163 FERC ¶ 61,023
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Kevin J. McIntyre, Chairman;
Cheryl A. LaFleur, Neil Chatterjee,
Robert F. Powelson, and Richard Glick.

California Independent System Operator Corporation Docket No. ER18-641-000

ORDER REJECTING TARIFF REVISIONS

(Issued April 12, 2018)

1. On January 12, 2018, pursuant to section 205 of the Federal Power Act (FPA),[1] the California Independent System Operator Corporation (CAISO) filed proposed tariff revisions pertaining to its risk of retirement capacity procurement mechanism (CPM). In this order, for the reasons discussed below, the Commission rejects CAISO's proposed tariff revisions and encourages CAISO to propose a more comprehensive package of reforms, consistent with the guidance provided herein.

I. Background

2. Since 2006, CAISO and the local regulatory authorities within its balancing authority area, chiefly the California Public Utilities Commission (CPUC), have jointly administered the resource adequacy program. The resource adequacy program requires that load serving entities procure capacity to meet their forecasted peak load plus a reserve margin, as established by their local regulatory authority. The program also requires load serving entities to procure local and flexible capacity, as determined by CAISO and adopted by their local regulatory authorities. To remedy unresolved resource adequacy deficiencies and/or meet specified reliability needs, CAISO relies on backstop capacity procurement authority under the CPM provisions of its tariff.

3. In 2011, the Commission accepted a new category of CPM procurement, "risk of retirement CPM," which would permit CAISO to procure capacity from a non-resource adequacy resource that would otherwise retire because it did not have a capacity contract for the current or upcoming year, but was determined by CAISO to be needed for

[1] 16 U.S.C. § 824e (2012).

reliability reasons for the following year. For example, a resource that did not obtain a resource adequacy contract in 2018 for the 2019 resource adequacy compliance year, but was needed for reliability in 2020, would be eligible to request a risk of retirement CPM designation for 2019. The designation acts as a "bridge" to prevent the resource from retiring before it is needed for reliability by providing a guaranteed payment stream during the term of the designation.[2]

4. Because the risk of retirement CPM designation is a part of the reliability backstop program, CAISO cannot issue designations in a way that would circumvent the bilateral resource adequacy procurement processes conducted by the local regulatory authorities. Thus, under the current CPM framework, CAISO may issue a risk of retirement CPM designation if (1) the resource owner has offered all eligible capacity into all competitive solicitation processes during the current year; (2) the resource was not contracted as resource adequacy capacity during the current year for the upcoming resource adequacy compliance year;[3] (3) CAISO's technical assessments project that the resource will be needed for reliability purposes by the year following the next resource adequacy compliance year;[4] (4) no new generation is projected by CAISO to be in operation by the time of the identified reliability need. If these requirements are met, CAISO will issue a study report that explains the basis and need for the CPM designation and will provide a 30-day window for a load serving entity with a deficiency in its annual resource adequacy plan to procure capacity from the resource at risk of retirement, which would obviate the need for the designation. In practice, because of the timing of the bilateral resource adequacy procurement process and because resources do not submit their annual resource adequacy showings to CAISO until the last business day of October, CAISO is not able to announce its intent to issue a risk of retirement CPM designation for the upcoming year until mid-December at the earliest.[5]

5. The decision for a generator to accept a risk of retirement CPM designation is voluntary, but in its request for a designation, the resource owner must attest that the decision to retire the resource is definite unless procurement under CPM occurs.

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

[3] For example, the resource did not enter into a contract in 2018 for the 2019 resource adequacy compliance year.

[4] If the resource is requesting a risk of retirement CPM designation in 2018, CAISO would need to consider whether the resource is needed for reliability in 2020.

[5] In this example, CAISO would be announcing its intent to issue the designation for 2019 by mid-December 2018.

6. A resource that accepts a risk of retirement CPM designation is compensated for capacity at the CPM offer price included in its risk of retirement CPM designation request, capped at the CPM soft offer cap of $6.31 per kilowatt-month. The resource owner may justify a price above the soft offer cap pursuant to a resource-specific cost-based filing with the Commission. The cost-based option is calculated using the formula for determining the annual fixed revenue requirement of a reliability must-run (RMR) unit contained in schedule F to the *pro forma* RMR Agreement.[6]

II. Instant Filing

7. Here, CAISO proposes revisions that it asserts will make the risk of retirement CPM framework more efficient, workable, and fair. In particular, CAISO proposes to: (1) create two request windows, one in the spring and one in the fall, to allow resource owners more lead time to make decisions about retirement; (2) modify the attestation requirement to permit resources to pursue legitimate business opportunities instead of retirement; (3) make acceptance of the risk of retirement CPM designation mandatory for resources that request it; and (4) eliminate the market-based compensation methodology in favor of the existing cost-based methodology.

III. Notice and Responsive Pleadings

8. Notice of CAISO's filing was published in the *Federal Register*, 83 Fed. Reg. 2978 (2018) with interventions and protests due on or before February 2, 2018. The NRG Companies;[7] Northern California Power Agency; Alliance for Retail Energy Markets; Western Power Trading Forum; California Department of Water Resources State Water Project; Powerex Corp.; Modesto Irrigation District; Cogeneration Association of California; and the City of Santa Clara, California filed timely motions to intervene. Timely motions to intervene and comments or protests were filed by the Department of Market Monitoring of the California Independent System Operator Corporation (DMM); Calpine Corporation (Calpine); the Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California (Six Cities); Pacific Gas and Electric Company (PG&E); San Diego Gas & Electric Company (SDG&E); and

[6] CAISO Tariff, section 43A.4.1.1.1. The *pro forma* RMR Agreement is contained in Appendix G to the tariff. *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 of 12.25 percent) minus the total annual variable cost (comprising annual variable operation and maintenance expenses, annual variable fuel costs, and annual emissions costs).

[7] For purposes of this proceeding, the NRG Companies are NRG Power Marketing LLC and GenOn Energy Management, LLC.

Southern California Edison Company (SoCal Edison). The California Public Utilities Commission (CPUC) filed a notice of intervention and protest. CAISO filed an answer.

IV. Discussion

A. Procedural Matters

9. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2017), the notices of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

10. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2017), prohibits an answer to a protest and/or answer unless otherwise ordered by the decisional authority. We will accept CAISO's answer because it has provided information that assisted us in our decision-making process.

B. Substantive Issues

1. Risk of Retirement CPM Process

a. CAISO Proposal

11. CAISO states that the risk of retirement of resources needed for reliability remains a significant concern as the percentage of renewable resources in the overall resource portfolio increases, energy market prices decrease, and therefore the potential revenue available to cover the fixed costs of existing generation resources declines. Further, CAISO asserts that one of the most fundamental deficiencies of the existing risk of retirement CPM process is that CAISO is unable to announce a designation until mid-December for the upcoming year, which does not provide resource owners with sufficient lead time to make significant business decisions regarding expenditures required to permit a resource to continue operating or to make preparations for retirement.[8]

12. To address this issue, CAISO proposes to implement two annual windows for resource owners to request a risk of retirement CPM designation. During the first window, which will occur between April and June,[9] resource owners can request risk of retirement CPM designations for the remainder of the current year (Type 1 designation) and/or for the upcoming year (Type 2 designation). During the second window, which

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[8] CAISO Transmittal at 12-15.

[9] CAISO proposes to set forth the specific dates for the application windows in its business practice manuals. *Id.* at 18, n.55.

will take place after the annual resource adequacy showings are submitted to CAISO at the end of October, resources may request a risk of retirement CPM designation for the upcoming year (Type 3 designation). CAISO explains that the Type 3 request window corresponds to the current designation process. CAISO states that the proposed earlier application window for Types 1 and 2 designations would be a new feature intended to make risk of retirement CPM designations a more practicable option than the current process for resource owners.[10]

13. CAISO contends that the proposed two-window process will improve CAISO's planning and allocation of resources and promote the orderly retirement of resources that do not receive risk of retirement CPM designations. In addition, CAISO asserts that, as a result of the earlier notice of potential Type 2 designations, along with the associated opportunity for load serving entities to procure such resources before the October annual resource adequacy plan deadline, the two-window process will help protect against over-procurement of CPM resources and unnecessary cost incurrence. CAISO notes that issuance of a study in the first half of the year indicating the need for a Type 2 designation for a particular resource does not constitute an actual designation. Rather, CAISO states that the Type 2 risk of retirement CPM designation would be conditional until the end of the year to ensure load serving entities have had an opportunity to procure the resource, and to ensure all other conditions have been satisfied. CAISO states that it will step in and procure the resource under its risk of retirement CPM authority as a last resort in the event that load serving entities do not procure a resource that is needed for reliability. However, CAISO emphasizes that there should not be any changed circumstances that would render unnecessary in December any conditional Type 2 designation reflected in a study conducted following the spring request window.[11]

14. CAISO proposes several new requirements specific to Type 2 designations in order to mitigate concerns that the new application window will undermine or unduly interfere with the bilateral resource adequacy capacity procurement, which takes place primarily during the summer. First, CAISO proposes to require an executive officer of the resource owner to attest that the resource made a reasonable effort to participate in all applicable resource adequacy competitive solicitations, requests for offers, or similar procurement process mechanisms by load serving entities for the upcoming resource adequacy compliance year. Second, under the proposed revisions, CAISO must find that the resource is uniquely situated as the only resource that can meet the identified reliability need.[12]

[10] *Id.* at 17-18.

[11] *Id.* at 19-22.

[12] *Id.* at 26.

15. For all three types of designations, CAISO proposes to establish limited exceptions to the existing retirement attestation requirement to make it more practical and avoid unreasonably foreclosing legitimate business opportunities. Specifically, CAISO proposes to require the resource owner to attest that, unless the risk of retirement CPM designation is granted, the decision to retire is final 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 current resource adequacy compliance year.[13] CAISO also proposes to require a resource that is rejected for a risk of retirement CPM designation, and does not qualify for one of the specified exceptions, to submit a plan for retiring the resource within 60 days of the rejection.[14]

16. Finally, whereas risk of retirement CPM designations are currently voluntary, CAISO proposes to make it mandatory for a resource requesting a designation to accept the designation, unless it becomes a resource adequacy resource for the designation period. CAISO states that obligating a resource to accept a risk of retirement CPM designation is comparable to the obligations of resources that submit bids into the CPM competitive solicitations. Further, CAISO asserts that if a resource voluntarily requests a risk of retirement CPM designation and CAISO expends the time and resources to perform the required technical studies, the decision of the resource to accept the designation should not be voluntary.[15]

b. Comments, Protests, and Answer

17. CPUC argues that the establishment of a spring application window will result in "gaming and front-running"[16] of CPUC's bilateral resource adequacy process. CPUC disputes that any of CAISO's proposed revisions will mitigate this effect. With regard to the requirement for a resource owner seeking a Type 2 designation to participate in all applicable load serving entity procurements that year, CPUC notes that most of the solicitations occur during the summer making any requirement to participate in solicitations before the spring application window meaningless. CPUC also contends that cost-based compensation will interfere with the bilateral resource adequacy process

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[13] *Id.* at 4.

[14] *Id.* at 23.

[15] *Id.* at 29-30.

[16] CPUC Protest at 6. The term "front-running" refers to a scenario where a resource owner that receives a risk of retirement CPM designation in the April request window could have the ability to impact prices in the current resource adequacy process.

because the cost-based compensation provided to risk of retirement CPM resources may be higher than market revenues, which could lead to gaming of the bilateral resource adequacy process by resource owners in order to earn higher revenues than otherwise through a bilateral contract. CPUC also refutes CAISO's assertion that the requirement for a resource to retire if it does not receive a risk of retirement CPM designation will deter front-running because the exceptions to that requirement create loopholes that would provide a risk-free opportunity to front-run the bilateral process.[17]

18. PG&E likewise asserts that the proposed spring application window has the potential to distort the bilateral resource adequacy market. PG&E contends that the proposed tariff revisions do not specify whether a conditional Type 2 designation will reduce the aggregate load serving entity resource adequacy procurement obligations. PG&E argues that if it does, then the spring application window will front-run the bilateral process. If it does not, PG&E contends that it will result in excess procurement of unneeded, expensive capacity. PG&E also opines that even though the proposed revisions give load serving entities the opportunity to procure capacity from a resource with a conditional Type 2 designation, load serving entities have no incentive to do so because each load serving entity is likely to focus on minimizing its procurement costs.[18]

19. Calpine states that it does not object to the proposed revisions to the risk of retirement CPM process so long as RMR remains an option regardless of whether a resource owner may have also chosen to seek a risk of retirement CPM designation. However, Calpine argues that the establishment of the spring application window will be of little benefit because it still may not provide sufficient lead time for resources considering retirement. Calpine highlights that up until December of each year, Type 2 designations will only reflect CAISO's intent to issue the designation, but will not actually provide the resource owner with certainty that it will receive the designation or what the level of compensation will be.[19]

20. In addition, Calpine argues that the new requirements specific to Type 2 designations may discourage resource owners from requesting the designation. Calpine claims that requirements such as making a "reasonable" effort to participate in all applicable resource adequacy solicitations and a finding that a resource is "uniquely situated" to fill a reliability need are subjective and potentially invite challenges from third parties. Calpine adds that the submission of the cost justification filing at the Commission creates another potential for burdensome litigation. Moreover, Calpine

[17] *Id.* at 6-8.

[18] PG&E Protest at 9-10.

[19] Calpine Comments at 4-6.

complains that a resource seeking a Type 2 designation would bear the full market risk of non-recovery of capital expenditures that arise after the date the designation commences, which may render the spring application untenable for generation units at risk of retirement regardless of the longer lead time afforded under the proposed revisions. Finally, Calpine asserts that CAISO's proposal to make acceptance of the designation mandatory, if offered, may make resource owners reluctant to seek Type 2 designations.[20]

21. Similarly, PG&E and SDG&E argue that, even considering CAISO's proposed revisions to the risk of retirement CPM process, resources at risk of retirement will still prefer to seek RMR agreements. PG&E asserts that RMR will remain preferable to risk of retirement CPM designations because RMR requests do not require an attestation that the facility will be retired absent the designation and can be requested at any time. PG&E claims that there are very few instances where a resource is not needed immediately for reliability but will be needed in the future timeframe.[21] SDG&E contends that there is no need to extend risk of retirement CPM to cover resources that are needed for the remainder of the current year because the current RMR provisions already fill that need and the RMR process has the advantage of being more flexible than the risk of retirement CPM process.[22]

22. PG&E and Calpine contend that the revisions proposed here constitute a piecemeal approach that does not address the underlying market design issues that warrant a more holistic and comprehensive review and solution. PG&E claims that the proposed revisions do not consider the interplay between the new risk of retirement CPM process and the current RMR provisions. Moreover, PG&E argues that the proposed revisions do not specify how CAISO will perform the reliability assessment with respect to Type 2 and Type 3 designations. PG&E hypothesizes that a resource seeking a Type 3 designation in November will have an inherent advantage over one requesting a Type 2 designation in April and asserts, therefore, that the new process may result in the procurement of resources that do not have the most efficient characteristics. PG&E requests that, if the Commission does not reject the proposal, that it direct CAISO to modify the proposal such that resources with the lowest costs or best reliability characteristics are designated regardless of when the designation was requested. PG&E

[20] *Id.* at 7-10.

[21] PG&E Protest at 5-8.

[22] SDG&E Protest at 5.

also requests that the Commission direct CAISO to move forward with developing a more comprehensive solution through the current CPM/RMR stakeholder process.[23]

23. Calpine acknowledges the need for CAISO to balance competing considerations in drafting this proposal, but contends that the complexity and limitations resulting from CAISO's attempt to achieve this balance underscore the need for a more comprehensive review and redesign of primary and backstop capacity procurement in California and requests that the Commission direct such an initiative.[24]

24. PG&E argues that, if the Commission does not reject the proposal, a number of other clarifications are necessary, including: (1) whether generators with resource adequacy contracts for a portion of their capacity are eligible for a conditional Type 2 designation, and how those applicants will be evaluated; (2) the time window in which CAISO will post information after the close of an application window; (3) the dates for the start and end of each window or a date by which CAISO will provide notice of the timelines and on what basis the start and close of each window will be determined; (4) details about what is to be contained in the retirement plan that must be submitted within 60 days of a resource being denied a designation; and (5) specific information regarding availability requirements for risk of retirement CPM resources.[25]

25. In its answer, CAISO reiterates that its proposal to establish a spring request window will not result in any front-running of the bilateral procurement process. CAISO asserts that any concerns that the resource may have market power are mitigated because the resource will be compensated based on the fixed cost-of-service formula that the Commission previously found to be just and reasonable. In addition, CAISO contends that CPUC's objections to the attestation requirement on the basis that it creates a "loophole" in which a generator could avoid retiring are based on an illogical premise. For these circumstances to occur, CAISO explains that an economically unviable resource at risk of retirement, which is not needed for reliability, would need to seek out every loophole it can to remain in service and continue earning insufficient revenues. In addition, CAISO emphasizes that, despite the proposed exceptions, due to the requirement to attest that the decision to retire is final unless some type of annual procurement occurs, a partial-year contract would not undo the commitment to retire and

[23] PG&E Protest at 10-11.

[24] Calpine Comments at 10-11.

[25] PG&E Protest at 11-12.

the resource owner could also be subject to penalties for submitting false information if that resource owner attempted to subvert the requirement to retire.[26]

26. Next, CAISO disputes arguments that the proposed spring request window has the potential to distort the bilateral resource adequacy market. CAISO argues that if PG&E's assertion that load serving entities are unlikely to procure a resource is correct, it follows that CAISO's proposal does not result in any front-running of the bilateral procurement process.[27]

27. CAISO defends the measures it has proposed to ensure the spring request window does not interfere with the bilateral resource adequacy market. Contrary to PG&E's assessment, CAISO contends that the requirement to make a reasonable effort to participate in the specified procurement processes is consistent with the longstanding principle that CPM is a backstop mechanism. Additionally, CAISO argues, the actual designation of a resource should only occur after load serving entities have had the opportunity to procure the resource.[28] With respect to the proposed requirement to identify a resource as "uniquely situated," CAISO responds that this requirement prevents the possibility that CAISO will select a higher-cost resource in the first resource window, even though a lower-cost resource may become available in the second request window to meet the same reliability need. CAISO states that this requirement ensures that in the study process following a request for a Type 2 designation during the spring request window, CAISO will not conditionally designate a resource if there are multiple resources that can meet the same reliability need.[29]

28. In response to Calpine's concern that the proposed revisions create a "cost risk," CAISO notes that the same Commission-approved formula and process that applies to RMR units will apply equally to risk of retirement CPM resources. CAISO also reiterates that obligating a resource owner to accept a requested risk of retirement CPM designation parallels the existing obligations for all resources that submit bids into the CPM competitive solicitation.[30] Finally, CAISO refutes Calpine's claim that there is little benefit in establishing a spring request window, asserting that resource owners will

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[26] CAISO Answer at 32-33.

[27] *Id.* at 29.

[28] *Id.* at 26-27 (citing 2011 Order, 134 FERC ¶ 61,211 at PP 126-130).

[29] *Id.* at 27.

[30] *Id.* at 35-37.

benefit from the longer "runway" created by the first request window to rationally plan for potential resource retirement or continued resource operation.[31]

29. CAISO disagrees with PG&E's and SDG&E's assertions that resource owners are likely to seek RMR designations rather than risk of retirement CPM designations. CAISO explains that the two services are procured differently, and as such, are not interchangeable, and thus resource owners cannot pick and choose between RMR and risk of retirement CPM.[32]

30. CAISO asserts that PG&E's argument that the tariff revisions do not fully consider the interplay between Type 2 and Type 3 designations disregards the fact that this situation can already occur under the existing risk of retirement CPM tariff provisions because under the current tariff provisions, resources can request a risk of retirement designation at any time during the year. According to CAISO, PG&E's comment disregards the fact that, under CAISO's proposal, the resource denied a Type 2 designation would not be required to retire if a load serving entity procures it. Thus, CAISO concludes that load serving entities would have every opportunity to procure the lower-cost resource in the course of their resource adequacy procurement. Therefore, CAISO opposes PG&E's suggestion to modify its proposal such that resources with the lowest cost or best reliability characteristics are designated.[33] CAISO also contends that the clarifications requested by PG&E are either unnecessary or properly belong in the business practice manual, and not in the tariff, because either the modifications are already sufficiently clear in the tariff or are implementation details that do not need to be in the tariff.[34]

31. Although CAISO agrees with protestors' interest in developing comprehensive improvements to the resource adequacy and CPM mechanisms, CAISO avers that such action is beyond the scope of this proceeding. CAISO argues that this proceeding was intended to provide incremental improvements to the existing risk of retirement CPM process, and that requests for more comprehensive market design changes will be addressed in separate, future proceedings.[35]

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[31] *Id.* at 26.

[32] *Id.* at 11 (citing 2011 Order, 134 FERC ¶ 61,211 at P 128).

[33] *Id.* at 29-30.

[34] *Id.* at 37-40.

[35] *Id.* at 12-15.

2. Risk of Retirement CPM Compensation

a. CAISO Proposal

32. CAISO proposes to eliminate the compensation option under which risk of retirement CPM resources are paid their market-based offer price up to the soft cap of $6.31 per kilowatt-month. CAISO proposes to retain the existing cost-based compensation methodology, under which resources make a section 205 filing with the Commission and a just and reasonable price is calculated using the annual fixed revenue requirement contained in schedule F of the *pro forma* RMR Agreement. CAISO explains that, under this methodology, a risk of retirement CPM resource will be paid a resource-specific, fixed-cost price, based on net plant investment at the time the designation commences. CAISO notes that during the interim period between the issuance of the designation and the Commission's determination of a just and reasonable rate, CAISO will compensate the resource using the cost-based offer price submitted to CAISO with the request for a risk of retirement designation.[36]

33. CAISO asserts that the use of this cost-based compensation methodology is just and reasonable because a resource receiving a risk of retirement CPM designation and an RMR unit are alike in that each is needed for reliability on a resource-specific basis.[37] CAISO argues that, because risk of retirement CPM payments are essentially "bridge" payments until the year the resource is needed for reliability, the resource should not be allowed to offer capacity at a price up to the soft offer cap and thus be paid a rate in excess of its cost-based capacity price during a year it is not needed for reliability. CAISO thus states that the formula for calculating the annual fixed revenue requirement only provides for recovery of a resource's fixed costs, but does not provide for the recovery of any variable costs, start-up costs, or minimum load costs. CAISO states that risk of retirement CPM resources would need to recover these variable costs through CAISO's energy and ancillary services markets. Thus, CAISO asserts that the proposed compensation methodology would essentially treat risk of retirement CPM resources like

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[36] *Id.* at 33-34.

[37] CAISO notes that risk of retirement CPM designations differ from RMR designations in that RMR designations are based on a reliability need for the current resource adequacy compliance year, whereas risk of retirement CPM designations are based on a reliability need for the following resource adequacy compliance year. In addition, RMR applies only for local reliability needs, whereas risk of retirement CPM additionally applies to broader reliability needs and can be used for local, system, or flexible capacity. Thus, CAISO argues that resources eligible for risk of retirement CPM designations cannot simply demand an RMR designation.

resource adequacy resources, and as such, they should be subject to the same availability, dispatch, and must-offer obligations. CAISO adds that the Commission has already approved this compensation methodology for justifying CPM payments above the soft offer cap.[38]

b. Comments, Protests, and Answer

34. SoCal Edison, the DMM, PG&E, CPUC, Six Cities, and SDG&E assert that the cost-based compensation methodology for risk of retirement CPM resources is not just and reasonable because it provides for full fixed cost recovery and also allows designated resources to retain all market revenues. Six Cities contend that this compensation method leads to over recovery of costs to the extent market revenues exceed the marginal costs of engaging in market transactions. Six Cities claim that the risk of recovery of variable costs can be managed through the bidding process by virtue of the CAISO's bid cost recovery tariff provisions. Thus, Six Cities argue that there is no justification for duplicative recovery. PG&E and SDG&E also argue that the cost-based compensation methodology overcompensates resources due to the lack of a mechanism for crediting market revenue against the fixed-cost payment. The DMM asserts that risk of retirement CPM resources, which are not needed for reliability in the year of the designation, should not receive compensation in excess of their cost of service, which is the result if resources earn their annual fixed revenue requirement and keep market revenues.[39]

35. The DMM, PG&E, CPUC, SoCal Edison, and SDG&E emphasize that the cost-based risk of retirement CPM compensation is inconsistent with RMR compensation, which requires a netting out of market revenue against the cost of service payment. SoCal Edison asserts that the RMR compensation construct is more appropriate for risk of retirement CPM, regardless of how the other categories of CPM are compensated, noting differences between risk of retirement and other types of CPM designations such as the term of the designation, the timeframe of the need, and the lack of a competitive process for risk of retirement designations.[40]

36. The DMM argues that because a risk of retirement CPM resource must be found to be "uniquely situated" to meet a specified reliability need, a resource that has been notified of CAISO's intent to issue a Type 2 designation has complete unilateral market

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[38] *Id.* at 34-35; *see also* CAISO Tariff, section 43A.4.1.1.1.

[39] SoCal Edison Protest at 3-4; Six Cities Protest at 2-3; DMM Protest at 6-8; PG&E Protest at 6-7; CPUC Protest at 2-3; SDG&E Protest at 4.

[40] SoCal Edison Protest at 4-5; DMM Protest at 7-8; PG&E Protest at 7; CPUC Protest at 3-5; SDG&E Protest at 4.

power. The DMM contends that it is unjust and unreasonable to provide a unit that has unilateral market power with guaranteed recovery of all costs, plus a return on equity, as well as market revenues. The DMM contends that the purpose of compensating units that provide backstop capacity, such as CPM and RMR resources, should be to mitigate market power, not reward units with market power with compensation in excess of what they could earn in the competitive market. The DMM notes that the soft offer cap for the market-based CPM compensation option is based on going forward costs as a form of mitigation.[41]

37. SoCal Edison, the DMM, PG&E, CPUC, and SDG&E argue that the cost-based compensation methodology, combined with the spring application window, will have deleterious impacts on the bilateral resource adequacy market. These protestors argue that resources that receive a conditional Type 2 designation will have an unfair advantage over generators participating in the bilateral market and will reflect the premium that can be earned with the risk of retirement CPM designation. The DMM also objects that because risk of retirement CPM payments may be higher than what the resource would receive in the bilateral market, resources might seek designations rather than participating in the bilateral resource adequacy process. PG&E argues that other generators will change their bids in both the bilateral market and the CPM competitive solicitations knowing their competition is bidding the risk of retirement CPM premium. PG&E contends that, even if conditional risk of retirement CPMs are not announced to other market participants, a market power assessment will be necessary for owners of multiple generators to ensure that a risk of retirement CPM designation does not increase market power in a specific area. PG&E contends that a risk of retirement CPM designation issued to a resource in a supply constrained area will send a market signal that all resources in that area are needed for reliability and will therefore raise capacity prices in the bilateral market.[42]

38. In addition, the DMM posits that the cost-based compensation methodology could encourage uneconomic and inefficient investment in alternatives to meeting the stated reliability need. The DMM notes that the Commission has not required CAISO to guarantee recovery of annual fixed revenue requirement by CPM resources and argues

[41] DMM Protest at 5-10.

[42] SoCal Edison Protest at 3, DMM Protest at 8-9; PG&E Protest at 3-4, 8-9; CPUC Protest at 7-8; SDG&E Protest at 3-4.

that basing risk of retirement CPM compensation on the going forward fixed cost of the resource provides the appropriate and efficient signal for investment in potential alternatives to meeting the reliability need.[43]

39. PG&E likewise argues that the cost-based compensation methodology will lead to inefficient choices because the resource will be selected on the basis of historical fixed costs. Further, PG&E contends that CAISO's proposal to switch solely to cost-based compensation is counter to the Commission's policy of pursuing market-based mechanisms.[44]

40. In its answer, CAISO emphasizes that the compensation approach proposed here is part of the existing Commission-approved tariff. CAISO claims that the only change proposed here is to eliminate the market-based compensation option for risk of retirement CPM designations. CAISO also objects to protestors' suggestions that risk of retirement compensation be based on going forward fixed costs, noting that the Commission has already found that going forward costs may not provide adequate opportunity for cost recovery. For these reasons, CAISO argues that any protests addressing the existing methodology are beyond the scope of this proceeding, and can only be pursued under an FPA section 206 investigation.[45]

41. CAISO identifies the underlying differences between RMR compensation and risk of retirement CPM compensation that justify permitting risk of retirement CPM resources to retain market revenues while also recovering their fixed costs. Namely, CAISO states that the *pro forma* RMR Agreement includes provisions, outside of schedule F, that allow for the recovery of planned and unplanned major maintenance expenses during the term of the RMR agreement.[46] CAISO states that these provisions are not applicable to risk of retirement CPM resources and, therefore, market revenues are the only means for recovery of these costs for risk of retirement CPM resources.[47]

42. CAISO contends that PG&E's claim that bidders in load serving entities' solicitations of resource adequacy resources will adjust their bids in light of a competitor's "conditional" risk of retirement CPM designation ignores the safeguards

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[43] DMM Protest at 10-15.

[44] PG&E Protest at 4.

[45] CAISO Answer at 16-17.

[46] *Id.* at 21 (citing section 7.4 of the *pro forma* RMR Agreement).

[47] *Id.* at 21-22.

CAISO has included in its proposal. Specifically, CAISO reiterates that under its proposal, it will not publish the compensation requested by a conditionally designated risk or retirement CPM resource. Further, CAISO's states that for a resource to receive a conditional risk of retirement CPM designation in the first request window, it must be the only resource in existence by the start of the designation term that can meet the reliability need, which means that other resources are not competing with it.[48]

C. Commission Determination

43. We reject CAISO's proposed revisions. Although we find that the issues raised by CAISO underscore the importance of a robust resource adequacy program to support reliability and bulk power system resilience, we find that CAISO has not adequately demonstrated that its proposal addresses the front-running concerns raised by protestors and that the proposal will avoid potentially deleterious effects on the competitiveness of capacity procurement under CPUC's resource adequacy program.

44. We find that protestors' concerns regarding the potential for the spring request window to distort prices or otherwise interfere with the bilateral resource adequacy process have merit and are significant enough to render CAISO's proposal unjust and unreasonable. Because a resource that is at risk of retirement likely has costs greater than what the resource would earn in a competitive market, the resource-specific cost-based compensation offered by CAISO under the risk of retirement program is likely to exceed what a resource could earn under a bilateral resource adequacy contract.[49] Despite CAISO's proposed revision to require a resource with a conditional Type 2 designation to make a reasonable effort to participate in all applicable resource adequacy competitive solicitations, we are concerned that this provision will not mitigate front-running concerns. Specifically, we are concerned that the resource with a conditional Type 2 designation would likely offer, in the bilateral resource adequacy market, no less than the payment it expected to receive as CPM risk of retirement resource.[50] Therefore, without more comprehensive reform, as discussed below, we find that any incremental improvement that may result from CAISO's proposed revisions here are outweighed by

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[48] *Id.* at 9-10.

[49] CAISO Tariff, § 43A.4.1.1.1 ("For a resource whose sales are under FERC jurisdiction that is providing CPM Capacity to be compensated at a rate higher than the CPM Soft Offer Cap, the resource owner must make a limited resource-specific filing before FERC to determine the just and reasonable capacity price for the resource as calculated per Schedule F to the pro forma RMR Agreement in Appendix G of the CAISO Tariff.").

[50] *See, e.g.*, PG&E Protest at 8-9; DMM Protest at 8-9.

the potential for deleterious effects on the competitiveness of capacity procurement under CPUC's resource adequacy program.

45. We do not conclude, however, that a risk of retirement CPM designation can never precede the bilateral resource adequacy process because of the potential for front-running. Indeed, we recognize that the record contains some evidence that could suggest that certain resources could benefit from earlier notice of a potential risk of retirement CPM designation. For example, Calpine notes that critical operational and investment decisions must be made 6-12 months in advance of the year of potential retirement.[51] We encourage CAISO to continue evaluating whether resource adequacy resources are receiving sufficient notice of their potential obligations, as discussed further below.

46. Finally, we note that CAISO has initiated a stakeholder process to holistically examine both the RMR and CPM programs. This further indicates the need to coordinate reform of these programs rather than proposing incremental changes that only address a portion of the underlying challenges. We encourage CAISO to propose a package of more comprehensive reforms, as discussed below. We expect that any such proposal will recognize the need to balance appropriate compensation for resources with the consideration of ratepayer concerns, as well as the need to strike a balance between CAISO's backstop procurement authority and primary procurement of supply needed for resource adequacy purposes.

47. We recognize CAISO's statement that "risk of retirement of resources needed for reliability remains a significant concern… as the number of resources subject to the [renewable portfolio standard] increase, market prices decrease, and the revenues necessary to cover the fixed costs of existing generation resources decline."[52] However, the issue of front-running the resource adequacy program is inextricably linked to issues of risk of retirement CPM compensation, the RMR program, and resource adequacy procurement in CAISO in general. The interrelated nature of these issues demonstrates the importance of CAISO's efforts in this area and the need to evaluate the fundamental reliability and market factors associated with resource adequacy as a whole.

48. Given the importance of these issues, we strongly encourage CAISO and stakeholders to make progress in the ongoing stakeholder process and to adopt a holistic, rather than piecemeal, approach. We believe that this should include: (1) revisiting the issue of the adequacy of CPM and RMR compensation; (2) evaluating whether both risk of retirement CPM and RMR need to be retained as separate backstop mechanisms; (3) examining the timeline and eligibility requirements for issuing risk of retirement CPM

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[51] *See* Calpine Comments at 4-5.

[52] CAISO Transmittal at 12.

designations and how those factors may impact bilateral resource adequacy procurement; and (4) evaluating measures that would trigger the review of its backstop procurement if it appears to be overused.

49. We direct CAISO to submit quarterly informational filings,[53] beginning on June 1, 2018, and every three months thereafter until the stakeholder process is completed,[54] reporting on the progress of the ongoing stakeholder process addressing RMR and risk of retirement CPM. These reports should include information on whether the process is adhering to proposed timelines, updates on changes to the scope of the stakeholder process, and a description of any challenges that may impede progress.

50. Because we are rejecting the proposal, we dismiss as moot PG&E's requests for clarifying revisions.

The Commission orders:

CAISO's proposed tariff revisions are hereby rejected, as discussed in the body of this order.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

[53] Upon receipt, the Commission will not act on or notice the informational filing.

[54] That is, until the CAISO Board of Governors approves the resulting proposal or CAISO issues a market notice terminating the stakeholder process.