I. Background

California’s RA program, which CAISO administers jointly with the California Public Utilities Commission (CPUC) and other local regulatory authorities in the CAISO balancing authority area, seeks to secure sufficient capacity when and where needed to support the operation of the CAISO grid. CAISO explains that, through the RA program, load serving entities procure two main categories of RA capacity: generic RA capacity and flexible RA capacity. According to CAISO, resources providing generic RA capacity generally must submit either an economic bid or self-schedule 24 hours a day, seven days a week, although some resource types have less than a 24x7 must-offer


obligation. In contrast, CAISO explains, resources providing flexible RA capacity must submit economic bids and may not self-schedule for designated hours and days because flexible RA capacity meets CAISO’s need for the resource’s flexibility to ramp up and down as needed or start up and shut down potentially multiple times per day. CAISO states that, if the resource submits a self-schedule during the hours in which CAISO anticipates it will need this flexibility, it would cancel the benefit the resource was procured to provide. CAISO further explains that the hours and days in which a resource providing flexible capacity must submit an economic bid depend on the category of flexible capacity the resource provides: base ramping (Category 1); peak ramping (Category 2); and super-peak ramping (Category 3). CAISO states that Category 1 has the most stringent requirements and Category 3 has the least stringent requirements, with Category 2 falling in between.

According to CAISO, the amount of generic RA capacity and flexible RA capacity a resource can provide is established by that resource’s net qualifying capacity and effective flexible capacity value, respectively. CAISO states that the starting point of both calculations is the resource’s qualifying capacity value, which is set by the CPUC and other local regulatory authorities. The qualifying capacity value represents the maximum capacity a resource theoretically can provide. CAISO explains that, for thermal resources, the qualifying capacity value essentially is the unit’s nameplate capacity, but for other technology types such as wind and solar, the qualifying capacity value generally is based on statistical measures of the resource’s performance over time. To derive net qualifying capacity values, CAISO performs a deliverability assessment to determine how much of a resource’s qualifying capacity is deliverable to the aggregate CAISO load. CAISO states that the net qualifying capacity value is the qualifying capacity value adjusted downward to reflect those deliverability limitations. For effective flexible capacity values, CAISO explains that its Tariff provides a formula that incorporates a resource’s start-up time, ramp rate, and net qualifying capacity. The Tariff also provides technology-specific effective flexible capacity methodologies for hydroelectric, proxy demand response, energy storage, multi-stage generator, and combined heat and power resources that CAISO must use instead of the general formula.

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3 CAISO Transmittal at 2 (citing CAISO, CAISO eTariff, § 40.6.4, Availability Requirements for Resources with Operation Limits (15.0.0), § 40.6.4.1).

4 Id.

5 Id. at 2-3 (citing CAISO, CAISO eTariff, § 40.10.4, Effective Flexible Capacity (8.0.0), § 40.10.4.1).

6 Id.
CAISO states that it has two main mechanisms to ensure that resources providing RA capacity meet their must-offer obligation. First, CAISO submits cost-based bids on behalf of resources providing generic RA capacity that do not meet their RA must-offer obligation. CAISO explains that the generated bid helps ensure the CAISO market has access to energy from an RA resource even when that RA resource fails to bid as required. Second, through RAAIM, CAISO assesses non-availability charges and provides availability incentive payments to both generic and flexible RA resources based on whether their performance falls below or above, respectively, defined performance thresholds. CAISO states that its Tariff exempts certain resource types from bid generation and RAAIM. CAISO explains that the exemptions from bid generation, RAAIM, and the 24x7 generic RA must-offer obligation are not necessarily paired; a resource type can be exempt from one but still face the other two.

CAISO’s Tariff recognizes that certain limits may affect a resource’s ability to run. Pursuant to CAISO’s Tariff, a use-limited resource is a resource with at least one limit that meets three criteria: (1) the limit impacts the resource’s number of starts, run-hours, or output; (2) the CAISO market process that dispatches the resource cannot recognize the limit; and (3) the limit requires the resource to ration its limited starts, run hours, or output. Resources qualifying as use-limited resources are eligible for an opportunity cost adder to their commitment costs and energy bid costs to recognize the opportunity cost of using a limited start or run-hour now instead of later. CAISO states that its market optimization accounts for that opportunity cost and more optimally uses that resource’s limited availability. With the opportunity cost adder, use-limited resources have the generally applicable RA must-offer obligation.

CAISO’s Tariff also provides for resources that do not qualify for use-limited status but still face limitations preventing 24x7 availability that cannot be rationed through an opportunity cost. As an example, CAISO points to a gas resource with noise permit issues that prevent it from operating at night and early in the morning. According to CAISO, there is no opportunity cost the market can consider to optimize such a resource’s limitations. Such resources qualify as conditionally available resources,

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7 Id. at 3 (citing CAISO, CAISO eTariff, § 40.6.8, Use of Generated Bids (28.0.0), § 40.6.8(e); id., § 40.9.2, Exemptions (12.0.0)).

8 Id.

9 Id. at 4 (citing CAISO, CAISO eTariff, § 30.4.1 Start-Up and Minimum Load Costs (20.0.0), § 30.4.1.1.6.1.1).

10 Id.

11 Id. at 4-5.
which CAISO’s Tariff defines as a “resource that has one or more regulatory or operational limits that are not eligible Use Limits . . . and that faces frequent and recurring periods of unavailability because of those limitations.”\(^{12}\) CAISO explains that a resource can be both a use-limited resource and a conditionally available resource if some of its limitations cannot be accounted for through the opportunity cost calculations applicable to use-limited resources.\(^{13}\)

7. CAISO explains that it did not intend for its Tariff to provide any unique RAAIM treatment or exemption for conditionally available resources, but this intent is not clearly reflected in the Tariff. Specifically, under Tariff section 40.9.3.1(b), CAISO calculates RAAIM by comparing: (1) the MW of capacity a RA resource offered into the day-ahead and real-time market; and (2) the MW of capacity for which a resource held “a performance obligation to submit Economic Bids or Self-Schedules in the CAISO Markets under the must-offer requirements applicable under Section 40.6 on a given day.” CAISO explains that Tariff section 40.6 creates the “expected energy” must-offer obligation for conditionally available resources. According to CAISO, at least one market participant argued that if a conditionally available resource offered its expected energy into the market, then it should face no RAAIM exposure because the resource met its must-offer obligation under Tariff section 40.6. CAISO states that the purpose of the must-offer obligation is to ensure reliability in all hours of the day, which would not be achieved under the market participant’s interpretation; however, CAISO concedes that a plain reading of its Tariff provisions supports the market participant’s argument.\(^ {14}\)

II. **Instant Filing**

8. In this filing, CAISO proposes revisions to its Tariff modifying several aspects of its RA program. Specifically, CAISO proposes changes to the: (1) availability requirements and exemption status under RAAIM for resources with operational limitations that are not eligible use limits, referred to as conditionally available resources; (2) exemption status under RAAIM for run-of-river hydroelectric generators; (3) exemption status under RAAIM for storage-backed hydroelectric generators; and (4) methodology and process for determining how much flexible RA capacity a resource

\(^{12}\) CAISO, CAISO eTariff, app. A, Definitions, Conditionally Available Resource (0.0.0).

\(^{13}\) CAISO Transmittal at 5.

\(^{14}\) Id. at 5-6.
is eligible to provide. CAISO requests an effective date for its proposed revisions of July 1, 2020.

III. Notice and Responsive Pleadings

9. Notice of CAISO’s April 17, 2020 filing was published in the Federal Register, 85 Fed. Reg. 22,727 (Apr. 23, 2020), with interventions and protests due on or before May 8, 2020. Timely motions to intervene were filed by NRG Power Marketing LLC, Calpine Corporation, the California Department of Water Resources State Water Project, the Northern California Power Agency, Powerex Corp., the City of Santa Clara, California, Modesto Irrigation District, and the Cities of Anaheim, Azusa, Banning, Colton, Pasadena and Riverside, California. Southern California Edison Company (SoCal Edison) filed a timely motion to intervene and comments, and Pacific Gas & Electric Company (PG&E) filed a timely motion to intervene and protest. The CPUC filed a notice of intervention. On May 26, 2020, CAISO filed an answer to PG&E’s protest.

IV. Discussion

A. Procedural Matters

10. Pursuant to Rule 214 of the Commission’s Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2019), the notice of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

11. Rule 213(a)(2) of the Commission’s Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2019), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We accept CAISO’s answer because it has provided information that assisted us in our decision-making process.

B. Substantive Matters

12. CAISO proposes to revise its Tariff to modify certain aspects of its RA program. As discussed below, we accept CAISO’s proposed Tariff revisions, effective July 1, 2020, as requested.

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15 CAISO states that the first three elements of its filing are interdependent and should be evaluated as a complete package, but the fourth category is discrete and severable from the other three elements. Id. at 1-2.

16 Id. at 2.
1. **Availability Requirements for Conditionally Available RA Resources**

   a. **CAISO Proposal**

13. CAISO proposes to amend section 40.9.3.1(b)(2) of its Tariff to clarify that RA resources subject to the expected energy must-offer obligation in Tariff section 40.6.4.1 will be subject to RAAIM for the RA capacity they show in the RA process as if they had the standard 24x7 RA must-offer obligation. CAISO explains that this amendment memorializes its original policy intent that conditionally available resources enjoy the expected energy must-offer obligation but not special RAAIM treatment. CAISO states that ensuring that conditionally available resources are subject to RAAIM serves the two purposes for which RAAIM was created: (1) incentivizing resources providing RA capacity to participate in the market to the greatest degree possible; and (2) signaling load serving entities to consider a resource’s performance and availability when making procurement decisions, which should foster procurement of better performing resources. CAISO states that if a resource expects it will face RAAIM charges, all else being equal, it would need to contract for a higher capacity payment from its load serving entity counterparty to account for the anticipated charges. CAISO explains that this makes a lower-performing capacity resource relatively more expensive than a comparable resource that need not factor in expected RAAIM charges in bilateral RA contract negotiations. CAISO states that exposing conditionally available resources to RAAIM also follows CAISO’s need to grant only limited exemptions from RAAIM.\(^{17}\)

14. CAISO also proposes to limit the scope of resources subject to the expected energy must-offer obligation in Tariff section 40.6.4.1 and make several conforming changes to Tariff sections 40.6.4.2 and 40.6.4.3. CAISO explains that currently, hydroelectric units, pumping load, non-dispatchable resources, and conditionally available resources can receive this special treatment by default. CAISO proposes to amend Tariff section 40.6.4.1 to restrict application of the expected energy must-offer obligation to conditionally available resources and resources that qualify for the new run-of-river resource category, discussed below. CAISO contends that limiting the categories of resources is not necessarily meant to limit the absolute number of resources that qualify for the expected energy must-offer obligation. CAISO explains that it anticipates these resources could qualify as a conditionally available resource if they applied. According to CAISO, by having them apply and having their must-offer obligation set by their registration, rather than their fuel type or inherent operating type, CAISO will have a clearer picture of which resources operate under a special requirement. CAISO states

\(^{17}\) CAISO Transmittal at 7-8.
that having fewer exemption categories also makes the RA rules less complex, which benefits both CAISO and its market participants.\(^{18}\)

15. CAISO also notes that, consistent with existing requirements, any resource that holds the expected energy must-offer obligation must report to CAISO any outage or derate.\(^{19}\) CAISO explains that this generally applicable rule applies irrespective of RA status, and absent a reported outage, CAISO will assume that the resource is available for its full RA capacity.\(^{20}\)

16. CAISO states that, consistent with the proposed changes in Tariff section 40.6.4.1, it proposes to remove references to hydroelectric generating units and non-dispatchable resources from Tariff section 40.6.4.2, which establishes the bidding obligations into the residual unit commitment process for resources that hold the expected energy must-offer obligations defined in Tariff section 40.6.4.1, and add a reference to run-of-river resources.\(^{21}\)

b. Comments

17. PG&E protests two discrete aspects of CAISO’s proposal regarding availability requirements for conditionally available RA resources. PG&E asserts that CAISO’s proposal to eliminate the expected available energy must-offer obligation as the default for all hydroelectric resources will create an operational burden for PG&E and other owners of storage-backed hydroelectric resources, with no demonstrable added value. PG&E contends that this proposed Tariff change will effectively require scheduling coordinators to submit outage cards for all hydroelectric resources to reflect water availability variance over the day, which creates a substantial burden. PG&E asserts that this is an onerous process, and one that requires information that PG&E may be unable to

\(^{18}\) Id. at 8-9.

\(^{19}\) Id. at 9 (citing CAISO, CAISO eTariff, § 9.3.2, Requirement for Approval (2.0.0); id., § 9.3.10, Forced Outages (8.0.0), § 9.3.10.3).

\(^{20}\) Id.

\(^{21}\) CAISO explains that it is not proposing to remove pumping load from section 40.6.4.2 because that resource type cannot participate in the residual unit commitment process. CAISO also proposes to revise Tariff section 40.6.4.3 to clarify that the must-offer obligation for participating load that is pumping load is limited to submitting, for hours where underlying load permits, non-spin ancillary services bids and/or a submission to self-provide non-spin ancillary services in the day-ahead market and economic bids for energy in the real-time market for its non-spinning reserve capacity that receives an ancillary service award in the day-ahead market. Id.
obtain from certain resources, such as from qualifying facilities. PG&E states that CAISO has not offered a sufficient reason to change this portion of the Tariff and, given the additional burden it will create, this change should be rejected.22

18. PG&E does not specifically discuss CAISO’s proposal to amend Tariff section 40.9.3.1(b)(2) to clarify the availability requirements for conditionally available RA resources. However, in the context of its objections to CAISO’s stopgap proposal to implement changes to the RAAIM status for storage-backed hydroelectric resource on an interim basis, discussed below, PG&E asks the Commission to require CAISO to revise proposed Tariff section 40.9.3.1(b)(2) to specify that it only applies to storage-backed hydroelectric resources beginning on January 1, 2021.23

c. CAISO Answer

19. CAISO states that PG&E’s concerns about the amendments to Tariff section 40.6.4.1 are misguided in two ways. First, CAISO states that the RA must-offer obligation is a wholly separate issue from outage reporting obligations. CAISO asserts that an amendment to section 40.6.4.1 does not override generally applicable outage reporting rules in section 9 of the Tariff. Second, CAISO explains that assuming the expected energy must-offer obligation conferred an outage reporting exemption, most of the resources that are losing default qualification for the expected energy must-offer obligation could register as a conditionally available resource. CAISO contends that, if there is any new burden, it is only the burden of having to register for conditionally available resource status, which is limited given that this is a streamlined one-time process for impacted resources.24

d. Determination

20. We find CAISO’s proposal to apply RAAIM to the full qualifying capacity for conditionally available resources to be just and reasonable and accordingly accept it. As CAISO notes, its proposal aligns with the reasons for which RAAIM was created in that it will incentivize resources to participate in the market to the greatest degree possible and will signal to load serving entities to consider a resource’s performance and availability when making procurement decisions. This modification should improve the ability of RAAIM to incentivize optimal performance of RA resources and should encourage load serving entities to acquire better performing RA capacity.

22 PG&E Protest at 5-6.

23 Id. at 5.

24 CAISO Answer at 7-8.
21. We also accept CAISO’s proposal to require resources to register as conditionally available resources in order to qualify for the expected energy must-offer obligation. We find that this is a reasonable requirement that will give CAISO a clearer picture of the resources under the expected energy must-offer obligation and will make RA rules less complex.

22. We disagree with PG&E that CAISO’s proposal will create an excessive burden for the owners of hydroelectric resources. As CAISO notes, it is not proposing to change the outage reporting rules under its Tariff. Thus, in order to retain their existing status with regard to outage reporting, resource owners would only need to apply to become conditionally available resources. CAISO states that its intent is not to reduce the absolute number of resources subject to the expected energy must-offer obligation and PG&E has not indicated that any hydroelectric resources that would be burdened by additional outage reports would be unable to qualify as a conditionally available resource. As such, any representation that CAISO’s proposal will excessively burden the owners of hydroelectric resources is speculative and unsupported. Accordingly, we accept CAISO’s proposal, effective July 1, 2020, as requested.

2. RAAIM Status for Run-of-River Hydroelectric Resources

a. CAISO Proposal

23. CAISO proposes to revise its Tariff to provide a RAAIM exemption for run-of-river hydroelectric resources. CAISO explains that run-of-river resources cannot be treated as variable energy resources under its Tariff because CAISO cannot forecast power production for run-of-river resources based on hydrological conditions in the same way it creates production forecasts for wind and solar resources based on meteorological data. However, CAISO states that run-of-river resources are sufficiently similar to wind and solar in other relevant respects to merit a RAAIM exemption, notwithstanding the above-noted interest in limiting such exemptions. Accordingly, CAISO proposes to define the term “Run-of-River Resource” in Appendix A of the CAISO Tariff and amend Tariff section 40.9.2(b)(1) to exempt such resources from RAAIM when providing local or system RA capacity.

25 CAISO proposes to define a Run-of-River Resource as “A hydroelectric Generating Unit that has demonstrated to the CAISO’s reasonable satisfaction that it 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.” CAISO, CAISO eTariff, app. A, Definitions, Run-of-River Resource (0.0.0).

26 Id., § 40.9.2, Exemptions (13.0.0), § 40.9.2(b)(1); CAISO Transmittal at 9-10.
24. CAISO explains that run-of-river resources face variability in their fuel source, and thus in their output, that is beyond their control. Accordingly, RAAIM does not necessarily create performance incentives for run-of-river resources. According to CAISO, for run-of-river resources, the qualifying capacity value, which is the basis for the amount of RA capacity for which a unit may be shown, is based on three-year historical performance, not a nameplate value. CAISO asserts that this approach is similar to the effective load carrying capability methodology used to establish the qualifying capacity for wind and solar resources. CAISO states that, as with wind and solar resources, a run-of-river resource’s poor performance in the past will reduce its future qualifying capacity value, which creates an incentive, independent of RAAIM, for a run-of-river resource to maximize its performance. CAISO states that, for these resources, RAAIM is also unnecessary to send signals regarding their relative value in meeting capacity needs because the qualifying capacity is already set based on prior performance, and that lowered qualifying capacity already sends the appropriate signals. CAISO proposes that run-of-river resources only be exempt from RAAIM when providing system or local capacity; they will still be subject to RAAIM if they qualify to provide flexible RA capacity. CAISO explains that, because variable energy resources are not exempt when providing flexible RA capacity, CAISO is not proposing to exempt run-of-river resources from RAAIM if they provide flexible RA capacity either.

27 CAISO Transmittal at 10.

28 Id. at 10-11.

29 PG&E Protest at 6.

b. Comments

25. PG&E supports CAISO’s proposal to provide a RAAIM exemption for run-of-river hydroelectric resources as well supported and reasonable.

c. Determination

26. We find that CAISO’s proposed revisions to its Tariff to provide an exemption from RAAIM for run-of-river hydroelectric resources providing system or general RA capacity are just and reasonable. The revisions appropriately recognize the fact that run-of-river hydroelectric resources face variability in their fuel source – and associated output – that is beyond their control. We agree with CAISO that RAAIM does not necessarily create performance incentives for run-of-river hydroelectric resources. Instead, run-of-river hydroelectric resources have an incentive outside of RAAIM to maximize their performance because a run-of-river resource’s poor performance in the past will reduce its future qualifying capacity value. Accordingly, we accept CAISO’s
proposed revisions to Appendix A and section 40.9.2(b)(1) of its Tariff, effective July 1, 2020, as requested.

3. RAAIM Status for Storage-Backed Hydroelectric Resources

a. CAISO Proposal

27. CAISO states that some stakeholders expressed concern about losing a RAAIM exemption for storage-backed hydroelectric resources. CAISO notes that stakeholders explained that the limitations that qualify them for conditionally available resource status are exogenous fuel limitations that cannot be controlled and that RAAIM is inappropriate because it does not establish performance incentives. CAISO notes that, for example, the opportunity cost model can optimize the limited run hours a hydroelectric resource may have given its water storage, but that CAISO cannot calculate opportunity costs where a resource is limited because of environmental regulations.

28. CAISO states that it worked with these stakeholders and the CPUC to develop an alternate qualifying capacity methodology because, given the limitations faced by these resources, all parties agreed that their qualifying capacity was overstated. CAISO states that the alternate qualifying capacity methodology would discount the RA capacity of a hydroelectric resource based on that resource’s expected production in years with limited precipitation. CAISO expects the CPUC to issue an order adopting these changes effective January 1, 2021.

29. As a result of this discounted RA capacity, CAISO proposes to grant a limited RAAIM exemption for all storage-backed hydroelectric resources whose qualifying capacity is set under the new methodology. Resources subject to the discounted qualifying capacity could take a RAAIM exempt outage when necessary for management of water-related operational or regulatory limitations.

30 CAISO, CAISO eTariff, app. A, Definitions, Run-of-River Resource (0.0.0); id., § 40.9.2, Exemptions (13.0.0), § 40.9.2(b)(1).

31 CAISO Transmittal at 12.

32 Id. at 13.

33 Id.

34 Id.

35 Id. at 14.
30. However, CAISO notes that the new qualifying capacity values would not be in place until January 1, 2021. Therefore, to cover the gap between July 1, 2020 (when these resources would be subject to the enhanced RA AIM obligation) and January 1, 2021 (when their qualifying capacities would be discounted), CAISO proposes a six month stopgap proposal that would sunset on December 31, 2020. Under this stopgap proposal, any storage-backed hydroelectric resource that can demonstrate to CAISO’s reasonable satisfaction that it is only showing the resource for the capacity value either that it would hold under the new methodology or that is supported by actual hydrological conditions would be able to take the RA AIM exempt outage.

31. CAISO states that this approach is just and reasonable and benefits both CAISO and the affected generators. CAISO notes that an enhanced counting methodology would provide it with a more realistic view of its capacity and that market participants would have greater certainty about their RA AIM exposure.

b. Comments

32. SoCal Edison supports CAISO’s proposal, asserting that it improves the RA program and resolves issues with RA AIM exposure for storage-backed hydroelectric resources for the balance of 2020. According to SoCal Edison, some resources, such as storage-backed hydroelectric resources, have significant underlying complexity in the representation of their limitations, including flow requirements, environmental standards, water rights, resource configurations, and regulatory requirements, which are not accommodated by CAISO’s existing Tariff. SoCal Edison states that CAISO has found storage-backed hydroelectric resources infeasible to model given these complexities, which precludes storage-backed hydroelectric resources from being registered as use-limited and instead commits them as conditionally available resources that face RA AIM exposure. According to SoCal Edison, CAISO recognizes the shortfalls of this approach, and its proposal to provide a limited RA AIM exemption for resources with qualifying capacities set under the alternate counting rule for the gap period of July 1, 2020 through December 31, 2020 is an enhancement of accurate representation of limitations to CAISO.

33. PG&E asserts that CAISO’s proposed stopgap measure for storage-backed hydroelectric resources is unnecessary and would create regulatory uncertainty for market

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36 Id. at 15.

37 Id. at 14.

38 SoCal Edison Comments at 3.

39 Id. at 4-5.
participants. PG&E contends that this proposal is unnecessary because the issue is being addressed in a CPUC proceeding and necessary modifications to RA values for storage-backed hydroelectric resources will likely be adopted in June 2020 and implemented for the 2021 RA year.\footnote{PG&E Protest at 3.} PG&E asserts that implementing potential changes to a resource’s RA value in the middle of the year may conflict with regulatory and contractual obligations already assumed on behalf of the affected capacity and effectively increases impacted local area RA requirements. PG&E states that, whether as a load serving entity or as a resource owner, it may not be able to adjust its regulatory or procurement obligations over the latter half of the year to avail itself of the proposed means of obtaining protection from RAAIM for conditionally available resources. PG&E contends that load serving entities generally plan for RA on an annual basis such that changing the RA value of a resource in the middle of the year could have a significant and detrimental impact on that planning. PG&E also asserts that this mid-year proposal creates uncertainty because CAISO has not established how it would calculate alternative RA values for the balance of 2020 and its proposed language provides it too much discretion. PG&E states that, unless CAISO is able to justify a substantial and imminent safety and/or reliability impact, the Commission should reject CAISO’s proposal and require CAISO to remove the gap period provided in Tariff section 40.9.3.4(d).\footnote{Id. at 4-5.}

\subsection*{CAISO Answer}

34. CAISO states that PG&E ignores that CAISO is not unilaterally imposing the proposed change on scheduling coordinators but is merely providing scheduling coordinators with an option they can choose to exercise. According to CAISO, if PG&E or any other scheduling coordinator for a storage-backed hydroelectric resource does not wish to lower its capacity voluntarily to reflect historical or actual hydrological conditions in exchange for a RAAIM exemption, then it does not have to do so. CAISO explains that, under the CAISO Tariff, a generator providing RA capacity is always in control of how much RA capacity it chooses to supply through the RA showings process.\footnote{CAISO Answer at 5.}

35. Similarly, CAISO explains, the proposed change does not override existing bilateral capacity procurement arrangements or obligations. If a resource were contractually obligated to provide more capacity than it believes it can provide based on historical or actual hydrological conditions, it could choose between (a) showing itself for its full qualifying capacity through the RA process and exposing itself to RAAIM charges...
for the expected amount of unavailable capacity, or (b) derating its capacity and having a RAAIM exemption. CAISO asserts that its proposal does not compel either choice.\footnote{Id. at 5-6.}

36. CAISO also states that it will include the details of how it would review proposed capacity derates in a business practice manual, and that it would accept any capacity derates that reflect a reasonable application of the expected CPUC methodology, which is straightforward. CAISO explains that a resource also could demonstrate that its 2020 hydrological status would permit it to provide more capacity than the amount determined based on historical review, though given the limited precipitation in California thus far in 2020, CAISO expects few resources to exercise this option.\footnote{Id. at 6.}

d. **Determination**

37. We find CAISO’s proposal to grant a RAAIM exempt outage to storage-backed hydroelectric resources whose qualifying capacity has been discounted by the new CPUC counting rules to be just and reasonable. As CAISO notes, the proposal is mutually beneficial to both CAISO and the affected generators as it allows CAISO to have a more realistic picture of the RA capacity available to it and allows hydroelectric resources to have more certainty about their exposure under RAAIM. CAISO’s proposal is also consistent with the purpose of RAAIM, under which RA resources are assessed non-availability charges or are provided incentive payments based on whether their performance falls below or above performance thresholds, because it limits the exemption to situations where non-performance is beyond the control of the resource.

38. We similarly find CAISO’s six-month stopgap proposal to be just and reasonable. This proposal will give storage-backed hydroelectric resources flexibility in dealing with the enhanced RAAIM obligation while giving CAISO a more realistic picture of the RA capacity available to it for the remainder of the year. No party disputes CAISO’s assertion that the RA capacity of certain hydroelectric resources may currently be overstated. Allowing load-serving entities to satisfy their RA obligations using overstated capacity values could undermine the effectiveness of the RA program, as CAISO relies on RA capacity to meet reliability and other needs in its balancing authority area. It is therefore important that CAISO have an accurate count of the RA capacity available to it, and its proposal will help achieve that goal. In addition to inhibiting the ability of CAISO to meet reliability and other needs over the remainder of the year, overstated RA capacity may impose costs on other market participants to the extent CAISO determines that it must acquire backstop capacity to replace it. While we recognize that CAISO’s proposal could create short-term uncertainty for some load-
serving entities’ RA plans, we nonetheless find that, on balance, CAISO’s proposal is just and reasonable.

39. We disagree with PG&E that the proposed stopgap Tariff provision is unclear or provides CAISO undue discretion. CAISO proposes to grant the RAAIM exempt outage to the extent a resource can demonstrate to CAISO’s reasonable satisfaction that it is only showing the resource for the capacity value either that it would hold under the new methodology or that is supported by actual hydrological conditions. As CAISO notes, both CAISO and the owners of hydroelectric resources have been involved in developing the new methodology as part of the CPUC proceeding, and so the methodology that should be used to develop the new RA values should be clear to all parties involved. We find that CAISO’s proposal gives it a reasonable amount of discretion in these circumstances. Accordingly, we accept CAISO’s proposal, effective July 1, 2020, as requested.

4. **Clarifications in Rules Governing how Resources can Provide Flexible RA Capacity**

a. **CAISO Proposal**

40. CAISO proposes four amendments to Tariff sections 40.10.4.1 and 40.10.4.2, which establish how CAISO calculates resources’ effective flexible capacity values. Specifically, CAISO proposes to revise: (1) Tariff section 40.10.4.1(a)(2), which describes how CAISO calculates the effective flexible capacity of a resource with a start-up time at or below 90 minutes; (2) Tariff section 40.10.4.1(b), which addresses how CAISO calculates effective flexible capacity for hydroelectric resources; (3) Tariff section 40.10.4.1(f), which addresses how CAISO calculates effective flexible capacity for combined heat and power resources; and (4) Tariff section 40.10.4.2(a), which addresses the CAISO process for posting the draft list of effective flexible capacity values. CAISO states that these amendments are non-substantive, clarifying edits that correct inadvertent errors and inconsistencies in the filed Tariff and do not materially change established policies or the rights and obligations of CAISO or its market participants.

b. **Determination**

41. We find that CAISO’s unopposed proposed revisions to Tariff sections 40.10.4.1(a)(2), 40.10.4.1(b), 40.10.4.1(f), and 40.10.4.2(a) provide additional clarity regarding how CAISO calculates resources’ effective flexible capacity values that will

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45 CAISO Transmittal at 15-16.

46 Id. at 1, 15-16.
benefit resource owners and scheduling coordinators by increasing transparency. Accordingly, we accept CAISO’s proposed revisions, effective July 1, 2020, as requested.

The Commission orders:

CAISO’s April 17, 2020 filing is hereby accepted, effective July 1, 2020, as requested, as discussed in the body of this order.

By the Commission.

( S E A L )

Nathaniel J. Davis, Sr.,
Deputy Secretary.