152 FERC ¶ 61,185
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Norman C. Bay, Chairman;
Philip D. Moeller, Cheryl A. LaFleur,
Tony Clark, and Colette D. Honorable.

California Independent System Operator Corporation — Docket No. ER15-1875-000

ORDER ACCEPTING IN PART, AND REJECTING IN PART, PROPOSED TARIFF REVISIONS

(Issued September 9, 2015)

1. On June 5, 2015 the California Independent System Operator Corporation (CAISO) submitted proposed tariff revisions under section 205 of the Federal Power Act[1] related to the transition costs of multi-stage generating resources and other clarifying changes (June 5 Filing). We reject the proposed revisions to the definition of "use-limited resources" and accept CAISO's other proposed tariff revisions, effective September 15, 2015, as requested. The Commission also dismisses CAISO's request for waiver of the Commission's notice requirements as moot.

I. Background

2. In the day-ahead market, CAISO commits generating resources and publishes a financially binding day-ahead schedule. The costs CAISO considers when making unit commitment decisions include the costs of starting up resources (start-up costs), the costs of running resources at their minimum operating levels (minimum load costs), and transition costs, among other things.[2] On a 30-day basis, scheduling coordinators for "use-limited resources"[3] participating in CAISO's markets may choose either the proxy

[1] 16 U.S.C. § 824d (2012).

[2] CAISO Tariff, section 31.3.

[3] Use-limited resources are unable to operate continuously due to certain, predefined restrictions.

cost option or the registered cost option for specifying their start-up costs or minimum load costs for the resources while all other resources must use the proxy cost option.[4] These two options are designed to compensate resources for start-up and minimum load costs while also mitigating potential market power concerns by setting a cap on the resources' allowed daily bids for those costs.[5] CAISO also generates cost-based bids when a scheduling coordinator does not submit a bid for a resource that is subject to a must-offer requirement such as a resource adequacy resource, or pursuant to the generally applicable scheduling and infrastructure bidding rules, as set forth in CAISO's tariff and the Business Practice Manual.[6]

3. CAISO states that during the past several years, it has engaged in a process of incrementally improving its commitment cost tariff mechanisms.[7] This past November, CAISO initiated a stakeholder process, Commitment Cost Enhancements Phase 2, which resulted in this filing. CAISO explains that its Market Surveillance Committee and the Department of Market Monitoring generally support the proposed tariff revisions. In the instant filing, CAISO proposes to amend the sections of its tariff pertaining to transition costs for multi-stage generating resources, adjust the definition of "use-limited resources," and make a few other clarifications.

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[4] CAISO Tariff, section 30.4. Under the proxy cost methodology, scheduling coordinators may submit daily start-up cost bids that are up to 125 percent of CAISO's daily estimated start-up costs based on each generator's physical characteristics and a daily natural gas price index. Under the registered cost methodology, scheduling coordinators may submit start-up cost bids that are fixed for the month for up to 150 percent of CAISO's estimated start-up costs based on each generator's physical characteristics and natural gas futures prices for the month. June 5 Filing at 2, n.4.

[5] June 5 Filing at 4, Attachment F – MSC Opinion at 2.

[6] *See* CAISO Tariff, section 30.7.3.1, 40.6.8, Appendix A, and definition of "Generated Bid."

[7] *See, e.g., Cal. Indep. Sys. Operator Corp.*, 145 FERC ¶ 61,082 (2013) (accepting tariff revisions to include additional categories of costs eligible for inclusion in proxy cost calculations for start-up and minimum load costs, default energy bids and generated bids); *Cal. Indep. Sys. Operator Corp.*, 149 FERC ¶ 61,284 (2014) (accepting tariff revisions to increase proxy cost bid cap, eliminate registered cost option for resources other than use-limited resources, and include the use of updated natural gas price data in the event of a spike in natural gas prices).

A. Multi-Stage Generating Resources and Transition Costs

4. CAISO explains that a multi-stage generating resource differs from other types of generating resources in that it can operate in various configurations[8] and incurs transition costs to move from one configuration to a higher configuration, in which the generator produces more electrical power.[9] CAISO states that each multi-stage generating resource configuration is treated as a distinct generating plant whose operation is mutually exclusive of the other configurations.[10] CAISO emphasizes that it uses the term "transition cost" only to refer to the costs associated with a change in multi-stage generating resource configuration when a plant is already on, and only when moving to a higher configuration.[11] CAISO states that transition costs are a type of start-up cost because those are the costs the multi-stage generating resource incurs to "start" when moving to a higher configuration. CAISO adds that these transition costs are in addition to the start-up costs and minimum-load costs.

5. CAISO states that, despite the similarities between transition costs and start-up costs, the current tariff treats transition costs differently. Under the current tariff, CAISO explains, scheduling coordinators for multi-stage generating resources register their transition costs, and CAISO then validates those costs by applying specific rules in the bid validation process. A multi-stage generating resource's transition costs are determined each day by multiplying the relevant daily gas price index by a predetermined transition cost multiplier. The predetermined transition cost multiplier is established by the multi-stage generating resource through a process of dividing total transition costs by the forward monthly gas price index. Once validated by CAISO, the predetermined transition cost multiplier applies for at least thirty days before the multi-stage generating resource can seek to again update the figure.[12] Conversely, CAISO explains, start-up costs, for both multi-stage generating resources and other resources, are calculated and

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[8] By way of example, consider a combined cycle generation plant consisting of both gas turbines and steam generators, which incur a cost when moving from one configuration to another. June 5 Filing at 4-5, and Attachment D – Board Memorandum at 1.

[9] *Id.* at 2.

[10] *Id.* at 4.

[11] *Id.* at 5.

[12] CAISO Tariff, section 30.4.2.

bid based on whether the resource is subject to the proxy cost methodology or the registered cost methodology.[13]

B. Use-Limited Resources

6. CAISO states that its tariff currently defines a "use-limited resource" as:

> [a] resource that, due to design considerations, environmental restrictions on operations, cyclical requirements, such as the need to recharge or refill, or other non-economic reasons, is unable to operate continuously. This definition is not limited to Resource Adequacy Resources. A Use-Limited Resource that is a Resource Adequacy Resource must also meet the definition of a Resource Adequacy Resource.[14]

CAISO emphasizes that a resource can only achieve "use-limited" status if it is unable to operate continuously due to non-economic reasons, and states the proposed tariff revisions will not change that element of the definition.[15] CAISO also points out that a use-limited resource may or may not also be a resource adequacy resource.

7. CAISO clarifies that certain resources, such as hydroelectric generating units, proxy demand resources, reliability demand response resources, and participating load (including pumping load) are deemed to be use-limited resources and are not required to apply for such status. For other types of resources, scheduling coordinators must request that CAISO grant use-limited status.[16]

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[13] June 5 Filing at 5.

[14] CAISO Tariff, Appendix A, Definitions.

[15] In its filing, CAISO cites the example of a resource that is unable to operate continuously due to a contractually-imposed limit, and states that this is not a use-limited resource under the current tariff definition because this is an economic limitation. June 5 Filing at 5.

[16] *Id.* at 5-6.

II. CAISO Filing

A. Proposed Revisions

1. Transition Costs of Multi-Stage Generating Resources

8. CAISO states that, in an effort to increase market efficiency, it wishes to align the calculation and bidding of transition costs more closely to that of start-up costs. Specifically, CAISO proposes to clarify that transition cost means "the non-negative dollar cost per feasible transition from one [multi-stage generating resource] configuration to a higher [multi-stage generating resource] configuration when the resource is already on."[17] Additionally, CAISO proposes to revise its tariff to require each multi-stage generating resource that bids its transition costs to elect the same methodology (proxy or registered cost) for its transition costs that it elects for its start-up costs.[18]

9. CAISO proposes to delete existing tariff language related to the calculation of transition costs and insert language to reflect the new method of determining those costs. Under the proxy cost methodology, CAISO will calculate the transition costs based on cost information provided by the scheduling coordinator and the difference between the start-up costs for the higher multi-stage generating resource configuration minus the start-up costs for the lower configuration. CAISO states that it will use these calculated transition costs unless the scheduling coordinator submits transition costs in the form of daily bids that are less than or equal to 125 percent of the transition costs calculated by CAISO, and are not negative.[19] CAISO also proposes to add language to the tariff to specify that if a scheduling coordinator does not provide sufficient information for CAISO to calculate a part of the proxy costs for a particular multi-stage generating

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[17] *Id.* at 7 (emphasis in the original). CAISO states that the underlined language is what would be added to the definition.

[18] CAISO states that the scheduling coordinator for a multi-stage generating resource must align his election for transition costs to match that of the start-up costs, and transition costs will now be subject to tariff provisions comparable to the existing provisions used to calculate, bid, and cap start-up costs under the proxy or registered cost methodologies. *Id.* at 8. *See also* CAISO Tariff, section 30.4.

[19] June 5 Filing at 8.

resource configuration (other than the lowest startable configuration), CAISO will use the value for the next lowest multi-stage generating resource configuration.[20]

10. CAISO proposes to revise its tariff to state that a scheduling coordinator for a multi-stage generating resource with use-limited capacity, that registers start-up costs under the registered cost methodology, must also register transition costs for each feasible multi-stage generating resource transition, subject to a 150 percent cap.[21] These costs must be between zero and a maximum of 150 percent of the difference between the projected proxy costs for the start-up of the higher configuration and the projected proxy costs for the start-up of the lower configuration. As before, any negative result will be treated as zero.[22]

11. In the tariff section pertaining to the proxy cost methodology, CAISO proposes to clarify that the scheduling coordinator for a resource subject to that methodology can submit daily bids for start-up and minimum load costs only if it chooses not to recover such costs based on the resource's actual unit-specific performance parameters.[23] In the subsection pertaining to multi-stage generating resources, CAISO proposes to add that the proxy costs "will be calculated for each specific [multi-stage generating resource] configuration, <u>including for each [multi-stage generating resource] configuration that cannot be directly started</u>."[24]

12. CAISO also proposes to clarify the definition of "[multi-stage generating resource] Transition" to state that it includes "a feasible transition from one [multi-stage generating

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[20] *Id.* at 9.

[21] CAISO states that the maximum start-up cost and minimum load cost values registered in the master file for capacity of a multi-stage generating resource will be limited to 150 percent of the projected proxy cost for each multi-stage generating resource configuration. CAISO further states that because each multi-stage generating resource configuration is treated as a distinct generating plant, making its transition costs a type of start-up cost, then it is only reasonable to apply the same 150 percent registered cost cap applicable to start-up costs to transition costs. *Id.* at 9-10.

[22] *Id.* at 10.

[23] *Id.* at 16.

[24] *Id.* CAISO's proposed language is underlined.

resource] configuration to another as registered in the transition matrix associated with a specific transition cost, if applicable."[25]

2. Use-Limited Capacity

13. CAISO proposes to change the term "use-limited resource" to "use-limited capacity" in recognition of the possibility that only a portion of a resource's capacity could be use-limited, or a resource may only be use-limited during certain times of the year.[26] CAISO proposes to define "use-limited capacity" as follows:

> [c]apacity with limitations or restrictions on its operation established by statute, regulation, ordinance, court order, design considerations, or other non-economic reasons that cannot be optimized by the appropriate CAISO commitment process without considering opportunity costs.[27]

CAISO reiterates that the limitations resulting in the use-limited status must be non-economic[28] in nature, and they also cannot be optimized by CAISO's commitment process without allowing for opportunity costs.[29] CAISO states that if, for example, a resource can only run 200 hours per month due to an environmental limitation, CAISO's current system may have it running 200 hours consecutively instead of the 200 hours when the system need and prices are at their highest. If the resource bids reflect the opportunity costs associated with dispatching the resource at particular times, then the resource's ability to only run 200 hours can be appropriately optimized.[30] CAISO

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[25] *Id.* CAISO's proposed language is underlined.

[26] *Id.*

[27] *Id.* at 11.

[28] CAISO argues that allowing economic limitations in granting use-limited status could lead to too much use-limited capacity that would unnecessarily reduce CAISO's flexibility in ensuring reliability. *Id.* at 14.

[29] *Id.* at 11. In other words, the limitations can be optimized by the commitment process by allowing for opportunity costs.

[30] *Id.*

contrasts this with a variable energy resource[31] that, because of the nature of its generation, cannot be reserved for the most profitable times of the month, and thus does not have opportunity costs. CAISO explains that because the resource's limitations cannot be optimized by opportunity costs (as opposed to the previous example), the variable energy resource would not be considered use-limited capacity. CAISO notes that regulatory must-take capacity will also no longer be considered use-limited capacity because its availability is dictated by contract, and its limitations cannot be quantified as opportunity costs in CAISO's market optimization.[32]

14. Finally, CAISO proposes to move the definition of use-limited capacity out of the section of the tariff related to resource adequacy to section 27, the general markets and processes section. CAISO states this move coincides with the proposed deletion of the last two sentences of the existing definition linking a resource's "use-limited" status with resource adequacy.

B. Request for Waiver

15. CAISO requests that the Commission accept the tariff changes related to transition costs and the other clarifications effective September 15, 2015. CAISO states that it will be implementing the multi-stage generating resource transition costs and bidding rules as part of its 2015 fall release on September 15, 2015. [33]

16. CAISO also requests waiver of the Commission's prior notice requirements to make the proposed tariff revisions related to use-limited resources effective March 1, 2016, which is more than 120 days after the date of filing. CAISO states that good cause exists to grant this waiver because the tariff revisions pertaining to use-limited capacity need to go into effect at the same time as related tariff revisions in CAISO's other recent filing addressing reliability services.[34] CAISO also argues that market participants will

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[31] A variable energy resource could be a wind-powered or solar-powered resource, for example.

[32] June 5 Filing at 11.

[33] *Id.* at 16-17.

[34] *See* CAISO Filing in ER15-1825-000 submitted on May 29, 2015, CAISO's Tariff Amendment to Implement Phase 1A of Reliability Services (Reliability Services Initiative filing). In the Reliability Services Initiative filing, CAISO has requested an effective date of March 1, 2016 for the majority of the proposed tariff revisions.

need adequate time to design, develop, implement, and test the changes resulting from the tariff revisions in these two filings.

III. Notice and Responsive Pleadings

17. Notice of CAISO's filing was published in the *Federal Register*, 80 Fed. Reg. 33,515 (2015), with interventions and protests due on or before June 26, 2015. Timely motions to intervene were filed by the Cogeneration Association of California and the Energy Producers and Users Coalition; NRG Power Marketing LLC and GenOn Energy Management, LLC; the Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California; the City of Santa Clara, California; and the Northern California Power Agency. Timely motions to intervene and comments were filed by Pacific Gas and Electric Company (PG&E); Southern California Edison Company (SoCal Edison); and the California Department of Water Resources State Water Project (SWP). Timely motions to intervene and protests were filed by the Western Power Trading Forum (WPTF) and San Diego Gas & Electric Company (SDG&E). The Public Utilities Commission of the State of California (CPUC) filed a motion to intervene out-of-time on July 7, 2015. CAISO submitted an answer to the protests and comments on July 13, 2015.

A. Protests and Comments

18. SDG&E takes issue with the proposed definition of "use-limited capacity" and seeks clarification of two points related to its contract-based start limitations. First, SDG&E wishes to clarify that its contract-based start limitations for certain peaking units constitute both "statute" and "regulation" and are entitled to receive opportunity cost treatment to prevent start limits from being exceeded. Specifically, SDG&E's concern is with five CPUC-approved contracts for combustion turbines, which were designed to operate as peakers. SDG&E argues that the contracts were established under the strict supervision of the CPUC which reviewed and approved them in the context of the Long Term Procurement Plan. Second, it seeks clarification that its contract-based start limitations are "non-economic" rather than "economic," because they were developed in the context of the regulatory process to meet California's statutory and regulatory mandates.[35]

19. Under either approach, SDG&E believes that CPUC-approved contractual start limitations should be provided opportunity cost adders, as stated in the proposed use-limited capacity definition. SDG&E argues that this clarification is especially appropriate given that the Long Term Procurement Plan process addresses various

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[35] SDG&E Protest at 2-5.

California energy and environmental regulations.[36] SDG&E explains that because these contractual start limitations are based on regulations emanating from the Long Term Procurement Plan, these start limitations should be entitled to receive opportunity cost adders to specifically address start limitations needed to meet reliability needs for the entire year.[37]

20. Since CAISO's market optimization only considers a single day for economic commitment, SDG&E states that it is faced with the prospect of running out of starts for these five peakers. SDG&E contends that, without the inclusion of the opportunity cost adder to specifically address starts, certain of its peaking units will not be economically bid into the market once the start limit is reached, and will not be available for dispatch under CAISO's market optimization process, which SDG&E argues will compromise reliability.[38]

21. SDG&E emphasizes that the adoption of CAISO's proposed modification would significantly undermine the CPUC's mandate to enhance SDG&E's local area reliability at reasonable costs to ratepayers, and argues that notions of comity and the *Mobile-Sierra*[39] doctrine preclude CAISO from upsetting the intent of these contracts in this manner. SDG&E explains that these contracts were entered into and reviewed and approved pursuant to California's legislative and regulatory processes, and argues that CAISO cannot operate in a manner to upset the will of the state as evidenced in those contracts.[40]

22. SDG&E argues that even if the CPUC-approved contract start limitations are not deemed to be "statute" or "regulation," the contracts must receive opportunity cost adders

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[36] *Id.* at 3.

[37] *Id.* SDG&E explains that CAISO has indicated that 100 percent of the output from these five units is needed to satisfy SDG&E's local area reliability needs for the entire year. SDG&E argues that anything that could prevent these peakers from being available for the entire year would compromise reliability in its local area. *Id.* at 4.

[38] *Id.* at 7.

[39] *See United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956), *Federal Power Commission v. Sierra Pacific Power Company*, 350 U.S. 348 (1956); *Pub. Utils. Comm'n of the State of California v. Sellers of Long-Term Contracts to the California Department of Water Resources*, 102 FERC ¶ 61,025, at P 13 (2003).

[40] SDG&E Protest at 4.

addressing starts because they are "non-economic." SDG&E states that CAISO has failed to point to any tariff language expressly defining the terms "economic" or "non-economic," and has found no instance in CAISO's tariff where the term "economic" is defined. SDG&E also notes that the term "economic" is only included with a list of examples in the amended use-limited capacity definition.[41]

23. In its comments, SoCal Edison explains that it generally supports the proposal. However, SoCal Edison also states that design considerations are necessary attributes that can be inappropriately excluded by an overly restrictive definition. SoCal Edison contends that contractual restrictions should be considered in cases where physical limitations may not be appropriate, in particular for use-limited gas generation, energy storage, and demand response resources.[42]

24. PG&E also believes that use limitations in contracts that reflect environmental or regulatory restrictions should be accepted as legitimate limitations. PG&E states that while it understands that contractual start and run hour limitations could theoretically be used to economically withhold capacity and manipulate market outcomes, this is not a concern for contracts subject to oversight and approval by independent evaluators and the CPUC, and that most load-serving entities that are net buyers in the market lack an incentive to exercise market power and increase prices by economically withholding.[43] PG&E requests that the Commission direct CAISO to accept existing contractual obligations in contracts subject to regulatory approval at the CPUC if they can be shown to reflect environmental restrictions.

25. PG&E further states that, while it does not request that the Commission require storage resources to be classified as default use-limited resources, these resources should be exempt from bid insertion and residual unit commitment obligations.[44] PG&E also explains that the use-limited definition currently serves as the de facto protection from bid insertion and residual unit commitment obligations for resource adequacy resources that are not capable of responding to real-time dispatch instructions. According to PG&E, in the Reliability Services Initiative proceeding, CAISO proposes exemptions that will prevent these resources from being subject to bid insertion and residual unit commitment obligations once the proposed definition of use-limited capacity is approved

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[41] *Id.* at 9.

[42] SoCal Edison Comments at 2.

[43] PG&E Comments at 3-4.

[44] *Id.* at 5.

in this docket. Accordingly, PG&E requests that the Commission accept CAISO's proposal in this proceeding simultaneously with the Reliability Services Initiative proposal.

26. In its protest, WPTF argues that the proposed tariff language in section 30.4 related to the proxy cost mechanism continues to limit market participants' ability to include the value of risk in their bids.[45] According to WPTF, CAISO's comments in a number of proceedings indicate that suppliers can build price risks into their bids, but the tariff language proposed in this proceeding only allows for recovery of costs to the extent the proxy cost mechanism ultimately reflects those costs. WPTF requests that the Commission require CAISO to move to a mechanism where start-up and minimum load costs are biddable by the spring of 2016.[46]

27. SWP indicates that it is not raising any issues with the current tariff revisions as its resources will continue to qualify as use-limited.[47]

B. CAISO's Answer

28. In its answer, CAISO argues that SDG&E's request for clarification of the definition of the use-limited resource with regard to its five contracts is not relevant to the justness and reasonableness of the tariff filing. CAISO states that the purpose of the modification to the definition was to remove from classification those resources that do not have opportunity costs that cannot be optimized by CAISO's market commitment processes, such as wind and solar resources, and that the filing does not propose to change the type of limitations that are eligible to qualify a unit's capacity as use-limited. CAISO also notes that no party protested or commented on the substance of the proposed modification.[48] CAISO argues that SDG&E's protest is in reality a request for declaratory order.

29. Regarding PG&E's and SoCal Edison's concerns about how environmental restrictions and design considerations may be inappropriately excluded by the proposed definition, CAISO states that it recognizes that start and run-hour limitations can be included in contracts as a means of reflecting non-economic obligations such as

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[45] WPTF Protest at 3.

[46] *Id.* at 3-5.

[47] SWP Comments at 5.

[48] CAISO Answer at 4-5.

environmental requirements or physical limitations, and that, in and of itself, would not preclude the resources from being classified as use-limited. However, CAISO states that the Commission should decline to mandate that it simply accept contractual limitations that "can be shown to reflect environmental restrictions," because CAISO believes that would go beyond the scope of this proceeding.[49] CAISO clarifies for PG&E and SoCal Edison that the use-limited resource definition will continue to include design considerations as a non-economic limitation that would justify use-limited status.

30. With respect to WPTF's protest, CAISO requests that the Commission reject WPTF's request to require CAISO to make a future filing by a certain date or direct CAISO to implement direct bidding of start-up and minimum load costs because CAISO believes it is beyond the scope of the proceeding. CAISO further notes that there is an ongoing stakeholder process in which the issues of the structure of commitment cost and compensation are being discussed. CAISO argues that it would be premature to set a deadline on potential tariff provisions if there is a stakeholder process underway, and notes that the Commission has declined a similar request by WPTF in a separate proceeding.[50]

IV. Discussion

A. Procedural Matters

31. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2015), the timely, unopposed motions to intervene serve to make the entities that filed them parties to the proceeding. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2015), the Commission will grant CPUC's late-filed motion to intervene given its interests in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

32. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2015), prohibits an answer to a protest and/or answer unless otherwise ordered by the decisional authority. We will accept CAISO's answer because it has provided information that assisted us in our decision-making process.

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[49] With regard to how such limitations relate to opportunity costs, CAISO asserts that this is not a relevant concern until CAISO files a tariff amendment specifically proposing a methodology for calculating opportunity costs. *Id.* at 9.

[50] *Id.* at 10-11 (citing *Cal. Indep. Sys. Operator Corp.*, 149 FERC ¶ 61,284, at P 34 (2014)).

B. Commission Determination

33. The Commission finds that the tariff revisions related to the transition costs of multi-stage generating resources and associated changes are just and reasonable and accepts the revisions effective September 15, 2015, as requested. The Commission agrees with CAISO that aligning the calculation and bidding of transition costs more closely to that of the start-up costs is reasonable because they are costs incurred (e.g., fuel, maintenance adders) to transition from a lower configuration to a higher configuration. Using the net start-up costs between the higher and lower configurations when calculating the transition cost allows the resource to capture incremental cost increases for fuel and maintenance that it incurs when it moves to a higher configuration and increases its output. When transitioning to a higher capability configuration, with its distinct operating characteristics, allowing for only the net costs to transition to that new configuration also ensures that start-up costs that were originally received under a lower configuration are not double recovered as part of the higher configuration. Also, in the case where a multi-stage generating resource transitions to a lower configuration, the netting must only be a non-negative result, thus the transition cost is deemed zero.[51] This is reasonable because the methodology allows the resource to recover its "marginal" fuel and maintenance costs when moving to a higher configuration, but it does not allow it to recover those costs when moving to a lower configuration because the resource is not incurring those costs as it moves to a lower configuration. In addition, using a similar methodology for calculating transition costs simplifies the tariff rules for market participants.[52]

34. The Commission, however, rejects the proposed tariff revisions related to use-limited resources. These proposed revisions have not been shown to be just and reasonable. In particular, the Commission finds that the proposed tariff language is not sufficiently transparent in describing how CAISO will determine what capacity is use-limited. Additionally, the Commission finds that CAISO has not sufficiently explained or justified the potential effect on market participants of changing from a definition of use-limited resource to use-limited capacity. Finally, the Commission finds that CAISO removed clarifying language from the tariff regarding the use-limited registration process without any justification.

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[51] *See* CAISO Tariff Section 30.4.1.1.5.

[52] Also, we note that these revisions are supported by commenters or otherwise uncontested.

35. The Commission notes that there is a lack of clarity as to what capacity will be deemed use-limited under the proposed new definition. For example, as SDG&E points out,[53] the proposed tariff revisions do not define an economic or non-economic limit, so it is difficult for the Commission, or any market participant, to determine in which category a resource would fall. CAISO should be able to identify a list of limitations to be included in the tariff, and it must do so in order for the Commission to understand how such a revision to the definition of use-limited resources impacts the market participants. In addition, as both CAISO and market participants have noted, CAISO's Business Practice Manual for Reliability Requirements indicates that "under the ISO tariff, contractual limitations on the availability of Resource Adequacy resources, do not qualify a resource for Use-Limited status."[54] CAISO has failed to discuss in sufficient detail the interaction of contractual limitations with economic and non-economic limitations, and has not supported its position that allowing economic limitations could unnecessarily reduce CAISO's flexibility in ensuring reliability.

36. The Commission has additional concerns with the proposed definition of use-limited capacity. For example, to the extent certain resources are use-limited by default, it is unclear why they are not included in the definition of use-limited capacity. Further, it is unclear from the filing what CAISO means when it states it will "consider opportunity costs" in the proposed definition for use-limited resources. The matter becomes even less clear given that CAISO stated in its answer that "CAISO's current commitment cost rules do not explicitly account for opportunity costs and the CAISO does not calculate opportunity costs."[55]

37. The Commission also finds that CAISO has also removed existing tariff language without providing any rationale. For example, CAISO states that it is moving the use-limited resource registration process from the resource adequacy section of the tariff (section 40) to the more general CAISO markets and processes section (section 27) because use-limited capacity is not limited to resource adequacy capacity.[56] In fact, CAISO did not simply move the registration process from section 40.6.4.1 to proposed section 27.11 of the tariff. In the process of moving the section, it deleted the documentation requirements from the tariff that are required as part of the application

[53] SDG&E Protest at 8-9.

[54] *See* Business Practice Manual for Reliability Requirements Version 1 at http://bpmcm.caiso.com/Pages/BPMDetails.aspx?BPM=Reliability%20Requirements.

[55] CAISO Answer at 7.

[56] June 5 Filing at 12.

process to be considered use-limited by CAISO, with no explanation. The new proposed section 27.11 titled "Registration of Use-Limited Capacity" has no description of the registration process but simply refers potential registrants to the Business Practice Manual. It is unclear to us whether or not these deletions were intentional, but in any event they are unexplained.

38. In addition, the proposed tariff language indicates that limitations and restrictions established by statute, regulation, or ordinance will be honored, but CAISO fails to include in its proposed definition any specific examples of the statutes, regulations, or ordinances it will honor or the criteria it will use in making such determinations. Although an exhaustive list of specific regulations in the tariff may not be feasible, these examples are necessary for market participants to understand how CAISO determines what kinds of limits or restrictions in those statutes, regulations, or ordinances qualify a resource's capacity as use-limited, and how closely those limitations must be tied to a statute, regulation, or ordinance. Currently, a market participant would have to read CAISO's draft proposal, included as Attachment C to the June 5 Filing, to find out what may constitute a use-limitation acceptable to CAISO (with an emphasis that Attachment C contains a non-exhaustive list of examples) and even that draft proposal does not identify any specific statutes or regulations.[57] The Commission is concerned that this lack of clarity leaves CAISO with unfettered discretion to decide what qualifies as use-limited, and may lead to inconsistent and discriminatory treatment of those participants seeking use-limited status for their resources.

39. For the reasons described above, the Commission rejects the revisions related to use-limited resources, without prejudice to CAISO submitting a new section 205 filing that provides a comprehensive explanation of what it is proposing to change, how the changes impact the various categories of market participants, and the impact on customers. We further expect that any such filing would include a detailed explanation of how it will implement the changes given the protests raised herein. Given our rejection of these proposed revisions, the Commission dismisses as moot CAISO's request for waiver of the Commission's prior notice requirements to make the proposed tariff revisions related to use-limited resources effective March 1, 2016.

40. Because the Commission is rejecting the proposed use-limited capacity definition, we need not address at this time SDG&E's argument that it should receive opportunity costs. The Commission finds that PG&E's request that all storage resources be exempt from bid insertion and residual unit commitment is beyond the scope of this proceeding as the bid insertion rules and residual unit commitment rules are not being modified in

[57] June 5 Filing, Attachment C – Draft Final Proposal at 9.

this proceeding. As PG&E and CAISO both point out,[58] the Reliability Services Initiative filing is where CAISO has proposed the exemption of certain resources from bid insertion, as certain resource adequacy rules are dependent upon the use-limited definition.[59] In addition, CAISO has an ongoing stakeholder initiative that addresses the modeling and market functionality that is available to address storage resources' operational constraints and how those provisions may be enhanced. Specifically, the Energy Storage and Distributed Energy Resources Stakeholder Initiative that was initiated earlier this year indicates that it will address how CAISO uses state of charge in the market optimization and the initiative is scheduled to be concluded by the end of this year.[60] Based upon our understanding of what those two initiatives are intended to explore, storage residual unit commitment and bid insertion questions are relevant in those proceedings.

41. The Commission finds that WPTF's comments concern issues that are beyond the scope of this proceeding. CAISO did not propose to modify the components of the proxy cost mechanism, nor did its proposal address the inclusion of risk premiums in bids or developing mechanisms to make start-up and minimum load costs biddable. As such, those concerns need not be addressed in this proceeding. Last, based on WPTF's statement that it has "no objection to the specific resolutions" in the instant filing, WPTF has expressed no opposition to the proposed tariff provisions related to aligning transition costs with start-up costs.[61]

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[58] June 5 Filing, Attachment D – Board Memorandum Commitment Cost Phase 2 at 6; PG&E Comments at 5.

[59] *See supra* n. 34 at 23-25 (changes to existing must-offer rules to accommodate updated use-limited definition).

[60] *See* Energy Storage and Distributed Energy Resources Stakeholder Initiative at 7-8, at http://www.caiso.com/Documents/RevisedScopeSchedule-EnergyStorageDistributedEnergyResources.pdf. *See also* June 5 Filing, Attachment D – Board Memorandum Commitment Cost Phase 2 at 6.

[61] WPTF Protest at 3.

<u>The Commission orders</u>:

(A) CAISO's proposed tariff revisions are hereby accepted in part and rejected in part, with the accepted revisions to become effective September 15, 2015, as requested, as discussed in the body of this order.

(B) CAISO's request for waiver of the Commission's prior notice requirement is hereby dismissed as moot, as discussed in the body of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.