E states that this exemption should apply to all RMT resources.