

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

**California Independent System            )           Docket No. ER19-1641-001  
Operator Corporation                    )**

**ANSWER TO COMMENTS OF THE CALIFORNIA INDEPENDENT  
SYSTEM OPERATOR CORPORATION**

The California Independent System Operator Corporation (CAISO) respectfully submits this motion for leave to answer and answers<sup>1</sup> the comments submitted in this proceeding in response to the CAISO’s response to Deficiency Letter.<sup>2</sup> The submitted comments provide no basis to reject or modify the CAISO’s proposal; although, the CAISO agrees to file informational reports with the Commission regarding each new RMR designation.

**I. BACKGROUND**

On April 22, 2019, the CAISO submitted proposed tariff provisions to improve its Reliability Must-Run (RMR) program and differentiate it from Capacity Procurement Mechanism (CPM) backstop procurement (April 22 RMR Tariff Amendment). On July 19, 2019, the Commission issued a Deficiency Letter, asking the CAISO to explain (a)

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<sup>1</sup> The CAISO submits this filing pursuant to Rules 212 and 213 of the Commission’s Rules of Practice and Procedure, 18 C.F.R. §§ 385.212, 385.213. Capitalized terms not otherwise defined herein have the meanings set forth in Appendix A to the CAISO tariff. References to section numbers are references to sections of the CAISO tariff as revised by the tariff amendment filed in this proceeding, unless otherwise specified.

<sup>2</sup> Calpine Corporation (Calpine) and Pacific Gas & Electric Company (PG&E) filed comments.

the types of criteria the CAISO plans to use to determine whether a specific resource should be retained to meet system and flexible reliability needs under an RMR contract and that no other resource meets these needs; and (b) whether and, if so, how the CAISO would evaluate longer term solutions that will reduce the need for an RMR contract to meet system and flexible reliability needs.<sup>3</sup> The CAISO submitted its Response to the Deficiency Letter on July 26, 2019 (Deficiency Letter Response).

Calpine and PG&E filed Comments regarding the CAISO's Deficiency Letter Response.<sup>4</sup> Neither set of comments warrants rejecting or modifying the CAISO's proposal, except that the CAISO agrees to file with the Commission for each new RMR designation an informational report. The CAISO proposes that the informational report explains the reliability need for the RMR designation supported by the technical study and identify the transmission access charge (TAC) area(s) in which the reliability need arises, and thus the load-serving entities (LSEs) that would be responsible for the costs of the RMR designation.

## **II. CAISO ANSWER**

### **A. CAISO Response to PG&E Comments**

PG&E continues to maintain that the CAISO should not have tariff authority to designate a resource for RMR service unless the reliability need is local. PG&E also argues that the CAISO has not adequately responded to the Commission's questions.

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<sup>3</sup> Deficiency Letter at 2.

<sup>4</sup> Although Calpine and PG&E style their filings as comments and not protests, if the Commission treats such pleadings as protests, then the CAISO moves for leave of Rule 213(a)(2) to answer such protests. The CAISO's answer will clarify matters under consideration, aid the Commission's understanding and resolution of the issues, and help the Commission to achieve a more accurate and complete record.

As discussed below, PG&E mischaracterizes the CAISO's existing RMR tariff authority and proposed changes to the RMR *pro forma* contract, and the CAISO has adequately addressed the Commission's questions.

**1. The CAISO Tariff Authorizes the CAISO to Use RMR to Ensure Compliance with Reliability Criteria**

PG&E asserts that the CAISO's proposed changes to "expand RMR procurement authority beyond local reliability to include system and flexibility needs . . . is unjust, unreasonable, and unsupported by the Tariff Amendment and CAISO Response [to the deficiency letter]."<sup>5</sup> As the CAISO explained in its Transmittal Letter accompanying the April 22 RMR Tariff Amendment, under existing section 41.2 of the CAISO tariff, the "CAISO will . . . have the right at any time based on CAISO Controlled Grid technical analyses and studies to designate a Generating Unit as a Reliability Must-Run Unit."<sup>6</sup> The CAISO's tariff authority to designate is not, and never was, limited to a local reliability. As discussed *infra* and in the Transmittal Letter, the tariffs of other independent system operators (ISOs) and regional transmission organizations (RTOs) similarly do not expressly limit RMR-type procurement to meeting only local reliability needs.

Consistent with the CAISO's existing tariff authority, the CAISO is proposing amendments to the *pro forma* RMR contract, which was developed 20 years ago, to expand the CAISO's dispatch rights beyond dispatch for local reliability and to address non-competitive congestion. Because RMR resources are being compensated their full cost-of-service and will have a must-offer obligation, RMR resources should offer all

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<sup>5</sup> PG&E Comments at 2.

<sup>6</sup> Transmittal Letter at 97, citing existing CAISO tariff section 41.2.

available energy products and services in the CAISO market, and be available to the CAISO through exceptional dispatch. The CAISO anticipates that RMR designations are far more likely to be for local reliability needs. However, limiting the CAISO's dispatch rights for local reliability or to manage non-competitive congestion would remove the resource from the market and unduly limit the CAISO's dispatch rights, even if the designation was solely for local reliability. This might have been satisfactory in 1998, but system need and operations have changed dramatically since then. If reliability needs arise, it is important that the CAISO have the appropriate tools to retain the resources needed to ensure it can comply with Reliability Criteria.

## **2. The CAISO has Addressed the Commissions Questions**

PG&E argues that the CAISO has not adequately responded to the Commission's questions because it has not stated the criteria, or types of criteria, the CAISO might use to determine whether an RMR designation is necessary. The CAISO disagrees. The CAISO also notes that PG&E continues to base its arguments on the false premise that the CAISO will use RMR "to meet system or flexible capacity needs." As the CAISO stated in its Deficiency Letter Response, the tariff revisions do not mention system and flexible capacity needs. Rather, the CAISO can only use RMR to "ensure compliance with Reliability Criteria."<sup>7</sup>

In its Deficiency Letter Response the CAISO identified specific North American Electric Reliability Council (NERC) Reliability Standards for which the CAISO might need to retain a retiring resource to ensure continued compliance.<sup>8</sup> These NERC

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<sup>7</sup> Existing CAISO tariff section 41.3.

<sup>8</sup> Deficiency Letter Response at 3-4.

Reliability Standards specify defined criteria with which the CAISO (and all other balancing authority areas) must comply. It is unclear what PG&E has in mind when it claims the CAISO has not stated what criteria the CAISO will apply. The NERC Reliability Standards specify the criteria with which the CAISO must comply. Further, the CAISO tariff requires that for each RMR designation, the CAISO must provide “technical analyses and studies”<sup>9</sup> that provide the justification case-by-case based on the specific reliability need, which is defined by Reliability Criteria, and the technical analysis and studies that demonstrate the resource proposed for RMR designation is necessary to meet that reliability need. The CAISO will conduct studies and scenarios with, and without, the retiring resource to assess whether the CAISO can comply with the Reliability Criteria absent the retiring resource.

If PG&E is instead asking about the types of inputs and assumptions the CAISO will use in its studies, that is an entirely different question and depends on the specific study and Reliability Criteria being assessed. NERC Reliability Standard a BAL-002-1.1 requires the CAISO to demonstrate that its system provides sufficient frequency response during disturbances that affect system frequency. To provide the required frequency response, the CAISO must have enough frequency responsive units online, and these units must have enough headroom to provide such a response. Primary drivers of primary frequency response include (1) magnitude of frequency deviation, (2) amount of synchronous on-line capacity providing sustained primary frequency response, and (3) headroom available from the capacity that is on-line. For studies assessing the CAISO's future ability to comply with NERC Reliability Standard BAL-

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<sup>9</sup> Existing CAISO tariff section 41.2.

003-1.1, inputs and assumptions have included the specific NERC Reliability Standard requirements, the resources that are expected to be available and their specific attributes, load levels, the output from (and varied dispatch levels) of renewable resources, what resources are committed on or off at a particular time, and the headroom<sup>10</sup> of units with responsive governors. As a general example, the Commission can refer to the Frequency Response Assessment and Data Requirements discussion in Section 6.3 of the 2018-2019 CAISO Transmission Plan where the CAISO assessed the adequacy of its forecast frequency response capabilities.<sup>11</sup> The study tried to determine if the CAISO could meet its frequency response obligation with the most severe credible contingency under the conditions studied and to determine the conditions under which the frequency response obligation might not be met. The CAISO studied a base case (Spring Off-Peak with high renewables and low gas generation) and two sensitivity cases (certain units off and frequency responsive units with decreased headroom). These studies showed minimum values of headroom and frequency responsive generation capacity for the CAISO to meet NERC Reliability Standard BAL-003 under various scenarios. Although the CAISO did not conduct this study for RMR purposes, it does show the general type of study the CAISO might conduct to assess if it needs to retain a retiring unit(s) to meet NERC Reliability Standard BAL-003.<sup>12</sup> As with other types of RMR and transmission planning studies,

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<sup>10</sup> Headroom is the difference between the maximum capacity of the unit and the unit's output.

<sup>11</sup> The CAISO's 2018-2019 Transmission Plan is available at [http://www.caiso.com/Documents/ISO\\_BoardApproved-2018-2019\\_Transmission\\_Plan.pdf](http://www.caiso.com/Documents/ISO_BoardApproved-2018-2019_Transmission_Plan.pdf).

<sup>12</sup> The CAISO notes that in the context of procuring transferred frequency response, the CAISO also assesses the performance of resources during frequency disturbance events. As part of its assessment, the CAISO examines the performance during prior frequency events of conventional resources scheduled

the CAISO would run scenarios with and without the retiring unit(s) to assess the CAISO's ability to meet the requirements of the NERC Reliability Standard in the timeframe(s) specified.

For assessing the CAISO's ability to comply with NERC Reliability Standard BAL-002-WECC-2a, the CAISO might consider inputs such as total net qualifying capacity of units on the system, load forecasts and hourly load portfolios, outage rates, renewable resource generation levels, historic weather patterns, needs and capabilities at different hours of the day, and import availability. The CAISO can run simulations to dispatch generation and curtailable demand to meet system energy, ancillary services, ramping needs, and NERC Contingency Reserve requirements simultaneously. Although the CAISO's annual 2019 Summer Loads and Resource Assessment (Summer Assessment) is not necessarily the exact study the CAISO would conduct to determine the need to designate a unit as RMR to comply with NERC Reliability Standard BAL-002-WECC-2a, it does provide a general example of the types of factors, inputs, scenarios, and studies the CAISO might apply for such an assessment. The Summer Assessment analysis deploys all available resources to meet load and ancillary services requirements, and uses an assessment of unloaded capacity and loaded capacity to characterize the capacity adequacy of the system. The CAISO calculates an Unloaded Capacity Margin (UCM), which is the excess capacity of available resources, responsive

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to retire and also considers the potential displacement of conventional generation by inverter-based resources. Some inverter-based resources will have frequency response capabilities, but most will not operate with available head-room to respond during a frequency disturbance. As part of its assessment, the CAISO also considers potential frequency response capabilities of resources that will likely reach commercial operation during subsequent compliance years under NERC Reliability Standard BAL-003-1.1. Depending on whether transferred frequency response is available from other balancing authorities, these assessments may inform the need to issue an RMR designation.

within 20 minutes or less, over the projected load on an hourly basis. The model produces a UCM for each modeled hour and can consider the unloaded capacity margin for all hours. The UCM level above the operating reserve requirements for any hour (typically around six percent) signify the capacity that is available beyond the requirement for operating reserves. Applying general techniques of this nature, the CAISO can test the probability of being unable to meet contingency reserve requirements hourly during a year as it removes (or adds) a resource(s) to the model. In its Summer Assessment, the CAISO ran 2,000 unique, randomly generated scenarios, each representing a combination of forecasted summer hourly load profiles and renewable generation levels based on historic weather patterns.<sup>13</sup>

Finally, the CAISO's prior RMR studies serve as general examples of how the CAISO assesses whether a particular unit is needed and must be procured under RMR to meet reliability because no other resource can meet the need. In the CAISO's 2017 analysis of the need for RMR designations for the Metcalf Energy Center, the Yuba City Energy Center, and the Feather River Energy Center, the CAISO found in all three cases that the specific generation was needed to meet reliability requirements, either because of a shortage of local capacity in the area or sub-area without the generation, or, in the case of the Feather River Energy Center, the need for the reactive voltage support the generator was uniquely situated to provide.<sup>14</sup>

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<sup>13</sup> The CAISO's 2019 Summer Loads and Resource Assessment is available at <http://www.aiso.com/Documents/Briefing-2019-SummerLoads-Resources-Assessment-Report-May2019.pdf>.

<sup>14</sup> Yuba City Energy Center and Feather River Energy Center assessment presented to stakeholders on March 6, 2017, available at: [http://www.aiso.com/Documents/Presentation\\_PotentialReliabilityMustRunDesignation\\_YubaCityEnergyCenter\\_FeatherRiverEnergyCenter.pdf](http://www.aiso.com/Documents/Presentation_PotentialReliabilityMustRunDesignation_YubaCityEnergyCenter_FeatherRiverEnergyCenter.pdf). Metcalf Energy Center assessment presented to stakeholders on September 26, 2017, available at: [http://www.aiso.com/Documents/Agenda\\_Presentation\\_MetcalfEnergyCenterRetirementAssessment-Sep262017.pdf](http://www.aiso.com/Documents/Agenda_Presentation_MetcalfEnergyCenterRetirementAssessment-Sep262017.pdf).

For 20 years the CAISO has conducted studies to determine if RMR designations were needed to meet reliability criteria, and whether the designated resource was the only resource capable of meeting the reliability need – either on its own, or in addition to other generation that would otherwise be insufficient to meet the reliability need. The CAISO will continue to make these determinations as it always has. The CAISO is not undertaking a completely new and unprecedented venture as PG&E suggests.

**3. The Fact that the CAISO has Procured Transferred Frequency Response from Third Parties Supports the CAISO's Position that it Might Need to Retain a Retiring Unit as RMR to Comply with the NERC Reliability Standard BAL Frequency Response**

PG&E claims that RMR authority to meet the NERC Reliability Standard BAL-003-1.1 frequency response criteria is unnecessary because the CAISO has procured Transferred Frequency Response (TFR) from other balancing authority areas to comply with the NERC Reliability Standard.<sup>15</sup> In recent years the CAISO has procured TFR from other balancing authority areas to comply with NERC Reliability Standard BAL-003-1.1 requirements, but it does not mean that the CAISO might not need to rely on RMR designations in the future to comply with such requirements. The TFR CAISO has procured reflects the capabilities of the existing CAISO fleet and the resulting need for TFR to ensure compliance with the NERC Reliability Standard. However, the ability to secure some level of TFR from other balancing authority areas as insurance does not necessarily obviate the need for resources within the CAISO balancing authority area to provide primary frequency response. For example, if TFR is not available, the CAISO might need to retain a retiring generating unit to ensure continued compliance with the

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<sup>15</sup> PG&E Comments at 3-4.

NERC Reliability Standard. As future conditions change in other balancing authority areas, they may not provide the CAISO with TFR, thus necessitating that the CAISO retain any retiring units necessary to remain in compliance with the NERC Reliability Standard. As the Commission recognized when it approved the CAISO's TFR tariff amendment, the CAISO had "performed three studies on the Western Interconnection's overall frequency response capability to show that there is a surplus of frequency response capability."<sup>16</sup> If that surplus is no longer there, the CAISO will need to rely on other mechanisms, including issuing RMR designations to needed resources. The Commission's order also recognized that the alternative to TFR was resources providing regulation service, which must be frequency responsive and the CAISO exceptionally dispatching generating units.<sup>17</sup> For this to work, there must be sufficient units available on the CAISO grid that can be exceptionally dispatched. This may require the CAISO to utilize RMR designations to retain the necessary resources.

PG&E also requests that the Commission require the CAISO to describe in greater detail how it would procure RMR where other options are available. PG&E ignores that RMR already contemplates that the CAISO examine alternatives to RMR contracts and requires that the CAISO pursue the most cost effective option. As the Commission recognized in the TFR order, the CAISO already compares the cost of TFR to regulation up costs.<sup>18</sup> The CAISO would likewise compare the costs of TFR to RMR, but the CAISO would also need to weigh frequency response surplus levels in the

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<sup>16</sup> *Cal. Indep. Sys. Operator Corp.*, 156 FERC ¶ 61,182 at P 37 (2016).

<sup>17</sup> *Id.* at PP 20, 22, 38-39, 44.

<sup>18</sup> *Id.* at P 38.

Western Interconnection, the prognosis for any future surplus, and the risk associated with allowing a frequency response-capable resource within the CAISO to retire.

**4. PG&E Misunderstands the CAISO’s Discussion of Using RMR to Procure “System” Resources to Meet Reliability Needs in Specific Areas of the System that are not Local Capacity Areas**

PG&E agrees with the CAISO that “there could be a scenario where a single resource could be needed to meet thermal and voltage criterion that resides outside of a Local Capacity Requirement (“LCR”) area” but states this “does not mean, however, that resources outside of a resource adequacy-defined LCR area should automatically be considered system RMR-eligible facilities if needed for reliability.”<sup>19</sup> PG&E misunderstands the CAISO’s discussion. The CAISO merely clarified that reliability needs may arise on distinct portions of the system not in a designated Local Capacity Area, as that term is defined in the CAISO tariff. The CAISO may need to issue an RMR designation to a resource near the voltage (or some other) problem. The CAISO merely noted that it might need to procure a resource to meet a reliability need that is “local” in nature, but not part of defining a Local Capacity Area requirement. Thus, the resource may not be a Local Capacity Area Resource as that term is defined in the CAISO tariff. The CAISO was not stating, as PG&E claims, that the CAISO can procure *any* resource within its system to meet a distinct need that requires a resource in the proximity of the specific reliability problem.

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<sup>19</sup> PG&E Comments at 5.

## 5. The CAISO Described how it Would Consider Transmission Alternatives to RMR Contracts

PG&E disagrees that the CAISO can consider in its transmission process alternatives to an RMR contract, claiming that system resources are not dependent on local transmission.<sup>20</sup> This claim is perplexing. Not all transmission is local. Indeed, in its annual transmission planning process, the CAISO conducts separate Local Areas Assessments and Bulk Transmission Assessments for its transmission owners.

PG&E also claims that “[t]ransmission alternatives do not have the ability to reduce system requirements within a balancing area.”<sup>21</sup> PG&E ignores that transmission solutions can connect to generation. Just as the CAISO can – and has – approved transmission solutions that connect to generation to meet public policy and economic needs, the CAISO can utilize transmission to connect to generation necessary to “ensure compliance with Reliability Criteria.” The CAISO provided some examples in its Deficiency Letter Response that PG&E ignores.<sup>22</sup> Just as the CAISO regularly conducts economic studies to determine if new transmission to access different, more cost-effective resources will cause production, capacity, or other electricity supply cost reductions, the CAISO can assess whether building transmission to access other resources would be less costly than an RMR contract. The generation to which any new transmission would connect would need to have the attributes

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<sup>20</sup> *Id.* at 6.

<sup>21</sup> *Id.*

<sup>22</sup> Deficiency Letter Response at 5. The CAISO might build transmission to access remote resources or resources in other balancing areas that desire to connect directly to the CAISO. The CAISO might also build transmission to access “untapped” capabilities of resources trapped in generation pockets. The CAISO previously has considered such transmission solutions.

required to “ensure compliance with Reliability Criteria.”

## **B. CAISO Response to Calpine Comments**

Despite the CAISO’s demonstration to the contrary, Calpine refers to the “sheer breadth and diversity of reliability needs” that could lead to RMR designations and suggests that the CAISO’s potential use of RMR is “relatively unbounded.”<sup>23</sup> Calpine further insinuates that it is merely the CAISO’s “word” that the CAISO will not use RMR to cure resource adequacy (RA) showing deficiencies, but it is too early to tell whether that will actually be the case.<sup>24</sup> Calpine suggests that allocating RMR costs to load in a TAC area(s) “may no longer prove appropriate” and the CAISO may find a need to allocate RMR costs case-by-case to “incentivize bilateral procurement by directly affected, identifiable LSE’s” within TAC area(s), rather than to “all load in the affected TAC area(s).”<sup>25</sup> Calpine asks the Commission to direct the CAISO to publish an informational report following an RMR designation that assesses the cause of each RMR designation and the load-serving entities that will benefit from the RMR designation.<sup>26</sup> In addition, Calpine asks that the Commission consider requiring the CAISO implement a cost allocation methodology to allocate the costs of RMR contracts to a subset of load within the affected TAC area(s) when such a causal relationship is identified.<sup>27</sup> Finally, Calpine goes so far as to suggest that the Commission even

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<sup>23</sup> Calpine Comments at 3.

<sup>24</sup> *Id.*

<sup>25</sup> *Id.* at 3-4.

<sup>26</sup> *Id.* at 4.

<sup>27</sup> *Id.*

consider finding the CAISO's filing to be incomplete and deficient because the cost allocation "may significantly affect LSE's incentives to procure resources that mitigate the need for RMR."<sup>28</sup>

### **1. The RMR Designation Criteria are not "Unbounded"**

Calpine's suggestion that the CAISO's RMR authority is extremely broad and relatively unfettered defies both the CAISO's RMR tariff language and the representations the CAISO has made in this proceeding. CAISO tariff section 401.3 provides that "[i]n addition to the Local Capacity Technical Study under 40.3.1, the CAISO may perform additional technical studies as necessary, to ensure reliance with Reliability Criteria." Reliability Criteria are defined in Appendix A of the CAISO tariff as "[p]re-established criteria that are to be followed to maintain desired performance of the CAISO Controlled Grid under Contingency or steady state conditions." Thus, the tariff precludes the CAISO from using RMR to procure resources to meet generic or undefined/unbounded "reliability needs." Basically, the CAISO is only authorized to enter into RMR contracts to meet NERC, Western Electricity Coordinating Council (WECC), or stricter, pre-established CAISO reliability standards (such as the CAISO Planning Standards)<sup>29</sup> that cannot be met without designating RMR resources. The CAISO's Deficiency Letter Response identified the few specific NERC Reliability Standards that might warrant RMR designations if a CAISO study showed that RMR designations were necessary to comply with the NERC Reliability Standards. The

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<sup>28</sup> *Id.* at 5.

<sup>29</sup> As the CAISO noted in its Deficiency Letter Response, the CAISO Planning Standards are an example of CAISO-established reliability standards that exceed the otherwise applicable NERC TPL Reliability Standards.

CAISO tariff also requires the CAISO to conduct a formal study showing the need for an RMR designation to ensure compliance with Reliability Criteria before it can issue an RMR designation, and any designation must be approved by the CAISO Board of Governors.<sup>30</sup> Further, the Commission’s Deficiency Letter correctly notes that for a resource to be designated as RMR, no other resource on the system can meet the identified reliability need.<sup>31</sup> Given these constraints, the CAISO cannot arbitrarily and capriciously issue RMR designations, and the CAISO’s RMR authority is not overly broad and unbounded. In particular, the CAISO tariff does permit the CAISO to issue RMR designations to meet general “reliability.” RMR designations are only permitted to ensure compliance with pre-established Reliability Criteria.

As the CAISO explained in its April 22 RMR Tariff Amendment filing, the CAISO is merely seeking to clarify that it already has RMR authority comparable to the RMR authority of other ISOs and RTOs. ISOs and RTOs are authorized to undertake RMR procurement (1) if the retirement of a resource “would adversely affect the reliability of the Transmission System;” (2) to “maintain the reliability of the Transmission System based on” a “Reliability Study;” or (3) to “meet a Generator Deactivation Reliability Need.”<sup>32</sup> If the CAISO’s RMR authority is “unbounded,” then so is the RMR authority of other ISOs and RTOs. The CAISO’s RMR authority appears to be more “bounded” than some of the other ISOs and RTOs because the CAISO can only be undertaken to meet defined Reliability Criteria, not “reliability” generally. The CAISO also notes that Calpine

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<sup>30</sup> Proposed CAISO tariff sections 41.2.2 (a) and (b).

<sup>31</sup> Deficiency Letter at 2.

<sup>32</sup> Transmittal Letter at 99.

had every opportunity to raise this issue in its comments on the CAISO's April 22 RMR Tariff Amendment filing and did not.

Calpine also fails in its attempt to suggest that it is merely the CAISO's "word" that the CAISO will not seek to use RMR to backstop RA showing deficiencies and "the **possibility** that the CAISO's use of RMR in a RA Deficiency context **may yet** be tested."<sup>33</sup> Calpine ignores that the CAISO's proposed tariff language expressly states that "the CAISO does not use its RMR authority to address Resource Adequacy deficiencies."<sup>34</sup> Thus, it is more than the CAISO's "mere" word that it will not use RMR to backstop for RA deficiencies, it would be tariff requirement. Any insinuation that the CAISO might seek to violate its own tariff is irresponsible and inappropriate. Further, the CAISO can only issue an RMR designation to ensure compliance with Reliability Criteria, not generally to "avoid reliability issues" as Calpine suggests.

## **2. The CAISO Agrees to File an Informational Report with the Commission for Each Proposed new RMR Designation**

As discussed above, section 41.3 of the CAISO tariff requires the CAISO to conduct a formal study to determine whether a retiring resource is needed to ensure compliance with Reliability Criteria.<sup>35</sup> The CAISO's reliability study reports will explain the need for the RMR designation and identify the TAC area(s) in which the reliability need arises, because the CAISO proposes to allocate RMR costs to LSE's in the TAC area(s) "in which the need for the RMR Contract arose."<sup>36</sup> Thus, LSEs in the TAC

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<sup>33</sup> Calpine Comments at 3 (emphasis added).

<sup>34</sup> Proposed CAISO tariff section 41.3.

<sup>35</sup> Proposed CAISO tariff sections 41.2.2 (a) and (b).

<sup>36</sup> Proposed CAISO tariff section 41.9.

area(s) in which the reliability need arises will know up front that they will bear the costs of any RMR designation. If the Commission so directs, the CAISO is agreeable to going a step further and filing an informational report with the Commission for each new RMR designation that provides this information. Filing an informational report will provide increased transparency and allow the Commission (and stakeholders) to (1) understand the reasons for the new RMR designation; (2) know which LSEs will be responsible for RMR costs; and (3) monitor the CAISO's compliance with its tariff requirements and ensure that the RMR designations are justified.

### **3. Calpine's Suggestion that Changes to RMR Cost Allocation Might be Needed Lack Merit**

Calpine prefers that the CAISO allocate RMR costs to a subset of load within a TAC area(s) because that will "incentivize LSEs to procure the right resources."<sup>37</sup> Calpine had ample opportunity to comment on the CAISO's proposed RMR cost allocation in its Comments and Limited Protest of the CAISO's April 22 RMR Tariff Amendment filing. Calpine's filing objected to several features of the CAISO's proposal, but it did not raise RMR cost allocation issues, even though that matter (and the CAISO's requested clarification regarding the scope of its RMR authority) were openly discussed in the Transmittal Letter to the CAISO's April 22 RMR Tariff Amendment. The narrowly targeted Deficiency Letter raised no questions regarding cost allocation.

Calpine's claim that the CAISO's RMR cost allocation proposal may not incentivize LSEs to procure resource adequacy resources through the bilateral market and that an allocation of costs to a subset of loads within TAC area(s) may be

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<sup>37</sup> Calpine Comments at 4.

necessary to provide the proper incentives is misplaced for many reasons.

First, Calpine's concern is based on the false premise that the CAISO might use RMR to backstop RA deficiencies instead of CPM and that under such circumstances it might not be appropriate to allocate RMR costs to all load in the TAC area(s).<sup>38</sup> The proposed tariff revisions expressly preclude this.

Second, Calpine's suggested cost allocation change is based on speculation, *i.e.*, "that the proposed cost allocation methodology of socializing RMR costs across all load in the applicable transmission access charge ("TAC") area(s) **may no longer prove appropriate.**"<sup>39</sup> The CAISO always retains the Federal Power Act Section 205 right to change the RMR cost allocation methodology or file for an RMR designation-specific cost allocation on a case-by-case basis if the proposed cost allocation "may no longer prove appropriate."

Third, a more granular allocation of RMR costs is unnecessary to incentivize

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<sup>38</sup> See Calpine Comments at 3. Calpine's belief that RMR and CPM need to be further coordinated too is based on this false premise. Moreover, RMR is solely for generating units that are retiring and submit an affidavit stating as such. If the retiring units are not procured, they are expected to retire. There is no longer a separate risk-of-retirement CPM. Even if the CAISO was authorized to use RMR to backstop RA deficiencies, Calpine's flawed belief that an LSE might forego its RA obligation in anticipation that the CAISO would procure any needed resource under RMR (instead of CPM) would require all of the following: the LSE must (1) be willing to accept the CPUC penalty for its RA deficiency plus the its costs resulting from backstop procurement; and (2) have 100 percent foresight that (a) there will ultimately be an aggregate deficiency based on all LSEs' RA showings, which is required for the CAISO to cure an individual LSE's RA deficiency, (b) a generator will decline the CPM designation and instead submit an affidavit notifying the CAISO of its retirement, and (c) its individual RA deficiency will result in the CAISO being unable to comply with Reliability Criteria. Calpine also ignores that a resource participating in a CPM competitive solicitation cannot decline a CPM designation. Further, an RA showing deficiency does not mean a resource is needed to ensure compliance with Reliability Criteria; it only means the LSEs did not procure sufficient capacity to meet their RA obligations. For example, there are no RA requirements that correspond to the NERC BAL Reliability Standards regarding frequency response, and the system RA procurement obligation is based on a 15 percent planning reserve margin; whereas, the contingency reserve requirement under NERC Reliability Standard BAL-002-WECC-2a is only equal to the greater of the loss of the single greater contingency or the sum of three percent of hourly load plus three percent of hourly generation.

<sup>39</sup> *Id.*

LSEs to procure needed resources before the CAISO uses its RMR authority to procure them. The CAISO's proposal already achieves that result. Calpine ignores that under the CAISO's proposed tariff provisions, all proposed RMR designations are conditional based on the retiring unit not receiving an RA contract.<sup>40</sup> The CAISO's posted reliability study report will identify the TAC area(s) in which the reliability need will arise and, thus, the LSEs to be allocated the costs of any RMR designation. LSEs will therefore know in advance – before the CAISO Governing Board makes any actual RMR designation – whether they will be allocated the costs of any RMR designation. LSEs will be incentivized to procure, and will have an opportunity to procure, the potential RMR unit as a resource adequacy resource before the CAISO procures it as an RMR resource. Otherwise, the LSEs will bear a portion of the costs of the RMR resource. Thus, the CAISO's proposal promotes the goal of “directly motivate[ing] those identifiable LSEs that benefit from, or that in any way may reasonably be deemed responsible for, specific RMR designations to procure resources that mitigate or eliminate the need for such RMR designations.”<sup>41</sup> No “sub-TAC area-load” cost allocation is needed to achieve this result. LSEs will be responsible for the costs of RMR contracts that result from their failure to procure the needed resources identified by the CAISO.

Fourth, Calpine's suggestions are based on the flawed belief that LSEs will purposely forgo procuring needed resources in the bilateral RA contracting process and instead defer to the CAISO to procure those under its RMR authority. Calpine engages in unsupported speculation that by its reasoning should apply today and yet there is no

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<sup>40</sup> Proposed CAISO tariff sections 41.2.2 (a) and (b).

<sup>41</sup> See Calpine Comments at 4-5.

evidence that LSEs are engaging in such behavior or that a “real” problem exists that necessitates a different cost allocation scheme. In the history of CPM (and its predecessors), the CAISO has only procured capacity to cure a deficiency in annual RA showings in one year – in 2018 – and, as the Commission has recognized, the circumstances surrounding that procurement were unique and transitional, including the fact that California Public Utilities Commission (CPUC)-jurisdictional LSEs were precluded from procuring a generating unit that was past its once-through cooling compliance date (even though such compliance date subsequently had been extended).<sup>42</sup> A significant deterrent to LSEs failing to procure sufficient resources is the fact that the CPUC imposes penalties on jurisdictional LSEs deficient in their system, local, and/or flexible RA showings.<sup>43</sup> These penalties are additive to any costs the deficient LSEs would incur as the result of CAISO backstop procurement, thus significantly incenting LSEs to meet their procurement obligations. Further, the California Public Utilities Code requires the CPUC to minimize CAISO backstop procurement through its RA program. In its ongoing proceeding to reform the RA program, the CPUC has signaled its intent to consider RA program modifications to reduce CAISO backstop procurement and that assessing such modifications is a “top priority.”<sup>44</sup> The CPUC has also adopted multiyear (three years ahead) local capacity

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<sup>42</sup> *CXA La Paloma, LLC v California Indep. Sys. Operator Corp.*, 165 FERC ¶ 61,148 at PP 30, 75 (2018); see also CAISO Tariff Amendment Filing, Docket No. EL18-177, Transmittal Letter at 64-68 (Aug. 24, 2018).

<sup>43</sup> See CPUC 2019 Filing Guide for System, Local and Flexible Resource Adequacy (RA) Compliance Filings at 32-33, citing CPUC Decisions D.11-06-022, D.10-06-036, and D.14 -06-050, available at <https://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442459140>.

<sup>44</sup> Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge, *Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Annual Local and Flexible Procurement Obligations for the 2019 and 2020 Compliance*

procurement requirements for LSEs. Thus, Calpine’s speculative concerns that LSEs will be purposely forgo bilateral procurement of needed resources are unfounded.

Fifth, requiring the CAISO to make a separate Federal Power Act Section 205 filing for cost recovery every time it seeks to charge LSEs for the costs of new RMR designations would change the CAISO’s proposal. Under *NRG*, such change might be considered an “entirely new rate scheme” that the Commission could not effectuate under Section 205 of the Federal Power Act.<sup>45</sup> Rather, the Commission would either have to accept the CAISO’s proposed cost allocation,<sup>46</sup> retain the existing methodology that allocates RMR costs to participating transmission owners,<sup>47</sup> or “transform” its action on this Section 205 matter into action under Section 206 of the Federal Power Act.<sup>48</sup>

In the Transmittal Letter accompanying the April 22 RMR Tariff Amendment filing, the CAISO explained why its proposed RMR cost allocation to LSEs was just and reasonable.<sup>49</sup> Calpine filed no comments opposing the CAISO’s cost allocation proposal. Among other reasons, the CAISO noted that the proposed allocation followed the existing methodology for allocating the costs of all CPM reliability designations not based on individual LSE RA showing deficiencies, including cost allocation for risk-of retirement CPM designations (which will now be incorporated into RMR) and collective

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Years, Rulemaking 17-09-020 (Jan, 18, 2018), available at <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M205/K706/205706239.PDF>.

<sup>45</sup> *NRG Power Marketing, LLC v. FERC*, 862 F.3d 108 at 115-17 (D.C. Cir. 2017).

<sup>46</sup> *Id.* at 115.

<sup>47</sup> *Id.*

<sup>48</sup> *Monongahela Power Company, et al.*, 162 FERC ¶61,129 at P 71 (2019), citing *Western Resources, Inc. v. FERC*, 9 F.3d 1568, 1579 (D.C. Cir. 1993).

<sup>49</sup> Transmittal Letter at 100-02.

local capacity deficiencies.<sup>50</sup> The Commission approved such allocation methodology as just and reasonable for these reliability-based CPM designations, and there is no basis to find that a different allocation methodology should apply to RMR reliability designations. No other ISO or RTO allocates backstop procurement costs to participating transmission owners as the CAISO currently does. The CAISO's approach provides an *ex ante* methodology so there are no potential last minute "surprises" to LSEs, and LSEs know upfront their potential responsibility for RMR costs.

As the CAISO explained in its Deficiency Letter Response, potential "system" RMR designations might arise to meet the NERC BAL Reliability Standards regarding frequency response performance. As PG&E noted, TFR Agreements can serve as an alternative to RMR contracts to meet these requirements. The CAISO allocates the costs of TFR to Scheduling Coordinators' metered demand,<sup>51</sup> which is basically how the CAISO would allocate the costs of any "system" RMR designations to meet frequency response needs (except that RMR costs would be allocated based on monthly metered demand). This further supports the justness and reasonableness of the CAISO's proposed RMR cost allocation.

Finally, neither the existing RMR nor CPM frameworks provide for "sub-TAC area(s)" cost allocations. The CAISO's proposed cost allocation, which merely allocates RMR costs to LSEs instead of PTOs, does not create the "possible" concern Calpine posits. Calpine provides no tangible evidence to demonstrate that a cost allocation to

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<sup>50</sup> *Id.* at 101.

<sup>51</sup> CAISO tariff section 11.34, which the Commission approved as just and reasonable in *Cal. Indep. Sys. Operator Corp.*, 156 FERC ¶ 61,182 (2016).

LSEs in a TAC area(s) is unjust and unreasonable. Instead, Calpine's suggested change is based on (1) speculation that "it is possible that the CAISO will rely on RMR in a manner that benefits specific, identifiable Responsible Utilities/PTOs or LSEs"<sup>52</sup> and (2) its flawed premise that the CAISO *may* use RMR to backstop individual LSE RA showing deficiencies.<sup>53</sup> Calpine also ignores that the "system" RMR designations of which the Commission queried in its Deficiency Letter benefit the entire system, not individual participating transmission owners or LSEs.

#### **4. There is no Basis to Find the CAISO's Entire Tariff Amendment Filing Incomplete or Deficient**

Calpine states that "[b]ecause the interaction of proposed changes to both RMR and CPM with the proposed RMR cost allocation rule may significantly affect LSEs' incentives to procure resources that mitigate the need for RMR, the Commission should consider finding the CAISO Filing, as supplemented by the CAISO Response, to be incomplete and deficient."<sup>54</sup> The Commission should deny this request.

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<sup>52</sup> Calpine Comments at 3-4.

<sup>53</sup> Calpine claims in a footnote that it is impossible to tell from the CAISO's filing "how the CAISO will make a determination for cost allocation purposes whether a single TAC area, multiple TAC areas or the entire system benefits from an RMR designation that relieves a specific reliably need." Calpine Comments at 3, n.8. The CAISO's proposal does not create a new responsibility in this regard. The CAISO has operated for many years under Commission-approved cost allocation tariff provisions whereby it can allocate RMR costs to one or multiple participating transmission owners and allocate CPM costs to one TAC area, multiple TAC areas, or the entire system depending on where the need for the backstop procurement arises. The CAISO has extensive experience in these matters and has in fact allocated RMR costs to individual and multiple participating transmission owners and has allocated CPM costs to one TAC area, two TAC areas, and all TAC areas. The CAISO is fully capable of determining the TAC area(s) in which the need for backstop procurement arises, and has conducted such assessments for years without any complaint being filed against the CAISO. Calpine is raising a frivolous concern that has nothing to do with the specific questions in the Commission's Deficiency Letter.

<sup>54</sup> Calpine Comments at 5.

Calpine's request is based on the false premise that the cost allocation rules may not incent LSEs to procure resources that mitigate the need for RMR designations. Even if the Commission concluded that some modifications to the RMR cost allocation are appropriate, that should not cause the Commission to reject the other proposed revisions in this extensive, multi-component filing. As the CAISO discussed in the Transmittal Letter to the April 22 RMR Tariff Amendment, the RMR cost allocation issue is severable from the remainder of the CAISO's filing.<sup>55</sup> The cost allocation revisions are contained in separate tariff sections, separate from other RMR revisions, and are merely an additional element of a multi-part filing. In particular, RMR cost allocation is not related to the other significant revisions the CAISO proposes such as an affidavit requirement for retiring resources, a revised RMR and retirement process, incorporating the CAISO's risk-of-retirement CPM authority into RMR, including a must-offer obligation for RMR resources, applying the Resource Adequacy Availability Incentive Mechanism (RAAIM) to RMR resources, removing the hardwired 12.25 percent rate of return for RMR resources, streamlining the RMR contract, lowering banking costs for RMR, and eliminating Condition 1 RMR resources. A finding regarding the justness and reasonableness of the RMR cost allocation proposal does not affect the justness and reasonableness of the other proposed tariff revisions, and vice-versa.

The Commission should not allow Calpine to use the narrowly focused Deficiency Letter an opportunity to seek rejection or further delay of a multi-part

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<sup>55</sup> Transmittal Letter at 121-22. If the Commission were to retain the tariff provisions allocating RMR costs to the participating transmission owners, the CAISO would need to change the proposed RA crediting provisions to LSEs, but any such changes would be "severable from other elements of the filing." *Id.* at 121.

proposal that contains several discrete features (several of which Calpine dislikes, *i.e.*, eliminating the hardwired rate of return, imposing a must-offer obligation on RMR resources, and applying RAIM).

## II. CONCLUSION

For the reasons set forth herein, in the CAISO's Deficiency Letter Response, and in the April 22 RMR Tariff Amendment, the Commission should accept the CAISO's proposed tariff revisions with the minor clarification identified herein.

Respectfully submitted,

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Dated: August 28, 2019

## CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each party on the official service list for this proceeding, under the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010 (2013)).

Dated at Folsom, California, on this 28<sup>th</sup> day of August, 2019

/s/ Grace Clark  
Grace Clark