January 12, 2018

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: California Independent System Operator Corporation
Docket No. ER18-______-000

Tariff Amendment to Improve the Risk of Retirement Capacity Procurement Mechanism

Dear Secretary Bose:

The California Independent System Operator Corporation (CAISO) submits this tariff amendment to implement revisions to improve the risk of retirement (ROR) provisions of its capacity procurement mechanism (CPM).[1] The CAISO is retaining a number of key features of the existing ROR CPM framework, but proposes several incremental modifications that will make it more efficient, workable, and fair. The revised ROR CPM framework will enhance the CAISO's ability to maintain grid reliability.

The CAISO respectfully requests that the Commission issue an order approving the proposed tariff revisions by April 12, 2018, for an effective date of April 13, 2018. That will provide the CAISO with sufficient time to open the first ROR CPM request window pursuant to the proposed tariff revisions by May 1, 2018.

I. Executive Summary

The risk of retirement of generation needed for reliability has been, and remains, a significant concern to the CAISO. The number of resources interconnecting to the CAISO controlled grid has increased dramatically and is expected to grow further, largely due to the addition of resources necessary to meet California's Renewables Portfolio Standard (RPS).[2] At the same time,

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[1] The CAISO submits this filing under Section 205 of the Federal Power Act, 16 USC § 824d, Part 35 of the Commission's Regulations, 18 C.F.R. § 35, *et seq.,* and rules 207 and 602 of the Commission's Rules of Practice and Procedure, 18 CFR §§ 385.207 and 385.602. The capitalized terms not otherwise defined have the meanings as specified in the CAISO tariff.

[2] See http://www.cpuc.ca.gov/RPS_Homepage/.

market prices and the revenues necessary to cover the costs of existing resources have both decreased, a trend expected to continue. These developments, and the risks they present, have been well documented by the CAISO and other entities in California.[3] Under these circumstances, it is important that the ROR CPM be as effective as possible to ensure that resources the CAISO needs to maintain system reliability and to integrate renewable energy resources remain operational.

The CAISO's ROR CPM provisions, which were first implemented in 2011, permit the CAISO to procure a resource needed for reliability that does not have a resource adequacy (RA) contract in the current or imminent resource adequacy compliance year.[4] Based on concerns raised before and during the stakeholder process that resulted in this filing, the CAISO has determined that it is appropriate to make certain incremental and targeted improvements to the ROR CPM provisions.

First, the existing process for the CAISO potentially to issue ROR CPM designations for the upcoming resource adequacy compliance year to qualifying resources at risk of retirement does not give resource owners sufficient lead time to make significant business decisions regarding expenditures required if a resource will continue operating or preparations for retirement if the resource will retire. Under the existing process, resource owners cannot learn until the end of the current year at the earliest whether they are eligible to receive an ROR CPM designation for the upcoming year. Resource owners stressed that this makes timely planning, maintenance, staffing, and potential decommissioning decisions

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[3] *See, e.g.*, CAISO 2016-2017 Transmission Plan at 205-19 (Mar. 17, 2017), available at http://www.caiso.com/Documents/Board-Approved_2016-2017TransmissionPlan.pdf; CAISO Presentation, Risks of Early Economic Retirement of Gas-Fired Generation – Sensitivities of the 2017-2017 TPP Studies, *passim* (Sept. 21, 2017), at pages 117-37 of the PDF document available at http://www.caiso.com/Documents/Day2_ISO-Presentation_2017-2018TransmissionPlanningProcess_PreliminaryReliabilityResults.pdf; CAISO Department of Market Monitoring 2016 Annual Report on Market Issues & Performance at 15-16, 47-51 (May 8, 2017), available at http://www.caiso.com/Documents/2016AnnualReportonMarketIssuesandPerformance.pdf; California Energy Commission workshop with the California Public Utilities Commission (CPUC) and CAISO (Joint Workshop) regarding *Risk of Economic Retirement for California Power Plants*, the transcript of which is available at: http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-14/TN217616_20170516T131659_Transcript_of_04242017_Joint_Agency_IEPR_Workshop_on_Risk_of_Ec.pdf;

California Energy Commission, 2017 Draft Integrated Energy Policy Report at 102 (Oct. 16, 2017), available at http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-01/TN221520_20171016T153945_Draft_2017_Integrated_Energy_Policy_Report.pdf; Comments of Southern California Edison Company, Pacific Gas and Electric Company, and San Diego Gas & Electric Company on the Order Instituting Rulemaking to Oversee the Resource Adequacy Program, California Public Utilities Commission Rulemaking Proceeding No. 17-09-020, at 2-3 (Oct. 30, 2017), available at http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M198/K355/198355179.PDF.

[4] *See Cal. Indep. Sys. Operator Corp.*, 134 FERC ¶ 61,211 (2011) (March 2011 Order).

problematic, and the CAISO agrees. Also, the late timing of ROR CPM notifications for an upcoming resource adequacy compliance year can cause uncontracted resources that the CAISO ultimately determines are not needed for reliability to operate uneconomically for a longer period than is necessary before they can be decommissioned and retire. Therefore, the CAISO determined that it should improve the existing designation process to allow it to signal earlier in the year its intent to issue an ROR CPM designation to a resource for the upcoming year, thus addressing the valid issues raised by resource owners. Providing an earlier signal regarding a resource's need can also prevent unnecessary over-procurement.

The CAISO proposes to implement two annual windows for requesting ROR CPM designations, one several months into the year and the other near the end of the year after load serving entities (LSEs) have submitted their annual resource adequacy showings for the upcoming year.[5] In the first window, resource owners can request ROR CPM designations for the remainder of the current year and/or for the upcoming year. In the second window, resource owners can request ROR CPM designations for the upcoming year. The new two-window process will allow for a more orderly and efficient ROR CPM designation procedures for the CAISO, resource owners, stakeholders, and the LSEs that have the opportunity to procure sufficient capacity from the resources to keep them from being issued ROR CPM designations. In particular, it will facilitate more efficient resource procurement and retirement.

Some participants in the stakeholder process expressed concern that significant numbers of resource owners might choose to seek ROR CPM designations for the upcoming year in the first of the two windows, thus undermining or unduly interfering with the resource adequacy program by impacting procurement and prices in the resource adequacy market. To mitigate any such potential "front-running" effect, the CAISO determined that it should implement the following measures in the ROR CPM process:

- A resource owner requesting an ROR CPM designation for its resource for the upcoming year in the first request window must make a reasonable effort to participate in all applicable LSE procurement efforts for that year; and

- The CAISO must determine that the resource is uniquely situated as the only one that can meet the identified reliability need as a condition for issuing the requested designation, *i.e.*, there is no competing or alternative

[5] The CAISO also proposes several tariff revisions associated with the new two-annual-window process, which are described below. In addition, the CAISO proposes other changes to clarify certain ROR CPM provisions, fill some gaps in the existing tariff, and maximize the benefits of ROR CPM designations for ratepayers.

resource that LSEs could otherwise procure in the RA process.[6]

In addition, the CAISO proposes to require all resource owners receiving an ROR CPM designation to seek, in a filing submitted to the Commission, cost-based compensation determined in accordance with the existing methodology for calculating the annual fixed revenue requirement of a reliability must-run (RMR) unit as set forth in Attachment F of the *pro forma* RMR Agreement.[7] This is one of the two means the CAISO tariff currently provides for compensating a resource with an ROR CPM designation. Given the other revisions the CAISO proposes in this filing, fixed cost recovery is a more appropriate means of compensation than the other existing tariff option, *i.e.,* market-based compensation up to the level of the CPM soft offer cap. Resources with ROR CPM designations are akin to RMR units in that each is needed for reliability on a resource-specific basis, and the existing RMR-based fixed-cost compensation methodology will permit just and reasonable cost recovery for resources receiving ROR CPM designations. The CAISO's Department of Market Monitoring, and other stakeholders emphasized that cost-based compensation for such resources would mitigate any potential "front running" effects of the first request window.

The CAISO also proposes to revise the attestation requirement for ROR CPM applicants to provide if the CAISO does not award an ROR CPM designation to a resource, it is not required to retire if it (1) is sold to a non-affiliated entity, (2) receives an RA contract, or (3) is procured by the CAISO through CPM, RMR, or some other backstop procurement mechanism. This recognizes that resource owners may be able to accept one of these limited legitimate business opportunities.

Even though the CAISO is proposing several changes to the ROR CPM framework, the CAISO is retaining the fundamental CPM principle, that LSEs will have an opportunity to procure any needed resource before the CAISO can procure it using an ROR CPM designation. ROR CPM designations will remain a backstop procurement mechanism of last resort.

The stakeholder process for this tariff amendment was at times contentious, and the comments submitted in response to this filing may well reflect those types of diverse views. However, the CAISO developed the proposed tariff revisions with the differing stakeholder positions, as well as the needs of the CAISO, in mind. In sum, the tariff revisions constitute a set of just

[6] If the CAISO rejects resource's request for an ROR CPM designation, the resource owner must submit a plan to the CAISO for retiring the resource. This requirement applies to resource owners that request ROR CPM designations in both request windows, but it can also deter any rush by resource owners to "front-run" the RA process.

[7] Appendix G, *pro forma* Reliability Must-Run Agreement, to the CAISO tariff.

and reasonable changes the CAISO developed to balance these various considerations, while producing a more effective, efficient, and fair ROR CPM framework.[8] Attempting to implement, for example, only the tariff revisions that resource owners may favor, or alternatively, only the tariff revisions that LSEs may favor, would fundamentally upset that balance and produce a less harmonious and less optimal result. Therefore, the Commission should accept in its entirety the set of tariff revisions the CAISO proposes.[9]

Some stakeholders have asserted that the most effective way to resolve the issues these tariff revisions are intended to address would be to change the timing of LSEs' resource adequacy procurement and the deadlines for LSEs to submit their annual resource adequacy plans. However, a change of that magnitude would constitute a significant modification to the resource adequacy paradigm and require an extensive effort and coordination among the CAISO, the California Public Utilities Commission (CPUC), and all local regulatory authorities. The CAISO notes that the CPUC has recently initiated a proceeding to examine, among other things, whether to change the basic structure of the RA program.[10] Any change to the RA timelines, however, would likely take years to implement. The issues this filing seeks to address exist now, and can and should be addressed now to the extent practicable. Pending any large-scale reforms in the resource adequacy program, the CAISO's proposed tariff revisions constitute a modest, incremental, and workable improvement that can help alleviate resource owners' concerns without undermining the existing resource adequacy process.

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[8] *See, e.g.*, *Cal. Indep. Sys. Operator Corp.*, 145 FERC ¶ 61,082, at P 23 (2013) (finding that CAISO tariff revisions strike "a reasonable balance between preventing the exercise of market power and enabling the recovery of costs"); *Cal. Indep. Sys. Operator Corp.*, 127 FERC ¶ 61,178, at P 27 (2009) (explaining that CAISO tariff revisions "strike a reasonable balance that addresses the barriers to development of location-constrained resources, while providing appropriate ratepayer protections to ensure that rates remain just and reasonable"); *ISO New Eng. Inc. and New Eng. Power Pool Participants Comm.*, 155 FERC ¶ 61,023, at P 36 (2016) (find that tariff revisions "struck an appropriate balance of competing interests").

[9] The matter before the Commission is to determine if the CAISO's proposal – and not any alternative proposal that might be suggested – is just and reasonable. "Pursuant to section 205 of the [Federal Power Act], the Commission limits its evaluation of a utility's proposed tariff revisions to an inquiry into 'whether the rates proposed by a utility are reasonable – and not to extend to determining whether a proposed rate schedule is more or less reasonable to alternative rate designs.'" *Cal. Indep. Sys. Operator Corp.*, 141 FERC ¶ 61,135, at P 44 n.43 (2012), quoting *City of Bethany v. FERC*, 727 F.2d 1131, 1136 (D.C. 1984). Therefore, "[u]pon finding that CAISO's proposal is just and reasonable, [the Commission] need not consider the merits of alternative proposals." *Id.* That is the case here.

[10] *Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Local and Flexible Procurement Obligations for the 2019 and 2020 Compliance Years*, CPUC Docket No. R-17-09-020 (Sept. 28, 2017).

II. Background

A. The CAISO's Existing ROR CPM Provisions

1. Implementing the ROR CPM

The CAISO tariff includes resource adequacy provisions to ensure that sufficient resources are available when and where needed to serve load, meet appropriate reserve requirements, and support reliable operation of the CAISO controlled grid.[11] There nevertheless may be circumstances in which the resource adequacy capacity procured by LSEs may be inadequate to fulfill the CAISO's operational needs and enable it to meet applicable reliability criteria. The CAISO tariff provides the CAISO with authority to designate backstop capacity pursuant to its CPM provisions to address such circumstances.[12]

On December 1, 2010, the CAISO filed tariff revisions in Docket No. ER11-2256 to replace the expiring Interim Capacity Procurement Mechanism with the CPM. The CAISO proposed to enhance its existing backstop procurement framework by adding the ROR CPM as a new category of CPM procurement in tariff section 43.2.6.[13] The ROR CPM tariff provisions would permit the CAISO to procure the capacity of a non-RA resource that has demonstrated its plans to retire because it will be uneconomic for the resource to remain in service because it has not been procured for the current or imminent (*i.e.,* upcoming) resource adequacy compliance year, but whose operation the CAISO needs to meet operational or reliability needs by the end of the calendar year following the year in which the resource is at risk of

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[11] Existing tariff section 40, *et seq.* For the sake of clarity, this filing distinguishes between existing tariff sections (*i.e.*, sections in the existing CAISO tariff), revised tariff sections (*i.e.*, sections in the existing tariff that the CAISO proposes to revise in this filing), and proposed tariff sections (*i.e.*, new tariff sections that the CAISO proposes to add in this filing).

[12] Existing tariff section 43A, *et seq.* The Commission has explained that "[w]hile the resource adequacy program provides the primary means for CAISO to ensure that needed resources are available, we believe that the risk of retirement category will provide CAISO with an additional, last resort tool to address reliability needs, particularly as the makeup of generation resources changes over time." March 2011 Order at P 124.

[13] In a 2015 tariff amendment filed and accepted in Docket No. ER15-1783, the CAISO moved all CPM tariff provisions from section 43 to section 43A of the CAISO tariff. *Cal. Indep. Sys. Operator Corp.,* 153 FERC ¶ 61,001 (2015) (October 2015 Order), Thus, the ROR CPM tariff provisions currently reside in CAISO tariff section 43A.2.6. In addition to its ROR CPM authority, the CAISO may also designate CPM capacity due to: (1) insufficient local capacity area resources in an annual or monthly resource adequacy plan; (2) a collective deficiency in local capacity area resources; (3) insufficient resource adequacy resources in the annual monthly resource adequacy plan of a load-serving entity; (4) a CPM significant event; (5) a reliability or operational need for an exceptional dispatch CPM; or (6) a cumulative deficiency in the total flexible resource adequacy capacity included in the annual or monthly flexible resource adequacy compliance plans, or in a flexible capacity category in the monthly flexible resource adequacy compliance plans. Existing tariff sections 43A.2(1)-(5) and (7).

retirement. The CAISO noted that in such a situation the resource does not meet RMR eligibility requirements.

The CAISO demonstrated that the ROR CPM tariff provisions would be a necessary and important component of the overall CPM framework to support the CAISO's ability to maintain grid reliability. For example, the CAISO explained that as the amount of generation produced by variable energy resources increases to accommodate California's 20 percent RPS[14] the CAISO must have the generation fleet capability needed to meet changing operational requirements and integrate the renewable energy into the CAISO grid. The ROR CPM backstop mechanism would enable the CAISO to maintain capacity on-line that is otherwise uneconomic and at risk of retirement in the current or imminent year, but necessary to meet reliability needs in the following year.

In approving the ROR CPM framework, the Commission recognized that the ROR CPM was carefully designed to address: the reliability need for a resource beyond the current or imminent resource adequacy compliance year. [15] The Commission rejected protesters' assertions that the ROR CPM was duplicative of the CAISO's RMR authority. The Commission noted that the ROR CPM provides more flexibility than the RMR authority to address reliability needs beyond local constraints, and that ROR CPM applies to reliability needs in the following year; whereas, RMR authority only applies for the current year.[16] The Commission also recognized that a situation could arise where a resource at risk of retirement but needed for reliability would not be eligible for an RMR contract.[17] Therefore, the Commission found that the "CAISO has demonstrated a need for the risk of retirement category that is not met by CAISO's reliability-must-run procurement authority."[18]

The Commission found that the ROR CPM category would not duplicate or interfere with the CPUC's or other local regulatory agencies' jurisdiction.[19] Consistent with the intent of the tariff provisions, the Commission directed the CAISO to clarify in the tariff that the ROR CPM designation would not be used to circumvent existing capacity procurement mechanisms that could adequately address reliability needs.[20] The Commission also rejected arguments that

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[14] The RPS standard subsequently was increased to 33 percent by 2020 and 50 percent by 2050.

[15] March 11 Order.

[16] *Id.* at P 128.

[17] *Id.*

[18] *Id.*

[19] *Id.* at P 126.

[20] Id at P 130.

offering ROR CPM designations would create significant market distortions or opportunities for gaming.[21] The Commission noted that the CAISO's proposal contained multi-layer safeguards and stringent requirements that would adequately protect against the possibility that resource owners would manipulate the system to receive CPM designations. Finally, the Commission rejected arguments that the CAISO should be required to incorporate into its tariff additional information regarding the technical analysis it would perform when assessing ROR CPM designation requests, finding that the precise details of the CAISO's technical assessment did not constitute a practice that will significantly affect rates and, thus, are more appropriately included in the business practice manuals.[22] The Commission stated that it had not required the details of other types of technical studies performed by the CAISO (*e.g.*, RMR) to be in the tariff.

2. Tariff Process to Request and Be Issued ROR CPM Designations

Under the existing ROR CPM framework, the CAISO is authorized to designate CPM capacity to keep in operation a resource that is at risk of retirement during the current resource adequacy compliance year and that will be needed for reliability by the end of the calendar year following the current resource adequacy compliance year.[23] The CAISO may issue an ROR CPM designation if all of the following requirements are satisfied:

(1) the resource was not contracted as resource adequacy capacity nor listed as resource adequacy capacity in the resource adequacy plan of any LSE during the current resource adequacy compliance year;

(2) the CAISO did not identify any deficiency, individual or collective, in an LSE's annual resource adequacy plan for the current resource adequacy compliance year that resulted in a CPM designation for the resource in the current resource adequacy compliance year;[24]

(3) CAISO technical assessments project that the resource will be needed for reliability purposes, either for its locational or

[21] *Id.* at P 131.

[22] *Id.* at P 134.

[23] Existing tariff sections 43A.2(6) and 43A.2.6. The tariff defines a resource adequacy compliance year as a calendar year from January 1 through December 31. Appendix A to the CAISO tariff, existing definition of "Resource Adequacy Compliance Year."

[24] The deadline for LSEs to submit their resource adequacy plans for the current resource adequacy compliance year is the last business day in October. Business practice manual for reliability requirements, section 13, exhibit A-2. Therefore, the CAISO cannot identify whether any deficiency exists pursuant to the tariff provision until after that October deadline.

operational characteristics, by the end of the calendar year following the current resource adequacy compliance year;

(4) no new generation is projected by the CAISO to be in operation by the start of the subsequent resource adequacy compliance year that will need the identified reliability need;

(5) the resource owner submits to the CAISO and the DMM, at least 180 days prior to terminating the resource's Participating Generator Agreement (PGA) or removing the resource from PGA Schedule 1, a request for an ROR CPM designation, including an offer price consistent with cross-referenced tariff provisions and the affidavit of an executive officer of the company who has the legal authority to bind such entity, with supporting financial information and documentation, that attests that it will be uneconomic for the resource to remain in service in the current resource adequacy compliance year and that the decision to retire is definite unless CPM procurement occurs;[25] and

(6) the scheduling coordinator for the resource has offered all eligible capacity from the resource into all competitive solicitation processes for the current resource adequacy year.[26]

If the CAISO determines that all of these requirements have been met, prior to issuing the ROR CPM designation, the CAISO will prepare a study report that explains the basis and need for the CPM designation. The CAISO first will post the report on its website and provide at least seven days for stakeholders to review and submit comments on the report.[27] Importantly, under the existing ROR CPM provisions, the CAISO cannot issue the study report indicating its intent to designate a resource until every one of these pre-conditions has been satisfied. In other words, LSEs must have submitted their annual RA showings by the specified deadline (the last business day in October); the CAISO must determine if there are any RA deficiencies and issue a report; the opportunity for LSEs to cure any individual and/or collective deficiency must conclude; and the CAISO must undertake a study and determine whether the resource seeking the designation is needed for reliability within the timeline specified in the tariff. Practically speaking this means the CAISO cannot signal its intent to issue an ROR CPM designation to a resource for the upcoming RA compliance year until

[25] The resource owner can request an ROR CPM designation any time during the year.

[26] Existing tariff section 43A.2.6(1)-(6). However, a resource with an ROR CPM designation – alone among the categories of CPM designations – is not subject to the selection of eligible capacity through the competitive solicitation processes set forth in the tariff. Existing tariff section 43A.4.

[27] Existing tariff section 43A.2.6 (at flush language following subsection (6)).

mid-December at the earliest. This timing, creates the issues discussed further below that this filing seeks to address.

The CAISO must also provide at least 30 days for an LSE to procure capacity from the resource. If the LSE does not, within that "cure period," procure sufficient resource adequacy capacity to keep the resource in operation during the current resource adequacy compliance year, the CAISO may issue the ROR CPM designation; provided that the CAISO determines that the designation is necessary and that all other available procurement measures have failed to procure the resources needed for reliable operation. The CAISO will not issue CPM designations to circumvent existing procurement mechanisms that could adequately resolve reliability needs.[28]

The tariff includes a "tiebreaking" procedure that addresses how the CAISO grants CPM designations if two or more CPM offers would meet the cost minimization criteria identified in the tariff; however, the tariff provision does not expressly apply to ROR CPM designations.[29]

3. Tariff Provisions that Apply After a Resource Is Issued an ROR CPM Designation

The CAISO tariff contains other provisions regarding ROR CPM designations (and the other categories of CPM designations) that address a variety of matters, including compensation the resource owner will be paid, the term of the designation, availability obligations, and crediting of CPM capacity.

Specifically, every resource receiving a CPM designation, including a resource issued an ROR CPM designation, is compensated at a market-based level capped at the CPM soft offer cap of $6.31 per kilowatt-month, unless the resource owner is able to justify a price above the soft offer cap pursuant to a resource-specific cost-based filing it submits to the Commission.[30] The latter price is calculated using the longstanding formula for determining the annual fixed revenue requirement of an RMR unit contained in schedule F to the *pro forma* RMR Agreement.[31] In the 2015 CAISO tariff amendment and offer of

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[28] *Id.*

[29] Existing tariff section 43A.4.2.3.

[30] Existing tariff section 43A.4.1.1. See also existing tariff section 43A.7 (setting forth provisions on payments to CPM capacity).

[31] Existing tariff section 43A.4.1.1.1. The *pro forma* RMR Agreement is contained in appendix G to the tariff. The formula in schedule F thereto went into effect in 1999. *See Cal. Indep. Sys. Operator Corp.*, 87 FERC ¶ 61,250 (1999). Schedule F states that the annual fixed revenue requirement consists of the resource's total annual revenue requirement (comprising operating expenses and a return and income tax allowance) minus total annual variable cost (comprising annual variable operation and maintenance expenses, annual variable fuel costs,

settlement filing that included the proposed tariff revisions to implement this dual pricing methodology, the CAISO explained:

> The ability of a resource to justify compensation above the CPM Soft Offer Cap using the formula applicable to Reliability Must Run resources is also significant because the formula accounts for all fixed costs, not only going-forward fixed costs. This provides additional certainty that capacity receiving a CPM designation receives appropriate compensation and contribution toward fixed cost recovery and is thus responsive to the Commission's guidance in the CPM Order.[32]

The Commission noted the CAISO's explanation and accepted its proposal, finding that it "should facilitate adequate cost recovery."[33]

The resource owner may not propose – and will not be compensated based upon – an offer price higher than the price submitted in its bid to the CAISO for the designated capacity. The resource will receive the price that the Commission finds to be just and reasonable for the remainder of the calendar year in which it is approved and for the subsequent two calendar years, unless superseded by a subsequent Commission-approved CPM capacity price during that period.[34]

The term of an ROR CPM designation is a minimum of one month and a maximum of one year, based on the number of months for which the capacity is to be procured within the resource adequacy compliance year.[35]

The tariff sets forth availability obligations, including the obligation for CPM capacity to meet the day-ahead and real-time availability requirements specified in 40.6 of the CAISO tariff.[36] The decision to accept a designation as CPM

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and annual emissions costs). Existing tariff appendix G, schedule F, article II, part B.

[32] Transmittal letter for CAISO tariff amendment and offer of settlement regarding CPM revisions, Docket No. ER15-1783-000, at 19 (May 26, 2015). The referenced CPM Order was the 2011 order addressing an earlier version of the CPM tariff provisions, in which the Commission found the CAISO's compensation proposal and convened a technical conference to discuss CPM compensation issues. March 2011 Order at PP 55-59.

[33] October 2015 Order at PP 14, 29. The Commission treated the offer of settlement component of the CAISO's filing "as record evidence in support of CAISO's Federal Power Act section 205 filing," which the Commission accepted as just and reasonable. *Id.* at P 28 & n.53.

[34] Existing tariff section 43A.4.1.1.1.

[35] Existing tariff section 43A.3.7. The CAISO will rescind the CPM designation for any month during which the resource is under contract with an LSE to provide resource adequacy capacity. *Id.*

[36] Existing tariff section 43A.5.1.

capacity is voluntary.[37]

Finally, the tariff requires the CAISO to credit CPM designations for the resource adequacy obligations of scheduling coordinators.[38] These tariff provisions include the requirement to credit the costs of ROR CPM designations to the resource adequacy obligations of scheduling coordinators for LSEs, to the extent the cost of such a designation is allocated to the scheduling coordinator for more than one month.[39]

B. Need to Improve the ROR CPM Framework

As documented in material cited above,[40] risk of retirement of resources needed for reliability remains a significant concern for the CAISO as the number of resources subject to the RPS increase, market prices decrease, and the revenues necessary to cover the fixed costs of existing generation resources decline. Under these circumstances, it is important that ROR CPM mechanism be as effective as possible to ensure that resources the CAISO needs to maintain reliability and effectively integrate f renewable resources remain operational and do not retire prematurely.

In recent years, resource owners have advised the CAISO that the existing ROR CPM framework: (1) does not give them enough time to address the issues they face and decisions they must make when contemplating whether to retire or continue operating a unit; and (2) includes features that diminish the utility of seeking an ROR CPM designation. The CAISO has considered these concerns in light of implementing the ROR CPM framework and has concluded that they have some merit. The problems resource owners have identified have become magnified in an era of deteriorating market dynamics, the transitional state of the system, reduced procurement of natural gas-fired resources in RA procurement, and considerable uncertainty regarding the reliability need for their units and their ability to receive an RA contract or some other capacity-type payment. The identified issues generally fall into two categories: (1) resource owners cannot learn of the potential for receiving an ROR CPM designation for the upcoming RA compliance year until December of the current year (or later), and this late notice is problematic for planning purposes and can require them to operate uneconomically for a longer period than is necessary; and (2) the attestation requirements are unduly stringent and dissuade resource owners from seeking ROR CPM designations because if the CAISO denies an ROR CPM request, the resource owner must retire its resource and is precluded from

[37] Existing tariff section 43A.5.2.

[38] Existing tariff section 43A.9.

[39] Existing tariff section 43A.9(d).

[40] *See supra* n. 3 and accompanying text.

accepting other business opportunities.

A letter that Calpine Corporation (Calpine) sent to the CAISO on November 28, 2016, illustrates the first of these issues.[41] Calpine explained that it had four peaking units under resource adequacy contracts that would terminate at the end of 2017, and the purchaser had advised Calpine that it would not renew them. Calpine stated that it had been unable to sell the capacity following contract expiration and that, commencing January 1, 2018, it would be uneconomic to operate the peaking units without a contract that provides for fixed cost recovery. Calpine stated that complicated and transformational activities leading up to an orderly and rational cessation of operations would require months to plan and implement, and those activities would place a significant burden on Calpine's commercial, operational, legal, and personnel functions. These activities would include: (1) retaining the engineering and permitting consultants necessary to develop the required permitting, decommissioning, or redeployment plans for each of the units; (2) assessing major maintenance expenditures for operations in 2018 and beyond if the units remained in service;[42] (3) engaging in the budgeting process for 2018, which would establish the operations, maintenance, personnel and/or closure or relocation budgets for units and which would conclude in mid-2017; and (4) filing for the California Energy Commission (CEC) approval to close one of the plants by mid-2017, to satisfy CEC licensing requirements prior to commencing decommissioning activities.[43]

Calpine emphasized that the existing ROR CPM tariff provisions did not allow a sufficient planning period, or "runway" to undertake these activities in a timely manner. Calpine noted that even if the CAISO determined that the peaking units were needed for reliability, the existing ROR CPM provisions could require Calpine to operate the resources uneconomically into 2018, after their contracts expired, but before the CAISO could designate them as ROR CPM resources. Calpine asserted that continued uneconomic operation with unknown

[41] The CAISO provides the letter in Attachment F to this filing.

[42] In particular, Calpine stated that in the first half of 2017 it either needed to move forward with staffing plans for changing the status of the units or have sufficient assurance of a revenue stream so it could invest in capital maintenance for any resource needed to maintain reliability.

[43] Calpine noted that the decommissioning planning and implementation process for combined cycle units (as opposed to peaking units) is an even longer process because many CEC licenses require submitting a decommissioning or closure plan to the CEC for review and approval of such a plan at least 12 months prior to the commencing decommissioning activities. That requirement also compels a resource owner seeking an ROR CPM designation to ascertain as early as possible whether its resource is needed for reliability and eligible for an ROR CPM designation. With earlier notice that the unit is not needed, a resource owner can begin the decommissioning process sooner, thus limiting the amount of time the owner must operate the resource uneconomically without an RA contract before it can shut-down the unit and stop incurring costs.

compensation was an unacceptable business outcome. In a letter sent on June 2, 2017, Calpine expressed similar concerns regarding its Metcalf unit.[44] The CAISO determined that the concerns expressed in these letters were valid.

CAISO studies showed that the Metcalf unit and two-of-the-four peaking were needed for reliability in 2018. Because the three units were needed for reliability in 2018, RMR was the appropriate course of action under the CAISO tariff. ROR CPM was not an available option. If the CAISO had found that the units were not needed for reliability until 2019, ROR CPM designations, not RMR contracts, would have been the only available option. Although the three units received RMR contracts, not ROR CPM designations, Calpine's letters illustrated that there were problems with the existing ROR CPM process that needed to be addressed.[45]

Other resource owners echoed similar concerns in the stakeholder process underlying this tariff amendment.[46] In particular, it is problematic to require resource owners to wait until mid-December at the earliest to learn about any potential ROR CPM designations for the upcoming year given that they

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[44] In the June 2, 2017, letter (June 2 letter), Calpine informed the CAISO that it was assessing a decision to make the Metcalf unit unavailable for 2018 because the unit lacked any form of capacity payment for 2018 or beyond and was facing a cyclical major maintenance project with a budget in excess of $20 million. In light of these facts, Calpine asked the CAISO to determine whether the resource would be needed for reliability in 2018. The letter sought an early indication of need so that Calpine could (1) prepare for the continued operation if the unit, including the cyclical major maintenance; and (2) prepare for the multifaceted process for staffing, budgeting, and permitting associated with shutting down such a large generating facility. Calpine again advised the CAISO that the ROR CPM provisions did not allow a sufficient planning period or "runway" for such complicated and transformational activities such as major, maintenance, budgeting, and personnel. The CAISO provides the June 2 letter in Attachment G to this filing.

[45] Calpine summarized these problems again in comments during the stakeholder process on the Metcalf RMR agreement:

> Most simply put, CPM allows no runway for the complicated and time-consuming decisions required for asset disposition…the timing limitations associated with CPM…do not allow generators to perform normal; planning in advance of the delivery year. Pursuant to the tariff, CPM designation would occur, at the earliest, only a few weeks (mid-December) before the anticipated availability date. That gives the generator owner no time to prepare for the disposition of an asset or the going forward operation of an asset that maybe, as is the case with Metcalf, entering a cyclical major maintenance period.

See Comments of Calpine Corporation on RMR designation for the Metcalf Energy Center at 2 (Oct. 6, 2017). Calpine's comments are available at http://www.caiso.com/Documents/CalpineComments_PotentialReliabilityMust_Run_MetcalfEnergyCenter.pdf.

[46] *See, e.g.*, Comments of NRG Energy Inc. on Issue Paper, June 6, 2017; Comments of Diamond Generating Corp. on Issue Paper, June 1, 2017. All materials related to this stakeholder process are available on the CAISO website at http://www.caiso.com/informed/Pages/StakeholderProcesses/CapacityProcurementMechanismRisk-of-RetirementProcessEnhancements.aspx.

typically make power plant investment decisions well ahead of that time. Because the ROR CPM process for an upcoming RA compliance year starts so late, resource owners do not know whether to invest in keeping their plants available until after the time frame in which such decisions typically are made. As such, resource availability could suffer absent major maintenance, resources could incur additional costs that turn out to be unnecessary if they are not designated as ROR CPM capacity, or resource may have to operate uneconomically for an extended period of time because of the late timing of ROR CPM notifications for the upcoming year. Like Calpine, these resource owners argued that there needs to be a more forward ROR CPM planning mechanism that can apply when the end of a resource's RA contract term is imminent so they can make timely and rational decisions either to suspend operations or pursue a backstop ROR CPM designation.

As to the second general issue identified above, some stakeholders expressed concern that the attestation requirement is unduly stringent and advised the CAISO that certain resource owners had not requested ROR CPM designations for this reason. They emphasized that the attestation requirement only gives the resource owner one option if the CAISO does not grant it an ROR CPM designation – retire its resource (or face potential penalties from the Commission for providing false information). Some resource owners argued that it is unreasonable to expect them to attest that their resource will retire unless it receives an ROR CPM designation, without knowing whether the resource might ultimately be offered a resource adequacy contract. Other resource owners noted that the existing attestation requirement would even preclude them from pursuing other legitimate business opportunities such as selling the resource. Again, the CAISO concluded that these concerns have merit.

The CAISO is committed to working with stakeholders and regulatory agencies to develop comprehensive and durable measures to ensure the availability of generation that is needed to maintain system reliability. However, it will take time to identify, adopt, and implement any durable changes to the resource adequacy program. Moreover, the effort will require significant discussion and coordination among the CAISO, CPUC, local regulatory authorities, stakeholders, and market participants. At the CEC Joint Workshop referenced above, the CAISO acknowledged the issues with the current ROR CPM process and indicated its intent to explore short-term enhancements to the process to help facilitate efficient resource procurement and retirement.[47] In particular, the CAISO recognized that there was a need to implement an earlier study and notification process so that interested resource owners might know earlier in the year whether their resources are needed for reliability so they can timely undertake the steps required either to retire their resources or ensure they are ready for continued operation.

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[47] Transcript of Joint Workshop at 53-58.

Consistent with its commitment at the Joint Workshop, the CAISO proposes some limited, near-term improvements to the ROR CPM process to better address these concerns. The CAISO also needed to consider other important concerns such as not undermining the existing resource adequacy program. The CAISO believes that the modest, incremental changes it proposes herein will better address issues than the existing process, while effectively balancing competing concerns pending any longer-term reform of the resource adequacy and backstop procurement processes.[48]

C. Stakeholder Process

The CAISO initiated the stakeholder process that led to this tariff amendment in May 2017.[49] The stakeholder process included a number of opportunities for stakeholder involvement:

- The CAISO issued five papers;[50]
- The CAISO held stakeholder conference calls to discuss the CAISO papers and provided opportunities for stakeholders to submit comments on the papers;[51]
- The CAISO developed draft tariff provisions; and
- The CAISO held additional conference calls and provided opportunities for stakeholders to submit written comments on the draft tariff provisions.

The CAISO Governing Board (Board) voted unanimously to authorize this filing at its public meeting held on November 2, 2017.[52]

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48 As indicated above, the CPUC has initiated a proceeding to consider, among other things, possible changes to the structure of the RA process. In addition, on January 2, 2018, the CAISO issued a market notice indicating that it was initiating a two-phased policy initiative to review and consider with stakeholders potential alignment of and aligning and refinements to the RMR and CPM processes. The market notice is available at: http://www.caiso.com/Documents/NewInitiativeReview-ReliabilityMust-Run_CapacityProcurementMechanismMeeting013018.html.

49 Materials issued and submitted in the stakeholder process are available at http://www.caiso.com/informed/Pages/StakeholderProcesses/CapacityProcurementMechanismRisk-of-RetirementProcessEnhancements.aspx.

50 These papers included the Addendum to the Draft Final Proposal (Addendum to Draft Final Proposal) provided in attachment C to this filing.

51 Among these were comments submitted by the DMM on October 4, 2017, regarding the draft final proposal (DMM Comments), which are provided in Attachment E to this filing.

52 Materials related to the Board's authorization are available at http://www.caiso.com/informed/Pages/BoardCommittees/Default.aspx. These materials included a memorandum to the Board from Keith Casey, Vice President, Market & Infrastructure Development (Board Memorandum), and a presentation to the Board by Keith Johnson, Infrastructure and Regulatory

III. Proposed Tariff Revisions

The CAISO proposes to revise certain of the ROR CPM provisions as discussed in this section. The discussion that follows does not address the existing ROR CPM provisions that this proposal does not change, such as those regarding reports on CPM designations, payments to CPM capacity, and allocation of CPM payment costs,[53] except as necessary to provide context for the proposed revisions.

A. Enhanced Process to Request and Be Issued ROR CPM Designations

The CAISO proposes to revise its tariff to implement an improved process for resource owners to request and potentially be issued ROR CPM designations. Pursuant to the tariff revisions, the CAISO will provide two annual windows for a resource owner to make its requests. The CAISO will then follow steps that largely tracks the steps under the existing tariff. If the CAISO determines that a resource is needed for reliability in accordance with the ROR CPM provisions, it will prepare and issue a study report and provide an opportunity for an LSE to procure capacity from the resource within a specified "cure period." If the CAISO rejects an owner's request, the owner must submit a plan to the CAISO for retiring the resource. If the CAISO finds that the resource meets the applicable requirements and no LSE has procured the resource, the CAISO will grants the owner's request and issue an ROR CPM designation. The owner will be obligated to accept the designation unless it becomes a resource adequacy resource for the same term as the designation.

The CAISO discusses each of these steps in the revised designation process in greater detail below. In Section III.A.8, the CAISO provides hypothetical timelines illustrating the revised proposed two-annual-window process.

1. Two Annual Windows for Making Requests

The CAISO will provide two windows annually during which a resource owner may request an ROR CPM designation. [54] The deadline for the first

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Policy Manager (Board Presentation), both of which are provided in attachment D to this filing.

[53] *See* existing tariff sections 43A.5, 43A.7, and 43A.8, respectively.

[54] In proposed tariff section 43A.2.6 (a), the CAISO clarifies that any resource can apply for an ROR CPM designation in the two request windows, including a resource that is RA at the time of the request. This revision is intended to clear up any confusion regarding the existing ROR CPM tariff provisions, which some market participants have interpreted as precluding a resource owner from submitting a request for an ROR CPM designation until the RA contract for its resource expires. The CAISO retains the general CPM principle that capacity under a RA contract, RMR contract, or designated under another CPM provision cannot concurrently be

window will be no earlier than April 15 and no later than June 30. The deadline for the second window will follow the deadline for LSEs to submit their annual resource adequacy plans to the CAISO, *i.e.*, the last business day in October.[55] The duration of each request window will be no less than two weeks.[56]

In the first window, a resource owner can request an ROR CPM designation during the current resource adequacy compliance year (called a Type 1 ROR CPM designation), can request a designation for the upcoming resource adequacy compliance year (called a Type 2 ROR CPM designation), or can request both a Type 1 designation and a Type 2 designation.[57] In the second window, a resource owner can request a designation for the upcoming resource adequacy compliance year for which the most recently submitted annual resource adequacy plans apply (called a Type 3 ROR CPM designation).[58] As discussed below, the subsequent tariff processes and conditions applicable to the CAISO designating a resource as ROR CPM will vary somewhat depending on which of the three types of designations the resource owner requests, but ultimately the CAISO will determine whether or not a resource meets all of the applicable requirements and should receive the requested designation.[59]

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designated as ROR CPM capacity and receive ROR CPM payments at the same time. *See* existing tariff sections 43A.2.5.2.4, 43A.7.1, and Appendix A, Definition of "Eligible Capacity". This tariff clarification also accords with the CAISO's intent to provide more lead time to resource owners that meet certain revised tariff requirements to learn of potential designations earlier in the year, thus enabling them to more effectively plan for and make business decisions regarding the retirement or continued operation of their resources.

[55] Proposed tariff section 43A.2.6(b). Pursuant to the tariff provisions, the dates of these annual deadlines will be specified in the business practice manual, consistent with the CAISO's standard practice regarding such implementation details. *See, e.g.*, existing tariff sections 40.2.2.4(a) (annual resource adequacy plans submitted in accordance with schedule set forth in business practice manual) and 40.2.4(2) (monthly resource adequacy plans and supply plans submitted in accordance with schedule set forth in business practice manual). This approach gives the CAISO needed flexibility in setting the dates based on its actual experience and on specific circumstances in a given year, such as a date falling on a weekend. *See also Cal. Indep. Sys. Operator Corp.,* 154 FERC ¶ 61,200 at P 4 (2016) (timeline for submitting substitute capacity is better classified as an implementation detail).

[56] Proposed tariff section 43A.2.6 (b). The CAISO will post the names of the resources for which resource owners have requested ROR CPM designations. Thus, market participants will know which resources have committed to retire unless procured as RA or sold, and they can consider that information in making procurement decisions.

[57] Proposed tariff section 43A.2.6(b)(1).

[58] Proposed tariff section 43A.2.6(b)(2).

[59] The CAISO's proposal retains the existing distinction between RMR and ROR CPM. As the Commission has recognized, RMR designations address a reliability need for the upcoming year; whereas, ROR CPM addresses a reliability need for the following year. *See Cal. Indep. Sys. Operator Corp.,* 134 FERC ¶61,211 at P 128 (2011). Thus, the fundamental nature of ROR CPM as a "bridge" to the year the resource is needed for reliability remains unchanged. After an ROR CPM resource's term ends, LSEs will be able to procure the resource for the year it will be

The two-window process will allow the CAISO to address designation requests using an efficient, regular, and orderly annual procedure. The current process, in contrast, may require the CAISO to address designation requests inefficiently, sporadically, and serially throughout the year. The proposal will improve the CAISO's planning and allocation of resources and promote the orderly retirement of resources that do not receive ROR CPM designations.

The two-window process will also help protect against over-procurement and unnecessary cost incurrence. Giving early notice of potential Type 2 designations (*i.e.,* designations for the upcoming resource adequacy compliance year) will provide LSEs ample opportunity to procure such resources before the end of October deadline for submitting their annual resource adequacy plans. Further, the CAISO's deferral of making Type 2 and Type 3 designations until after the cure period has ended will allow LSEs, when they cure resource adequacy deficiencies, to procure resources that will otherwise be designated as ROR CPM instead of other resources that may not be required to meet reliability needs. Also, by identifying resources that are needed for reliability at an earlier stage, the two-window process can promote multi-year contracting for such resources. Thus, the revised framework will better promote overall resource portfolio optimization.

The Type 1 and Type 3 designations essentially reflect intra-year and upcoming-year designations, respectively, that would occur under the existing ROR CPM tariff provisions, with necessary modifications to account for the new two-window framework. Implementing the Type 2 designation and the first request window will help address the concerns described above that the current ROR CPM designation process does not provide resource owners with sufficient time to make orderly and prudent decisions regarding the disposition of their resources that are at risk of retirement. In particular, these tariff revisions will provide for a more orderly retirement of resources and give resource owners more lead time to make resource planning decisions. Also, providing earlier notification to resources that the CAISO ultimately determines are not needed for reliability purposes and thus may retire will help reduce the amount of time such resources must operate uneconomically while they await the CAISO's determination, followed by the lengthy resource shut-down and decommissioning process. Under the current framework, resource owners typically would not know whether they are needed for reliability and eligible to receive an ROR CPM designation for the upcoming year until December or later. The proposed Type 2 designation process provides that information months earlier. If the CAISO indicates its intent to issue an ROR CPM designation following the first window (provided that the resource satisfies all the tariff requirements), the resource owner can make timely planning, facility, and staffing decisions for the upcoming

needed for reliability. If no LSE procures the resource, and it is needed for reliability, the CAISO can procure the resource either pursuant to an RMR contract or one of the other CPM categories.

year.[60]

DMM submitted comments on the draft final proposal that likewise recognized the value of the CAISO's proposed Type 2 designation framework, in particular the earlier notice it provides. The DMM comments state that:

> The Proposal allows resources to know earlier in the year whether the [sic] will receive a risk-of-retirement CPM. The proposed earlier designations makes the risk-of-retirement CPM a more viable option for resources considering retirement. This is an improvement over the current risk-of-retirement CPM process which occurs too late in the year to be of practical use.[61]

Some stakeholders expressed concerns that adding the Type 2 designation process and the first request window, and making designations thereto, would enable resource owners to "front-run" the resource adequacy procurement process, thus undermining or unduly interfering with the resource adequacy program by impacting that procurement and prices in the resource adequacy market. As discussed below, the CAISO has included new requirements in the proposed ROR CPM tariff provisions to address these concerns.

2. Study Report

Prior to issuing an ROR CPM designation, the CAISO will prepare and issue a study report using a process similar to the study report process under the existing tariff.[62] Consistent with the existing ROR CPM tariff provisions, the study

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[60] Moving to the two-window request framework also allows the CAISO to omit the existing requirement in tariff section 43A.2.6(5) that a resource owner must submit its request to the CAISO at least 180 days prior to terminating its PGA or removing the resource from PGA Schedule 1. The purpose of that requirement was to give the CAISO those 180 days to study the need for the resource, which is appropriate if a resource owner can request a designation at any time but is necessary under the two-window process. Eliminating the 180-day requirement will also serve to limit the number of days a resource owner seeking a designation might have to operate its resource uneconomically without a contract as it awaits the CAISO's determination.

[61] DMM Comments at 1. Similarly, in a report that DMM submitted on October 25, 2017, for the November 1-2, 2017 CAISO Board Meeting, DMM reaffirmed its support for the CAISO's proposal to provide notice of intended ROR CPM designations earlier in the year and stated that the change "is an improvement in the current process which occurs too late to be of practical use." DMM Report at 1.

[62] Proposed tariff section 43A.2.6(c). *Cf.* existing tariff section 43A.2.6 at provisions following subsection (6). The proposed tariff language is more detailed than the existing tariff language in that it specifies that the study report will explain the CAISO's intent to make a designation and will only identify the specific resource to which the CAISO intends to issue a designation, provided all other applicable requirements are met, but the study report will not specify the offer price of such a resource.

report will be based on the CAISO's technical assessment of the reliability need for the resource based on the operational or locational characteristics of the resource.[63] The study report will explain the basis and need for the ROR CPM designation, and the CAISO's intent to make the designation (assuming the resource meets all the other designation requirements under the tariff and no LSE procures the needed resource). The CAISO will post the study report on its website and give market participants at least seven days to submit comments on a proposed Type 1 or Type 3 designation, as is the case under the existing tariff provisions,[64] and at least 14 days to submit comments on a proposed Type 2 designation. A longer comment period for a proposed Type 2 designation is appropriate because the actual designation will not occur until the end of the calendar year; thus, providing an additional seven days for comments will not interfere with the designation process or adversely affect the resources being designated as Type 2.[65]

Several stakeholders requested additional detail on the types of reliability studies the CAISO will perform, how the CAISO will conduct the studies, what study assumptions and analysis the CAISO will use to support the determination of need for an ROR CPM designation, and the content of the study report. In response, the CAISO explained that it does not propose to change the existing reliability requirements for a resource to receive a designation. Consistent with the existing ROR CPM tariff provisions and the Commission's prior decision approving the ROR CPM program, the CAISO will include additional details regarding the ROR CPM reliability technical assessment in the business practice manual, not in the tariff. [66]

There should not be any changed circumstances that would render unnecessary in December any proposed Type 2 designation reflected in a study report prepared following the first request window. [67] There will not be a new load forecast for the year in which the Type 2 resource will be needed for reliability between the first and second windows. Further, the CAISO has already modeled in the transmission planning process all potential new generation and

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63 The specific reliability requirements applicable to each type of ROR CPM designation are discussed *infra* in section III.A.5 of this transmittal letter.

64 As explained above, the Type 1 and Type 3 designations essentially reflect intra-year and upcoming-year designations, respectively, that would occur under the existing tariff provisions.

65 Issuing the study report does not constitute the actual ROR CPM designation. It merely indicates the reliability need for the resource and signals the CAISO's intent to designate the resource if all applicable conditions specified in the tariff are satisfied.

66 *See* March 2011 Order at P 134.

67 It is more likely that any changed circumstances that occur between the first and second windows would reinforce or increase the need for CPM designations. This can arise due to unexpected resource retirements, long-term resource outages, and delays in the in-service dates of approved transmission and generation projects.

transmission facilities projected to be in service by the start of the year in which the reliability need arises. The CAISO is aware of the projected in-service dates of new transmission and generation. The transmission planning base cases also account for demand response programs. Finally, stakeholders have the opportunity in their comments on the Type 2 study report to identify any reasons why a proposed designation is unnecessary.

Allowing for any type of “off-ramp” from a proposed Type 2 designation is not only unnecessary, it would create undue uncertainty for the resource owner, thus defeating the fundamental rationale for implementing Type 2 designations in the first place. Moreover, LSEs receive resource adequacy credits for designated ROR CPM capacity, which will offset the need for them to procure a corresponding amount of RA capacity from other resources.

3. Opportunity for LSEs to Procure Capacity from the Resource

The proposed revisions retain the opportunity for an LSE, following the end of the market participant comment period, to procure capacity from a resource that the CAISO intends to issue an ROR CPM designation.[68] The amount of time the LSE will have to procure capacity from the resource will depend on the type of ROR CPM designation.

For a Type 1 ROR CPM designation, the CAISO will allow an LSE at least 30 days from the comment deadline to procure capacity from a resource. This is the same amount of time allowed under the existing tariff.[69]

For a Type 2 ROR CPM designation, the CAISO will allow an LSE to procure capacity from a resource until the later of: (i) 30 days after the CAISO issues any notice of deficiency in an annual resource adequacy plan; or (ii) 15 days prior to the beginning of the upcoming resource adequacy compliance year.[70] This schedule will align the ROR CPM capacity procurement deadline with the due date for an LSE to cure any annual resource adequacy deficiency or local collective deficiency the CAISO identifies, thus reducing the potential for over-procurement of resources and incurrence of unnecessary costs. Also, because the CAISO expects that it will issue a study report signaling its intent to make a Type 2 designation in the May timeframe, LSEs will have more than ample opportunity to procure such resources and reflect them in their annual RA plans, which are due by the last business day in October, thus optimizing their resource adequacy portfolios and avoiding over-procurement.

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68 *Compare* proposed tariff section 43A.2.6(d) *with* existing tariff section 43A.2.6 at provisions following subsection (6).

69 Proposed tariff section 43A.2.6 (d)

70 *Id.*

For a Type 3 designation, the CAISO will allow an LSE to procure capacity from a resource until the later of: (i) 14 days after the CAISO issues a Type 3 study report; or (ii) 30 days after the CAISO issues any notice of deficiency in an annual resource adequacy plan.[71] Again, this schedule aligns the ROR CPM capacity procurement deadline with the due date for the LSE to cure any annual resource adequacy or collective deficiency the CAISO identifies.

Just as under the existing CAISO tariff,[72] the proposed tariff revisions state that if an LSE does not, within the specified period, procure sufficient resource adequacy capacity to keep a resource in operation during the term of an ROR CPM designation, the CAISO may issue the designation reflected in its study report on the condition that all other applicable requirements have been satisfied and all other available procurement measures have failed to procure the resources needed for reliable operation.[73] Further, the proposal retains the existing tariff provision ordered by the Commission stating that the CAISO will not issue CPM designations to circumvent existing procurement mechanisms that could adequately resolve reliability needs.[74]

4. Resource Owner Obligations If the CAISO Rejects the Request

The CAISO proposes a new requirement that if the CAISO rejects the resource owner's request for an ROR CPM designation, the owner has 60 days to submit a plan to the CAISO for retiring the resource.[75] This requirement is consistent with the resource owner's existing obligation to attest that its decision to retire the resource is definite unless procurement occurs. The requirement will also help to mitigate potential adverse impacts on the resource adequacy market of implementing the first request window, in that market participants will have certainty that resource owners will retire their resources if the CAISO rejects their requests for designations, and the resource is not sold to an unaffiliated entity or procured by an LSE.

5. Requirements for the CAISO to Grant the Request

The CAISO proposes to revise the existing tariff requirements that must be met for the CAISO to determine that it should issue an ROR CPM designation for the resource. These revised requirements are tailored to the new two-annual-

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71 *Id.*

72 *See* existing tariff section 43A.2.6 at provisions following subsection (6).

73 Proposed tariff section 43A.2.6 (d).

74 March 2011 Order at P 130.

75 Proposed tariff section 43A.2.6(e). The contents of the plan will be set forth in the business practice manual.

window process, reflect refinements to the existing tariff provisions suggested by stakeholders, and differ somewhat depending on whether the resource is seeking a Type 1, Type 2, or Type 3 designation.[76]

(a) Type 1 Designation

The set of requirements for an ROR CPM designation under the existing tariff includes the requirement that the resource not have been contracted as resource adequacy capacity nor listed as resource adequacy capacity in any LSE's annual resource plan during the current resource adequacy compliance year.[77] To tailor this requirement to the new two-annual-window process, the CAISO proposes to modify it to state that, in order to be issued a Type 1 designation, the resource cannot be contracted as resource adequacy capacity through the end of the current resource adequacy compliance year.[78]

The existing CAISO tariff also requires that the CAISO project no new generation to be in operation by the start of the subsequent resource adequacy compliance year that will meet the identified reliability need.[79] In response to stakeholder input, the CAISO proposes to replace the word "generation" with "alternative solutions" to reflect that broader options, beyond just generation, might be available to address the reliability need and eliminate the need for an ROR CPM designation.[80]

In addition, the existing tariff requires the resource owner to submit to the CAISO and DMM a request for a designation that includes an offer price and an attestation of an executive officer that it will be uneconomic for the resource to remain in service in the current resource adequacy compliance year and that the decision to retire is definite unless CPM procurement occurs.[81] The CAISO proposes to retain these provisions, but to modify the attestation requirement to make it more practical and to avoid unreasonably foreclosing appropriate business opportunities. Specifically, pursuant to the new requirement, the resource owner's executive officer must attest that the decision to retire is definite unless: (1) CPM or some other type of CAISO procurement of the resource occurs; (2) the resource is sold to a non-affiliated entity; or (3) the resource enters into a resource adequacy contract for the remainder of the

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[76] Proposed tariff sections 43A.2.6(f)-(h).

[77] Existing tariff section 43A.2.6(1).

[78] Proposed tariff section 43A.2.6(f)(1).

[79] Existing tariff section 43A.2.6(4).

[80] Proposed tariff section 43A.2.6(f)(3). The proposed tariff provision will apply to all three ROR CPM designation types.

[81] Existing tariff section 43A.2.6(5).

current resource adequacy compliance year.[82] This modified requirement addresses input from certain resource owners that the existing attestation requirement was unnecessarily stringent and deterred them from seeking ROR CPM designations because it precludes them from pursuing other business opportunities, such as selling the resource or executing a resource adequacy contract if offered, without potentially facing a claim that they submitted false information to the CAISO.

The CAISO proposes to maintain without modification the existing tariff requirements that CAISO technical assessments must project that the resource will be needed for reliability purposes, either for its locational or operational characteristics, by the end of the calendar year following the current resource adequacy compliance year;[83] and the CAISO not have identified any deficiency, individual or collective, in an LSE's annual resource adequacy plan for the current resource adequacy compliance year that resulted in a CPM designation for the resource in the current resource adequacy compliance year.[84]

(b) Type 2 and Type 3 Designations

The CAISO proposes to add tariff provisions stating that it may issue a Type 2 or Type 3 ROR CPM designation for a resource if all of the requirements described above for a Type 1 designation are met, as well as the additional requirements discussed below.[85]

These additional Type 2 and Type 3 requirements for the most part mirror the corresponding Type 1 requirements, the only difference being that the additional requirements reference the upcoming resource adequacy compliance year relevant to a Type 2 or Type 3 designation instead of the current resource adequacy year relevant to a Type 1 designation.[86] For example, the CAISO's technical assessment must determine that the resource is needed for reliability by the end of the calendar year following the upcoming resource adequacy

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[82] Proposed tariff section 43A.2.6(f)(4).

[83] *Compare* proposed tariff section 43A.2.6(f)(1) *with* existing tariff section 43A.2.6(3). For example, if a resource submitted a request for a Type 1 designation in the first window in 2018, the CAISO would assess whether the resource is needed for reliability by the end of 2019. If the CAISO finds that such reliability needs exists, then the CAISO may issue an ROR CPM designation to the resource for a term consistent with the provisions of revised tariff section 43A.7, provided all other applicable requirements are met.

[84] *Compare* proposed tariff section 43A.2.6(f)(2) *with* existing tariff section 43A.2.6(2).

[85] Proposed tariff sections 43A.2.6(g)-(h).

[86] *Compare* proposed tariff section 43A.2.6(g)(1) *with* proposed tariff section 43A.2.6(f)(1), proposed tariff section 43A.2.6(g)(2) *with* proposed tariff section 43A.2.6(f)(4), proposed tariff section 43A.2.6(g)(3) *with* proposed tariff section 43A.2.6(f)(3), and proposed tariff section 43A.2.6(g)(4) *with* proposed tariff section 43A.2.6(f)(2).

compliance year.[87] The resource cannot be contracted as resource adequacy capacity for the upcoming resource adequacy compliance year.[88] There cannot be any new "alternative solutions" that address the reliability need in operation by the start of the resource adequacy compliance year following the upcoming resource adequacy compliance year.[89] Finally, there cannot be any deficiency, individual or collective, in the LSE annual resource adequacy plans for the upcoming resource adequacy compliance year that result in a CPM designation for the resource.

The CAISO also proposes two requirements specific to Type 2 designations only. These requirements obligate an executive officer of the resource owner to attest that the owner made a reasonable effort to participate in all applicable resource adequacy competitive solicitations, requests for offers, or similar procurement process mechanisms by LSEs for the upcoming resource adequacy compliance year.[90] The CAISO must also find that the resource is uniquely situated as the only resource that can meet the identified reliability need.[91] If the CAISO denies a request for a Type 2 designation on the grounds that the resource was not the sole resource that applied for a Type 2 designation that could meet the identified reliability need, the resource may request a Type 3 designation in the next request window.[92]

The CAISO proposes to apply these tariff provisions to Type 2 designations to help mitigate the risk that issuance of Type 2 designations in the first annual request window may unduly "front-run" LSEs' resource adequacy procurement processes, thus undermining or interfering with the resource adequacy program by impacting that procurement and prices in the resource adequacy market.[93] These requirements effectively balance such concerns with

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[87] Proposed tariff section 43A.2.6(g)(2). In other words, the CAISO must find that a resource submitting a request for an ROR CPM designation in the second window in 2018 is need for reliability before the end of 2020.

[88] *Id.* The CAISO will study a resource in the second window unless it is a resource adequacy resource for the entire upcoming resource adequacy year.

[89] Proposed tariff section 43A.2.6(g)(3).

[90] Proposed tariff section 43A.2.6(h)(1).

[91] Proposed tariff section 43A.2.6(h)(2).

[92] Proposed tariff section 43A.2.6(g)(2). This safeguard ensures that a resource owner will not be denied an opportunity to have the CAISO study its resource for a potential ROR CPM designation simply because another resource owner with a resource that meets the same reliability need also requested a Type 2 designation in the same window. This approach also (1) allows resource adequacy procurement to run its course and gives LSEs the first opportunity to procure resources in situations where there are multiple resources that might meet a reliability need; and (2) avoids a problematic outcome whereby all of the resources able to meet an identified reliability need would be required to retire simply because each of the owners applied for a Type 2 designation in the same window.

[93] As noted above, issuing a study report in the first half of the year indicating the need for a

resource owners' desire for a longer "runway" to rationally plan for potential resource retirement or continued resource operation. The proposed revisions to the ROR CPM framework provide an opportunity for resource owners to obtain earlier notice of their need and eligibility for ROR CPM designation in limited, well-defined circumstances, which is an improvement to the existing ROR CPM tariff provisions. As such, there will be no unfettered "front-running" of the resource adequacy program.

The requirement to attest that the resource owner made a reasonable effort to participate in the specified procurement processes is consistent with the longstanding principle that the CPM is a backstop mechanism and the actual designation of a resource should only occur after LSEs have had the opportunity to procure the resource.[94] The requirement that the resource be the only one that can meet the identified reliability need prevents the possibility that Type 2 designations may create a situation where the CAISO might select a higher-cost resource following the first request window even though a lower-cost resource might become available in the second request window to meet the same reliability need. This requirement also ensures that in the Type 2 study process that occurs in the first half of the year, the CAISO will not designate a resource if there are multiple resources that can meet the same reliability need (whether or not all such resources are seeking Type 2 ROR CPM designations). Rather, the CAISO will defer such decisions to LSEs the resource adequacy procurement process. Thus, LSEs will first have the opportunity to procure the resource(s). Only if LSEs do not procure a resource that is needed for reliability will the CAISO then "step-in" and procure the resource as a last resort.[95]

Type 2 designation for a particular resource does not constitute actual designation of the resource. The ROR CPM designation will not occur until the end of the year after LSEs have had an opportunity to procure the resource, and all other conditions have been satisfied.

[94] March 2011 Order at PP 126-30.

[95] One stakeholder expressed concern that if a resource owner with a lower-cost resource sought a Type 2 designation but there was another higher-cost resource that could meet the same need (and whose owner had not sought a Type 2 designation), the CAISO would be required to deny to request for a Type 2 designation for the lower-cost resource and the resource would be forced to retire, leaving only the higher-cost resource available to be procured. As an initial matter, this comment ignores that this situation already can occur under the existing, Commission-approved ROR CPM tariff provisions. The comment also ignores that, under the CAISO's proposal, the resource denied a Type 2 designation would not be required to retire if an LSE procures it. Thus, LSEs would have every opportunity to procure the lower-cost resource in the course of their resource adequacy procurement. In any event, the CAISO does not control a resource's retirement decisions. Under existing section 3.2.1 of the *pro forma* Participating Generator Agreement contained in tariff appendix B.2 to the CAISO tariff, a resource can retire upon 90 days' notice to the CAISO. Similarly, under the CPUC's General Order No. 167, resources need only give at least 90 days advance notice of a long-term change in status. If a resource needed for reliability is not eligible for an RMR contract, the CAISO has no means to require it to remain in service. In particular, the CAISO cannot require a resource to remain in service simply because it is more economic than other resources that meet the same reliability need, nor can the CAISO require a resource to seek an ROR CPM designation. On the other

Some stakeholders argued that the first annual request window will give resource owners requesting Type 2 designations a free shot at "price discovery" regarding their resources and possibly market power. However, a resource receives no "price discovery" from a notification of a CAISO determination that it is not needed for reliability. Even if a study report indicates the reliability need for a resource and the CAISO's conditional intent to issue the resource a Type 2 designation, the resource owner knows only that it will be entitled to the same annual fixed cost-of-service compensation as an RMR unit.[96] This is the same price the resource would receive if the CAISO waited until the end of the year to determine that the resource was needed for reliability. Thus, the resource owner is in no position to command a price from LSEs (or the CAISO) higher than its fixed costs. DMM agrees that the "cost-of-service compensation reduces the potential for rent seeking compared to compensation at the CPM soft offer cap."[97]

Also, as discussed above, the Type 2 early notification process can reduce the potential for over-procurement and incurrence of unnecessary costs by facilitating LSE's procurement of the needed resource as part of their RA portfolio (or to cure an individual or collective deficiency). On the other hand, if LSEs procure sufficient resources to meet their resource adequacy requirements but do not procure a needed resource, the CAISO will have to procure the resource in addition to the other resource adequacy resources LSEs have procured, resulting in over-procurement compared with LSE procurement of the needed resource in the first instance. Further, the CPUC's rules already prevent any exercise of market power by permitting LSEs to request a waiver to avoid entering into a resource adequacy contract with a resource that seeks a price for local capacity higher than $40 per kilowatt-year (*i.e.*, $3.66 per kilowatt-month).[98]

Finally, DMM, agrees with the CAISO that the proposed Type 2 early notification process designation proposal will inappropriately front-run the resource adequacy process:

> While the proposal does create an April application window before than [sic] RA process is complete, a resource currently can receive an RMR contract if it applies for retirement at any time during the

hand, LSEs have resource adequacy obligations, and they determine annually which resources to procure and which resources not to procure. The CAISO only steps in when backstop resource procurement is necessary to maintain reliability.

96 The offer price a resource owner submits to the CAISO is not necessarily the price the resource will be paid. The Commission will ultimately determine the resource's just and reasonable compensation based on the RMR fixed-cost rate formula.

97 DMM Comments at 1.

98 *Opinion on Local Resource Adequacy Requirements*, CPUC Decision 06-06-064, at 4, 65-74 (Dec. 15, 2005).

> year. Therefore, creating an option to apply for a risk-of-retirement CPM does not create a fundamentally new way for a resource to 'front-run' the RA process. Further, a resource receiving a risk-of-retirement CPM is compensated based on its cost-of-service rather than the CPM soft cap, which also reduces concern that this option will undermine the current RA process and market.[99]

6. Tiebreaking Procedure for Issuing Designations

The current CPM tariff provisions do not expressly specify how the CAISO determines which resource to grant an ROR CPM designation if there are multiple resource owners requesting an ROR CPM designation, and their resources can all meet the reliability need identified by the CAISO, but the CAISO does not need all of resources. The CAISO proposes to determine which resource receives the ROR CPM designation (*i.e.*, "break the tie") by using the tiebreaking criteria set forth in the existing CPM tariff provisions, which apply to other categories of CPM designations but do not expressly apply to ROR CPM designations.[100] This revision fills a potential gap in the existing tariff.

7. Obligation to Accept a Designation

The existing tariff states that the decision to accept a CPM designation is voluntary for the scheduling coordinator for any resource.[101] The CAISO proposes to revise this tariff language to state that, if a resource owner chooses to request, and the CAISO issues a Type 1, Type 2, or Type 3 ROR CPM designation to a resource, the resource owner must accept the designation unless its resource becomes a resource adequacy resource for the same term as the ROR CPM designation or a longer period.[102]

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[99] DMM Comments at 1. DMM reiterated in its report to the CAISO Board that "[e]lements of the proposal reduce incentives for resources to seek CPM payments by feigning retirement." Under existing tariff section 41.2, the CAISO has the right "at any time upon CAISO Controlled Grid technical analysis and studies to designate a Generating Unit as a Reliability Must-Run Unit." *Id.* The Type 2 designation proposal provides for possible early notification of a resource's need and an intent to designate, albeit with more restrictions and conditions than apply to RMR designations.

[100] Proposed tariff section 43A.2.6(j) and revised tariff section 43A.4.2.3 (referencing existing tariff sections 43A.4.2.2 and 43A.4.2.3).

[101] Existing tariff section 43A.5.2.

[102] Revised tariff section 43A.5.2. If the resource becomes a resource adequacy resource, then it will be released from its obligation consistent with proposed tariff section 43A.2.6(a) discussed above, which states that capacity cannot be both CPM capacity and resource adequacy capacity at the same time.

Obligating a resource owner to accept an ROR CPM designation parallels the existing obligation of an owner to accept an RMR unit designation.[103] This comparable treatment for RMR and ROR CPM resources is reasonable given that both types of resources are needed for reliability and, pursuant to this tariff amendment, resources with an ROR CPM designation and RMR unit owners will both be receiving appropriate compensation for all of their resource-specific fixed costs pursuant to the existing formula contained in schedule F of the *pro forma* RMR Agreement.[104]

The obligation of a resource owner to accept an ROR CPM designation that it requested is also comparable to the obligations of owners of all other types of resources with CPM designations that submitted bids into an annual, monthly, or intra-monthly CPM competitive solicitation.[105] In that regard, if the CAISO issues a CPM designation to a resource that did not withdraw its competitive solicitation offer during the offer applicable adjustment period, the resource cannot decline the designation. [106] Similarly, if a resource voluntarily requests an ROR CPM designation and the CAISO expends the time and resources to study the need for the resource and finds the resource is needed to meet reliability, the decision whether to accept the designation should not be voluntary. The proposed tariff revision will constitute the only available avenue to keep a resource needed for reliability, but ineligible for an RMR contract, from shutting down.[107]

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103 *See* existing tariff section 41.2 (stating that "[a] Generating Unit so designated [as an RMR unit] shall be then obligated to provide the CAISO with its proposed rates for Reliability Must-Run Generation for negotiation with the CAISO").

104 The Commission has previously found that where the independent system operator had an exclusively mandatory RMR regime that required a unit needed for reliability to remain in service, the independent system operator should "provide for compensation at a full cost-of-service." *New York Independent System Operator Corp.,* 150 FERC ¶ 61,116 a P 17 (2015); *Midcontinent Independent system Operator, Inc.,* 148 FERC ¶ 61,057 at P 84 (2014) (finding it unjust and unreasonable to not allow system support resources, *i.e*., RMR resources, to receive compensation for the fixed costs of existing plant given Midcontinent ISO's authority to unilaterally require a generator that seeks to retire or suspend operations to remain online to address reliability concerns). Because ROR CPM compensation is based on a resource's full fixed cost of service, a mandatory ROR CPM regime is warranted. *See* also Appendix G, *pro forma* RMR Agreement, to the CAISO tariff.

105 Unlike the other types of resources with CPM designations, a resource with an ROR CPM designation is not subject to the selection of eligible capacity through the competitive solicitation processes set forth in the tariff. Existing tariff section 43A.4.

106 *See* existing tariff sections 43A.4.2.4, 43A.4.2.5, and 43A.4.2.6.

107 *See also* discussion in section III.A.5(b).

8. Illustrative Examples of the Timeline Under the Revised Designation Process

The CAISO below provides some hypothetical examples of the timelines for the various steps that will apply under the revised ROR CPM framework.[108]

Type 1 ROR CPM designation: Scenario in which the resource is not a resource adequacy resource in 2018 and requests an ROR CPM designation for the balance of 2018

The resource requests an ROR CPM designation for the balance of the year in the first window in 2018. The CAISO conducts a study and finds the resource to be needed for reliability in 2019, in which case the CAISO could designate the resource for the remaining months of 2018 as a "bridge" during 2018 to get to 2019.

May 1-15: Window open for resource owner to apply for Type 1 ROR CPM designation

June 15: CAISO issues study report explaining basis and need for CPM designation and its intent to designate resource

June 22: Stakeholder comments on study report due

July 22: Deadline for LSEs to procure resource in lieu of CAISO ROR CPM procurement

July 23: If not procured by LSEs, CAISO may designate the resource as Type 1

Type 2 ROR CPM designation: Scenario in which the resource is either a resource adequacy resource or a non-resource adequacy resource in 2018, and requests an ROR CPM designation for 2019

The resource requests an ROR CPM designation in the first window in 2018 for 2019. The CAISO conducts a study and finds the resource is needed for reliability in 2020, in which case the CAISO will indicate in the study report its intent to designate the resource for 2019 as a "bridge" during 2019 to get to 2020. The effective date for the ROR CPM designation would be January 1, 2019 (after the CAISO validates that no LSE procured the resource in its annual resource adequacy showings for 2019 or to cure any 2019 annual resource adequacy deficiency).

[108] The dates shown are for illustrative purposes only and should not be construed as exact dates that will be in effect in a given year.

May 1-15:	Window open for resource owner to apply for Type 2 ROR CPM designation
June 15:	CAISO issues study report explaining basis and need for CPM designation and its intent to designate resource if all conditions are satisfied
June 29:	Stakeholder comments on study report due
Oct. 31	Annual RA showings due
Nov. 15:	CAISO issues annual resource adequacy/collective local deficiency report
Dec. 16:	Deadline for LSEs to procure resource in lieu of CAISO, *i.e.*, the latter of (1) 30 days after the date the CAISO issues any notice of deficiency in an annual resource adequacy plan, or (2) 15 days before the start of the upcoming resource adequacy compliance year
Dec. 17:	CAISO can designate resource as Type 2 for a January 1, 2019, effective date

Type 3 ROR CPM designation: Scenario in which the resource is not shown by any LSE in a 2019 annual resource adequacy plan and the resource owner requests an ROR CPM Designation for 2019

The resource requests an ROR CPM designation in the second window in 2018 for 2019. The CAISO conducts a study and finds the resource is needed for reliability in 2020, in which case the CAISO will indicate in the study report its intent to designate the resource for 2019 as a "bridge" during 2019 to get to 2020. The effective date for the ROR CPM designation would be January 1, 2019.

Oct. 31	Annual RA showings due
Nov. 1-15:	Window open for resource to apply for Type 3 designation
Nov. 15:	CAISO issues annual resource adequacy/collective local deficiency report
Dec. 15:	CAISO issues study report explaining basis and need for Type 3 designation
Dec. 22:	Stakeholder comments on study report due

Dec. 29: Deadline for LSEs to procure resource identified in study report in lieu of CAISO, *i.e.*, the latter of (1) 14 days after the CAISO issues any Type 3 study report, or (2) 30 days after the date the CAISO issues any notice of deficiency in an annual resource adequacy plan

Dec. 30: CAISO may designate resource as Type 3 for a January 1, 2019 effective date

B. Enhancements to Provisions that Apply After a Resource Is Issued an ROR CPM Designation

If the CAISO issues an ROR CPM designation to a resource, the resource will be subject to the existing framework of CPM provisions in the tariff, as modified by the proposed revisions discussed below regarding the compensation the resource owner will be paid, the term of the designation, availability obligations, and crediting of CPM capacity.

1. Compensation

The CAISO proposes that a resource receiving an ROR CPM designation will be paid a resource-specific, fixed cost-based price, based on net plant investment at the time the designation commences. The price will be calculated using the existing methodology for determining the annual fixed revenue requirement of an RMR unit contained in schedule F of the *pro forma* RMR Agreement, which is referenced in the existing CPM tariff provisions regarding proposals for compensation above the CPM soft offer cap.[109] Consistent with the process set forth in those existing CPM tariff provisions, the resource owner must obtain from the Commission a determination of the just and reasonable price, which cannot be higher than the offer price the resource owner submitted to the CAISO with its request for a designation.[110] Resource owners will no longer have the option to be paid based on non-cost-justified offers up to the CPM soft offer cap.

It is just and reasonable for a resource receiving an ROR CPM designation to receive compensation based solely on the cost-based

[109] Proposed tariff section 43A.2.6(i) (referencing existing tariff section 43A.4.1.1.1, which the CAISO does not propose to modify in this tariff amendment).

[110] Proposed tariff section 43A.2.6(i). For the interim period between the issuance of the ROR CPM designation and the Commission's approval of a just and reasonable resource-specific, cost-based price, the CAISO will use the offer price the resource owner submitted with its request for a designation for purposes of calculating the monthly CPM payment for financial settlement. That amount will be subject to refund based on the outcome of the Commission proceeding for months in which the CAISO paid the offer price for the resource. *Id.*

methodology set forth in schedule F to the *pro forma* RMR Agreement. A resource issued an ROR CPM designation and an RMR unit are alike in that each is needed for reliability on a resource-specific basis. Unlike all the other types of resources with CPM designations, the CPM competitive solicitation process does not apply to ROR CPM designations. It is accordingly reasonable to use the same approach to compensate the resource owners for their fixed costs.

The Commission previously approved the use of the RMR schedule F methodology for a resource receiving a CPM designation.[111] Pursuant to the tariff revisions, the Commission will determine – following an opportunity for public review and comment – the just and reasonable price a resource with an ROR CPM designation will receive, and that cost-based price will be no higher than the offer price the resource owner submitted to the CAISO. Thus, the price will neither be too low to provide sufficient fixed cost recovery nor so high as to provide exorbitant cost recovery.[112] The cost-based price will therefore address any potential concerns that the resource may be able to exercise market power.[113]

Cost-of-service-based pricing is also more appropriate than market-based pricing under the revised process the CAISO proposes in this filing, which provides for the CAISO to indicate its intent to issue Type 2 designations to resources in advance of the deadline for submitting annual resource adequacy showings (although the CAISO would not actually procure the resource until after the close of that deadline, and only then if an LSE has not procured the resource). As noted *supra*, DMM agrees that "cost-of-service compensation reduces the potential for rent-seeking compared to compensation at the CPM soft offer cap" and "reduces concern that this option will undermine the current RA process and market."[114] Further, regarding the CAISO's cost-of-service pricing proposal, a large LSE concerned about potential impacts of the Type 2 designation timeline on the RA market stated in written comments that, without this crucial pricing mechanism, it would be concerned with price discovery issues.

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[111] October 2015 Order at P 29.

[112] As discussed above in section III.A.7 in this transmittal letter, Commission precedent supports cost-based pricing for resources needed for reliability that are at risk of retirement. *New York Independent System Operator Corporation,* 150 FERC¶ 61,116 at P17 (2015); *Midcontinent Independent System Operator, Inc.,* 148 FERC ¶ 61,057 at P 84 (2014).

[113] The RMR Schedule F provisions place the burden of proof on the resource owner to show that its costs are just and reasonable and only permit the recovery of costs the Commission finds to be prudent. Schedule F requires the resource owner to "affirmatively demonstrate that all such costs included costs are directly related to the provision of service" under the ROR CPM. Existing Appendix G, schedule F, part C, section 1(K), to the CAISO tariff.

[114] DMM Comments at 1.

Further, resources with ROR CPM designations are essentially receiving "bridge" payments until the year they are needed for reliability. Until that time, they should not be paid a price in excess of their full cost of service for a year in which they are not needed for reliability purposes. Indeed, a resource with an ROR CPM designation that is not immediately needed for reliability purposes should not be eligible to receive a market-based price that is higher than the cost-based price paid to a resource that is needed for reliability purposes now, *i.e.*, an RMR unit.

The proposed pricing structure will not unduly interfere with the functioning of the CAISO's day-ahead and real-time markets. In that regard, the proposed pricing formula, which the Commission has already approved for CPM payments above the soft offer cap, [115] only provides for recovery of a resource's fixed costs; it does not provide for the recovery of any variable costs (including variable fuel costs), start-up costs, or minimum load costs.[116] ROR CPM resources are at risk for recovery of these costs through the CAISO's energy and ancillary services markets just like other resources participating in such markets, including resources receiving other types of CPM designations and resources receiving capacity payments under RA contracts. The CAISO tariff essentially treats ROR CPM resources like resource adequacy resources. Among other things, they are subject to the same availability, dispatch, and must-offer obligations[117] and to the resource adequacy availability incentive mechanism.[118]

Finally, one stakeholder argued that, without market-based pricing, a resource would never seek an ROR CPM designation but would instead only seek to be evaluated in the RMR process. The CAISO disagrees. The Commission has rejected claims that ROR CPM designations and RMR designations are duplicative, explaining that RMR designations are based on a reliability need for the current resource adequacy compliance year, whereas ROR CPM is based on a reliability need for the following year, and RMR applies for local reliability needs; but ROR CPM applies to broader reliability needs.[119] Thus, resources eligible for an ROR CPM designation cannot simply demand an RMR designation instead.

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[115] Existing tariff section 43A,4.1.1.1.

[116] See existing tariff Appendix G, schedule F, part B, section 1 to the CAISO tariff. The treatment of ROR CPM resources is different than the treatment of Condition 2 RMR units that are assured recovery of their contract-based variable costs; ROR CPM resources are not assured such recovery.

[117] Compare revised tariff section 43A.5.1 with existing tariff section 43A.5.1.

[118] Existing tariff section 40.9.6.

[119] March 2011 Order at P 128. For example, a resource owner requesting a Type 3 designation in the second window of 2018 for a resource that is not needed for reliability until 2020 would be eligible for an ROR CPM designation in 2019, but it would not be eligible for an RMR designation.

2. Term of the Designation

To include the different durations of the new Type 1, Type 2, and Type 3 ROR CPM designations in the tariff, the CAISO proposes to modify the existing tariff provisions regarding term to specify that a Type 1 designation will have a term for the balance of the resource adequacy compliance year, commencing prospectively on the latter of the date the CAISO issues the designation to the resource or the first day after the last month of the year for which the resource is a resource adequacy resource.[120] Type 2 and Type 3 designations will have a term of 12 months unless the resource is a resource adequacy resource for part of the year, in which case the term will be for the balance of the year in which it occurs, commencing on the first day after the last month for which the resource is a resource adequacy resource.[121] The CAISO is retaining existing tariff language that ROR CPM designation cannot extend into the next calendar year.

The revisions reflect that Type 2 and Type 3 designations are intended to be whole-year designations for the upcoming resource adequacy compliance year; whereas, a Type 1 designation occurs intra-year and is intended to be a designation for the remainder of the year. However, the provisions regarding the term are flexible enough so that, in conjunction with the tariff, clarification that any resource owner can request an ROR CPM designation, they ensure that, even under the two-window process there will be no gap in a resource's ability to obtain an ROR CPM designation effective immediately upon the expiration of its RA contract, even if that contract expires mid-year. For example, a resource owner whose RA contract expires on August 31 can request a Type 1 designation in the first window and potentially obtain a designation commencing September 1. Similarly, a resource owner with a resource adequacy contract for the period January 1, 2018, through February 2019, can request a Type 2 or Type 3 designation in the April or November 2018 windows, to be effective March 1, 2019.

3. Availability Obligations

To include the availability obligations of the new Type 1, Type 2, and Type 3 ROR CPM designations in the tariff, the CAISO proposes to modify the existing tariff provisions regarding availability obligations to specify that the three types of designations must meet the applicable day-ahead and real-time availability requirements set forth in the existing tariff, as well as the day-ahead and real-time availability requirements for the highest flexible capacity category for which

[120] Revised tariff section 43A.3.7.

[121] *Id.* The "balance-of-year" provisions also reflect the underlying ROR CPM principle not to treat a resource with a resource adequacy contract as being at risk of retirement until its contract expires.

the capacity qualifies under the existing tariff.[122] These obligations are identical to the obligations of CPM capacity under the existing tariff provisions, except for the new obligation to meet the availability requirements for the highest qualifying flexible capacity category.

The purpose of the latter obligation is to reflect the fact that, because the ROR CPM designation applies to the entire resource and ratepayers are paying the full fixed costs of the resource, the resource's must-offer obligations should correspond to all of the resource's possible capacity attributes, *i.e.*, as system, local, and/or flexible capacity.

4. Crediting ROR CPM Capacity

The CAISO proposes to modify the existing tariff provisions regarding crediting of the costs of ROR CPM designations to the resource adequacy obligations of scheduling coordinators for LSEs, to the extent the cost of such a designation is allocated to the scheduling coordinator for more than one month.[123] The modifications add the requirement that the CAISO provide to the scheduling coordinator, for the term of the designation, local capacity resource requirements if the designated resource is located in a local capacity area, as well as flexible resource adequacy capacity requirements, as determined under the tariff.[124]

Making this addition will account for the possibility that the resource may be located in a local capacity area and/or meet flexible resource adequacy requirements, thus ensuring that LSEs paying for the full fixed costs of the resource receive the full benefit of the resource's attributes for resource adequacy purposes. This will also help to mitigate against unnecessary over-procurement of resources.

IV. Effective Date

The CAISO respectfully requests that the Commission issue an order by April 12, 2018, accepting the tariff revisions in this filing effective April 13, 2018. That will give the CAISO and any interested resource owners sufficient time to take all necessary steps to be ready to implement the first annual request window by May 1, 2018 pursuant to the tariff revisions.

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[122] Revised tariff section 43A.5.1 (referencing existing tariff sections 40.6.1, 40.6.2, and 40.10.6.1, none of which the CAISO proposes to modify in this filing).

[123] Existing tariff section 43A.9(d).

[124] Revised tariff section 43A.9(d).

V. Communications

In accordance with the Commission's regulations,[125] correspondence and other communications concerning this filing be served upon the following individuals, whose names should be placed on the official service list established by the Commission with respect to this filing:

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VI. Service

The CAISO has served copies of this filing on the California Public Utilities Commission, the California Energy Commission, and all parties with Scheduling Coordinator Agreements under the CAISO tariff. In addition, the CAISO has posted a copy of the filing on the CAISO website.

VII. Contents of Filing

The following documents, in addition to this transmittal letter, support the instant filing:

Attachment A	Clean CAISO tariff sheets incorporating this tariff amendment;
Attachment B	Red-lined marked document showing the revisions in this tariff amendment;
Attachment C	Addendum to Draft Final Proposal;
Attachment D	Board Memorandum and CAISO Presentation to the CAISO Board;
Attachment E	DMM Comments, dated October 4, 2017;

125 18 C.F.R. § 385.203(b)(3).

Attachment F	Letter from Mark Smith to Steve Berberich dated November 28, 2016; and
Attachment G	Letter from Mark Smith to Steve Berberich dated June 2, 2017

VIII. Conclusion

The CAISO respectfully requests that the Commission issued an order by April 12, 2018 accepting the tariff changes proposed in this filing to effective April 13, 2018.

Respectfully submitted,

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Attachment A – Clean Tariff Records

Tariff Amendment to Improve the Risk of Retirement Capacity Procurement Mechanism

California Independent System Operator Corporation

43A.2.6 Capacity at Risk of Retirement Needed for Reliability

The CAISO will have the authority to designate CPM Capacity to keep a resource in operation that is both at risk of retirement during the current Resource Adequacy Compliance Year or the upcoming Resource Adequacy Compliance Year and is needed to maintain reliability as discussed below.

(a) Any resource owner can apply for a risk of retirement CPM designation under this Section and consistent with the requirements below, but Capacity cannot be both CPM Capacity and Resource Adequacy Capacity at the same time.

(b) The CAISO will provide two windows annually for resource owners to request a risk of retirement CPM designation. The duration of each window will be no less than two weeks. To be considered for a risk of retirement CPM designation in a given window, a resource owner must submit a request by the deadline for that window as specified in the Business Practice Manual. The deadline for the first window will be no earlier than April 15 and no later than June 30 of each calendar year. The deadline for the second window will be after the deadline for LSEs to submit their annual Resource Adequacy Plans to the CAISO. The CAISO will post the names of the resources requesting risk of retirement CPM designations after the close of each window.

(1) In the first window, the CAISO will consider two types of risk of retirement CPM designation requests: first, a request by a resource for a risk of retirement CPM designation during the current Resource Adequacy Compliance Year (referred to as a Type 1 Risk of Retirement CPM Designation); and second, a request by a resource for a risk of retirement CPM designation during the upcoming Resource Adequacy Compliance Year (referred to as a Type 2 Risk of Retirement CPM Designation). A resource owner can seek both a Type 1 and a Type 2 designation in the same request, if applicable.

(2) In the second window, the CAISO will consider requests for a risk of retirement CPM designation for the upcoming Resource Adequacy Compliance Year, i.e., the Resource Adequacy Compliance Year for which the recently submitted annual Resource Adequacy Plans apply (referred to as a Type 3 Risk of

Retirement CPM Designation).

(c) Prior to issuing a risk of retirement CPM designation, the CAISO will prepare a study report that explains the basis and need for the risk of retirement CPM designation and its intent to make such designation. The CAISO will issue a Market Notice indicating the posting of the study report. The study report will only identify the specific resource to which the CAISO intends to grant a risk of retirement CPM designation, provided all other applicable requirements are met, and will not specify the offer price of such resource. The CAISO will post the study report on the CAISO's Website and allow an opportunity of no less than seven (7) days for stakeholders to review and submit comments on proposed Type 1 and Type 3 designations in a study report and no less than 14 days for stakeholders to review and submit comments on a proposed Type 2 designation in a study report.

(d) For Type 1 Risk of Retirement CPM Designations, the CAISO will allow an LSE no less than thirty (30) days from the comment deadline to procure Capacity from the resource. For Type 2 Risk of Retirement CPM Designations the CAISO will allow an LSE until the latter of 30 days after the CAISO issues any notice of a deficiency in an annual Resource Adequacy Plan under Section 40.7, or 15 days prior to the beginning of the upcoming Resource Adequacy Compliance Year to procure Capacity from the resource. For Type 3 Risk of Retirement CPM Designations, the CAISO will allow an LSE until the latter of 14 days after the CAISO issues any Type 3 study report or 30 days after the CAISO issues any notice of a deficiency in an annual Resource Adequacy Plan to procure Capacity from the resource. If an LSE does not, within the specified period, procure sufficient RA Capacity to keep the resource in operation during the term of the risk of retirement CPM designation, the CAISO may issue the risk of retirement CPM designation reflected in the study report, provided that all other applicable requirements set forth herein have been satisfied and all other available procurement measures have failed to procure the resources needed for reliable operation. The CAISO will not issue CPM designations in order to circumvent existing procurement mechanisms that could adequately resolve reliability needs.

(e) Within 60 days after the CAISO notifies a resource owner that it is not needed for reliability within the risk of retirement CPM timeframe and the CAISO is rejecting its request for a risk of retirement CPM designation, the resource owner must submit a plan to the CAISO for retiring the unit in accordance with the Business Practice Manual.

(f) The CAISO may issue a Type 1 Risk of Retirement CPM Designation if all of the following requirements are met:

(1) The resource is not contracted as RA Capacity through the end of the current Resource Adequacy Compliance Year and CAISO technical assessments project that the resource will be needed for reliability purposes, either for its locational or operational characteristics, by the end of the calendar year following the current Resource Adequacy Compliance Year;

(2) The CAISO did not identify any deficiency, individual or collective, in an LSE's annual Resource Adequacy Plan for the current Resource Adequacy Compliance Year that resulted in a CPM designation for the resource in the current Resource Adequacy Compliance Year;

(3) The CAISO does not project any new alternative solutions to be in operation by the start of the next Resource Adequacy Compliance Year that will meet the identified reliability need; and

(4) The resource owner submitted the following information to the CAISO and DMM in its request for a risk of retirement CPM designation: an offer price consistent with Section 43A.2.6(i) and an affidavit of an executive officer of the company who has the legal authority to bind such entity, with the supporting financial information and documentation discussed in the Business Practice Manuals, attesting that it will be uneconomic for the resource to remain in service in the current Resource Adequacy Compliance Year, and that the decision to retire is definite unless CPM or some other type of CAISO procurement of the resource occurs, the resource is sold to a non-affiliated entity, or the resource enters into

an RA contract for the balance of the current Resource Adequacy Compliance Year. Failure to provide this information will result in the CAISO rejecting the request and not issuing the study report contemplated in Section 43A.2.6(c).

If a resource owner fails to make these showings in a request for a Type 1 Risk of Retirement CPM Designation, the CAISO will not study the need for the resource in the window.

(g) The CAISO may issue a Type 2 or Type 3 Risk of Retirement CPM Designation if all of the requirements specified below are met. In addition, Type 2 Risk of Retirement CPM Designations require satisfaction of the requirements in Section 43A.2.6(h).

(1) The resource is not contracted as RA Capacity or listed as RA Capacity in any LSE's annual Resource Adequacy Plan for the upcoming Resource Adequacy Compliance Year, and CAISO technical assessments project that the resource will be needed for reliability purposes, either for its locational or operational characteristics, by the end of the calendar year following the upcoming Resource Adequacy Compliance Year;

(2) The resource owner submitted the following information to the CAISO and DMM in its request for a risk of retirement CPM designation: an offer price consistent with Section 43A.2.6(i) and an affidavit of an executive officer of the company who has the legal authority to bind such entity, with the supporting financial information and documentation discussed in the Business Practice Manuals, attesting that it will be uneconomic for the resource to remain in service in the upcoming Resource Adequacy Compliance Year, and that the decision to retire is definite unless an annual CPM or some other type of annual CAISO procurement occurs, the resource is sold to a non-affiliated entity, or the resource enters into an annual RA contract for the next Resource Adequacy Compliance Year; provided that if the CAISO denies a request for a Type 2 designation on the grounds that the resource was not the sole resource that applied for a Type 2 Risk of Retirement CPM Designation that could meet the CAISO-identified

reliability need, the resource may request a Type 3 designation in the next request window. Failure to provide this information will result in the CAISO rejecting the request and not issuing the study report contemplated in Section 43A.2.6(c). If a resource owner fails to make these showings in its request for a Type 2 or 3 Risk of Retirement CPM Designation, the CAISO will not study the need for the resource in the window.

(3) The CAISO does not project any new alternative solution to be in operation by the start of the Resource Adequacy Compliance Year following the upcoming Resource Adequacy Compliance Year that will meet the identified reliability need; and

(4) The CAISO did not identify any deficiency, individual or collective, in an LSE's annual Resource Adequacy Plan for the upcoming Resource Adequacy Compliance Year that resulted in an annual CPM designation for the resource.

(h) In addition to the requirements of Section 43A.2.6, the requirements below must be satisfied for the CAISO to issue a Type 2 Risk of Retirement CPM Designation to a resource:

(1) By the deadline specified in the Business Practice Manual and after the deadline for LSEs to submit annual Resource Adequacy Plans to the CAISO, the resource owner submitted an affidavit of an executive officer of the company who has the legal authority to bind such entity attesting that the resource owner made a reasonable effort to participate in all applicable resource adequacy competitive solicitations, requests for offers, and/or or similar procurement processes mechanisms by load serving entities for the upcoming Resource Adequacy Compliance Year; and

(2) The resource is uniquely situated in that it is the only resource that can meet the identified reliability need.

(i) The price paid to a resource receiving a risk of retirement CPM designation will be a resource-specific, cost-based price, based on net plant investment at the time the CPM designation commences, calculated based on the methodology for determining the Annual Fixed Revenue Requirement of an RMR unit as set forth in Schedule F of the pro forma RMR Agreement in Appendix G of the CAISO Tariff, and as determined by FERC as prudent, just, and reasonable. The resource owner must follow the process set forth in Section 43A.4.1.1.1 and obtain from FERC a resource-specific, cost-based price. A resource owner may not propose to FERC – and will not be compensated for any risk of retirement CPM designation based upon – a price higher than the offer price it submitted to the CAISO with its request for a risk of retirement CPM designation. Prior to the determination by FERC of the resource-specific price for CPM capacity designated under this Section, and paid pursuant to Sections 43A.4.1.1.1 and 43A.7.1 the CAISO will proceed as follows: For the period between the CAISO's designation and FERC's determination of the resource-specific, cost-based price, the CAISO will utilize the offer price the resource submitted with its request for a risk of retirement CPM designation for purposes of calculating monthly CPM payment for financial Settlement. This amount will be paid by the CAISO to the resource and will be subject to refund by the resource based on the outcome of the FERC proceeding for the months in which the CAISO paid the offer price to the resource. Once approved by FERC, the CAISO will apply the resource-specific price determined by FERC.

(j) If multiple resources request a risk of retirement CPM designation and can meet the reliability need identified by the CAISO, but the CAISO does not need all of the resources, the CAISO will determine which resource receives a risk of retirement CPM designation by using the offer price the resource owner submitted with its request for a risk of retirement CPM designation and applying the criteria in Sections 43A.4.2.2 and 43A.4.2.3.

* * * *

43A.3.7 Term – Capacity at Risk of Retirement Needed for Reliability

A Type 1 Risk of Retirement CPM Designation will have a term for the balance of the Resource Adequacy Compliance Year commencing prospectively on the latter of the date the CAISO issues the designation to the resource or the first day after the last month of the year for which the resource is a Resource Adequacy Resource. Type 2 and Type 3 Risk of Retirement CPM Designations will have a term of 12 months unless the resource is a Resource Adequacy Resource for part of the year, in which case the term will be for the balance of the year in which the designation occurs commencing on the first day after the last month for which the resource is a Resource Adequacy Resource. The term of the designation may not extend into a subsequent Resource Adequacy Compliance Year. The CAISO shall rescind the CPM designation for any month during which the resource is under contract with an LSE to provide RA Capacity.

* * * *

43A.4.2.3 Additional Permissible Considerations

In the Annual CSP Monthly CSP, or for a Type 1, Type 2, or Type 3 Risk of Retirement CPM Designation, if two or more offers would meet the cost minimization criteria identified in Section 43A.4.2.2 equally, then the CAISO shall grant the designation in its discretion based on criteria A and B, below. In the Intra-monthly CSP, if two or more offers are within 10% of each other in terms of total cost to designate the capacity, then the CAISO shall grant the designation in its discretion based on criteria A and B, below.

* * * *

43A.5.1 Availability Obligations.

CPM Capacity shall be subject to all of the availability, dispatch, testing, reporting, verification and any other applicable requirements imposed under Section 40.6 or Section 40.10.6 as applicable to Resource Adequacy Resources identified in Resource Adequacy Plans and Flexible RA Capacity resources identified in Resource Flexible RA Capacity Plans. In accordance with those requirements, Type 1, Type 2, or Type 3 Risk of Retirement CPM Capacity Designation under Section 43A.2.6 will meet the Day-Ahead Availability requirements specified in Section 40.6.1, the Real-Time Availability requirements of Section 40.6.2, and the Day-Ahead and Real-Time Availability requirements specified under Section 40.10.6.1 for the highest Flexible Capacity Category for which the Capacity qualifies under Section 40.10.3. CPM Capacity designated under the CPM shall meet the Day-Ahead availability requirements specified in Section 40.6.1 and the Real-Time availability requirements of Section 40.6.2, and Flexible Capacity CPM shall meet the Day-Ahead and Real-Time availability requirements specified in Section 40.10.6.1. Also in accordance with those requirements, Generating Units designated under the CPM that meet the definition of Short Start Units shall have the obligation to meet the additional availability requirements of Section 40.6.3, and Generating Units designated under the CPM that meet the definition of Long Start Units will have the rights and obligations specified in Section 40.6.7.1.

If the CAISO has not received an Economic Bid or a Self-Schedule for CPM Capacity, the CAISO shall utilize a Generated Bid in accordance with the procedures specified in Section 40.6.8. In addition to Energy Bids, resources designated under the CPM shall submit Ancillary Service Bids for their CPM Capacity to the extent that the resource is certified to provide the Ancillary Service.

43A.5.2 Obligation to Provide Capacity and Termination

The decision to accept a designation as CPM Capacity shall be voluntary for the Scheduling Coordinator for any resource; provided, however, that if the CAISO grants a resource's request for a Type 1, Type 2, or Type 3 Risk of Retirement CPM Designation under Section 43A.2.6, the resource must accept the designation unless it becomes a Resource Adequacy Resource for the same term as the CPM designation or a longer period. If the Scheduling Coordinator for a resource accepts a CPM designation, it shall be obligated to perform for the full quantity and full period of the designation with respect to the amount of CPM Capacity for which it has accepted a CPM designation. If the Scheduling Coordinator for a resource accepts a Flexible Capacity CPM designation, the resource shall be obligated to perform for the full quantity and full period of the designation, subject to the must-offer obligation in Section 40.10.6 that applies to the Flexible Capacity Category of the resource that was designated. If a Participating Generator's or Participating Load's Eligible Capacity is designated under the CPM after the Participating

Generator or Participating Load has filed notice to terminate its Participating Generator Agreement, Net Scheduled PGA, Pseudo-Tie Participating Generator Agreement, or Participating Load Agreement or withdraw the Eligible Capacity from its Participating Generator Agreement, Net Scheduled PGA, Pseudo-Tie Participating Generator Agreement, or Participating Load Agreement, and the Scheduling Coordinator for the resource agrees to provide service under the CPM, then the Scheduling Coordinator shall enter into a new Participating Generator Agreement, Net Scheduled PGA, Pseudo-Tie Participating Generator Agreement, or Participating Load Agreement, as applicable, with the CAISO.

* * * *

43A.9 Crediting of CPM Capacity

The CAISO shall credit CPM designations to the resource adequacy obligations of Scheduling Coordinators for Load Serving Entities as follows:

(a) To the extent the cost of CPM designation under Section 43A.2.1.1 is allocated to a Scheduling Coordinator on behalf of a LSE under Section 43A.8.1, the CAISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards (1) the LSE's Local Capacity Area Resource obligation under Section 40.3.2 in an amount equal to the LSE's pro rata share of the CPM Capacity designated under Section 43A.2.1.1 and (2) the LSE's Demand and Reserve Margin requirements determined under Section 40 in an amount equal to the LSE's pro rata share of the CPM Capacity designated under Section 43A.2.1.1.

(b) To the extent the cost of CAISO designation under Section 43A.2.2 is allocated to a Scheduling Coordinator on behalf of a LSE under Section 43A.8.3, the CAISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards the LSE's Demand and Reserve Margin requirements determined under Section 40 in an amount equal to the LSE's pro rata share of the CPM Capacity designated under Section 43A.2.2.

(c) To the extent the cost of CPM designation under Section 43A.2.3 is allocated to a

Scheduling Coordinator on behalf of a LSE under Section 43A.8.4, and the designation is for greater than one month under Section 43A.3.4, the CAISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards the LSE’s Demand and Reserve Margin requirements determined under Section 40 in an amount equal to the LSE’s pro rata share of the CPM Capacity designated under Section 43A.2.3.

(d) To the extent the cost of CPM designation under Section 43A.2.6 is allocated to a Scheduling Coordinator on behalf of a LSE under Section 43A.8.7, and the designation is for greater than one month under Section 43A.3.7, the CAISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards the LSE’s Demand and Reserve Margin requirements, Local Capacity Resource Requirements if the resource is located in a Local Capacity Area, and Flexible RA Capacity requirements, all as determined under Section 40, in an amount equal to the LSE’s pro rata share of the CPM Capacity designated under Section 43A.2.6.

(e) The credit provided in this Section shall be used for determining the need for the additional designation of CPM Capacity under Section 43A.2 and for allocation of CPM costs under Section 43A.8.

(f) For each Scheduling Coordinator that is provided credit pursuant to this Section, the CAISO shall provide information, including the quantity of capacity procured in MW, necessary to allow the CPUC, other Local Regulatory Authority, or federal agency with jurisdiction over the LSE on whose behalf the credit was provided to determine whether the LSE should receive credit toward its resource adequacy requirements adopted by such agencies or authorities.

(g) To the extent the cost of Flexible Capacity CPM designation under Section 43A.2.7 is allocated to a Scheduling Coordinator for an LSE under Section 43A.8.8, and the designation is for greater than one month under Section 43A.3.8, the CAISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards the LSE’s Flexible Capacity requirements determined under Section 40 in an amount equal to the LSE’s pro rata share of the Flexible Capacity CPM designated under Section 43A.2.7.

Attachment B – Marked Tariff Records

Tariff Amendment to Improve the Risk of Retirement Capacity Procurement Mechanism

California Independent System Operator Corporation

43A.2.6 Capacity at Risk of Retirement Needed for Reliability

The CAISO will have the authority to designate CPM Capacity to keep a resource in operation that is both at risk of retirement during the current Resource Adequacy Compliance Year or the upcoming Resource Adequacy Compliance Year and is needed to maintain reliability as discussed below.

(a) Any resource owner can apply for a risk of retirement CPM designation under this Section and consistent with the requirements below, but Capacity cannot be both CPM Capacity and Resource Adequacy Capacity at the same time.

(b) The CAISO will provide two windows annually for resource owners to request a risk of retirement CPM designation. The duration of each window will be no less than two weeks. To be considered for a risk of retirement CPM designation in a given window, a resource owner must submit a request by the deadline for that window as specified in the Business Practice Manual. The deadline for the first window will be no earlier than April 15 and no later than June 30 of each calendar year. The deadline for the second window will be after the deadline for LSEs to submit their annual Resource Adequacy Plans to the CAISO. The CAISO will post the names of the resources requesting risk of retirement CPM designations after the close of each window.

(1) In the first window, the CAISO will consider two types of risk of retirement CPM designation requests: first, a request by a resource for a risk of retirement CPM designation during the current Resource Adequacy Compliance Year (referred to as a Type 1 Risk of Retirement CPM Designation); and second, a request by a resource for a risk of retirement CPM designation during the upcoming Resource Adequacy Compliance Year (referred to as a Type 2 Risk of Retirement CPM Designation). A resource owner can seek both a Type 1 and a Type 2 designation in the same request, if applicable.

(2) In the second window, the CAISO will consider requests for a risk of retirement CPM designation for the upcoming Resource Adequacy Compliance Year, i.e., the Resource Adequacy Compliance Year for which the recently submitted annual Resource Adequacy Plans apply (referred to as a Type 3 Risk of

Retirement CPM Designation).

(c) Prior to issuing a risk of retirement CPM designation, the CAISO will prepare a study report that explains the basis and need for the risk of retirement CPM designation and its intent to make such designation. The CAISO will issue a Market Notice indicating the posting of the study report. The study report will only identify the specific resource to which the CAISO intends to grant a risk of retirement CPM designation, provided all other applicable requirements are met, and will not specify the offer price of such resource. The CAISO will post the study report on the CAISO's Website and allow an opportunity of no less than seven (7) days for stakeholders to review and submit comments on proposed Type 1 and Type 3 designations in a study report and no less than 14 days for stakeholders to review and submit comments on a proposed Type 2 designation in a study report.

(d) For Type 1 Risk of Retirement CPM Designations, the CAISO will allow an LSE no less than thirty (30) days from the comment deadline to procure Capacity from the resource. For Type 2 Risk of Retirement CPM Designations the CAISO will allow an LSE until the latter of 30 days after the CAISO issues any notice of a deficiency in an annual Resource Adequacy Plan under Section 40.7, or 15 days prior to the beginning of the upcoming Resource Adequacy Compliance Year to procure Capacity from the resource. For Type 3 Risk of Retirement CPM Designations, the CAISO will allow an LSE until the latter of 14 days after the CAISO issues any Type 3 study report or 30 days after the CAISO issues any notice of a deficiency in an annual Resource Adequacy Plan to procure Capacity from the resource. If an LSE does not, within the specified period, procure sufficient RA Capacity to keep the resource in operation during the term of the risk of retirement CPM designation, the CAISO may issue the risk of retirement CPM designation reflected in the study report, provided that all other applicable requirements set forth herein have been satisfied and all other available procurement measures have failed to procure the resources needed for reliable operation. The CAISO will not issue CPM designations in order to circumvent existing procurement mechanisms that could adequately resolve reliability needs.

(e) Within 60 days after the CAISO notifies a resource owner that it is not needed for reliability within the risk of retirement CPM timeframe and the CAISO is rejecting its request for a risk of retirement CPM designation, the resource owner must submit a plan to the CAISO for retiring the unit in accordance with the Business Practice Manual.

(f) The CAISO may issue a Type 1 Risk of Retirement CPM Designation if all of the following requirements are met:

(1) The resource is not contracted as RA Capacity through the end of the current Resource Adequacy Compliance Year and CAISO technical assessments project that the resource will be needed for reliability purposes, either for its locational or operational characteristics, by the end of the calendar year following the current Resource Adequacy Compliance Year;

(2) The CAISO did not identify any deficiency, individual or collective, in an LSE's annual Resource Adequacy Plan for the current Resource Adequacy Compliance Year that resulted in a CPM designation for the resource in the current Resource Adequacy Compliance Year;

(3) The CAISO does not project any new alternative solutions to be in operation by the start of the next Resource Adequacy Compliance Year that will meet the identified reliability need; and

(4) The resource owner submitted the following information to the CAISO and DMM in its request for a risk of retirement CPM designation: an offer price consistent with Section 43A.2.6(i) and an affidavit of an executive officer of the company who has the legal authority to bind such entity, with the supporting financial information and documentation discussed in the Business Practice Manuals, attesting that it will be uneconomic for the resource to remain in service in the current Resource Adequacy Compliance Year, and that the decision to retire is definite unless CPM or some other type of CAISO procurement of the resource occurs, the resource is sold to a non-affiliated entity, or the resource enters into

an RA contract for the balance of the current Resource Adequacy Compliance Year. Failure to provide this information will result in the CAISO rejecting the request and not issuing the study report contemplated in Section 43A.2.6(c).

If a resource owner fails to make these showings in a request for a Type 1 Risk of Retirement CPM Designation, the CAISO will not study the need for the resource in the window.

(g) The CAISO may issue a Type 2 or Type 3 Risk of Retirement CPM Designation if all of the requirements specified below are met. In addition, Type 2 Risk of Retirement CPM Designations require satisfaction of the requirements in Section 43A.2.6(h).

(1) The resource is not contracted as RA Capacity or listed as RA Capacity in any LSE's annual Resource Adequacy Plan for the upcoming Resource Adequacy Compliance Year, and CAISO technical assessments project that the resource will be needed for reliability purposes, either for its locational or operational characteristics, by the end of the calendar year following the upcoming Resource Adequacy Compliance Year;

(2) The resource owner submitted the following information to the CAISO and DMM in its request for a risk of retirement CPM designation: an offer price consistent with Section 43A.2.6(i) and an affidavit of an executive officer of the company who has the legal authority to bind such entity, with the supporting financial information and documentation discussed in the Business Practice Manuals, attesting that it will be uneconomic for the resource to remain in service in the upcoming Resource Adequacy Compliance Year, and that the decision to retire is definite unless an annual CPM or some other type of annual CAISO procurement occurs, the resource is sold to a non-affiliated entity, or the resource enters into an annual RA contract for the next Resource Adequacy Compliance Year; provided that if the CAISO denies a request for a Type 2 designation on the grounds that the resource was not the sole resource that applied for a Type 2 Risk of Retirement CPM Designation that could meet the CAISO-identified

reliability need, the resource may request a Type 3 designation in the next request window. Failure to provide this information will result in the CAISO rejecting the request and not issuing the study report contemplated in Section 43A.2.6(c). If a resource owner fails to make these showings in its request for a Type 2 or 3 Risk of Retirement CPM Designation, the CAISO will not study the need for the resource in the window.

(3) The CAISO does not project any new alternative solution to be in operation by the start of the Resource Adequacy Compliance Year following the upcoming Resource Adequacy Compliance Year that will meet the identified reliability need; and

(4) The CAISO did not identify any deficiency, individual or collective, in an LSE's annual Resource Adequacy Plan for the upcoming Resource Adequacy Compliance Year that resulted in an annual CPM designation for the resource.

(h) In addition to the requirements of Section 43A.2.6, the requirements below must be satisfied for the CAISO to issue a Type 2 Risk of Retirement CPM Designation to a resource:

(1) By the deadline specified in the Business Practice Manual and after the deadline for LSEs to submit annual Resource Adequacy Plans to the CAISO, the resource owner submitted an affidavit of an executive officer of the company who has the legal authority to bind such entity attesting that the resource owner made a reasonable effort to participate in all applicable resource adequacy competitive solicitations, requests for offers, and/or or similar procurement processes mechanisms by load serving entities for the upcoming Resource Adequacy Compliance Year; and

(2) The resource is uniquely situated in that it is the only resource that can meet the identified reliability need.

(i) The price paid to a resource receiving a risk of retirement CPM designation will be a resource-specific, cost-based price, based on net plant investment at the time the CPM designation commences, calculated based on the methodology for determining the Annual Fixed Revenue Requirement of an RMR unit as set forth in Schedule F of the pro forma RMR Agreement in Appendix G of the CAISO Tariff, and as determined by FERC as prudent, just, and reasonable. The resource owner must follow the process set forth in Section 43A.4.1.1.1 and obtain from FERC a resource-specific, cost-based price. A resource owner may not propose to FERC – and will not be compensated for any risk of retirement CPM designation based upon – a price higher than the offer price it submitted to the CAISO with its request for a risk of retirement CPM designation. Prior to the determination by FERC of the resource-specific price for CPM capacity designated under this Section, and paid pursuant to Sections 43A.4.1.1.1 and 43A.7.1 the CAISO will proceed as follows: For the period between the CAISO's designation and FERC's determination of the resource-specific, cost-based price, the CAISO will utilize the offer price the resource submitted with its request for a risk of retirement CPM designation for purposes of calculating monthly CPM payment for financial Settlement. This amount will be paid by the CAISO to the resource and will be subject to refund by the resource based on the outcome of the FERC proceeding for the months in which the CAISO paid the offer price to the resource. Once approved by FERC, the CAISO will apply the resource-specific price determined by FERC.

(j) If multiple resources request a risk of retirement CPM designation and can meet the reliability need identified by the CAISO, but the CAISO does not need all of the resources, the CAISO will determine which resource receives a risk of retirement CPM designation by using the offer price the resource owner submitted with its request for a risk of retirement CPM designation and applying the criteria in Sections

43A.4.2.2 and 43A.4.2.3. ~~The CAISO shall have the authority to designate CPM Capacity to keep a resource in operation that is at risk of retirement during the current RA Compliance Year and that will be needed for reliability by the end of the calendar year following the current RA Compliance Year. The CAISO may issue this risk of retirement CPM designation in the event that all of the following requirements apply:~~

~~(1) the resource was not contracted as RA Capacity nor listed as RA Capacity in any LSE's annual Resource Adequacy Plan during the current RA Compliance Year;~~

~~(2) the CAISO did not identify any deficiency, individual or collective, in an LSE's annual Resource Adequacy Plan for the current RA Compliance Year that resulted in a CPM designation for the resource in the current RA Compliance Year;~~

~~(3) CAISO technical assessments project that the resource will be needed for reliability purposes, either for its locational or operational characteristics, by the end of the calendar year following the current RA Compliance Year;~~

~~(4) no new generation is projected by the CAISO to be in operation by the start of the subsequent RA Compliance Year that will meet the identified reliability need;~~

~~(5) the resource owner submits to the CAISO and DMM, at least 180 days prior to terminating the resource's PGA or removing the resource from PGA Schedule 1, a request for a CPM designation under this Section 43A.2.6 including an offer price consistent with Section 43A.4.1.1 and the affidavit of an executive officer of the company who has the legal authority to bind such entity, with the supporting financial information and documentation discussed in the BPM for Reliability Requirements, that attests that it will be uneconomic for the resource to remain in service in the current RA Compliance Year and that the decision to retire is definite unless CPM procurement occurs; and~~

~~(6) the Scheduling Coordinator for the resource has offered all Eligible Capacity from the resource into all CSPs for the current RA year.~~

~~If the CAISO determines that all of the requirements have been met, prior to issuing the CPM designation, the CAISO shall prepare a report that explains the basis and need for the CPM designation. The CAISO~~

~~shall post the report on the CAISO's Website and allow an opportunity of no less than seven (7) days for stakeholders to review and submit comments on the report and no less than thirty (30) days for an LSE to procure Capacity from the resource. If an LSE does not, within that period, procure sufficient RA Capacity to keep the resource in operation during the current RA Compliance Year, the CAISO may issue the risk of retirement CPM designation; provided that the CAISO determines that the designation is necessary and that all other available procurement measures have failed to procure the resources needed for reliable operation. The CAISO will not issue CPM designations in order to circumvent existing procurement mechanisms that could adequately resolve reliability needs.~~

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43A.3.7 Term – Capacity at Risk of Retirement Needed for Reliability

~~A CPM designation for Capacity at risk of retirement under Section 43A.2.6 shall have a minimum commitment term of one (1) month and a maximum commitment term of one (1) year, based on the number of months for which the capacity is to be procured within the current RA Compliance Year.~~A Type 1 Risk of Retirement CPM Designation will have a term for the balance of the Resource Adequacy Compliance Year commencing prospectively on the latter of the date the CAISO issues the designation to the resource or the first day after the last month of the year for which the resource is a Resource Adequacy Resource. Type 2 and Type 3 Risk of Retirement CPM Designations will have a term of 12 months unless the resource is a Resource Adequacy Resource for part of the year, in which case the term will be for the balance of the year in which the designation occurs commencing on the first day after the last month for which the resource is a Resource Adequacy Resource. The term of the designation may not extend into a subsequent Resource Adequacy Compliance Year. The CAISO shall rescind the CPM designation for any month during which the resource is under contract with an LSE to provide RA Capacity.

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43A.4.2.3 Additional Permissible Considerations

In ~~either~~ the Annual CSP ~~or~~ Monthly CSP, or for a Type 1, Type 2, or Type 3 Risk of Retirement CPM Designation, if two or more offers would meet the cost minimization criteria identified in Section 43A.4.2.2 equally, then the CAISO shall grant the designation in its discretion based on criteria A and B, below. In the Intra-monthly CSP, if two or more offers are within 10% of each other in terms of total cost to designate the capacity, then the CAISO shall grant the designation in its discretion based on criteria A and B, below.

* * * *

43A.5.1 Availability Obligations.

CPM Capacity shall be subject to all of the availability, dispatch, testing, reporting, verification and any other applicable requirements imposed under Section 40.6 or Section 40.10.6 as applicable to Resource Adequacy Resources identified in Resource Adequacy Plans and Flexible RA Capacity resources identified in Resource Flexible RA Capacity Plans. In accordance with those requirements, Type 1, Type 2, or Type 3 Risk of Retirement CPM Capacity Designation under Section 43A.2.6 will meet the Day-Ahead Availability requirements specified in Section 40.6.1, the Real-Time Availability requirements of Section 40.6.2, and the Day-Ahead and Real-Time Availability requirements specified under Section 40.10.6.1 for the highest Flexible Capacity Category for which the Capacity qualifies under Section 40.10.3. CPM Capacity designated under the CPM shall meet the Day-Ahead availability requirements specified in Section 40.6.1 and the Real-Time availability requirements of Section 40.6.2, and Flexible Capacity CPM shall meet the Day-Ahead and Real-Time availability requirements specified in Section 40.10.6.1. Also in accordance with those requirements, Generating Units designated under the CPM that meet the definition of Short Start Units shall have the obligation to meet the additional availability requirements of Section 40.6.3, and Generating Units designated under the CPM that meet the definition of Long Start Units will have the rights and obligations specified in Section 40.6.7.1.

If the CAISO has not received an Economic Bid or a Self-Schedule for CPM Capacity, the CAISO shall utilize a Generated Bid in accordance with the procedures specified in Section 40.6.8. In addition to

Energy Bids, resources designated under the CPM shall submit Ancillary Service Bids for their CPM Capacity to the extent that the resource is certified to provide the Ancillary Service.

43A.5.2 Obligation to Provide Capacity and Termination

The decision to accept a designation as CPM Capacity shall be voluntary for the Scheduling Coordinator for any resource; provided, however, that if the CAISO grants a resource's request for a Type 1, Type 2, or Type 3 Risk of Retirement CPM Designation under Section 43A.2.6, the resource must accept the designation unless it becomes a Resource Adequacy Resource for the same term as the CPM designation or a longer period. If the Scheduling Coordinator for a resource accepts a CPM designation, it shall be obligated to perform for the full quantity and full period of the designation with respect to the amount of CPM Capacity for which it has accepted a CPM designation. If the Scheduling Coordinator for a resource accepts a Flexible Capacity CPM designation, the resource shall be obligated to perform for the full quantity and full period of the designation, subject to the must-offer obligation in Section 40.10.6 that applies to the Flexible Capacity Category of the resource that was designated. If a Participating Generator's or Participating Load's Eligible Capacity is designated under the CPM after the Participating Generator or Participating Load has filed notice to terminate its Participating Generator Agreement, Net Scheduled PGA, Pseudo-Tie Participating Generator Agreement, or Participating Load Agreement or withdraw the Eligible Capacity from its Participating Generator Agreement, Net Scheduled PGA, Pseudo-Tie Participating Generator Agreement, or Participating Load Agreement, and the Scheduling Coordinator for the resource agrees to provide service under the CPM, then the Scheduling Coordinator shall enter into a new Participating Generator Agreement, Net Scheduled PGA, Pseudo-Tie Participating Generator Agreement, or Participating Load Agreement, as applicable, with the CAISO.

* * * *

43A.9 Crediting of CPM Capacity

The CAISO shall credit CPM designations to the resource adequacy obligations of Scheduling Coordinators for Load Serving Entities as follows:

(a) To the extent the cost of CPM designation under Section 43A.2.1.1 is allocated to a

Scheduling Coordinator on behalf of a LSE under Section 43A.8.1, the CAISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards (1) the LSE's Local Capacity Area Resource obligation under Section 40.3.2 in an amount equal to the LSE's pro rata share of the CPM Capacity designated under Section 43A.2.1.1 and (2) the LSE's Demand and Reserve Margin requirements determined under Section 40 in an amount equal to the LSE's pro rata share of the CPM Capacity designated under Section 43A.2.1.1.

(b) To the extent the cost of CAISO designation under Section 43A.2.2 is allocated to a Scheduling Coordinator on behalf of a LSE under Section 43A.8.3, the CAISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards the LSE's Demand and Reserve Margin requirements determined under Section 40 in an amount equal to the LSE's pro rata share of the CPM Capacity designated under Section 43A.2.2.

(c) To the extent the cost of CPM designation under Section 43A.2.3 is allocated to a Scheduling Coordinator on behalf of a LSE under Section 43A.8.4, and the designation is for greater than one month under Section 43A.3.4, the CAISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards the LSE's Demand and Reserve Margin requirements determined under Section 40 in an amount equal to the LSE's pro rata share of the CPM Capacity designated under Section 43A.2.3.

(d) To the extent the cost of CPM designation under Section 43A.2.6 is allocated to a Scheduling Coordinator on behalf of a LSE under Section 43A.8.7, and the designation is for greater than one month under Section 43A.3.7, the CAISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards the LSE's Demand and Reserve Margin requirements, Local Capacity Resource Requirements if the resource is located in a Local Capacity Area, and Flexible RA Capacity requirements, all as determined under Section 40, in an amount equal to the LSE's pro rata share of the CPM Capacity designated under Section 43A.2.6.

(e) The credit provided in this Section shall be used for determining the need for the additional designation of CPM Capacity under Section 43A.2 and for allocation of CPM costs under Section 43A.8.

(f) For each Scheduling Coordinator that is provided credit pursuant to this Section, the CAISO shall provide information, including the quantity of capacity procured in MW, necessary to allow the CPUC, other Local Regulatory Authority, or federal agency with jurisdiction over the LSE on whose behalf the credit was provided to determine whether the LSE should receive credit toward its resource adequacy requirements adopted by such agencies or authorities.

(g) To the extent the cost of Flexible Capacity CPM designation under Section 43A.2.7 is allocated to a Scheduling Coordinator for an LSE under Section 43A.8.8, and the designation is for greater than one month under Section 43A.3.8, the CAISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards the LSE's Flexible Capacity requirements determined under Section 40 in an amount equal to the LSE's pro rata share of the Flexible Capacity CPM designated under Section 43A.2.7.

Attachment C – Addendum to Draft Final Proposal

Tariff Amendment to Improve the Risk of Retirement Capacity Procurement Mechanism

California Independent System Operator Corporation

Capacity Procurement Mechanism Risk-of-Retirement Process Enhancements

Addendum to Draft Final Proposal

October 19, 2017

Market & Infrastructure Policy

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1. Changes from Draft Final Proposal

In response to stakeholder comments during the September 20, 2017 stakeholder call and written comments on the draft final proposal, the California Independent System Operator ("CAISO") is making the changes described below to the draft final proposal. The CAISO will present its proposal to the CAISO Board of Governors during their meeting on November 1-2, 2017. Specifically, this addendum reflects the following changes to the draft final proposal:

1. Revised the proposal to require that within 60 days after the CAISO notifies a resource that it is not receiving a capacity procurement mechanism ("CPM") risk-of retirement ("ROR") designation, the resource owner will submit a plan for retiring the resource. This addresses a concern expressed by several stakeholders that there should be a mechanism to provide that a resource will retire within a certain period of time if the resource submits a request for a CPM ROR designation and the resource does not receive a CPM ROR designation. Changes are reflected in pages 5, 16, 20 and 28.
2. Clarified that (a) for both windows the CAISO will post the names of the resources requesting CPM ROR designations after the close the request window, and (b) for Type 2 and Type 3 CPM ROR designations the CAISO will allow the load-serving entity ("LSE") until the latter of 14 days after the CAISO issues the technical study report or 14 days after the CAISO issues any notice of a deficiency in an Annual Resource Adequacy ("RA") Plan under Section 40.7 to procure capacity from the resource. The CAIOS made this change to address stakeholder concerns that the timing of CPM ROR procurement did not effectively align with the LSE "cure" process for RA showings. The proposal now provides additional time as applicable for LSEs to procure the resource in lieu of the CAISO procuring the resource through the CPM ROR mechanism. Changes are reflected in pages 15, 16, 19, 21, 26 and 27.
3. Revised the proposal to remove the provision that to be eligible to receive a Type 2 CPM ROR designation the applicant must attest in the affidavit that it reasonably believes the resource's annual fixed costs meet or exceed the following prices, which are derived from the California Public Utilities Commission's ("CPUC") 2016 RA Report: (1) if the resource is located in a Local Capacity Area as defined in the tariff $50.28 kW-year; or (2) if the resource is not located in a Local Capacity Area as defined in the tariff $36.00 kW-year. This change was made to address stakeholder concerns that the threshold is unreasonable and unnecessary given the other protections for Type 2 designations.

2. Executive Summary

In the *2017 Stakeholder Initiatives Catalog* process, there was considerable interest from stakeholders in enhancing the CAISO's CPM process for "backstop" procurement of resources that are needed for reliability but are at ROR.[1] These retirements may be driven by the failure of

[1] The CAISO's webpage for the stakeholder initiatives catalog process is available at 2017 Catalog.

a resource to earn sufficient revenues when not procured by a LSE for RA capacity. The process for the CAISO to procure such ROR resources through its CPM backstop procurement authority is contained in section 43A.2.6 of the CAISO tariff.[2]

In 2016, the CAISO committed to conduct a stakeholder initiative in 2017 to explore potential enhancements to its existing ROR backstop procurement process. Under the backstop process, the CAISO may designate a CPM procurement to a resource that is at ROR during the current RA compliance year if that resource will be needed for reliability by the end of the next RA compliance year. The CAISO is interested in exploring clarifications and modifications that will enhance the current process.

This addendum to the draft final proposal describes the plan for stakeholder engagement, scope and background of the initiative, stakeholder written comments received and CAISO responses, changes from the revised straw proposal and the proposal.

The key elements of the proposal are described below.

- Any resource can apply for a CPM ROR designation, including a resource that is currently a RA resource, but capacity cannot be both RA capacity and CPM capacity at the same time.
- There will be two windows each year for resources to submit an application for a CPM ROR designation: one in the first half of the year and one in the second half. The deadline for first window cannot be before April 15 or later than June 30. The deadline for the second window will be after the deadline for LSEs to submit their year-ahead annual RA plans to the CAISO.
- If a resource at ROR is found to be needed for reliability, the CAISO will post a report no sooner than 30 days after the close of the window and stakeholders will have no less than seven days to comment on the report's findings regarding proposed Type 1 and Type 3 designations and no less than 14 days to comment on proposed Type 2 designations.
- LSEs will have an opportunity to procure a needed ROR resource before the CAISO procures the resource through its CPM ROR mechanism.
- There are general requirements that apply to both CPM ROR request windows. However, there are additional requirements for CPM ROR Type 2 designations in the April window.
- The CAISO proposes to modify the attestation requirement to provide that a resource that has applied for but is not awarded a CPM ROR designation need not retire if the resource: 1) is subsequently sold to a non-affiliated entity; 2) receives a RA contract; or 3) is procured by the CAISO through CPM, Reliability Must-Run ("RMR"), or any other applicable capacity procurement mechanism.

[2] Refer to section 43A, applicable after November 1, 2016, available at [CAISO CPM Tariff.]

- A resource must submit a retirement plan within 60 days after being informed by the CAISO that the resource is not going to receive a CPM ROR designation
- For a Type 2 CPM ROR designation the applicant has an obligation to offer its capacity into applicable competitive procurement solicitation processes for the RA year
- If the CAISO finds that a ROR resource is needed for reliability, the CAISO will communicate its intent to designate the resource as CPM ROR in its report. However, the intent to designate is conditional. For example, if an LSE subsequently procures the resource as RA, the CAISO would not designate the resource as CPM ROR.
- The CAISO will add selection criteria to address situations where there are multiple resources simultaneously seeking a CPM ROR designation, but the CAISO does not need to designate all of the resource as CPM all of the resources to meet the identified reliability need.
- The CAISO will clarify the tariff to indicate that the CAISO will pay resources designated as CPM ROR designation will be paid based on a “balance of the year” concept or a 12-month term, depending on the specific circumstances of the designation. Consistent with the existing tariff, payment for each month of the designation will be based on a calculation of 1/12 per month of the annual compensation amount.
- A resource that has been awarded a CPM ROR must make a filing at the Federal Energy Regulatory Commission (“FERC”) to justify its costs, and FERC will decide the resource’s price and level of compensation.
- The CAISO retains existing tariff language that allocates the cost of a CPM ROR designation to all Scheduling Coordinators (SCs”) for LSEs that serve load in the TAC area(s) in which the need for the CPM ROR designation arose.
- The CAISO will provide LSEs that are allocated ROR CPM costs credit towards their RA obligations, and will coordinate with the CPUC, other Local Regulatory Authorities (“LRAs”), or federal agencies with jurisdiction over the LSE on whose behalf a credit will be provided to determine whether the LSE should receive credit toward its RA requirements adopted by such agencies or authorities.
- Capacity designated as CPM ROR must meet day-ahead (“DA”) and real-time (“RT”) availability requirements for system, local and flexible capacity specified in section 6 of this proposal.
- If the CAISO grants a resource’s request for a ROR CPM designation, the owner must accept the designation except in a few limited circumstances.

Appendix 1 contains draft tariff language reflecting the proposal for the CPM ROR tariff sections.

3. Plan for Stakeholder Engagement

The schedule for this stakeholder initiative is presented in Table 1 below. The CAISO plans to present its proposal to the CAISO Board of Governors for their approval on November 1-2, 2017.

Table 1 – Schedule for CPM ROR Stakeholder Initiative

Step	Date	Milestone
Kick-off	April 26, 2017	Issue market notice announcing this new initiative
Issue Paper	May 10	Post issue paper
	May 18	Hold stakeholder working group meeting
	May 25	Hold stakeholder working group meeting
	Jun 6	Stakeholder written comments due
Straw Proposal	Jun 20	Post straw proposal
	Jun 27	Hold stakeholder call
	Jul 12	Stakeholder comments due
Revised Straw Proposal	Aug 8	Post revised straw proposal
	Aug 15	Hold stakeholder call
	Aug 28	Stakeholder comments due
Draft Final Proposal	Sep 13	Post draft final proposal
	Sep 20	Hold stakeholder call
	Oct 4	Stakeholder comments due
Addendum to Draft Final Proposal	Oct 19	Post addendum to draft final proposal
Proposal	Nov 1-2	Present proposal to CAISO Board for approval

4. Scope of Initiative and Background

The CAISO's current ROR CPM provisions are limited to resources that did not receive an RA contract for the upcoming RA year. Some resource owners have expressed a concern that this process is problematic because resource owners do not know whether their resource will have a RA contract until October 31 of the current year. The initiative will look at process enhancements that would provide for the ROR analysis to take place prior to the end of the RA contracting period. In addition, there is a need for provisions to address issues related to multiple resources that meet the same reliability need requesting a ROR backstop designation for the same period even though the CAISO does not need all of the resources.

Under the current tariff, the CAISO has the authority to designate CPM capacity to keep a resource in operation that is at ROR during the current RA compliance year and will be needed for reliability by the end of the calendar year following the current RA compliance year. During the current RA compliance year, the CAISO cannot procure a resource under the CPM ROR provisions if the resource is already contracted as RA capacity or listed as RA capacity in any

LSE's year-ahead RA plan.[3] This is based on the CPM principle that RA capacity cannot be CPM capacity at the same time. Stakeholders have generally interpreted this requirement as precluding a resource that is currently RA from even applying for a CPM ROR designation while they are RA, but a close reading of the tariff shows there is no such express requirement. As discussed *infra,* to eliminate any confusion, the CAISO intends to clarify the tariff language to indicate that any resource can apply for a ROR CPM designation, even if it is RA at the time it submits its request.

A more detailed discussion of the scope of this initiative, and background information on the CAISO's current CPM tariff authority, was provided in the June 20, 2017 straw proposal and will not be reproduced here. See June 20, 2017 Straw Proposal.

5. Stakeholder Comments and CAISO Responses

This section provides a summary of the written stakeholder comments that were received on the August 8, 2017 revised straw proposal, as well as the CAISO's responses to those comments. The full version of the written stakeholder comments that were received is provided in Appendix 2.

1. Who Can Apply

Most stakeholders support the CAISO clarifying that any resource, including a resource that is currently RA, can apply for a CPM ROR designation. A few stakeholders requested that the CAISO clarify if there are any conditions regarding timing and whether there may be a gap in which a resource cannot request any CPM ROR at all.

CAISO Response – The CAISO further clarifies in this draft final proposal how any resource, including a resource that is currently RA, can apply for any of the three types of CPM ROR designations. The draft final proposal recognizes that RA contrary may be partial year or carry over into another year. The CAISO does not wish to preclude a supplier that has a contract like this from being able to apply for a CPM ROR designation. However, it might affect the term of any CPM ROR designation. Accordingly, the CAISO clarifies its proposal to provide that a balance of year designation might be appropriate for certain circumstances, with the designation commenting after the last month in which the resource is RA. This will eliminate any potential gap in a resources' ability to request and receive a CPM ROR designation.

2. Timing of Requests for Designation - Windows

Several stakeholders do not support the addition of the April window because they believe that adding the window will front run the annual RA procurement process, and a designation mid-year will eliminate a resource's incentive to bid competitively when it knows it can receive cost-of-service recovery, effectively setting a floor price for the resource. Some stakeholders express concern that a designation in the April window will not help LSEs in meeting RA

[3] Tariff section 43A.2.6 (1).

obligations due to the timing of the CAISO procurement. One stakeholder recommends the CAISO allow resources to request Type 1 and 2 designations in a single application.

CAISO Response – The CAISO describes in this draft final proposal several provisions that it believes will ensure that the CPM ROR designation process does not unduly interfere with the RA process. These provisions are described in the draft final proposal section of this paper in the subsection that describes the April window. The CAISO has included in this draft final proposal a provision that allows resources to request Type 1 and 2 designations in a single application.

3. Process for Study and Procurement

Several stakeholders requested additional detail on the types of reliability studies that the CAISO will perform, how the CAISO conduced the studies, what study assumptions and analysis the CAISO used to support the determination of need, and the content of the study report. Stakeholders also requested clarification on the types of resources that the CAISO will consider in the study, how new resources would be considered as an alternative to the resource seeking a designation, and clarification regarding the requirement that “no new resource is projected to be in operation by the month of the identified need.” A few stakeholders requested additional information in the designation report so that it is clear why a resource was designated. One stakeholder recommended extending the seven day comment period to 14 days following the study report. One stakeholder asked for additional clarity on whether the CAISO would choose to not procure a resource if no LSE procures the resource. One stakeholder suggested requiring the resource to issue a solicitation for bids at the same time the study report is issued, with the resource required to accept bids up to the max NQC/EFC of its capacity in descending order of price subject to an independent monitor. One stakeholder requested that the CAISO clarify the must-offer obligations for a designated CPM ROR resource, including whether there are system, local and flexible must-offer obligations.

CAISO Response – In this draft final proposal, the CAISO has provided additional detail on the types of reliability studies that will be performed, how the studies will be done, the study assumptions and analysis that will be used to support the determination of need, and the content of the study report. The CAISO has also provided clarification on the types of resources it will consider in the study, how new resources will be considered as an alternative to the resource seeking a designation, and the requirement that “no new resource is projected to be in operation by the month of the identified need.” The CAISO is not proposing any additional information for inclusion in the designation report beyond what is currently provided in the tariff, as the CAISO believes the current designation report, in conjunction with the study report that will have been issued previous to the designation report, will adequately explain why the resource was designated. The CAISO has changed its proposal for a Type 2 designation so that stakeholders will have 14 days to provide comments following the issuance of the study report. The CAISO clarifies herein that if an LSE did not procure (“cure”) a CPM ROR designation proposed by the CAISO in its CPM ROR report, the CAISO may procure the resource as a CPM ROR resource. The CAISO is not proposing to require a resource to issue a solicitation for bids at the same time the study report is issued. The CAISO has added a section to this draft final proposal that describes the must-offer obligations of CPM ROR resources.

4. Application Requirements, Timelines and Reliability Studies

Several stakeholders asked that the CAISO clarify the start and stop dates of the two proposed windows and synch up the language in the tariff with what is being proposed to be in the BPM. Several stakeholders do not support the requirement that to be studied in the April window a resource's costs must exceed the CPM soft-offer cap. They believe this provision forces resources to wait until the November window to seek a designation, effectively negating one of the primary reasons why resources sought a change in the CPM ROR process. One stakeholder believes that forcing resources to prepare an expensive and detailed Schedule F cost-of-service study for the offer price for the application is unduly burdensome and unreasonable, and suggests that the CAISO consider requesting resource owners to develop and submit cost-of-service information after it is clear that the resource is potentially needed for reliability. One stakeholder asked the CAISO to clarify how the CAISO will assess which resources are expected to retire and which are not expected to retire. Several stakeholders do not believe it is necessary to require that a requesting resource demonstrate that its costs are above the soft-offer price cap. They question whether the CAISO should filter out less expensive but similarly qualified resources from the process. One stakeholder suggested requiring the requestor to pay for the cost of the study. One stakeholders asked the CAISO to clarify the binding offer price requirement in the application process for both the April and November windows, and how that offer price will be used. One stakeholder asked if it would be appropriate for the "uniquely situated" standard apply to all designation types.

CAISO Response – In this draft final proposal, the CAISO has clarified the proposed dates of the two proposed windows and explained how the language in the tariff works with the language that will be in the Business Practice Manual ("BPM"). The CAISO has changed the cost threshold requirement to be studied in the April window for a Type 2 designation. The criteria will no longer be that a resource's costs must exceed the CPM soft-offer cap. Rather, the CAISO now proposes that to be eligible to receive a Type 2 CPM ROR Designation, the applicant must attest in the affidavit that it reasonably believes the resource's annual fixed costs meet or exceed the following prices, which are derived from the CPUC's 2016 RA Report: (1) if the resource is located in a Local Capacity Area as defined in the tariff $50.28 kW-year; or (2) if the resource is not located in a Local Capacity Area as defined in the tariff $36.00 kW-year. This requirement will help ensure that only resources that are less likely to receive an RA contract will be eligible for a Type 2 designation. This change provides an option for resources to use the April window and not have to wait until the November window to seek a designation. This attestation does not require an applicant to complete an Annual Fixed Revenue Requirement calculation as provided in Schedule F at the time it submits its request for an ROR CPM designation. In this latest proposal the CAISO has clarified how the CAISO will assess which resources are expected to retire and with are not expected to retire. The CAISO is not proposing that the applicant pay for the cost of the study. In this latest proposal the CAISO has clarified the binding offer price requirement in the application process for both the April and

November windows and how that offer price will be used. The CAISO is proposing to use the "uniquely situated" standard only for the Type 2 CPM ROR designation.

5. Selection Criteria when there are Competing Resources

Most stakeholders support the proposed selection criteria. One stakeholder recommends that the CAISO consider how the reliability assessment for Type 2 and Type 3 CPM ROR designations with a local area or providing system support are evaluated together to ensure that resources with the best characteristics are granted the designations.

CAISO Response – The CAISO continues to support the selection criteria proposed in the revised straw proposal. One commenter states that the CAISO should evaluate Type 2 and Type 3 designations together to ensure that resources with the best characteristics and lowest costs are granted designations, because the CAISO might grant a resource a Type 2 designation in April but a better, lower cost resource might appear in the November window that the CAISO would be unable to designate because it already selected a resource in the April window. This scenario cannot happen under the CAISO's proposal because the CAISO cannot issue a Type 2 designation if there is more than one resource that can meet the identified reliability need. So there cannot be a better or least costly resource than the resource that receives a Type 2 designation.

6. Term and Monthly Payment Amount

Most stakeholders agree with the terms and monthly payments for the various types of designations. One stakeholder believes that setting a minimum term of 12 months may not allow resources that have contracts ending between January 2018 to April 2018 to apply or be designated as CPM ROR under the 2017 windows, which would not be an optimal outcome.

CAISO Response – The CAISO continues to support its previous proposal for the terms and monthly payment amount for CPM ROR designations. The CAISO has revised its proposal to reflect circumstances where a resource might be RA, RMR or CPM for some months of the year and thus eligible to a balance of year designation rather than a full 12-month designation may need to occur.

7. Cost Justification

Most stakeholders support using cost-of-service as the pricing mechanism for a CPM ROR even if it the price is lower than the soft offer cap, including using Schedule F to the pro forma RMR agreement to determine costs. Several stakeholders do not support including major maintenance costs or capital additions in the determination of the price and ask the CAISO to clarify how such costs would be treated. One stakeholder questions why a bridge payment designed to keep a resource afloat for a short period of time should be based on capacity costs and suggests instead that FERC utilize a cost-based approach for basic maintenance while the resource awaits a guaranteed contract from a LSE. One stakeholder requested that the proposal be changed such that the payment prior to the FERC ruling would be the lesser of the soft-offer cap price and the offer submitted by the resource. One stakeholder requested that the CAISO clarify how the requirement to file a cost-based rate at FERC fits with the proposed application requirement to provide a binding offer price. One stakeholder pointed out that the unit's AFRR is the unit's total fixed cost in dollars, while the price specified in tariff section 43A.4.1.1 is given in $/KW-year, and asked the CAISO to clarify the two references.

CAISO Response – The CAISO continues to support cost-of-service pricing based on the calculation methodology used for RMR resources. The CAISO does not support the alternate form of compensation proposed in the stakeholder comment above. The CAISO has changed its proposal so that the monthly CPM payment prior to the FERC ruling will be the offer price submitted by the resource in its application. In this latest proposal the CAISO has clarified how the requirement to file a cost-based rate at FERC fits with the proposed application requirement to provide a binding offer price.

8. Decision to Accept

Several stakeholders support having the decision to accept a designation be voluntary, while several other stakeholders believe accepting the designation should be mandatory. Some stakeholders question how the CAISO could allow a resource to not accept a designation after the resource is found to be needed for reliability. One stakeholder states that if a resource opts not to accept the CPM payment, then the attestation is still binding and the resource should be required to shut-down. One stakeholder asked for confirmation that resources opting to decline a designation will remain subject to a potential RMR designation.

CAISO Response – In this draft final proposal the CAISO is now proposing that if offered a CPM ROR the resource must accept the designation. The CAISO believes that this is appropriate in circumstances where the resource has requested a CPM ROR designation, the CAISO has committed time and resources to conduct a reliability study, and the CAISO s determined that the resource is needed for reliability. The stakeholder comments suggesting that if a resource opts not to accept the CPM payment then the resource should be required to shut down is better addressed by requiring the resource to accept the designation.

9. Cost Allocation

Most stakeholders support the proposed cost allocation. One stakeholder requests that if the CAISO makes a designation due to a flexible system need, the costs should be allocated to all LSEs based on their system load ratios, not Transmission Access Charge ("TAC") area load ratios. Another stakeholder requests that if the CAISO designates a resource in the San Diego-IV area as CPM ROR for purposes of supporting the LA Basin, then the costs should also be shared with LSEs that serve load in that TAC area.

CAISO Response Costs associated with CPM ROR designations are allocated to LSEs in all of the TAC areas. Otherwise CPM ROR costs are allocated to LSEs in the TAC Area(s) where the need for the CPM ROR arose. Thus, all CPM ROR allocations are made on a case-by-case basis to a TAC Area or TAC Areas depending in the specific need for the ROR CPM designation.

10. RA Credits

Many stakeholders support the CAISO's proposal to provide RA credits for CPM ROR procurement. Several stakeholders have requested additional details on how RA credits will work and how the CAISO will coordinate with LRAs regarding use of the credits. One stakeholder requested that the CAISO provide the CPM credit to the LRA for allocation to the LSEs. Several stakeholders asked for clarification of how the timing of the designation would allow RA credits to be useful to LSEs given the RA program procurement timelines and encourage the CAISO to work with the LRAs to ensure that any allocation of RA credits will work with the schedules and processes of the LRA. One stakeholder requested that the proposal provide that if the CAISO designates for purposes of local and flexible operational needs, then LSEs should be credited for those capacity attributes.

CAISO Response – The CAISO continues to support its proposal for RA credits and has added in this draft final proposal additional detail on how it will coordinate with the CPUC, other LRAs and federal agencies with jurisdiction over the LSE on whose behalf the credit may be provided to determine whether the LSE should receive RA credits.

6. Changes from Revised Straw Proposal

The CAISO has made the following changes from the revised straw proposal to create the draft final proposal:

1. The CAISO is further clarifying its proposal such that it is now clear that any resource can apply for a CPM ROR designation, even a resource that is currently a RA, RMR or CPM resource. As described in the draft final proposal, any resource can apply for a designation, but a resource cannot be a CPM ROR capacity and RA, RMR or another kind of CPM capacity at the same time. There is now no gap in the proposal in which a resource cannot request a CPM ROR at all.
2. The CAISO is revising the draft tariff language regarding the deadlines for the ROR CPM request windows. The deadline for the first window cannot close before April 15 or after January 30.
3. The CAISO clarifies the tariff language to reflect that a resource can request both a Type 1 and a Type 2 ROR CPM designation in the same application.
4. The CAISO is extending the comment period for proposed Type 2 designations to no less than 14 days (from no less than seven days).
5. For Type 2 designations, LSEs have until 10 days before the beginning of the RA Compliance Year to procure the resource. Thereafter, the CAISO can designate it as CPM ROR.
6. The CAISO has further clarified the text in its illustrative examples of timelines to explain how the examples work and the caveats that go with the examples provided (since the examples illustrate general timelines, every date in the examples should not be considered firm, as the tariff language will not "hard wire" specific dates in the tariff, but

instead will use language such as “cannot be before,” “cannot be later than,” no less than,” and the CAISO will put the specific dates in the BPM for Reliability Requirements).

7. The CAISO has added additional details on the technical assessment that the CAISO must perform in order to issue a CPM ROR designation.

8. The CAISO is changing the reference to “generation” in sections 43A.2.6 (d)(3) and (e)(3) to “alternative solution”.

9. For Type 2 CPM ROR designation requests the resource owner must attest that it reasonably believes that that its annual fixed costs for the year in which it seeks a CPM ROR designation will exceed $50.28/kw-year if it is located in a local capacity area and $36.00/kW-year if it is not. These prices are the 85th percentile of local capacity RA contracts and system RA capacity contracts as reflected on page 23 of the 2016 Resource Adequacy Report issued by the CPUC’s Energy Division in June 2017. The CAISO commits to revisit these price levels each time it undertakes a stakeholder process und section 43A.4.1.1.2 to consider updating the CPM Soft Offer Cap.

10. The CAISO clarifies that the compensation a CPM ROR resource receives cannot be higher than the cost-based rate FERC approves for it, calculated in accordance with the RMR calculation methodology. Further, consistent with existing tariff policy, a resource cannot request from FERC, or be paid by the CAISO, a CPM ROR price that is higher than the offer price it submitted to the CAISO with its request for a CPM ROR. The CPM soft offer cap will play no role in connection with the CPM ROR designation process.

11. Clarified how capital additions are considered when using Schedule F of the pro forma RMR agreement to determine the price of a CPM ROR designation.

12. Clarified that prior to the determination by FERC of the resource-specific price for CPM capacity designated under CPM ROR and paid the CAISO will proceed as follows: For the period between the CAISO’s designation and FERC’s determination of the resource-specific, cost-based price, the CAISO will utilize the offer price the resource submitted with its request for a risk-of-retirement CPM designation for purposes of calculating monthly CPM payment for financial Settlement. This amount shall be subject to surcharge or refund based on the outcome of the FERC proceeding for months in which the CAISO paid the offer price to the resource. Once approved by FERC, the CAISO will apply the resource-specific price determined by FERC.

13. If the CAISO grants a resource’s request for a CPM ROR designation, the resource must accept the designation unless it enters into an RA contract for the same period as the CPM ROR designation or a longer period.

14. Comments recognized that not all RA contracts may be January1 through December 1; rather, contracts may be partial year or may extend from one RA Compliance Year into a subsequent RA Compliance Year. So as not to inadvertently preclude any resource from requesting a CPM ROR and to address issues resulting from RA contracts with irregular

terms, the CAISO has revised the CPM ROR term provisions to allow for balance-of-year designations commencing after the last month of the year in which the resource is RA.

15. Clarified how cost allocation works under the existing tariff for local and flexible resources and will work for CPM ROR going forward.
16. The CAISO is revising the existing crediting provisions to add that applicable LSEs will also receive credit toward their local capacity requirements if the designated resource is located in a local capacity area and credit toward any flexible RA capacity requirements for capacity that qualifies as flexible capacity.
17. The CAISO has added the text of existing tariff subsection 43A.9(f), which explains how RA crediting will be done for CPM ROR and the interaction and coordination between the CAISO and the CPUC, other Local Regulatory Authorities, or federal agencies with jurisdiction over the LSE.
18. The CAISO proposes to add language to tariff section 43A.5.1 stating that capacity designated as ROR CPM must meet the DA availability requirements specified in section 40.6.1, the RT availability requirements of section 40.6.2, and the DA and RT availability requirements specified in section 40.10.6.1 for the highest category of flexible capacity for which the resource's capacity qualifies as flexible capacity. Further, if the resource is located in a local capacity area it will be subject to all of the requirement applicable to Listed Local capacity.

7. Proposal

The CAISO's proposal is described below.

<u>Eligibility for Designation</u>

Capacity that is under an RA contract, RMR contract or another kind of CPM procurement may not be designated as ROR CPM and receive CPM payments at the same time. A resource that is "partial RA," i.e., has part of its overall capacity contracted for RA, is not eligible to receive a CPM ROR payment for that month. In other words, if a resource has even one-half of a MW contracted for RA for a month, the resource is considered an RA resource and is ineligible to receive a CPM ROR designation for that month.

<u>ROR CPM Request and Designation Process</u>

The CAISO proposes to change the current tariff to provide two application windows each year when resources can apply for a CPM ROR designation. The application windows initially will be open each year during the first-half of the months of April and November (April 1-15 and November 1-15), with these specific initial dates established in the BPM for Reliability Requirements.

However, the tariff language will state that there will be two windows each year for resources to submit an application for a CPM ROR designation: one in the first half of the year and one in the second half. The tariff language will state that the deadline for first window cannot be before

April 15 or later than June 30. The deadline for the second window will be after the deadline for LSEs to submit their annual RA plans to the CAISO.

The intent of this approach is to give the CAISO some flexibility in setting the exact dates for the request window, while still providing some level of certainty to market participants. This approach will allow some leeway to the CAISO, based on its actual experience, to change the exact timing of the request windows based on its actual experience by using the CAISO BPM Change Management stakeholder process rather than having to make a tariff amendment filing with FERC to modify the dates for the windows. FERC has previously recognized that implementation dates like these typically belong in a business practice manual not in the tariff.

In the first window in April, the CAISO will consider two types of CPM ROR designation requests. The first type, referred to as a Type 1 CPM ROR Designation, is a request by a non RA resource for a CPM ROR designation for the current RA compliance year. The second type, referred to as a Type 2 CPM ROR Designation, is a request by a RA resource or a non-RA resource for a CPM ROR designation for the calendar year following the current RA compliance year. A resource can seek both types of designations simultaneously, if applicable.

In the second window in November, the CAISO will consider CPM ROR designation requests for the upcoming RA Compliance Year,[4] referred to as a Type 3 CPM ROR Designation.

For each window, the CAISO will retain the following steps from the current tariff:

1. Perform a reliability study, and, if there are any resources eligible for CPM ROR, will post a report no less than 30 days after the closing of the window indicating the reliability need for the resource and proposing a CPM designation. The report will describe the reliability studies the CAISO performed as part of the reliability study, the assumptions underlying the CAISO's studies, the study results, the resource (or resources) that the CAISO has determined are needed to reliably operate the grid and may receive a CPM ROR designation, why that resource (or those resources) are needed such that the grid cannot be reliably operated without that specific resource (or resources) in service, and the time period for which a CPM ROR designation is needed.
2. After the posting of the report, for Type 1 and Type 3 designations, the CAISO will allow no less than seven days for stakeholders to review and submit comments on the report. For Type 2 designations, the CAISO proposes to extend the stakeholder comment period to no less than 14 days (from no less than seven days) because the actual designation will occur several months in the future.
3. For Type 1 CPM ROR designations, LSEs will have at least 30 days to procure capacity from that resource before the CAISO could procure that resource under CPM ROR. For Type 2 and Type 3 risk of retirement CPM designations, the CAISO will allow the LSE until the latter of 14 days after the CAISO issues the study report or 14 days after the

[4] The RA compliance year for which the recently submitted year-ahead annual RA Plans apply.

CAISO issues any notice of a deficiency in an Annual Resource Adequacy Plan under Section 40.7 to procure Capacity from the resource.

4. If no LSE procures the specific resource that the CAISO identified as needed for reliability, the CAISO may then procure the resource as CPM ROR capacity. Existing tariff section 43A.6.2 describes the CPM designation report and market notice that the CAISO must issue within the earlier of 30 days of procuring a resource or 10 days after then end of the month. The designation report will contain the following information and the CAISO does not propose to make any changes to the current tariff language in section 43A.6.2 as this is existing tariff language that has been approved by FERC and in place for years.

   > A description of the reason for the designation and an explanation of why it was necessary for the CAISO to utilize the CPM authority. The following information: the resource name; amount of CPM capacity designated in MW; explanation of why that amount of CPM capacity was designated; date CPM Capacity was designated; duration of the designation; and price of the resource.

For both windows the CAISO will post the names of the resources requesting CPM ROR designations after the close the request window in accordance with the business practice manual.

The CAISO proposes two sets requirements for resource owners seeking a ROR CPM designation. First, there are general requirements applicable to all requests for a CPM ROR designation (for both the April and November windows). Second, there are additional requirements applicable to a resource owner in the April window that seeks a Type 2 CPM ROR designation (applying in the April window and requesting a designation for the upcoming RA Compliance Year). The CAISO will treat the information submitted by the resource owner as confidential. The provisions for each window are described below.

<u>April Window</u>

The applicant must submit an affidavit from an executive officer of the company that represents the resource attesting that the resource will be uneconomic to remain in service without a CPM ROR designation and the decision to retire is definite unless CPM or other CAISO procurement occurs, the resource is sold to a non-affiliated entity, or the resource receives an annual RA contract. The application must provide an offer price that will be binding such that the resource owner cannot request from FERC a price higher than its offer price submitted to the CAISO. The CAISO discusses the actual price to be paid to a resource receiving a CPM ROR *infra*. No other price will be considered valid.

Within 60 days after the CAISO notifies a resource that it is not receiving a CPM ROR designation, the resource owner will submit a plan for retiring the resource.

Prior to finalizing procurement of a resource under a Type 2 CPM ROR Designation the CAISO must find that the resource participated in all applicable RA competitive solicitations, requests for offers, or similar procurement mechanisms conducted by LSEs for such RA compliance year and was not offered an annual RA contract consistent with its offer. The CAISO notes that mere issuance of the report indicating the CAISO's intent to designate a resource as CPM ROR does not itself constitute designation of the resource. Actual designation of a resource as CPM ROR does not occur until after the comment and "cure" period has closed, the resource has not been procured by an LSE, and the CAISO formally designates the resource, which creates a market notice and reporting requirement. Further, the actual term of the CPM ROR designation occurs in accordance with Section 43A.3.7 and capacity cannot be CPM ROR capacity at the same time it is RA capacity. Thus, if the CAISO indicates its intent to issue a Type 2 designation to a resource in the report, the resource has a continuing obligation to participate in all applicable RA solicitations until the day the CAISO actually issues it a CPM ROR designation.

The CAISO technical study will determine whether the resource will be needed for reliability purposes, *e.g.,* for its locational or operational characteristics, by the end of the calendar year following the compliance year in which the resource would receive a CPM ROR designation, and that no new generation is projected to be in operation during that period that could meet the identified reliability need.

For Type 2 CPM ROR Designations in the April window, the CAISO must find that the resource that is uniquely situated such that it is the only resource that can meet the identified reliability need. In other words, multiple resources cannot meet the same need. Because there are no alternative resources that can meet the reliability need, this requirement helps prevents Type 2 designations from unduly interfering with the RA process or creating any situation where the ISO might select a higher cost resource in the April window even though a cheaper resource might become available in the November window to meet the reliability need. In other words, the CAISO can only make a Type 2 designation if there is no other resource that can meet the reliability need identified in the April window. This requirement does not apply to Type 1 or Type 3 designations, both of which occur after annual RA procurement.

If a resource at ROR is needed for reliability, the CAISO would be able to communicate in its study report that the resource is eligible for a CPM designation, but any CPM designation is conditional, and the resource, if selected in a RA competitive solicitation, request for offers, or similar procurement mechanism conducted by an LSE must take that contract rather than the CPM designation if such contract is offered to the resource.

Examples are provided below of the timelines for the April application window if it were in place for 2017. The dates shown are for illustrative purposes only and should not be construed as exact dates that will be in effect each year (due to calendar days like weekends and holidays). The CAISO will not "hard wire" specific dates in the tariff, but instead will use language such as "cannot be before," "cannot be later than," no less than," and will put the specific dates in the BPM for Reliability Requirements. This approach enables the CAISO, based on experience, to change dates in the future through the CAISO BPM Change Management stakeholder process and not require a tariff filing at FERC to amend the tariff for date changes.

There are two possible designation scenarios for the April application window. Example scenarios and their associated timelines are described below. The dates shown are for illustrative purposes only, and the example timelines shown below assume that the CAISO is able to complete the study report 30 days after the close of the application window (the tariff language provides that the CAISO "will issue a report no sooner than 30 days after the close of the applicable window").

<u>Type 1 CPM ROR Designation: Designation Scenario where Resource is not RA in 2017 and requests a 2017 Balance-of-Year CPM ROR Designation</u> – Resource requests a CPM ROR designation for 2017, the CAISO does a study and finds the resource to be needed for reliability in 2018, in which case the CAISO could designate the resource for the remaining months of 2017 as a bridge during 2017 to get to 2018.

April 1-15: Window open for resource owner to apply

May 15: CAISO issues report explaining basis and need for CPM designation and intent to designate

May 22: Stakeholder comments on report due

June 22: Deadline for LSEs to procure in lieu of CAISO CPM ROR procurement

June 23: If not procured by LSEs, CAISO can designate unit as CPM ROR capacity

The CAISO will perform a technical assessment to determine if the resource will be needed for reliability purposes, typically for its locational or operational characteristics. To determine whether the resource is eligible for a CPM ROR designation, the CAISO will undertake a reliability study to determine whether the resource is needed by the end of calendar year 2018. The CAISO will assume that all resources not expected to retire are available.

The CAISO study will have up-to-date information on resources that are recently approved or under review and resource interconnections from the CAISO generator interconnection process and Resource Information Management System ("RIMS") database and the latest information on transmission projects through RIMS and CPUC quarterly Form 970. Any type of resource that is scheduled to be in service will be included in the study. The CAISO will consider any new addition to the grid, transmission or generation, as an alternative to the resource seeking CPM ROR. The study will include any and all reliability studies (see NERC, WECC, and CAISO standards). The study will use the latest information on resources that are expected to retire and are not expected to retire based on announced retirements and once-through cooling ("OTC") effective dates. The CAISO will use a diverse set of tools and follow a multi-step process whereby the CAISO will study a resource for its impact on the system and any local capacity area. The reliability, operational flexibility, given the best available information regarding grid conditions for year 2 and the assumed availability in year 2 of RA resources procured for year 1 (including other known generator retirements) and any new generation that will achieve commercial operation to meet year 2 needs.

1. This analysis consists of one or more of the following studies -- power flow, voltage stability, transient stability, reactive margin studies, and production simulation. The analysis will evaluate the adverse effects on the transmission system as well as operational flexibility requirements.
2. This analysis considers the characteristics of the individual resources in the fleet and will be able to highlight resources that are needed for locational and system reliability or have non-generic resource flexibility required to operate the integrated grid and have not been secured through the procurement process.

The CAISO intends to include all of the foregoing information in its Reliability Requirements business practice manual.

For Type 2 CPM ROR Designations in the April window, for the resource to be designated as CPM ROR capacity the CAISO must find that the resource that has applied for a CPM ROR is uniquely situated such that it is the only resource that can meet the identified reliability need. In other words, multiple resources cannot meet the same need. The "uniquely situated" condition applies only for Type 2 designations, and does not apply for all three types of designation.

<u>Type 2 CPM ROR Designation: Resource, is RA or Non-RA in 2017, and requests a 2018 CPM ROR Designation</u> – Resource requests a CPM ROR designation for 2018, the CAISO does a study and finds the resource to be needed in 2019, in which case the CAISO will indicate its intent to designate the resource for 2018 as a bridge during 2018 to get to 2019, and can establish an effective date for CPM ROR procurement of January 1, 2018 (after the CAISO checks to see if any LSE procures the resource in the year-ahead showings for 2018).

April 1-15: Window open for resource owner to apply

May 15: CAISO issues report explaining basis and need for CPM designation and intent to designate (CAISO will report a conditional designation)

May 29: Stakeholder comments on report due

December 22: Deadline for LSEs to procure in lieu of CAISO

December 26: CAISO can designate resource as CPM ROR capacity

January 1: Effective date of Type 2 CPM ROR designation

For Type 2 CPM ROR designations, the CAISO will allow the LSE until the latter of 14 days after the CAISO issues the study report or 14 days after the CAISO issues any notice of a deficiency in an Annual Resource Adequacy Plan under Section 40.7 to procure Capacity from the resource.

In response to comments that it is possible for an RA contract to carry over from one year into another, *e.g.*, a contract from January 1, 2017 through March 31, 2018, the CAISO has modified the proposal to allow a resource under such circumstances to receive a Type 2 designation for the balance of the year, i.e., from April 1-December 31. In all other instances, Type 2 designations commence on January 1

The CAISO will perform a technical assessment to determine if the resource will be needed for reliability purposes, typically for its locational or operational characteristics. To determine whether the resource is eligible for a CPM ROR designation, the CAISO will undertake a study to determine whether the resource is needed by the end of calendar year 2019. In the study process the CAISO will assume that all resources not expected to retire are available. The CAISO study will be performed as described in the Type 1 CPM ROR Designation: Designation Scenario section above.

One set of comments suggested that the CAISO should evaluate Type 2 and Type 3 designations together to ensure that resources with the best characteristics and lowest costs are granted designations. The concern was that the CAISO might grant a resource a Type 2 designation in April but a better, lower cost resource might appear in the November window that the CAISO would be unable to designate because it already selected a resource in the April window. This scenario cannot happen under the CAISO's proposal because the CAISO cannot issue a Type 2 designation where if there is more than one resource that can meet the identified reliability need.

<u>November Window</u>

The tariff language will require the applicant to submit an affidavit from an executive officer of the company that represents the resource to attest that its resource will be uneconomic to remain in service without a designation and the decision to retire is definite unless CPM or other CAISO procurement occurs, the resource is sold to a non-affiliated entity, or the resource receives an annual RA contract. The tariff language also will continue to state that the application must provide an offer price that will be binding. The resource owner must file at FERC for a cost of service price that is no higher than the price it submitted with its request for a CPM ROR. No other price will be valid.

Within 60 days after the CAISO notifies a resource that it is not receiving a CPM ROR designation, the resource owner will submit a plan for retiring the resource.

The CAISO provides an example of the timelines for the November application window if it were in place for 2017. The dates shown are for illustrative purposes only and should not be construed as exact dates that will be in effect each year (due to calendar days like weekends and holidays). As discussed above, the CAISO will not "hard wire" specific dates in the tariff, but instead will use language such as "cannot be before," "cannot be later than," no less than," and will put the specific dates in the BPM for Reliability Requirements.

The dates shown are for illustrative purposes only, and the example timelines shown below assume that the CAISO is able to complete the study report 30 days after the close of the application window (the tariff language provides that the CAISO "will issue a report no sooner than 30 days after the close of the applicable window.

- Nov 1-15: Window open for resource to apply
- Dec 15: CAISO issues report
- Dec 22: Stakeholder comments on report due
- Jan 22: Deadline for LSEs to procure in lieu of ISO\
- Jan 23: CAISO may designate resource via CPM ROR

For Type 3 CPM ROR designations, the CAISO will allow the LSE until the latter of 14 days after the CAISO issues the study report or 14 days after the CAISO issues any notice of a deficiency in an Annual Resource Adequacy Plan under Section 40.7 to procure Capacity from the resource.

Consistent with the discussion above, if a resource seeking a Type 3 ROR CPM designation had an RA contract for the first three months of 2018, any actual designation would not commence until April 1.

The CAISO performs technical assessments to determine if the resource will be needed for reliability purposes, typically for its locational or operational characteristics. The study done for will be done after the CAISO knows through the year-ahead RA showings which resources are RA for the upcoming RA year. A resource in this window will be studied unless it is RA for the entire year. Under the CPM ROR tariff provisions, the CAISO will undertake a study to determine if the resource is needed for reliability by the end of calendar year 2019. If the CAISO finds the resource to be needed by the end of calendar year 2019, then it may issue a CPM ROR designation to the resource for 2018. In the study process the CAISO will assume that all resources not expected to retire will be considered available. The CAISO study will be performed as described in the Type 1 CPM ROR Designation: Designation Scenario section above.

The CAISO will revise the tariff to refer to selection criteria specified in sections 43A.4.2.2 and 43A.4.2.3 in the event there are multiple resources seeking a CPM ROR designation at the same time, but the "need" is such that the CAISO cannot designate all of the resources. Section 43A.4.2.3 will serve as a tiebreaker. The language from sections 43A.4.2.2 and 43A.4.2.3 is provided below. The offer price that will be used with regard to Section 43A.4.2.2 will be the offer price that is provided by the resource in its CPM ROR application to the CAISO.

43A.4.2.2 Minimizing the Overall Cost of Meeting the Reliability Need

Once the CAISO has identified the pool of resources that can meet the designation criteria, the CAISO shall then designate Eligible Capacity from that pool of resources in order to minimize the overall cost of meeting the designation criteria. Aside from considering the respective offer prices from the Eligible Capacity, as part of this cost minimization the CAISO also may consider: the quantity of a resource's available Eligible Capacity, based on a resource's PMin, *relative to the remaining amount of capacity needed; and the quantity of a resource's available Eligible Capacity, based on outages and replacement or substitute daily RA Capacity.*

For a potential Exceptional Dispatch CPM, the CAISO also shall consider the overall costs to the CAISO of issuing the Exceptional Dispatch to RA Capacity rather than to Eligible Capacity. If the CAISO determines it would minimize overall costs to issue the Exceptional Dispatch to RA Capacity, then the CAISO shall issue the Exceptional Dispatch to RA Capacity and not designate Eligible Capacity as CPM Capacity to meet the designation criteria.

If capacity would receive a CPM designation based on the cost minimization criteria but the resource from which the capacity would be provided faces use limitations such that the capacity, in the CAISO's reasonable discretion, poses the risk of being unavailable to fully meet the reliability need creating the CPM event, then the CAISO may, at its reasonable discretion and giving due regard for meeting cost minimization considerations, not grant that capacity a CPM designation and instead grant the designation to the next-best capacity at meeting the CAISO cost minimization process defined in this Section 43A.4.2.2. In exercising this discretion, the CAISO shall not unduly discriminate against resources with use limitations.

Additionally, if capacity would receive a CPM designation based on the cost minimization criteria but the resource from which the capacity would be provided is already going to be RA Capacity at some point during the CPM designation period and, in the CAISO's reasonable discretion, poses the risk of the capacity being unavailable fully to meet the reliability need creating the need for a CPM designation, then the CAISO may, at its reasonable discretion and giving due regard for meeting cost minimization considerations, not grant that capacity a CPM designation and instead grant the designation to the next-best capacity at meeting the CAISO cost minimization process defined in this Section 43A.4.2.2.

43A.4.2.3 Additional Permissible Considerations

In either the Annual CSP or Monthly CSP, if two or more offers would meet the cost minimization criteria identified in Section 43A.4.2.2 equally, then the CAISO shall grant the designation in its discretion based on criteria A and B, below. In the Intra-monthly CSP, if two or more offers are within 10% of each other in terms of total cost to designate the capacity, then the CAISO shall grant the designation in its discretion based on criteria A and B, below.

Criterion A – Relative effectiveness of the resources in meeting local and/or zonal constraints or other ISO system needs.

Criterion B – Relative operating characteristics of the resources, including dispatchability, ramp rate, and load-following capability.

Term and Compensation

The CAISO will modify the tariff to state that Type 1 CPM ROR Designations will have a term for the balance of the RA Compliance Year in which they occur.[5] Type 2 and Type 3 CPM ROR Designations will have a term of 12 months, or balance of the RA Compliance Year if the resource is already RA for a part of the RA Compliance Year (in other words, not all Type 2 and Type 3 designations have to be for all 12 months of the year). Capacity cannot be both CPM Capacity and RA Capacity at the same time. For example, if a resource seeks a Type 1 designation and it is RA capacity through August 31, it would be eligible for a Type 1 designation for the period September 1-December 31.The term of any designation may not extend into a subsequent RA Compliance Year.

Comments recognized that not all RA contracts may be January1 through December 1; rather, contracts may be partial year or may extend from one RA Compliance Year into a subsequent RA Compliance Year.[6] So as not to inadvertently preclude any resource from requesting an ROR CPM and to address issues resulting from RA contracts with irregular terms, the CAISO has revised the ROR CPM term provisions to allow for balance-of-year designations commencing after the last month of the year in which the resource is RA. Consistent with the existing tariff, CPM resources will not receive CPM payments for capacity that is shown as RA, RMR or other kind of CPM procurement in a given month.

To be paid for an awarded CPM ROR offered by the CAISO, the resource owner must make a filing at FERC to justify its costs, and FERC will decide the level of compensation. The pricing formula costs are to be determined using the Annual Fixed Revenue Requirement for a RMR Unit as set forth in Schedule F to the pro forma RMR agreement in Appendix G of the CAISO tariff.[7] This is the existing methodology for establishing a CPM price above the soft offer cap. The payment for each month of designation will be based on the existing CPM calculation of 1/12 per month of the annual compensation amount.

Under Section 4 of Schedule F to the pro forma RMR agreement, net investment is determined as of the end-of-year balances in the accounts specified for the relevant cost year. Because some CPM ROR designation may occur mid-year, net investment should be based on the resource's plant in service at the start of the CPM designation.

Prior to FERC's determination of the resource's CPM ROR price, the CAISO will pay the resource based on its offer price submitted in the CPM ROR application. The price will be subject to refund or surcharge for periods in which the offer price was applied once FERC

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[5] For example, if following the evaluation of applications in the April window, the ISO designates a non-RA resource as ROR CPM on June 30, the designation would be effective for the six remaining months of the year.

[6] SDG&E believes setting a minimum term of 12 months may not allow resources that have contracts ending intra-year 2017 or 2018 to apply or be designated as CPM ROR under the 2017 windows. It indicated that in such a case, the resource could be required to wait until April of 2018 prior to applying for risk of retirement.

[7] A link to the CAISO's tariff is: http://www.caiso.com/rules/Pages/Regulatory/Default.aspx

determines the applicable cost-based price. After FERC determines the cost-based price, the CAISO will a use the FERC-determined price.

The CPM tariff's more general soft offer cap price will not be available to resources seeking CPM ROR designations. The intent is for CPM ROR payments to be cost-based. ROR CPM is essentially a one-year or balance-of-year "bridge" to an RA compliance year when the resource will be needed.

If the CAISO grants a resource's ROR CPM designation, the resource must accept the designation unless it enters into an RA contract for the same period as the ROR CPM designation or a longer period. This ensures that a needed resource will remain available to the CAISO.

Cost Allocation

Cost allocation for CPM ROR procurement will be treated as is already provided for in the current CAISO tariff, in section 43A.8.7. The CAISO is not proposing any changes to section 43.A.8.7 of the tariff.

> 43A.8.7 Allocation of CPM Costs For Resources at Risk of Retirement
>
> If the CAISO makes any CPM designations under Section 43A.2.6 for resources at risk of retirement needed for reliability, the CAISO shall allocate the costs of such designations to all Scheduling Coordinators for LSEs that serve Load in the TAC Area(s) in which the need for the CPM designation arose based on the percentage of actual Load of each LSE represented by the Scheduling Coordinator in the TAC Area(s) to total Load in the TAC Area(s) as recorded in the CAISO Settlement system for the actual days during any Settlement month period over which the designation has occurred.

For example, if the CAISO designated a resource as CPM ROR because it needed flexible capacity to meet a system reliability need, the CAISO would allocate the costs to all LSEs on the system.

RA Credits

The CAISO proposes to continue the current tariff approach where if a CPM designation is for greater that one month the CAISO will provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards meeting RA requirements, and will coordinate with the CPUC, other LRA, or federal agency with jurisdiction over the LSE regarding the use by LSEs of those credits.. The provision of RA credits for CPM ROR procurement is already included in the current CAISO tariff, in section 43A.9(d). As requested by stakeholders, the CAISO is proposing some revisions to section 43A.9(d) regarding local and flexible capacity. The proposed text for revised section 43A.9(d) is shown below. Further, in this draft final proposal the CAISO has added the existing text of tariff subsection 43A.9(f), which further explains how RA crediting will be done for CPM ROR and the interaction and coordination between the CAISO and with the CPUC, other LRA, or federal agency with jurisdiction over the LSE.

43A.9 Crediting Of CPM Capacity

The CAISO shall credit CPM designations to the resource adequacy obligations of Scheduling Coordinators for Load Serving Entities as follows:

(d) To the extent the cost of CPM designations under Section 43A.2.6 is allocated to a Scheduling Coordinator on behalf of a LSE under Section 43A.8.7, and the designation is for greater that one month under Section 43A.3.7, the CAISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards the LSE's Demand and Reserve Margin requirements, credit towards the LSE's Local Capacity Resource Requirements if the resource is located in a Local Capacity Area, and credit towards the LSE's Flexible RA Capacity requirement for capacity that qualifies as Flexible Capacity under Section 40.10.3, all as determined under Section 40, in an amount equal to the LSE's pro rata share of the CPM Capacity designated under Section 43A.2.6. Credit will be rescinded for any month during the CPM designation period in which the resource is under contract with an LSE to provide RA Capacity.

(f) For each Scheduling Coordinator that is provided credit pursuant to this Section, the CAISO shall provide information, including the quantity of capacity procured in MW, necessary to allow the CPUC, other Local Regulatory Authority, or federal agency with jurisdiction over the LSE on whose behalf the credit was provided to determine whether the LSE should receive credit toward its resource adequacy requirements adopted by such agencies or authorities.

<u>Must-Offer Obligation</u>

In response to stakeholder comments, the CAISO proposes to clarify the must-offer obligations for a designated CPM ROR resource. The CAISO proposes to add language to tariff section 43A.5.1 stating that capacity designated as CPM ROR must meet the Day-Ahead availability requirements specified in section 40.6.1, the RT availability requirements of section 40.6.2, and the Day-Ahead and Real-Time availability requirements specified in section 40.10.6.1 for the highest category of flexible capacity for which the resource's capacity qualifies as flexible capacity.

8. Next Steps

The CAISO discussed the draft final proposal with stakeholders during a conference call on September 20 2017 and stakeholders submitted written comments by October 4, 2017 to initiativecomments@caiso.com. On October 19, 2017, the CAISO posted an addendum to the draft final proposal. The CAISO plans to present its proposal to the CAISO Board of Governors on November 1-2, 2017.

Appendix 1

Draft Tariff Language

This appendix provides draft tariff language for the main CPM ROR tariff sections that are affected by this revised straw proposal.

43A.2.6 Capacity at Risk of Retirement Needed For Reliability

The CAISO will have the authority to designate CPM Capacity to keep a resource in operation that is at risk of retirement during the current RA Compliance Year or the calendar year following the current RA Compliance Year and is needed to maintain reliability as discussed below.

(a) Any resource owner can apply for a risk of retirement CPM designation under this Section consistent with the requirements below, but Capacity cannot be both CPM Capacity and Resource Adequacy Capacity at the same time.

(b) The CAISO will provide two windows annually for resource owners to request a risk of retirement CPM designation. To be considered for a CPM risk of retirement designation in a given window, a resource owner must submit a request by the deadline specified in the BPM for Reliability Requirements for that window. The deadline for the first window will be no earlier than April 15 and no later than June 30 of each year, and the deadline for the second window will be after the deadline for LSEs to submit their annual Resource Adequacy Plans to the CAISO. For both windows the CAISO will post the names of the resources requesting CPM ROR designations after the close the request window in accordance with the business practice manual

(1) In the first window, the CAISO will consider two types of risk of retirement CPM designation requests: first, a request by a resource for a CPM risk of retirement designation during the current RA Compliance Year (referred to as a Type 1 Risk of Retirement CPM Designation); and second, a request by a resource for a risk of retirement CPM designation during the calendar year following the current RA Compliance Year (referred to as a Type 2 Risk of Retirement CPM Designation). A resource owner can seek both a Type 1 and a Type 2 designation in the same request, if applicable.

(2) In the second window, the CAISO will consider requests for a CPM risk-of-retirement designation for the upcoming RA Compliance Year, *i.e.,* the RA Compliance Year for which the recently submitted annual Resource Adequacy Plans apply (referred to as a Type 3 Risk of Retirement CPM Designation).

(c) Prior to issuing a risk of retirement CPM designation, the CAISO will prepare a report that explains the basis and need for the risk of retirement CPM designation and its intent to make such designation. The report will not identify the need for specific resources that the CAISO is not proposing to grant a risk of retirement CPM designation and will not specify the offer price of any resource for which the CAISO proposes to grant a risk of retirement CPM designation. The CAISO will post the report on the CAISO's Website and allow an opportunity of no less than seven (7) days for stakeholders to review and submit comments on proposed Type 1 and Type 3 designations in a report and no less than 14 days for stakeholders to review and submit comments on a proposed Type 2 designation in a report. The CAISO will issue a report no sooner than 30 days after the close of the applicable window. For Type 1 Risk of Retirement CPM Designations, the CAISO will allow an LSE no less than thirty (30) days from the applicable comment date to procure Capacity from the resource. For Type 2 and Type 3 risk of retirement CPM designations, the CAISO will allow the LSE until the latter of 14 days after the CAISO issues the technical study report contemplated in this section or 14 days after the CAISO issues any notice of a deficiency in an Annual Resource Adequacy Plan under Section 40.7 to procure Capacity from the resource. If an LSE does not, within the specified period, procure sufficient RA Capacity to keep the resource in operation during the term of the risk of retirement CPM designation, the CAISO may issue the risk of retirement CPM designation provided that all applicable requirements set forth herein have been satisfied and all other available procurement measures have failed to procure the resources needed for reliable operation. The CAISO will not issue CPM designations in order to circumvent existing procurement mechanisms that could adequately resolve reliability needs.

(d) The CAISO may issue a Type 1 Risk of Retirement CPM Designation if all of the following requirements are met:

(1) The resource is not contracted as RA Capacity or listed as RA Capacity in any LSE's annual Resource Adequacy Plan during the current RA Compliance Year, and CAISO technical assessments project that the resource will be needed for reliability purposes, either for its locational or operational characteristics, by the end of the calendar year following the current RA Compliance Year;

(2) The CAISO did not identify any deficiency, individual or collective, in an LSE's annual Resource Adequacy Plan for the current RA Compliance Year that resulted in a CPM designation for the resource in the current RA Compliance Year;

(3) The CAISO does not project any new alternative solution to be in operation by the start of the next RA Compliance Year that will meet the identified reliability need;

(4) The Scheduling Coordinator for the resource has offered all Eligible Capacity from the resource into all CSPs for the current RA year; and

(5) The resource owner submitted the following information to the CAISO and DMM in its request for a risk of retirement CPM designation: an offer price consistent with Section 43A.2.6(g) and an affidavit of an executive officer of the company who has the legal authority to bind such entity, with the supporting financial information and documentation discussed in the BPM for Reliability Requirements, that attests that it will be uneconomic for the resource to remain in service in the current RA Compliance Year, and that the decision to retire is definite unless CPM or some other type of CAISO procurement of the resource occurs, the resource is sold to a non-affiliated entity, or the resource enters into an RA contract for the remainder of the current RA Compliance Year. Failure to provide this information will result in the CAISO rejecting the request and not issuing the report contemplated in Section 43A.2.6(c). If a resource owner fails to make these showings in its request for a Type 1 Risk of Retirement CPM designation, the CAISO will not study the need for the resource in the window. Within 60 days after the CAISO notifies a resource that it is not receiving a Risk of Retirement CPM designation, the resource owner will submit a plan for retiring the resource.

(e) The CAISO may issue a Type 2 or Type 3 Risk of Retirement CPM Designation if all of the requirements specified below are met. In addition, Type 2 Risk of Retirement CPM designations require satisfaction of the requirements in Section 43A.2.6 (f).

(1) the resource is not contracted as RA Capacity or listed as RA Capacity in any LSE's annual Resource Adequacy Plan for the RA Compliance Year in which the resource will be CPM, and CAISO technical assessments project that the resource will be needed for reliability purposes, either for its locational or operational characteristics, by the end of the calendar year following the RA Compliance Year in which the resource would be CPM;

(2) The resource owner submitted the following information to the CAISO and DMM in its request for a risk of retirement CPM designation: an offer price consistent with Section 43A.2.6(g) and an affidavit of an executive officer of the company who has the legal authority to bind such entity, with the supporting financial information and documentation discussed in the BPM for Reliability Requirements, that attests that it will be uneconomic for the resource to remain in service in the next RA Compliance Year, and that the decision to retire is definite unless an annual CPM or some other type of annual CAISO procurement occurs, the resource is sold to a non-affiliated entity, or the resource enters into an annual RA contract for the next RA Compliance Year. Failure to provide this information will result in the CAISO rejecting the request and not issuing the report contemplated in Section 43A.2.6(c). If a resource owner fails to make these showings in its request for a Type 2 or 3 Risk of Retirement CPM designation, the CAISO will not study the need for the resource in the window. A resource must submit a retirement plan within 60 days after being informed by the CAISO that the resource is not going to receive a CPM ROR designation.

(3) The CAISO does not project any new alternative solution to be in operation by the start of the RA Compliance Year following the RA Compliance Year in which the resource will be CPM that will meet the identified reliability need; and

(4) The CAISO did not identify any deficiency, individual or collective, in an LSE's annual Resource Adequacy Plan for the upcoming RA Compliance Year that resulted in an annual CPM designation for the resource.

(f) In addition to the requirements of Section 43A.2.6 the requirements below must be satisfied for the CAISO to issue a Type 2 Risk of Retirement CPM designation to a resource:

1) The resource participated in all applicable resource adequacy competitive solicitations, requests for offers, or similar procurement mechanisms conducted by load serving entities for such RA Compliance Year and was not offered an annual RA contract consistent with its offer. If an LSE accepts the resource's offer in any such solicitation, the resource will not receive a risk of retirement CPM designation; and

(2) The resource is uniquely situated in that it is the only resource that can meet the identified reliability need.

(g) The price paid to a resource receiving a CPM risk of retirement designation will be a resource-specific ,cost-based price, based on net plant investment at the time the CPM designation commences, calculated based on the formula set forth in Section 43A.4.1.1.1, and as determined by FERC as prudent, just, and reasonable. The resource owner must follow the process set forth in Section 43A.4.1.1.1 and obtain from FERC a resource-specific, cost-based price. A resource owner may not propose to FERC --and will not be compensated for any risk-of-retirement CPM designation based upon -- a price higher than the offer price it submitted to the CAISO with its request for a risk of retirement CPM designation. Prior to the determination by FERC of the resource-specific price for CPM capacity designated under this Section, and paid pursuant to Sections 43A.4.1.1.1 and 43A.7.1 the CAISO will proceed as follows: For the period between the CAISO's designation and FERC's determination of the resource-specific, cost-based price, the CAISO will utilize the offer price the resource submitted with its request for a risk-of-retirement CPM designation for purposes of calculating monthly CPM payment for financial Settlement. This amount shall be subject to surcharge or refund based on the outcome of the FERC proceeding for months in which the CAISO paid the offer price to the resource. Once approved by FERC, the CAISO will apply the resource-specific price determined by FERC.

(h) If there are multiple resources that can meet the reliability need identified by the CAISO, but the CAISO does not need all of the resources, the CAISO will determine which resource receives a risk of retirement CPM designation by using the offer price the resource owner submitted with its request for a risk of retirement CM designation and applying the criteria in Section 43A.4.2.2 and the criteria in Section 43A.4.2.3 applicable to the annual and monthly CSPs.

(i) If the CAISO grants a resource's request for a risk-of-retirement CPM designation, the resource must accept the designation unless it enters into an RA contract for the same period as the risk-of-retirement CPM designation or a longer period.

43A.3.7 Term-Capacity at Risk of Retirement Needed for Reliability

Type 1 Risk of Retirement CPM Designations will have a term for the balance of the RA Compliance Year in which they occur commencing after the last month of the RA Compliance Year for which the resource is a Resource Adequacy Resource. Type 2 and Type 3 Risk of Retirement CPM Designations will have a term of 12 months unless the resource is a Resource Adequacy Resource for part of the year, in which case the term will be for the balance of the RA Compliance Year in which they occur commencing after the last month in the RA Compliance Year for which the resource is a Resource Adequacy Resource. The term of any designation may not extend into a subsequent RA Compliance Year. The CAISO will rescind the CPM designation for any month during which the resource is under contract with an LSE to provide RA Capacity.

43A.9 Crediting of CPM Capacity CONTAINS EDITS TO EXISTING TARIFF LANGAUGE]

The CAISO shall credit CPM designations to the resource adequacy obligations of Scheduling Coordinators for Load Serving Entitles as follows:

(d) To the extent the cost of CPM designations under Section 43A.2.6 is allocated to a Scheduling Coordinator on behalf of a LSE under Section 43A.8.7, and the designation is for greater that one month under Section 43A.3.7, the CAISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards the LSE's Demand and Reserve Margin requirements, credit towards the LSE's Local Capacity Resource Requirements if the resource is located in a Local Capacity Area, and credit towards the LSE's Flexible RA Capacity requirement for capacity that qualifies as Flexible Capacity under Section 40.10.3, all as determined under Section 40, in an amount equal to the LSE's pro rata share of the CPM Capacity designated under Section 43A.2.6. Credit will be rescinded for any month during the CPM designation period in which the resource is under contract with an LSE to provide RA Capacity.

(f) [**THIS IS ENTIRELY EXISTING TARIFF LANGAUGE]** For each Scheduling Coordinator that is provided credit pursuant to this Section, the CAISO shall provide information, including the quantity of capacity procured in MW, necessary to allow the CPUC, other Local Regulatory Authority, or federal agency with jurisdiction over the LSE on whose behalf the credit was provided to determine whether the LSE should receive credit towards its resource adequacy requirements adopted by such agencies or authorities.

TARIFF LANGUAGE TO BE ADDED SOMEWHERE IN SECTION 43A.5.1

CPM Capacity designated under Section 43A.2.6 will meet the Day-Ahead availability requirements specified in Section 40.6.1, the Real-Time Availability requirements of Section 40.6.2, and the Day-Ahead and Real-Time Availability requirements specified under Section 40.10.6.1 for the highest Flexible Capacity Category for which the Capacity qualifies under Section 40.10.3.

Appendix 2

Stakeholder Written Comments on August 8, 2017 Revised Straw Proposal

This section of the draft final proposal provides the full written comments submitted by stakeholders. The CAISO has summarized these comments and provided responses in section 4.

List of Acronyms:

CPUC	Energy Division Staff, California Public Utilities Commission
NRG	NRG Energy, Inc.
ORA	Office of Ratepayer Advocates, California Public Utilities Commission
PG&E	Pacific Gas & Electric
SCE	Southern California Edison
SDG&E	San Diego Gas & Electric Company
Six Cities	Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California

1. Who Can Apply

CPUC - In its May 2017 Issue Paper, CAISO states: "The current CPM risk-of-retirement tariff allows only resources that are not under an RA contract to request CPM risk-of-retirement procurement. This requirement limits the scope of resources that can apply. For example, in the case of the two Calpine plants that were authorized in March 2017 to receive RMR designations, both plants are under an RA contract until the end of 2017." In its August 8, 2017 Revised Straw Proposal, the CAISO states that there "has been a general belief that resources cannot apply for a CPM ROR designation while they are RA, but a close reading of the tariff shows there is no such express requirement." ED Staff has no objection with the CAISOs clarifying that any resource, including a resource that is currently RA, can apply for a CPM ROR designation.

NRG - One minor comment: On page 10 of the Revised Straw Proposal ("RSP"), the CAISO indicates that "The CAISO will clarify the tariff to confirm that any resource, including a resource that is currently RA, can apply for a CPM ROR designation." The CAISO also states, however, that a non-RA resource may not apply in the proposed April window if the resource's costs are not greater than the CPM soft offer cap price of $75.68/kW-year. It may be true that any resource can apply in certain windows, but not in all windows. The CAISO should clarify that the provision that "any resource may apply" has some conditions with regards to timing.

ORA - ORA continues to support the ability for all resources to apply for CPM ROR status.

PG&E - No comment.

SCE - SCE has no comments on this section.

SDG&E - SDG&E agrees that all resources should have the option to apply for Risk of Retirement protection. While the section in the proposal state that any resource may apply, later sections prohibit resources under RA contract from applying. SDG&E recommends the CAISO to clarify this limitation within the "who can apply" section of the proposal. Specifically, resources under RA contract for January 2019 cannot apply for CPM ROR in the November 2018 window.

Since this is the case, SDG&E is unsure if there is a gap in which a resource cannot request any CPM ROR at all. For example, a resource is under contract from January 2017 to March 2018. This resource would not be eligible to apply for Type 1 CPM ROR in April 2017 because it is RA for all of 2017. The resource would also not be eligible to apply for Type 3 CPM ROR in November 2017 because it is RA for Q1 2018. Per the proposal, "the resource must not be RA for 2018 and must be needed before the end of the calendar year 2019".1 SDG&E is uncertain if the resource could apply for Type 2 CPM ROR in April 2017 and would appreciate the CAISO clarify this question. SDG&E would also recommend removing language regarding designation qualifications from this section as it creates confusion as it mixes application as well as designation.

Six Cities - The Six Cities do not oppose the proposal to allow any resource to apply for a Risk-of-Retirement CPM designation, regardless of whether the resource is subject to a Resource Adequacy contract at the time of its application. The Six Cities specifically support the CAISO's confirmation that a resource may not receive payments for a Risk-of-Retirement CPM designation at the same time that it is either (i) a party to and receiving payments under a Resource Adequacy contract or a Reliability-Must-Run agreement; or (ii) designated as a CPM resource for another category of CPM procurement. (*See* Revised Straw Proposal at 8.)

2. Timing of Requests for Designation - Windows

CPUC - In its revised Straw Proposal, CAISO adds an additional application window, allowing generators to apply for a CPM ROR designation. The proposal states that this window will occur in April, allowing "Type 1" and "Type 2" resources to apply. ED Staff does not support the addition of the April window. Adding an April window to the CPM ROR process will front run the annual resource adequacy procurement process.

Additionally, the CAISO added two conditions to the April window. These conditions do not mitigate ED Staff concerns regarding front running RA procurement.

One of the additional conditions is that the generator must demonstrate that their costs are above the CPM soft offer cap. The current language of the Straw proposal does not indicate whether capital additions can be included in the demonstration generators are being required to submit. Specifically, the CAISO's draft tariff language says that for a "Type 2" Risk of Retirement designation the resource must demonstrate "that it is unlikely to be procured as resource adequacy for the next compliance year because its annual fixed revenue requirement calculated in accordance with Schedule F to the pro forma RMR agreement in Appendix G of the CAISO Tariff exceeds the price specified in the Section 43A.4.1".[8]

In response to parties' comments regarding the inclusion of major maintenance costs, CAISO states it,

> "has removed the major maintenance costs example from the four examples of what could be submitted for the April application window as documentation to prove that a resource is not likely to be procured as RA. Maintenance costs can be included in the price pricing formula for how costs are to be determined using the Annual Fixed Revenue Requirement for a RMR Unit as set forth in Schedule F to the pro forma RMR agreement in Appendix G of the CAISO tariff."

Reading Schedule F to the pro forma RMR agreement, it was ED Staff's understanding, that capital additions would not be included in the cost calculation. Major maintenance would appear to fall into the category of capital additions. However, after further discussion with CAISO staff, ED Staff now understands that capital additions can be included in the costs, as long as they are completed in the

[8] August 8, 2017 Revised Straw Proposal pp. 21

same year that the generator has applied for a CPM designation. For example, if a generator applies for a "Type 2" CPM ROR in April 2017, and includes capital additions in its cost of service, those capital additions would have to be completed no later than December 31, 2017.

ED Staff does not support the inclusion of major maintenance capital additions in the cost calculation. The CAISO needs to make the inclusion of capital additions clear in its straw proposal and stakeholders need an opportunity to comment on this aspect of the proposal, if this is the actual interpretation of the inclusion of capital additions.

The second condition is that the CAISO must find that the resource is the only resource that can fill the identified need. It is unclear to ED Staff what reliability criteria and assumptions that CAISO will use in determining its need. For example, will the study use a 1 in 10 load forecast for system need, what criteria will be used for flexible need, what assumptions will be made regarding imports, demand response and outage management. Staff requests more details on the assumptions that will flow into the CAISO's determination of need. This is further discussed in Section 11 below.

<u>NRG</u> - No comment.

<u>ORA</u> - At the request of resource owners, the CAISO seeks to alter the current CPM ROR process by allowing the CAISO to conduct ROR analysis and designation before the period for executing RA contracts closes at the end of October. The proposed period would provide seven additional months for resources to plan for retirement, thus minimizing closing costs. In theory, this new earlier analysis and designation could result in resources successfully filing for CPM ROR status and perhaps prevent a plant from retiring prior to the subsequent year when it would be needed. During the stakeholder calls for this initiative, stakeholders representing generation resources noted that the failure of any resource to previously file for CPM ROR status was largely due to the filing requirement being set for late in the year which does not allow for adequate retirement planning. Unfortunately, no evidence exists to support the concept that additional retirement planning time would do more than simply reduce closing costs.

It might be reasonable to grant resources more time to plan their retirements and minimize closing costs, if the process did not pose the risk of negative ratepayer impacts. However, the proposed April window would allow resources to obtain a CAISO determination that they are needed in advance of the deadline for executing a bilateral contract with a load serving entity (LSE). The operators of such resources therefore would be unlikely to execute an RA contract at a price lower than the CPM price, which is typically well above the price LSEs pay for RA capacity. Given the risk that ratepayers would pay more for capacity designated as needed during the proposed April window, the CPM ROR analysis and designation process should not be expanded to include this additional window unless more evidence indicates that a lower reliability risk from early retirements is a reasonably anticipated outcome.

The proposed April window also would include a Type 1 category designation that would pay a resource for the remaining months of the current year if it is determined that a need for the resource exists in the following year. It is difficult to imagine that a resource notified in late June of a guaranteed profitable contract just six months later would choose to retire. Furthermore, ratepayers should not pay for capacity beginning in late June for resources that would not help LSEs in meeting RA obligations, which in most cases would already have been placed under contract for the current year.

<u>PG&E</u> - PG&E understands the CAISO position that the CPM ROR payment be based on cost of service. However, if a resource is granted a conditional CPM in April, it does not have an incentive to bid competitively when it knows it can receive cost-of-service recovery. A resource that can demonstrate that their costs are above the CPM soft-offer cap will not have the incentive to seek cost saving measures to bid more competitively with the designation guarantee.

SCE - SCE has no comments on this section.

SDG&E - SDG&E believes the 3 types and 2 windows of CPM ROR create more complexity. SDG&E recommends the CAISO to join Type 1 and 2 options into a single application where the CAISO would study the need for a resource for both 2018 and 2019. It would be an awkward situation if the resource is needed in 2019 but the resource only submitted for a Type 1 CPM ROR and the CAISO did not have a need for the resource in 2018 and therefore could not CPM the resource.

Six Cities - The Six Cities do not oppose the timeline for designation requests as outlined in the Revised Straw Proposal.

3. Process for Study and Procurement

CPUC - With regards to the study process and procurement, CAISO states it will retain the three steps listed in the current tariff. ED Staff requests that the current tariff be revised to require more granular details in the CPM reports. Transparency is very important to stakeholders, and currently the CPM designation reports are not very detailed and do not provide sufficient information to fully understand why a resource was designated. The reports should include the applicable reliability criteria, load and resource assumptions as well as contingencies. It should also include the WECC reliability criteria requirement (if applicable) that the CAISO is complying with. Reports should also include the total cost of the designation and whether those costs include any major capital additions (and over how many years the capital addition costs are being amortized).

In its August 8, 2017 Revised Straw proposal, the draft tariff language of 43A.2.6 b states that

> "[t]he deadline for the first window will be no later than June 30 of each year..." The draft tariff also states that the CAISO will issue a report no sooner than 30 days from the applicable window and allow stakeholder no less than 7 days to submit comments on the report. Finally, the draft tariff states, "[f]or type 2 CPM Risk of Retirement Designation, the CAISO will allow no less than six months from the comment date for an LSE to procure Capacity from the resources."

The timing defined in the tariff does not seem to make sense. If the window closes on June 30th, CAISO posts the report (no sooner than) 30 days later, and parties have 7 days to comment, that puts us at August 8th. LSEs then have 6 months to procure the capacity, which puts us at February 8th. Wouldn't the timeline need to end prior to the end of the year in order for the resource to be designated for that year? Also, the timing provided in the draft tariff would not allow for any RA credits to transfer to LSEs prior to an LSE making its year-ahead procurement. This would lead to over-procurement in the year ahead time frame.

NRG - No comment.

ORA - The CAISO proposes to perform a reliability study to determine whether a resource will be needed for reliability and will post a report no less than 30 days after the closing of each CPM ROR window. In the August 15th stakeholder call, CAISO staff stated that they rely on resource operators to provide in service dates to consider resources for their study and do not typically seek this information from the CPUC. ORA recommends that the CAISO coordinate with the CPUC to gather the latest information on resources that are recently approved or under review for inclusion in its reliability study. Resources under review at the CPUC may meet reliability needs identified two years out and should be included at least as an alternative to the base case. This information would allow LSEs to procure resources to meet future reliability needs at least cost and prevent the CAISO from mistakenly designating a resource as CPM ROR.

ORA also recommends that the CAISO modify its proposal to provide more detail on transparency when it conducts studies, including the content of any studies. The CAISO should notify all stakeholders when a resource seeks a CPM ROR designation and should identify the reliability issues that the CAISO will consider. This notification would allow stakeholders to understand the resources that are seeking CPM ROR and to prepare for review of the reliability study. To provide for more informed feedback, ORA recommends extending the seven day comment period to fourteen days following the study report.

In section d.3 of the proposed tariff, for Type 1 designation, the CAISO states that it may designate a resource as CPM ROR if "[n]o new generation is projected by the CAISO to be in operation by the start of the next RA Compliance Year that will meet the identified reliability need." In section e.3 of the proposed tariff, for Type 2 or Type 3 designation, the CAISO similarly states that it may designate a resource as CPM ROR if "[n]o new generation is projected by the start of the RA Compliance Year following the RA Compliance Year in which the resource will be CPM that will meet the identified reliability need." In the stakeholder call, the CAISO clarified that it intends to consider all resources in its reliability study, such as storage and transmission projects, and not simply new generation. The CAISO should revise sections d.3 and e.3 of the proposed tariff to clarify the types of resources that would be considered in its reliability study.

Additionally, it is not clear why the CAISO would only consider a new resource as an alternative to the generator seeking CPM ROR, if the new resource will be in operation by the start of an RA Compliance Year. For Type 1 CPM ROR designations, this means that if a reliability need is identified for December 2018, new resources would need to be projected in operation by January 2018 to avoid the CPM ROR designation for the generator. For Type 2 and Type 3 designations, if a reliability need is identified for December 2019, new resources would need to be projected to be in operation by January 2019 to avoid the resource's designation as CPM ROR. Based on the current proposed language, even if a new resource is projected to be in operation by mid-2018 or mid-2019 to address the reliability need, CAISO would still provide the CPM ROR designation to the existing generator seeking designation. This would lead to costly CPM RPR contracts when ratepayers would already be paying for the new resource that can address the reliability need. To minimize ratepayer costs, ORA recommends CAISO revise the language to state that it may issue a CPM ROR if no new resource is projected by the CAISO to be in operation by the month of the identified reliability need.

PG&E - PG&E requests that the CAISO confirm that the report posted for resources eligible for CPM ROR designation will specify the study assumptions and analysis used to support the reliability need. The Revised Straw Proposal also indicates that "If no LSE procures the specific resource that was identified by the CAISO as needed for reliability, the CAISO may then procure the resource as CPM ROR capacity." Additional clarity is needed to understand the circumstances when the CAISO would not choose to procure a resource as CPM ROR Capacity if no LSE procures the resource identified by the CAISO as needed for reliability. In addition, PG&E asks that the CAISO clarify in its proposal the types of studies that will be used to determine the reliability need.

SCE - SCE has no comments on this section.

SDG&E - SDG&E requests the CAISO to expand on the reliability study that will be performed. The current Tariff only mentions a CAISO technical assessment in which the resource will be needed for reliability purposes for either locational or operational characteristics. Are the studies different for 2018 versus 2019 as far as methodology? Are the studies different than the existing annual Local capacity technical study or Flexible capacity assessment or the Transmission planning study? If it is different, would those studies have provided the signals to LSEs to indicate such a resource was needed?

SDG&E is concerned with the release of the designation report for the April window. Releasing such information for Type 1 designation sets the floor for the resource. Instead, SDG&E requests the CAISO to consider requiring the resource to issue a solicitation for bids at the same time the report is issued. The resource would be required to accept bids up to the max NQC/EFC of its capacity in descending order of price. The solicitation must be monitored by an independent evaluator to ensure fairness. If there are megawatts uncontracted, then the CAISO's CPM process can supplement the remaining volume at the offer price.

Six Cities - The Six Cities do not oppose the proposed process for study and procurement of resources.

4. Application Requirements, Timelines and Reliability Studies

CPUC – See comments in Sections 2 and 3.

NRG - The CAISO proposes that a resource may not submit a request into the April window (which the proposed tariff language says could be as late as June 30) unless the resource's costs exceed the CPM soft-offer cap. The CAISO's justification for this is that costs this high project the likelihood that the resource will not be selected as an RA resource. This requirement effectively means that a resource whose costs do not exceed the soft offer cap is required to submit their request in the November window. Forcing generator owners to wait until November to seek a CPM ROR designation effectively negates one of the primary reasons why resource owners sought a change in the ROR process, namely, to provide for a longer "runway" with regards to seeking, and the CAISO evaluating and granting, an ROR designation prior to the end of a calendar year, to allow for better planning and coordination. As a result, this new proposed requirement calls into question the value of this initiative.

The CAISO also proposes that a resource owner must submit a binding offer, which must reflect its costs and cannot be changed, when the resource owner submits the resource's costs to FERC. (*See, e.g.,* page 11 of the RSP). Given that a resource must develop a detailed cost-of-service analysis to project its costs (on RSP pages 9 and 16, the CAISO indicates that the resource's costs must be presented through Schedule F of the RMR contract), the CAISO's proposed process means that a resource owner must prepare an expensive and detailed cost-of-service study without knowing whether the resource will be selected and provided with a CPM risk-of-retirement (ROR) designation. This is unduly burdensome and unreasonable.

To address exaggerated fears of the CPM ROR process "front-running" the Resource Adequacy process, the CAISO has decided that the most a resource that receives a CPM ROR designation can be paid is its cost of service. If a particular resource is uniquely needed for reliability, it should not be required to conduct a complicated cost-of-service study before submitting its application. If multiple resources can meet the need, and the CAISO wishes to use economics as one of the factors to choose between resources, it can request the resource owners to develop and submit the cost-of-service information after it is clear that the resource is potentially needed for reliability. It is not reasonable to require a resource owner to prepare the detailed Schedule F information unless there is some basis to conclude that their resource will be required.

On Page 14, the CAISO observes that, for Type 3 designations, it will assume that all resources "not expected to retire" will be available in the year following the next RA year. The CAISO should clarify how it will assess which resources are expected to retire and with are not expected to retire. As the CAISO is well aware, under the current market conditions, all non-contracted resources are at risk of retirement, regardless of their mechanical age. Overly optimistic assumptions regarding which resources will be in operation will yield unreliable results that will lead to the unexpected retirements of resources.

ORA - The Revised Straw Proposal only allows for seven days for stakeholders to review and submit comments on a CAISO reliability study following a CPM ROR application. ORA recommends granting fourteen days for stakeholders to file comments to allow sufficient time to analyze the report and prepare well-reasoned comments. As previously stated in Section 3, the CAISO should notify all stakeholders when any resource seeks a CPM ROR designation and the reliability issues that the CAISO plans to consider. This would inform stakeholders which resources are using CPM ROR and provide more time for their review of the issues related to the potential CPM ROR designation.

PG&E - PG&E encourages the CAISO to consider in its proposal how Type 2 and Type 3 CPM ROR designations for the same area or providing similar system support might give a competitive advantage to resources that seek an early designation but may not have the lowest cost or best reliability characteristics.

SCE - As SCE mentioned on the stakeholder call, SCE does not believe it is completely necessary to require that a requesting entity demonstrate that their costs are above the soft-offer price cap. SCE understands and appreciates that the CAISO should not have to study an inappropriate number of requests and that this threshold helps to accomplish that objective. SCE suggests that instead of setting a threshold the requestor should be required to pay for the cost of the study. By doing so, a requestor will not have a “free option” to determine if they are needed. Rather, the requestor will have to fund the study as a pre-condition to being considered for a Risk of Retirement CPM.

SDG&E - SDG&E does not believe the resource’s costs need to be above the current CPM soft-offer cap price in order to receive a CPM ROR designation. The CAISO should not filter out less expensive but similarly qualified resources from the CPM ROR process. SDG&E cannot find reasonable benefits to keep more expensive resources online over less expensive ones if both are needed for reliability. SDG&E recommends the CAISO clarify its assumption that all resources must have costs greater than the soft offer cap to qualify for CPM ROR. SDG&E supports requiring resources to justify costs with FERC even if it is lower than the soft offer cap.

Six Cities - In general, the proposed application requirements appear to represent a reasonable step forward in terms of developing the process and criteria for Risk-of-Retirement CPM designations, but the Six Cities seek further explanation regarding several aspects of this section of the Revised Straw Proposal. First, the Six Cities ask the CAISO to clarify the binding offer price requirement in the application process for both the April and November windows. (*See* Revised Straw Proposal at 11, 13.) According to the Revised Straw Proposal, resources are required to include with their application materials a binding offer price and will be required to subsequently “file at FERC an offer price that is no higher than the price submitted” in the application. Is the intent of the CAISO that the binding offer price be a cost-based price that either has been or will be approved by FERC, or are applicants permitted to propose a binding offer price that is based on something other than a resource’s costs? The Six Cities request that the CAISO explain how the binding offer price will be used, given that the CAISO proposes to compensate resources that are awarded a Risk-of-Retirement CPM designation according to the cost-based methodology for the Annual Fixed Revenue Requirement for a Reliability-Must-Run Unit as set forth in Schedule F to the *pro forma* RMR Agreement. Additionally, the Six Cities have several specific questions regarding the offer price and compensation:

- The Six Cities request confirmation that the compensation rate for resources that are designated for Risk-of-Retirement CPM will be no higher than the FERC-approved rate.
- Does the CAISO intend that the FERC-approved, cost-based price (calculated according to the RMR methodology) serve as a cap on a resource’s compensation if designated as a Risk-of-

Retirement CPM resource, but that a resource is not precluded from providing a binding offer price that is below the results of the RMR methodology?

- How does the CPM soft offer cap interrelate (if at all) with either the binding offer price or the FERC-approved cost-based rate for Type 1 and Type 3 designations?

The Six Cities also request clarification as to the technical study the CAISO will perform and the criteria that the CAISO will use to assess if a resource should receive a Risk-of-Retirement CPM designation. According to the Straw Proposal, "[f]or Type 2 CPM ROR Designations in the April window, for the resource to be designated as CPM ROR capacity the CAISO must find that the resource . . . *is uniquely situated such that it is the only resource that can meet the identified reliability need*." (Revised Straw Proposal at 11, emphasis supplied.) As the Six Cities interpret the Revised Straw Proposal, the "uniquely situated" standard is limited to Type 2 designations and does not apply to Type 1 or 3 designations, which will be made if the resource is "needed for reliability purposes, e.g., [for] locational or operational reasons . . . and no new generation is projected to be in operation during" the relevant time period. (*Id.* at 11; *see also id.* at 13-14.) Assuming that the CAISO intends to apply a different test to Type 2 designations, as opposed to Type 1 and 3 designations, how are the announced criteria for each designation type different and what is the basis for this? Is the Six Cities' understanding of the Revised Straw Proposal correct in that the "uniquely situated" standard is intended to be a higher bar than the standard for Type 1 and 3 designations? Finally, would it be appropriate for the "uniquely situated" standard apply to all designation types? Lastly, will resources deemed eligible to receive a Risk-of Retirement CPM designation have continuing obligations to participate in competitive solicitation processes for Resource Adequacy contracts once designated? Or does the obligation to participate in such processes end upon designation?

5. Selection Criteria when there are Competing Resources

CPUC - ED Staff has no comment at this time.

NRG - NRG provided comments with regards to the role of costs in deciding between multiple units in the section above. NRG has no other comments on this section.

ORA - ORA has no additional comments at this time.

PG&E - PG&E recommends that the CAISO consider how the reliability assessment for Type 2 and Type 3 CPM ROR designations with a local area or providing system support are evaluated together to ensure that resources with the best characteristics are granted the designations. This also highlights the risk of narrowing the scope to resources that are requesting CPM ROR designations, the proposed process ignores that resources with longer contracts may have higher costs and poorer reliability characteristics than those currently at risk-of retirement.

SCE - SCE appreciates the change to utilize the bid price and minimization of costs where multiple resources have sought a Risk of Retirement CPM but not all of those resources are needed to meet grid reliability needs. SCE supports this change.

SDG&E - SDG&E supports selecting resources based on least cost when there are multiple competing resources.

Six Cities - The Six Cities do not oppose the CAISO's proposal to use existing selection criteria as a tiebreaker when there are multiple resources that could meet an identified need and are eligible for a Risk-of-Retirement CPM designation.

6. Term and Monthly Payment Amount

CPUC - ED Staff has no comment at this time.

NRG - NRG agrees with the CAISO's proposal in this section.

ORA - ORA has no additional comments at this time.

PG&E - No comment.

SCE - SCE agrees with the terms and monthly payments of the new type 1-3 designations.

SDG&E - SDG&E believes setting a minimum term of 12 months may not allow resources that have contracts ending between January 2018 to April 2018 to apply or be designated as CPM ROR under the 2017 windows. In such a case, the resource must wait until April of 2018 prior to applying for risk of retirement. If so, the resource might submit a Type 1 for "immediate" relief or the conventional retirement. If the resource is not needed for 2019 in the case of Type 1 or 2018 for conventional retirement, but is needed for 2020 for Type 2 or 3, then the CAISO would not be able to designate that resource due to the type of application it submits. This would not be an optimal outcome.

Six Cities - The Six Cities generally support this section of the Revised Straw Proposal, including the following elements:

- The proposal to compensate resources each month at 1/12 the annual compensation amount.
- The proposal to make "balance of year" payments for Type 1 designations. The Six Cities do not support retroactively compensating Type 1 resources back to the beginning of the calendar year in which the resource was designated, nor do the Six Cities support dividing an annual compensation amount by the remaining months of the calendar year and compensating Type 1 resources at that higher monthly level.
- The proposal that designated resources will not be permitted to receive Risk-of- Retirement CPM payments while also receiving compensation under Resource Adequacy contracts, Reliability-Must-Run agreements, or other CPM procurement categories.

7. Cost Justification

CPUC – The Revised Straw Proposal states that,

"The pricing formula costs are being determined using the Annual Fixed Revenue Requirement for a RMR unit as set forth in Schedule F to the pro forma RMR agreement in Appendix G of the CAISOs tariff."

It is ED Staff's understanding that Schedule F to the pro forma RMR agreement in Appendix G, does not include major maintenance (capital additions). If this understanding is accurate, then Staff is fine with using Schedule F to the pro forma RMR agreement to determine costs.

If major maintenance is allowed under Schedule F to the pro forma RMR agreement, then Staff objects to the inclusion of major maintenance in the cost.

NRG - The CAISO's decision to not allow a resource to be compensated at the CPM soft-offer cap price and instead require a resource owner to submit a cost-based offer with its ROR evaluation request is problematic, as noted in section 4.

ORA - The Revised Straw Proposal calls for resource owners to file at the Federal Energy Regulatory Commission (FERC) to justify costs, with FERC deciding the level of compensation. The CAISO recommends that FERC apply a pricing formula based on the current Reliability Must Run (RMR) process with the intent that the payments be cost-based.

The initiative proposes to provide resources considered for uneconomic retirement with "a bridge to a future RA year when it is needed for reliability." Resource owners requesting a CPM ROR designation will trigger a reliability study to determine potential need to retain the resource for reliable grid operation. If a need for the specific resource exists in a subsequent year, the resource will qualify for payments during a bridge period of 6-12 months, after which either the CAISO or a load serving entity (LSE) will negotiate a capacity contract. It is unclear why a bridge payment designed to keep a resource afloat for a short period of time should be based on capacity costs, rather than the costs associated with a temporary shutdown or a cold lay-up.

The CPM ROR concept of providing a bridge payment differs from the other types of CPM processes, which are designed to procure needed capacity rather than simply providing a source of revenue for an unprofitable resource. In the case of a request for a CPM ROR designation, the CAISO study would determine whether the resource's capacity is not needed in the future, or while the resource's capacity or operational characteristics are not needed in the current year, the specific resource would be needed in the subsequent year.

While bridge payments are designed to prevent early retirement, the likelihood of a resource actually retiring with a profitable contract guaranteed in the near future seems remote. However, if a bridge payment is determined to be necessary to prevent a resource from retiring, the CAISO should recommend that FERC utilize a cost-based approach for basic maintenance while awaiting the guaranteed contract, rather than the RMR capacity calculation methodology. In Resolution ESRB-6, the CPUC approved a request by Calpine to place its Sutter plant in cold layup. This provides an example of remaining viable with low maintenance costs and notes one resource operator's choice to expend minimal costs to allow for an eventual restart and avoid permanent retirement. During cold layup, Calpine will provide a five-person team for security and necessary maintenance and continue to maintain Sutter in compliance with all applicable laws, ordinances, regulations, and standards. This includes maintaining all applicable environment permits and meeting all obligations required to ensure a prompt and eventual restart.

PG&E - No comment.

SCE - SCE continues to believe that the cost of major maintenance adders should not be allowed within the costs recovered through the Risk of Retirement CPM. As stated previously, it is too difficult for the CAISO to ensure that the costs incurred are being utilized to provide the capital improvements stated or that the capital improvements are necessary for the resource to continue operation. If the Risk of Retirement CPM is intended to be a bridge mechanism, SCE does not support the mechanism paying for new capital additions.

In addition, the proposal now states:

> Prior to determination by FERC of the resource's CPM ROR price, the CAISO will use the CPM soft-offer cap price. The price will be subject to refund or surcharge for periods in which the soft offer cap price was applied once FERC determines the applicable cost-based price. After FERC determines the cost-based price, the CAISO will a use the FERC-determined price.

SCE believes that the payment prior to FERC ruling should be the lesser of the soft-offer cap price and the offer submitted by the resource. If the resource has submitted an offer below the cap, there is no reason to pay above their offer prior to acceptance by FERC. The refund and surcharge language should remain as the final FERC ruling could be different than the amount being recovered prior to the FERC ruling.

SDG&E - SDG&E supports requiring resources to justify costs with FERC even if it is lower than the soft offer cap.

Six Cities - The Six Cities support the CAISO's proposal that compensation to designated resources be cost based using the methodology for Reliability-Must-Run resources as described in Schedule F to the *pro forma* RMR Agreement. However, as stated above in response to Question No. 4, the Six Cities request that the CAISO clarify how the requirement to file a cost-based rate at FERC fits with the proposed application requirement to provide a binding offer price.

8. Decision to Accept

CPUC - ED Staff has no comment at this time.

NRG - NRG agrees with the CAISO's proposal in this section.

ORA - The Revised Straw Proposal states that it "does not propose to change the current CPM tariff provision, which allows a resource to accept or decline a CPM ROR designation, i.e. CPM is voluntary." However, it is not clear what would happen if a resource declines a CPM ROR designation. If the CAISO offers the resource CPM ROR designation based on its determination that the resource is need for reliability, yet the resource declines the designation and retires, how would CAISO work with the CPUC to ensure that the reliability need is met? Alternatively, could the resource decline the designation and choose not to retire and attempt to solicit a contract at higher cost than under CPM ROR, knowing that it is needed to meet reliability needs? The CAISO should therefore elaborate on the next steps if a resource declines CPM ROR designation.

Additionally, CAISO's argument relies on its reading of the current tariff to state that CPM ROR is voluntary. However, the tariff discussion regarding declining CPM specifically references Exceptional Dispatch CPM (Sections 39.10.3 43A.2.5.3 and 43A.4.2.1) and does not mention CPM ROR. To clarify the ability of resources to decline a CPM ROR designation, the CAISO should cite the specific language it relies on to determine that CPM ROR is voluntary.

PG&E - No comment.

SCE - As noted on the stakeholder call, SCE believes that if a resource opts not to accept the payment, then the attestation is still binding. That is, the resource would be required to shut-down. In the alternative if the rate provided is a cost based rate approved by FERC, there should be no economically based reason to reject such a payment. If the loss of the resource would result in reliability concerns, it may be justified to require acceptance of the CPM. However, since these reliability concerns are not in the immediate year, the CAISO would need to define the conditions under which they would require a resource to accept the Risk of Retirement CPM.

SDG&E - SDG&E disagrees that CPM is voluntary given that the CAISO's current CPM CSP designations are not voluntary when a resource submits offers into the CAISO's CPM CSP. A resource's owner should already know their decision to accept the CPM ROR designation prior to submitting for CPM ROR protection.

Six Cities - The Six Cities do not oppose the CAISO's proposal that acceptance of a Risk-of-Retirement CPM designation will be voluntary. The Six Cities seek confirmation that resources opting to decline such a designation will remain subject to a potential Reliability-Must-Run designation by the CAISO, consistent with the applicable rules governing RMR procurement.

9. Cost Allocation

CPUC - CAISO proposes no change to the current tariff, which states that if the CAISO makes a ROR CPM designation it will allocate the costs "to all Scheduling Coordinators for LSEs that serve Load in the TAC Area(s) in which the need for CPM designation arose."

ED Staff has concerns with this language. Specifically, Staff is concerned that the cost allocation being proposed is inconsistent with the current cost allocation for flexible reliability need. Flexible reliability is for the entire CAISO system and allocated to each Local Regulatory Authority. CPUC allocates the flexible requirements to LSEs using system load ratios. If the CAISO makes a CPM ROR designation due to a flexible system need (as was the case for Calpine's Sutter resource), then the costs should be allocated to all LSEs based on their system load ratios, not TAC area load ratios.

NRG - No comment.

ORA - ORA has no additional comments at this time.

PG&E - No comment.

SCE - SCE has no comments on this section.

SDG&E - SDG&E believes the CAISO should review the cost allocation methodology. For the past several years, the CAISO has studied the San Diego-IV and La Basin Local areas together. In the LCR studies, the CAISO has needed all of San Diego-IV's generation to be online in order to lower that of La Basin's local requirements. This was the optimal outcome. If the CAISO designates a resource in the San Diego-IV area as CPM ROR for purposes of supporting La Basin, then the costs should also be shared with LSEs that serve Load in that TAC area.

Six Cities - The Six Cities do not oppose the CAISO's proposal to use the existing CPM cost allocation provisions in the tariff to allocate the costs of Risk-of-Retirement CPM designations.

10. RA Credits

CPUC - The CAISO proposes no changes to its current tariff which states,

> "The CAISO shall credit CPM designations to the resource adequacy obligations of Scheduling Coordinators for Load Serving Entities as follows: to the extent the cost of CPM designation under Section 43A.2.6 is allocated to a Scheduling Coordinator on behalf of a LSE under Section 43A.8.7, and the designation is for greater than one month under Section 43A.3.7, the CAISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards the LSE's Demand and Reserve Margin requirements determined under Section 40 in an amount equal to the LSE's pro rata share of the CPM Capacity designated under Section 43A.2.6."

ED Staff does not believe the current language is sufficient to allow for RA credits to transfer to LSEs in a timely manner sufficient to avoid other RA procurement that would have been offset by the credit. LSEs need to have these credits transferred to them in advance of making RA purchase agreements with generators so that it can accurately calculate its RA obligation.

The CPUC has a CAM mechanism that it uses to allocate resource capacity credits/debits based upon the costs allocation of these resources. The CPUC allocates IOUs a debit equal to the aggregate credit allocated to ESPs and CCAs in its service territory. In exchange for the higher RA requirement (debit) the IOU can show the entire CAM resource on its RA plan. This allows the CAISO to see the resource in its CIRA system and to apply the scheduled outage maintenance rules. RMR resources do not flow through this mechanism. CPM resource would not be able to flow through this mechanism because the IOUs would not be able to show this resource in its RA plan.

ED Staff proposes that the tariff language be changed to provide the CPM credit to the LRA for allocation to the LSEs. A CPM credit mechanism would have to be incorporated into the CPUC's annual RA process.

NRG - No comment.

ORA - The Revised Straw Proposal would allocate RA credits to LSEs in accordance with current tariff provisions. The tariff grants RA capacity credits to LSEs on a pro rata basis when capacity payments have been authorized under the CPM processes. As noted above, ORA does not support capacity payments for resources during periods when no need for the capacity exists. During the August 15th stakeholder call, the CAISO noted that capacity payments would provide benefits to LSEs in the form of capacity allocations. Current RA regulations require LSEs to have contracts supplying 100% of their local capacity obligations and 90% of system and flexibility needs for the following year by the end of October. Thus, there would be no benefit to allocating additional local capacity to LSEs after October. LSEs are allowed to true up any shortfalls for system and flexible capacity in month-ahead filings. Based on the proposed process, the earliest any November CPM ROR filings could be allocated by a Local Regulatory Authority (LRA) such as the CPUC would be after the February 22 completion of the ROR process. LSEs must have signed contracts for April by the beginning of March and most likely could not benefit from any assigned capacity until possible inclusion for a June month-ahead filing. The April window provides even less opportunity for LSEs to benefit from allocated capacity, because any assigned capacity for the current year probably would not be available for use until the month-ahead filings for September. Prudent planning and contract negotiations by LSEs are likely to leave few gaps for which the allocated capacity would provide a significant benefit to the LSE's ratepayers.

PG&E - PG&E appreciates the clarification that a provision for CPM ROR procurement credits is already included within the CAISO tariff. PG&E requests that the CAISO provide additional clarity on how a resource that receives a Type 1 designation will count towards the LSE requirement for the balance-of-year determinations to prevent over-procurement due to previous LSE showings.

SCE - As discussed during the stakeholder conference call, SCE encourages the CAISO to work with the LRAs to ensure that any allocation of RA credits will work seamlessly with the schedules and processes set forth by the LRA.

SDG&E - SDG&E agrees that language exists within the Tariff to allocate capacity credit to LSEs for various CPM designations. However no actual mechanism in the CAISO BPM or the CIRA tool exists to facilitate this process. SDG&E believes this is due to several factors. First, CPM is a backstop mechanism. It is only triggered after LSEs and Suppliers do not submit RA and supply plans to the CAISO that include that resource. Tariff section 43A.3.7 says: "The CAISO shall rescind the CPM designation for any month during which the resource is under contract with an LSE to provide RA Capacity". This phrase intends to allow the resource to continue to seek RA contracts during the ROR designation term and if contracted, it cannot be CPM capacity. Therefore, the resource's capacity cannot be "pre-allocated" to LSEs before the RA showing as it is possible for the resource to be contracted as RA capacity. If the CAISO were to pre-allocate the capacity to LSEs then there would be double counting of the resource's capacity for the showing. Second, the CAISO has consistently said it has never designated CPM for any deficiencies and therefore never had the need to credit capacity to LSEs. This is true with the exception of significant event CPMs in 2012 when the SONGs units were offline. In that year, the CAISO issued several significant event CPM designations for the Huntington Beach Units. The

CAISO on August 9, 2012 extended the CPM designations for an additional 84 days on top of the initial 30-day designation on May 11 and 60-day extension on June 9, 2012. During this time, LSEs did not receive credit for the CPM from the CAISO per Tariff section 43.9(e) of the then relevant Tariff. SDG&E believe the CPUC acted on its own to provide the credit based on the CAISO market notices rather than information submitted per Tariff section 43.9(f). Finally, SDG&E would like to point out that section 43A.9(d) only mentions credit towards the LSE's Demand and Reserve Margin requirements and does not mention Local or Flexible RA requirements. Tariff section 43A.9(a) uses the term LSE's Local Capacity Area Resource obligation to mean Local RA requirements and 43A.9(g) uses the term LSE's Flexible Capacity requirements. If the CAISO designate CPM ROR for purposes of Local and Flexible operational needs, then LSEs should also be credited for those capacity attributes as well.

Six Cities - The Six Cities support the CAISO's proposal to provide credits for procurement of Risk-of-Retirement CPM resources. The Six Cities suggest that the next iteration of the proposal in this initiative provide additional detail as to how the CAISO will implement this credit.

11. Other Comments

CPUC - The CAISO should not make CPM ROR determination prior to the annual RA procurement process. As indicated in prior comments on the Issue Paper, ED staff remains concerned that moving a CAISO Risk-of-Retirement determination to a date prior to the year-ahead filing deadline could result in front running the current RA procurement process.

The CAISO should revise its proposal to highlight the connection between the RMR process used by Calpine for resources at risk of retirement and the CPM ROR enhancements being proposed. In its issue paper the CAISO stated:

> "The limitations of the current CPM risk-of-retirement process were recently highlighted in March 2017 when there were two peaking plants owned by the Calpine Corporation that were at risk of unplanned, early Retirement and were needed for reliability. The CAISO Board of Governors authorized the CAISO to procure the two plants using the CAISO's Reliability Must-Run ("RMR") tariff provisions, rather than the CAISO's CPM backstop risk-of-retirement tariff provisions, because of specific process conditions in the CPM risk-of-retirement tariff. The only viable option was to use an RMR designation, rather than procure the two plants using the CPM risk-of-retirement backstop procurement provisions."

This cited example appears to be one of the main motivations for changing the CPM ROR tariff. However, the revised straw proposal does not mention this example. This highlights a gap in the logic and the need to change the current ROR CPM mechanism. It also raises the question of why a generator would use the proposed ROR CPM mechanism when a less stringent mechanism (RMR) appears to be available.

If the RMR tariff allows generators, such as Calpine, to request studies of need, why would a generator opt to use the ROR CMP mechanism, which requires them to sign an affidavit attesting they will retire? The CAISO should explain how the proposed changes to the ROR CPM mechanism would minimize and/or eliminate incentives for generators to use the seemingly less stringent RMR process.

As CAISO footnoted in its issue paper, "The CAISO prefers to use a CPM designation rather than an RMR designation in risk-of-retirement situations such as the March 2017 Calpine case as the CAISO has been moving away from using RMR since the creation of the RA." However, the straw proposal does not appear to prioritize CPM over RMR. It does not even mention it.

It is also worth noting that the current draft NQC list includes both King City Energy Center and Wolfskill Energy Center. These are two of the four resources Calpine had requested be studied for a reliability need through the RMR process. The CAISO found that these resources were not needed for reliability.

ED staff is concerned about bringing this proposal to the Board of Governors in November 2017. Many implementation and tariff provisions need additional clarifications and discussion (e.g. can generators include capital additions and major maintenance in their proposed costs).

ED Staff requests that more clarification on what exact reliability criteria the April and November study will be looking at and what assumptions will be used for each reliability need. For example if the study is looking at system peak needs will it be using a one-in-two load forecast, for flexible need what assumption will be made about the flexible framework and market conditions. How will demand response resources be counted in the assessment?

CAISO states that it has provided a description of the reliability study that it will perform for each three designation types. The revised Straw Proposal specifically states that,

> “The CAISO technical study will determine whether the resource will be needed for reliability purposes, e.g., location or operation characteristics, by the end of the calendar year following the compliance year in which the resource would receive a CPM ROR designation, and that no new generation is projected to be in operation during that period that could meet the identified need.”

Staff does not believe that CAISO has adequately explained its reliability study. Specifically, Staff would like to know what assumptions the CAISO will make about resource retirements, load, and transmission projects. These types of assumptions can have a large impact on the outcome of a reliability study.

NRG - Comments on the proposed tariff language on 43A.2.6.2.1 (f) (1) –

> (1) The resource demonstrated in its request for a CPM risk of retirement designation that it is unlikely to be procured as resource adequacy capacity for the next RA Compliance Year because its $/KW-year price based on the resource’s annual fixed revenue requirement calculated in accordance with Schedule F to the pro forma RMR Agreement in Appendix G of the CAISO Tariff exceeds the price specified in Section 43A.4.1.1. If a resource owner fails to make this showing in its request for a Type 2 CPM Risk of Retirement designation, the CAISO will not study the need for the resource in the window.

The unit’s AFRR is the unit’s total fixed cost in dollars, while the price specified in 43A.4.1.1 is given in $/KW-year, and the two numbers cannot be compared directly. Further, the indentation on subsections (1), (2) and (3) should be uniform.

ORA - Comprehensive Analysis - ORA concurs with Pacific Gas and Electric Company’s (PG&E) comments in the Temporary Shutdown of Resource Operation initiative in which PG&E recommends a more holistic view of the retirement retention process. PG&E observes that: Without analyzing the interplay between the TSRO and a number of related processes - including the CPM ROR and RMR designation processes, annual/monthly RA compliance requirements, and the outage management process – the CAISO risks implementing an initiative that skews generator incentives and leads to significant unintended consequences, including expanding gaming opportunities, which could lead to higher RA procurement costs, or result in a net increase in CPM awards. ORA supports further analysis to assess the severity of the risk of retirement and a comprehensive plan to retain resources needed to secure grid reliability. This comprehensive analysis should include minimizing ratepayer risks and costs while maintaining reliability.

Draft Tariff Language - The draft tariff language should be modified to clarify when resource owners can request a CPM risk of retirement designation. Section 43A.2.6 of the draft currently states,

> The CAISO will provide two windows annually for resource owners to request a CPM risk of retirement designation. To be considered for a CPM risk of retirement designation in a given window, a resource owner must submit a request *by the deadline specified in the BPM for Reliability Requirements for that window. The deadline for the first window will be no later than June 30 of each year, and the deadline for the second window will be after the deadline for submitting annual Resource Adequacy Plans. (emphasis added)*

In the stakeholder call, CAISO stated that they will define the dates of the windows more clearly in the Business Practice Manual (BPM) instead of stating hard dates in the tariff. While this approach may allow the CAISO to make changes to any dates for the windows more easily through the BPM, the current draft tariff language does not sufficiently reflect the Proposal and could create confusion.

The Revised Straw Proposal defines two-week windows that will allow the CAISO to simultaneously assess all resources who apply for CPM ROR during the window. These short windows mitigate the potential for resource owners to gain market information by staggering their resource applications to determine the specific need of each resource. However, the draft tariff language does not define a window and only discusses a deadline for when a window closes and not when it opens. Even though the tariff references the BPM, it only states that a request must be submitted by the deadline in the BPM and not within a specific window. This could lead to an interpretation that a resource owner could apply for CPM ROR in January 2017 for Type 3 designation for 2018 based on any reliability need in 2019, because it is submitted before the deadline for the second window. ORA recommends modifying the draft language to explicitly state that applications should be submitted within a two-week window as defined in the BPM.

PG&E - PG&E appreciates the CAISO's efforts to improve the risk-of-retirement process and the opportunity to comment on the following concerns which are highlighted below and captured in further detail in the subsequent section:

1. PG&E requests the CAISO consider how the reliability assessment for Type 2 and Type 3 CPM ROR designations within the same area are evaluated. PG&E believes the types must be evaluated together to ensure that resources with the best characteristics and lowest costs are granted the designations.
2. PG&E contends that the CAISO specify the process interplay between the Temporary Shutdown of Resource Operations (TSRO), Reliability Must Run (RMR), and the CPM ROR to ensure the various mechanisms are designed to work properly.

Type 2 and Type 3 CPM ROR designations within the same area should be evaluated together to ensure that resources with the best characteristics and lowest costs are granted the designations. The Revised Straw proposal enables generators to seek a Type 2 CPM ROR designation in the April window if it can demonstrate that its costs are above the CPM soft-offer cap and that it has participated in the applicable solicitations. The conditional designation for a resource applying in 2018 would be based upon a reliability need identified in 2020. A resource seeking Type 3 CPM ROR designation in the November window wouldn't have to demonstrate the same requirements but if it applied for the designation in 2018 the reliability need would be based upon 2020. As such, CAISO's proposal should address how the CAISO will evaluate or reevaluate resources that reside within a local area having similar impact on the reliability constraint applying under these circumstances. The process should be designed so that early designations aren't given to resources that don't have the lowest costs or best reliability characteristics.

In addition, the process interplay within this initiative of Type 2 and Type 3 CPM ROR designations further highlights the risks of only evaluating resources imminently at risk of retirement rather than considering the entire portfolio. This process could result in the retirement of a resource that has a lower cost and better reliability characteristics than another resource that may need to make the designation request in the following window and would have to be retained to maintain reliability. The narrow scope of enhancing this existing process may result in the procurement of resources that don't have the best characteristics and supports the need for a more comprehensive process of determining which resources to retain/retire.

The CAISO's Proposal should consider the process interplay between the Temporary Shutdown Resource Operations (TSRO), Reliability Must Run (RMR), and the CPM ROR to ensure the interplay between the various mechanisms works properly. PG&E requests that the CAISO provide a single process map showing how retirement, RMR, temporary shutdowns, and CPM ROR designations will be evaluated within each of the windows within the process. Without understanding how the proposed process enhancements will interact with each of the available options it is difficult to comprehend how unintended market outcomes will be avoided.

SCE - SCE has no comments on this section.

SDG&E - SDG&E requests the CAISO to clarify the must offer obligations for a designated CPM ROR resource. Does the CAISO require flexible RA moo if the resource is only needed for Local operational needs? Is it possible to designate a Local resource for System only needs as the CAISO is expecting to allow unbundling of Local and System RA attributes as part of the RSI Phase 2 Tariff filing? Would the resource be required to submit separate Local, System and Flexible CPM offers for ROR? If the resource receives a CPM ROR designation for Local needs, would the resource be allowed to provide Flexible RA to an LSE? In this case, would the resource be both RA capacity and CPM capacity at the same time? Finally, would the usage of CPM ROR credit by an LSE mean the LSE is relying on CPM as a means of capacity procurement to meet RA obligations?

SDG&E also requests the CAISO to provide detail on what occurs during the two windows if a resource requests CPM ROR. Would the CAISO treat the resource as if it were to retire immediately and thus run an assessment for the remainder of the current year? Or would the CAISO consider the resource as a CPM ROR resource and analyze the impact during the next open window?

Six Cities - The Six Cities have no further comments on the Revised Straw Proposal.

Attachment D – Board Memorandum and CAISO Presentation

to the CAISO Board of Governors

Tariff Amendment to Improve the Risk of Retirement Capacity Procurement Mechanism

California Independent System Operator Corporation

California ISO

California Independent System Operator Corporation

Memorandum

To: ISO Board of Governors

From: Keith Casey, Vice President, Market & Infrastructure Development

Date: October 25, 2017

Re: Decision on capacity procurement mechanism risk of retirement process enhancements

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This memorandum requires Board action.

EXECUTIVE SUMMARY

The ISO is authorized to procure critical resources that are at risk of retiring under its capacity procurement mechanism (CPM) if load serving entities have not procured such resources through their procurement programs. Resource owners have highlighted, among other concerns, that the current CPM process does not provide sufficient advance notification to meet their business needs to retire a facility. Under the current risk of retirement CPM process, resource owners will not know whether the ISO intends to procure them for the upcoming year until after completion of the annual resource adequacy procurement process (*i.e.*, October 31). Resource owners have asked the ISO to improve the designation process so the ISO can indicate its intent to designate a resource earlier in the year, thus providing resource owners with sufficient lead time to make significant decisions regarding retirement and major maintenance.

To address this concern, Management proposes to provide two windows each year wherein resource owners can request risk of retirement CPM designations. Both resource adequacy and non-resource adequacy resources may request a risk of retirement CPM designation during the two windows. This change will allow for the earlier notification resource owners have requested. Management also proposes market power protections and provisions to ensure the new process does not have adverse impacts on the resource adequacy market including: (1) requiring a resource owner to accept any risk of retirement CPM designation, and (2) compensating a resource based on its cost-of-service.

Management proposes the following motion:

Moved, that the ISO Board of Governors approves the proposal to enhance the* capacity procurement mechanism risk of retirement process *as described in the memorandum dated October 25, 2017; and

Moved, that the ISO Board of Governors authorizes Management to make all necessary and appropriate filings with the Federal Energy Regulatory Commission to implement the proposed tariff change, as described in the memorandum dated October 25, 2017.

BACKGROUND

The ISO has authority to procure resources that are needed for reliability but are at risk of retirement. These retirements are often due to a resource's failure to earn sufficient revenues if it is not procured by a load serving entity for resource adequacy.

Resource owners have requested enhancements to the ISO's existing process because under it, they do not know until the end of the current year whether the ISO intends to procure them for the upcoming year. They indicated that this this provides insufficient time to make important business decisions regarding their units and that they need a longer "runway" so they can make important business decisions regarding whether to retire their resource earlier in the year.

Through the stakeholder process that commenced in May 2017, the ISO has strived to modify the CPM risk of retirement process to allow for conditional designations earlier in the year so resource owners can know sooner whether their resource is needed and will be procured, either through the resource adequacy process or under a CPM risk-of-retirement designation.

PROPOSAL

Management proposes the following enhancements to the ISO's CPM risk-of-retirement process:

- New language clarifying that any resource can request a designation, including a resource adequacy resource.
- A requirement that if the ISO designates a resource, the resource must accept the designation, except in a few limited circumstances. Management believes that this is appropriate because the resource voluntarily requested the designation, the ISO determined that the resource is needed for reliability, and the ISO will compensate the resource based on its full cost of service.
- Two windows each year during which resources can request a CPM risk-of-retirement designation. This will result in a more orderly and efficient process. Entertaining risk-of-retirement CPM requests earlier in the year will address

resource owners' concerns about the need for a longer "runway" to make retirement and major maintenance decisions.

- Specific requirements that apply in the first request window to a resource requesting a designation for the upcoming resource adequacy year. These requirements address concerns that designations resulting from the first window will front-run the RA process. In particular, for a resource to receive a designation for the upcoming year it must be the only resource that addresses the reliability need. Because there are no alternative resources that can meet the reliability need, the process does not unduly interfere with RA procurement.

- A revised affidavit requirement that accommodates other reasonable circumstances in which a resource owner should not be required to retire the unit.

- A requirement that a designated resource must make a cost-of-service filing with the Federal Energy Regulatory Commission, and FERC will decide the resource's compensation based on its cost of service. Risk-of-retirement CPM decisions are inherently resource specific, and the competitive solicitation process does not apply to risk-of-retirement CPM designations. Designated units are essentially receiving a "bridge" payment until the year they are needed, and RMR-type pricing is more appropriate than market-based pricing in these circumstances.

POSITIONS OF THE PARTIES

Management balanced diverse stakeholder positions to arrive at this proposal. Stakeholders are split on their views of Management's proposal. Several stakeholders either support the proposal or do not oppose it. Others oppose it for various reasons. A stakeholder comments matrix is included as Attachment A, which describes stakeholders' positions. The Department of Market Monitoring provided supportive comments in its Market Monitoring Report, which is included in the informational reports of the November Board materials.

The CPUC and some load serving entities object to the first window because it could result in the ISO indicating its intent to designate a resource before completion of the year-ahead annual resource adequacy procurement process. They express concern that this will "front run" and impact prices in the resource adequacy bilateral contract market because the ISO will procure resources in lieu of such resources being procured in the resource adequacy market. On the other hand, resource owners believe that early notification is necessary to facilitate orderly and timely retirement and maintenance decisions. The following features of the ISO's proposal effectively mitigate any "front running" concerns: (1) for the ISO to indicate its intent to designate a resource for the upcoming year, the ISO must find that it cannot operate the grid reliably without that single resource in operation (*i.e.,* there cannot be multiple resources that meet the identified reliability need); (2) the resource will be compensated based on its cost-of-service; and (3) the resource must continue to seek a resource adequacy contract by participating in solicitations and requests for offerings/proposals until the time the ISO actually designates the unit. Management stresses that the ISO will designate the unit only if it is not procured through the resource adequacy process.

A second issue is the compensation to be paid to a designated resource. Management proposes to pay a cost-of-service based rate that FERC will determine. Load serving entities support this cost-based pricing, but resource owners advocate that the ISO allow resources to submit price offers up to the soft offer cap even if those prices exceed the resource's cost of service. Management finds that cost-based pricing is appropriate because CPM risk-of-retirement decisions typically will be based on unit specific needs, which are not amenable to competitive solicitations like the other categories of CPM. Also, a CPM risk-of-retirement designation is only intended as a bridge to a future date when the resource is needed for reliability and would be expected to be procured under the resource adequacy program. The proposed cost-based pricing is similar to the reliability must-run pricing structure that the ISO has used in recent years to procure other resources at risk of retirement.

Resource owners do not support mandatory acceptance of a risk-of-retirement designation and instead request that designations remain voluntary. Other stakeholders support having mandatory designations because the ISO has found the resource to be needed for reliability and is paying the resource its full annual cost of service. For the reasons discussed above, Management believes it is appropriate to require acceptance of a designation a resource owner has voluntarily requested, except under limited circumstances.

CONCLUSION

Management requests the ISO Board of Governors approve the incremental improvements to the capacity procurement mechanism risk-of-retirement process described above. The enhancements will provide the longer runway and earlier notification that resource owners have requested and support reliable grid operation through procurement of critically needed resources.

Attachment A

Stakeholder Process: Decision on Capacity Procurement Mechanism Risk of Retirement Process Enhancements

Summary of Submitted Comments

Stakeholders submitted four rounds of written comments to the ISO on the following dates:

- Round One, 6/6/17
- Round Two, 7/12/17
- Round Three, 8/28/17
- Round Four, 10/4/17

Stakeholder comments are posted at: http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=55D6490D-5F74-4266-9031-AB0E9B74DDE1

Other stakeholder efforts include:

- 5/18/17 stakeholder working group meeting on needs and issues
- 5/25/17 stakeholder working group meeting on potential solutions
- 6/27/17 stakeholder call on straw proposal
- 8/15/17 stakeholder call on revised straw proposal
- 9/20/17 stakeholder call on draft final proposal
- 10/19/17 posted addendum to draft final proposal

Position	Stakeholder	Comment
Support	DMM SCE	Proposed earlier designations make a more viable option for resources considering retirement and is an improvement over current process which occurs too late in year to be of practical use. (DMM) Several aspects reduce likelihood a resource will submit inefficient retirement requests. (DMM) • Cost-of-service compensation reduces potential for rent seeking compared to compensation at capacity procurement mechanism soft-offer cap. • Resource must attest in writing that it intends to retire, which increases difficulty of, and rewards from, fishing for designation payments. • Proposal allows a resource to not retire if it receives a resource adequacy contract; this flexibility allows resources that were uneconomic to stay in service when conditions change. Providing an April window does not create a fundamentally new way to front run the resource adequacy process as a resource currently can receive a reliability must-run agreement at any time of the year. Receiving compensation on a cost-of-service basis rather than soft-offer cap reduces concern that April window will undermine current resource adequacy process and market. (DMM) Concerns about designations occurring before resource adequacy process highlights need to change resource adequacy process timeline so that resource adequacy contracting is completed further in advance of operations. (DMM) Support clarification that resource adequacy crediting will be based on attributes of procured resource. (SCE) Support FERC being the entity that approves all costs, including amortized past expenses. (SCE)
Do not object (Calpine) Do not oppose (Six Cities)	Calpine Six Cities	ISO has made several helpful clarifications that improve the mechanism, but object to other aspects of the proposal such as mandatory acceptance, the cost of service framework, and the usefulness of the process to Calpine. (Calpine) Support elements that allow designation “for the balance of the calendar year,” striking tariff language that allows the discretion to designate resources from “one to twelve” months, and modifications to determination of price that would be paid. (Calpine) Request ISO specify the steps the ISO will take to ensure that commitments made in affidavit to retire are fulfilled in absence of a designation. (Six Cities)
Do Not Support	Cogentrix CPUC NRG	Providing an April window results in inappropriate front running of the resource adequacy process. It will negatively impact bilateral resource adequacy contacting because a resource that is eligible for a CPM designation would gain an unfair

Position	Stakeholder	Comment
	ORA PG&E SDG&E WPTF	advantage in contract negotiations with load serving entities, likely resulting in higher ratepayer costs. (CPUC, ORA, PG&E, SDG&E) Attestation requirement is not stringent enough to ensure that price discovery behavior will not occur in April window. (CPUC, ORA) Adding additional reasons for a generator to not have to retire lowers attestation burden on generator. Current Business Practice Manual language is critical to safeguarding ratepayer interests and must be reflected in proposal. (CPUC) Initiative does not address the use of reliability must-run agreement for resources as highlighted by reliability must-run agreement procurement in March 2017. (CPUC, ORA, PG&E, SDG&E) Do not support imposing a trigger price to be eligible for designation during the April window because it makes it unlikely the window will be used. (NRG, Cogentrix, WPTF) The timing of Type 3 procurement process for the November window needs to be improved to provide the ability for load serving entities to procure a potentially designated resource in their year-ahead resource adequacy showings in lieu of the ISO procuring the resource. (SDG&E) Proposed cost-of-service payment unnecessarily compensates resources needed in near-term and provides too high a level of compensation. (ORA) Proposal is for cost-of-service pricing, but FERC has clearly indicated its preference for market-based backstop mechanisms. (Cogentrix, WPTF) Believe there are issues with using the CPUC's 2016 Resource Adequacy Report for the price to be used as a trigger for being eligible to be studied because: (a) data could be misinterpreted as representing current resource adequacy market, which it does not; (b) there is no insight as to annual price trends in the data; (c) and it does not represent what generators receive on actual capacity basis. The trigger price for a resource in a local area is too high for resources to qualify to apply for a designation, which will create situations where ISO needs to use reliability-must-run agreement procurement instead of risk of retirement designation procurement. Although some companies are set up to find a cost-based rate such as a reliability-must-run agreement acceptable, other companies have different opportunities and should not be limited to a cost-based rate absent market power. (WPTF)

<table>
<tr><th>Position</th><th>Stakeholder</th><th>Comment</th></tr>
<tr><td>Management Response</td><td colspan="2">To address concerns regarding the potential for front running the resource adequacy program, the ISO proposal includes two requirements for a resource that has applied for a designation for the upcoming year in the April window: (1) the ISO must find that it cannot reliably operate the grid without that single resource in operation, i.e., no other resource can meet the reliability need; and (2) the resource must continue to try to seek a resource adequacy contract by participating in solicitations and requests for offerings/proposals until the time the ISO actually designates the unit. Resource owners desire market-based compensation that would be higher than the cost-based compensation proposed by the ISO, and some stakeholders advocate for compensation lower than what Management is proposing (such as paying only cold layup mothball costs). Management supports cost-based pricing because it provides a capacity payment to keep a resource on-line for a period of time as a bridge to a future period when the resource will be needed for reliability. This type of cost-based pricing is similar to the pricing structure the ISO uses for reliability-must-run agreements, which the ISO has executed in recent years to procure other resources that were at risk of retirement. Although some resource owners support retaining the voluntary nature of risk-of-retirement CPM designations, Management believes that acceptance should be mandatory except in limited circumstances. The ISO is paying the resource its full annual cost of service and has found that the resource will be needed to meet reliability. On October 19, 2017, the ISO posted an addendum to its draft final proposal that includes three revisions to address the following stakeholder concerns discussed in the matrix above. First, the ISO revised the proposal to require that a resource submit a retirement plan within 60 days after being informed by the ISO that that the ISO will not designate the resource. This addresses a concern expressed by several stakeholders that there should be a mechanism to provide that a resource will retire within a certain period of time if the resource does not receive a designation. The addendum clarified that the ISO will post the names of the resources seeking a designation for both windows, and if there is a designation the ISO will give load serving entities until 14 days after the latter of the issuance of the study report or the annual resource adequacy deficiency report to procure resources. If the ISO does not issue a study report for that year, load serving entities will have until 30 days after issuance of the annual resource adequacy deficiency report to procure resources. Third, Management no longer proposes a trigger price for a resource to be eligible for a designation.</td></tr>
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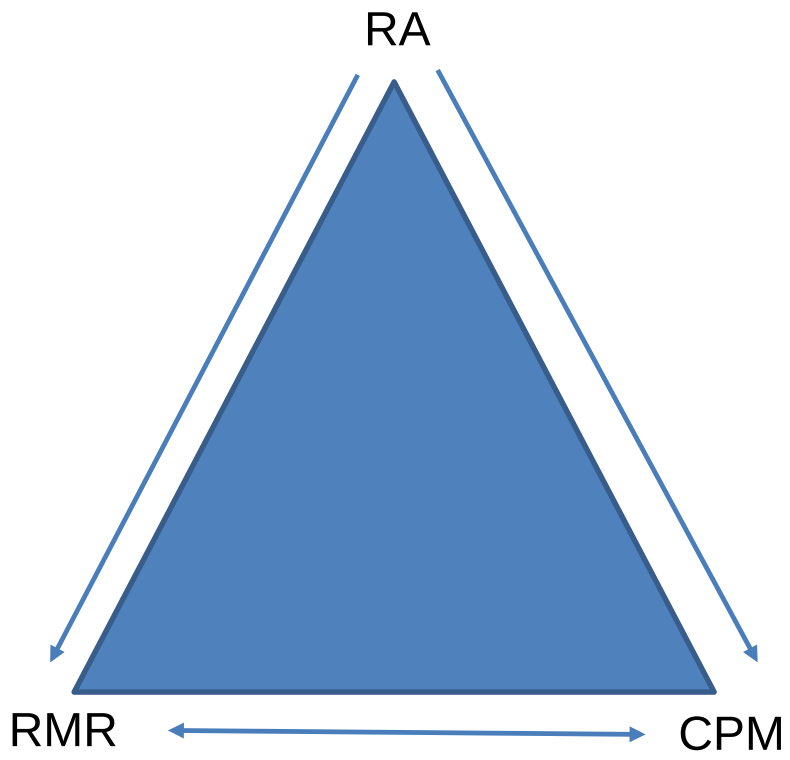
Decision on capacity procurement mechanism risk of retirement process enhancements

Keith Johnson
Infrastructure and Regulatory Policy Manager

Board of Governors Meeting
General Session
November 2, 2017

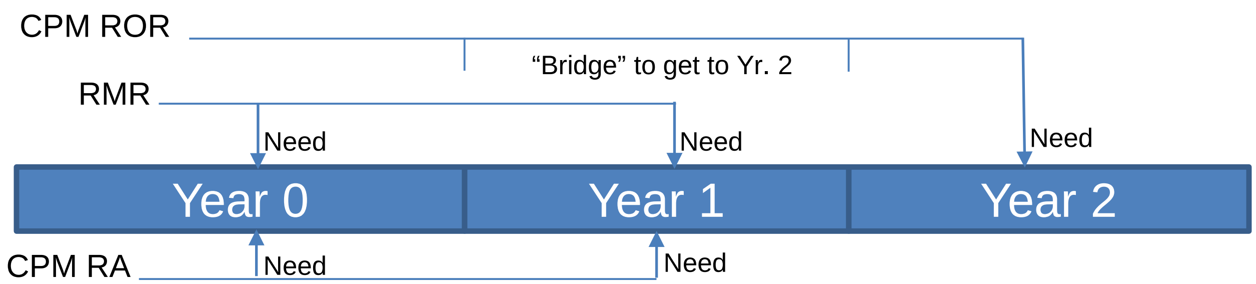
RA, RMR and CPM work together to ensure reliability.



RA = Resource Adequacy Program
RMR = Reliability Must-Run Agreements
CPM = Capacity Procurement Mechanism

The attributes needed affect how capacity is procured.

Element	RMR	CPM RA Showing Deficiency	CPM Risk of Retirement
Reliability Need	Local	Local and system	Local and system
Timing of Need	Near-term (yr. 0, yr. 1)	Near-term (yr. 0, yr. 1)	Longer term (yr. 2)
Timing of Procurement	Any time of year	Year-ahead or month-ahead	Year-ahead
Term of Procurement	Annual contract, with extension provisions	Annual or monthly, maximum of 12 months	Annual or monthly, maximum of 12 months
Compensation	Cost-of-service pricing	Market pricing	Market pricing (propose cost-of-service pricing)
Compensation for Major Capital Expenditures	Yes, and can be over several years	Yes – limited to CPM term	Yes – limited to CPM term
Acceptance of Procurement	Mandatory	Voluntary	Voluntary (propose mandatory)



ROR = Risk of retirement

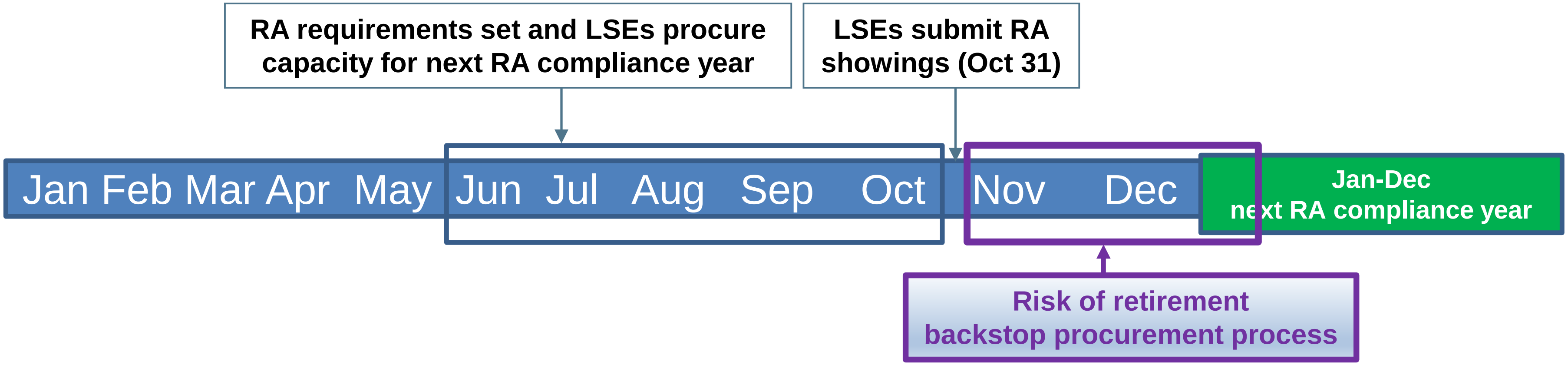
CPM and RMR designations reflect deficiencies in RA framework.

- CPUC’s 2019 RA proceeding is an opportunity to address identified issues
- ISO will evaluate potential modifications to RMR construct to better align with current environment

Capacity Procurement Mechanism Risk of Retirement Process Enhancements

The current CPM ROR process does not provide sufficient notice to meet business needs to retire a facility.

- ISO’s procurement decisions are not made until after the October 31 year-ahead RA showings are due

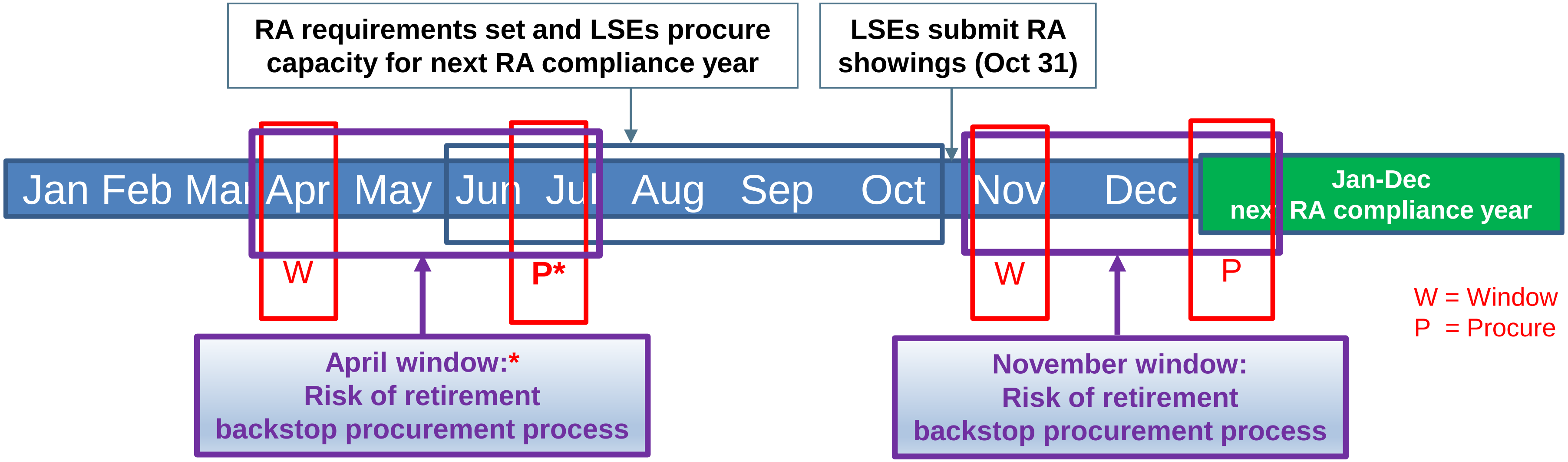


- Resource owners have requested process be improved to allow ISO to indicate its decision earlier in year

LSE = Load serving entity

Propose two windows each year when resources can request retirement assessment: April and November.

- Both RA and non-RA resources may request an assessment during the windows



* Procurement would occur in Jun-Jul if resource is not currently RA, and in Dec-Jan if currently RA

- April window will allow earlier notification of ISO decision that resource owners have requested

California ISO

Some stakeholders are concerned that creating an April window will have adverse impacts on RA market.

- Proposal includes several provisions to mitigate potential adverse impacts to RA market
  - Must retire resource if not designated
  - Must be only resource that addresses reliability need
  - Must continue to try to become RA by participating in procurement solicitations until procured by ISO
  - Will be procured by ISO only if not procured as RA, or during the RA showing cure process
  - Must accept backstop designation if offered
  - Cost-of-service compensation

Stakeholders generally support the proposal, but there are some concerns.

- CPUC and some LSEs are concerned that April window will “front run” and impact prices in RA market, but resource owners believe early notification is needed for orderly and timely business decisions

- LSEs generally support proposed cost-of-service pricing, but resource owners advocate market-based pricing

- LSEs support having acceptance of a designation be mandatory, but resource owners believe it should remain voluntary

Management recommends the Board approve the capacity procurement mechanism risk of retirement process enhancements proposal.

- Earlier notification and longer “runway” that resource owners have requested
- Clarify existing tiebreaker criteria applies to select from among multiple resources that may seek a designation at same time
- Supports reliable operation of grid through last resort ISO procurement of critically needed resources

Attachment E – DMM Comments dated October 4, 2017

Tariff Amendment to Improve the Risk of Retirement Capacity Procurement Mechanism

California Independent System Operator Corporation

Comments on the Capacity Procurement Mechanism Risk-of-Retirement Process Enhancements – Draft Final Proposal

Department of Market Monitoring
October 4, 2017

The California ISO Department of Market Monitoring (DMM) appreciates the opportunity to comment on the ISO's Capacity Procurement Mechanism Risk-of-Retirement Process Enhancements Draft Final Proposal (Proposal).[1]

The Proposal allows resources to know earlier in the year whether the will receive a risk-of-retirement CPM. The proposed earlier designations makes the risk-of-retirement CPM a more viable option for resources considering retirement. This is an improvement over the current risk-of-retirement CPM process which occurs too late in the year to be of practical use.

Several aspects of the Proposal reduce the likelihood that a resource will submit inefficient retirement requests.[2] The ISO proposes to compensate a resource who receives a risk-of-retirement CPM at the resource's cost-of-service. The cost-of-service compensation reduces the potential for rent seeking compared to compensation at the CPM soft offer cap. The resource owner must also attest in writing that they intend to retire the unit. This increases the difficulty of, and rewards from, fishing for CPM payments in the proposed risk-of-retirement process.

The Proposal also allows a resource to not retire if it receives an RA contract in the bi-lateral. This flexibility allows resources that were uneconomic to stay in service when conditions change, mitigating the potential for an inefficient retirement.

While the proposal does create an April application window before than annual RA process is complete, a resource currently can receive an RMR contract if it applies for retirement at any time during the year. Therefore, creating an option to apply for a risk-of-retirement CPM does not create a fundamentally new way for a resource to "front run" RA process. Further, a resource receiving a risk-of-retirement CPM is compensated based on its cost-of-service rather than the CPM soft cap, which also reduces concern that this option will undermine the current RA process and market. Concerns about the CPMs occurring before the RA process highlight the need to change the RA process timeline so that RA contracting is completed further in advance of operations.

[1] *Capacity Procurement Mechanism Risk-of-Retirement Process Enhancements – Draft Final Proposal*, September 13, 2017: http://www.caiso.com/Documents/DraftFinalProposal-CapacityProcurementMechanismRisk-of-RetirementProcessEnhancements.pdf.

[2] Requests to retire resources that would actually be economic to keep in operation.

Attachment F – Letter from Calpine Corporation to the CAISO

dated November 28, 2016

Tariff Amendment to Improve the Risk of Retirement Capacity Procurement Mechanism

California Independent System Operator Corporation

CALPINE CORPORATION

4160 DUBLIN BOULEVARD
SUITE 100
DUBLIN, CA 94568
925.557.2280 (M)
925.479.9560 (F)

November 28, 2016

NYSE CPN

Mr. Steve Berberich
President and Chief Executive Officer
California Independent System Operator
250 Outcropping Rd
Folsom, CA 95630

Dear Mr. Berberich, Steve

After unsuccessful, but diligent efforts to try to sell Capacity and Energy from four of its fast-start peaking plants[1] that come off contract at the end of 2017 ("2017 Peakers"), Calpine has concluded that these units will no longer be economic to operate commencing January 1, 2018. Accordingly, our current plan is to remove these units from the relevant Participating Generator Agreement, Schedule 1, making them unavailable for CAISO dispatch effective January 1, 2018.

In order to facilitate Calpine's operational planning and expenditures, we ask that you direct CAISO staff to undertake the studies necessary to confirm that the absence of these units will not create unacceptable reliability impacts. We ask that the results of that review be communicated to Calpine no later than March 31, 2017, to allow for an orderly and rational cessation of operations on January 1, 2018. Your staff has indicated that completing the necessary analysis within this timeframe is feasible.[2]

Should Calpine not be apprised of a definitive reliability need by March 31, 2017, it will commence specific actions (which may be difficult to reverse) regarding the disposition of the physical assets. Indeed, some of these actions have already commenced or are imminent, for example:

- Calpine is in the process of retaining the engineering and permitting consultants necessary to develop the required permitting, decommissioning or redeployment plans for each of the units.
- Discussions regarding major maintenance expenditures important for operations in 2018 and beyond have commenced and certain projects have been conditionally eliminated.

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1 The four Calpine Peakers are the 47 MW Yuba City Energy Center, 47 MW Feather River Energy Center, 44 MW King City Energy Center and 48 MW Wolfskill Energy Center. The Resource IDs, respectively are YUBACT_6_UNITA1, BOGUE_1_UNITA1, KNGCTY_6_UNITA1 and WOLFSK_1_UNITA1. The four Calpine Peakers are part of an eleven unit portfolio of LM6000 aero-derivative, fast-start, peaking gas turbines with approximately 550 MW of capacity located throughout NP15 that Calpine owns and operates. A contract for the balance of these peaking facilities expires on December 31, 2021.

2 Concurrently, your staff has also requested specific data regarding the 2017 Peakers, which we will be submitting under separate cover pursuant to the confidentiality provisions of the Tariff.

- More generally, by mid-2017, the Calpine budgeting process for 2018 will conclude. This process establishes the operations, maintenance, personnel and/or closure or relocation budgets for each of the units.
- By mid-2017, Calpine will file for approval of a closure plan with the California Energy Commission (CEC) regarding the King City Energy Center. Approval of this closure plan is required to satisfy its CEC license requirements prior to the commencement of decommissioning activities.

These complicated and transformational activities require months to plan and implement, and place a large burden on the commercial, operational, legal and personnel functions at Calpine.[3] We cannot and will not defer these decisions until late 2017. In this regard, we have concluded, based on discussions with your staff, that the provisions of the Capacity Procurement Mechanism (CPM) do not allow a sufficient planning period, or "runway" for such complicated and transformational activities. In fact we conclude, with the concurrence of your staff, that even if the 2017 Peakers are needed for reliability, the CPM risk-of-retirement provisions (§ 43A.2.6) would require them to operate uneconomically into 2018 after their contracts expire, but before the CAISO could designate them as eligible for compensation. We do not view continued operation with unknown compensation as an acceptable business outcome. As such, *we will not pursue such a CPM designation.*

We are aware, however, that if the CAISO determines that all or some of the 2017 Peakers are required for reliability, the CAISO retains the unilateral right to designate those units as Reliability Must Run (RMR) under CAISO Tariff §41. As noted earlier, in order to provide for reasoned planning and coordination of activities, Calpine asks that the CAISO complete any reliability analysis and communicate the results on or before March 31, 2017.

As always, we stand ready to meet with you when further discussions are advisable.

Sincerely,

Mark Smith

Mark Smith
Vice President, Governmental & Regulatory Affairs

cc: Keith Casey, ISO

[3] It is worthy of note that the decommissioning planning and implementation process for combined cycle units (as opposed to the 2017 Peakers), is an even longer process – many CEC licenses require the submission of a decommissioning or closure plan to the CEC for review and approval at least 12 months prior to the commencement of decommissioning activities.

Attachment G – Letter from Calpine Corporation to the CAISO

dated June 2, 2017

Tariff Amendment to Improve the Risk of Retirement Capacity Procurement Mechanism

California Independent System Operator Corporation

CALPINE CORPORATION

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Mr. Steve Berberich
President and Chief Executive Officer
California Independent System Operator
250 Outcropping Rd
Folsom, CA 95630

Dear ~~Mr. Berberich~~, Steve

Given deteriorating market dynamics, substantial capital required to maintain availability, and the absence of compensatory contracts, Calpine is currently assessing whether to make Metcalf unavailable for CAISO dispatch effective January 1, 2018. Metcalf Energy Center ("Metcalf") is in a local, constrained sub-area of the Greater Bay Area.[1]

In order to facilitate Calpine's operational planning, capital commitments and approvals needed for the potential suspension of operations of the facility, we ask that you direct CAISO staff to undertake the studies necessary to confirm that the absence of Metcalf generation will not create unacceptable reliability impacts.[2] We ask that the results of that review be communicated to Calpine as soon as practicable.

The CAISO is well-aware of the financial distress that is mounting upon natural-gas fired resources. In fact, the Department of Market Monitoring indicates that the preponderance of zero (or negative) marginal cost resources have driven energy margins for combined-cycle gas generation facilities (CCGTs), like Metcalf, down to roughly $1 per kw-month. Resource Adequacy payments have not risen concomitantly, in part because the local RA requirements are enforced by the CPUC at the aggregate (and oversupplied) level of the "Greater Bay Area," and not at the constrained local sub-area level in which Metcalf resides (the South Bay/Moss Landing sub-area).

In addition, Metcalf's key generating components (each of the two gas-turbines and the steam turbine) are all expected to require major maintenance, which is currently planned for spring 2018. Current estimates place the expenditures required to complete such major maintenance at well over $20 million. It would be economically irrational for Calpine to

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[1] Metcalf is a 2x1 combined cycle plant with an August NQC of 570 MW. The plant was commissioned and on-line in 2005 and uses reclaimed water for all cooling purposes.

[2] We are aware that there are other facilities in this constrained sub-area that will quickly be facing similar decision points, including at least the following Calpine facilities, which are nearing the end of their contractual commitments: 120 MW Gilroy Cogeneration (contracted through December 2018), 28 MW Agnews (contracted through Spring 2021), and 135 MW Gilroy Peakers (contracted through December 2021).

undertake that investment without a clear line-of-sight to compensation that yields capital recovery.[3]

Our expectations of compensation are clear – the prevailing RA market prices will not support continued operation of Metcalf. In fact, Metcalf has no RA contracts for any part of calendar year 2018 and we do not expect any such contracts to materialize. Of course, we will keep the CAISO apprised of any unexpected success we might have in contracting.

With these uncertainties evident, Calpine cannot and will not defer operational and capital decisions regarding Metcalf until late 2017. As we have informed you previously and again recently, we conclude that the provisions of the Capacity Procurement Mechanism (CPM) do not allow a sufficient planning period, or "runway" for such complicated and transformational activities, such as major maintenance, budgeting and personnel planning. As such, *we will not pursue such a CPM designation.*

We are aware, however, that if the CAISO determines that Metcalf is required for reliability, the CAISO retains the unilateral right to designate it as Reliability Must Run (RMR) under CAISO Tariff §41. As noted earlier, in order to provide for reasoned planning and coordination of activities, Calpine asks that the CAISO complete any reliability analysis and communicate the results to Calpine as soon as practical.

As always, we stand ready to meet with you when further discussions are advisable.

Mark

Mark Smith
Vice President, Governmental & Regulatory Affairs

cc Keith Casey, ISO

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[3] We note that the CPUC once again has proposed to reject a multi-year forward RA procurement requirement.