

## Stakeholder Comments Template

Submitted by	Company	Date Submitted
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The California Independent System Operator Corporation’s (CAISO) Revised Straw Proposal recommends making short-term modifications to flexible capacity through the current Flexible Resource Adequacy Criteria and Must Offer Obligation - Phase 2 (FRACMOO2) initiative process, while deferring long-term changes that would create a more durable flexible capacity program to a separate initiative process.<sup>1</sup> The Office of Ratepayer Advocates’ (ORA) recommends limiting or removing certain of the short-term and long-term objectives from the proposed processes to allow time for completing a single FRACMOO2 initiative in 2017. ORA is concerned that, because the CAISO Board is not scheduled to approve the short-term FRACMOO2 initiative until the second quarter of 2018,<sup>2</sup> it may be too late for California Public Utilities Commission (CPUC) adoption in the 2019 Resource Adequacy (RA) procurement cycle.

Rather than attempting to create a short-term solution for 1-2 years, the focus of the FRACMOO2 process should be the creation of a durable flexible capacity process. Creation of a durable flexible capacity program would benefit long-term planning in other proceedings, such as the Integrated Resource Plan (IRP) at the CPUC, and would enhance the effectiveness of long-term planning through more accurate information about future system needs. Creation of a durable flexible capacity program would provide participants in the RA program with greater regulatory certainty compared to an interim solution designed to last one year or two years.

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<sup>1</sup> Flexible Resource Adequacy Criteria and Must Offer Obligation – Phase 2 Revised Straw Proposal – Short Term Solutions (Proposal), May 1, 2017, pp. 4-5.

<sup>2</sup> Proposal, p. 5.

## Proposal to modify eligibility criteria

### 1. Start-up time less than 4.5 hours

The CAISO proposes to modify the eligibility criteria for resources to provide flexible capacity (Effective Flexible Capacity, or EFC)<sup>3</sup> by requiring resources to have a start-up time of less than 4.5 hours.<sup>4</sup> This change would reduce the flexible capacity available to meet RA requirements from the current 35,234 megawatts (MW) to 18,374 MW.<sup>5</sup> The largest flexible requirement in 2018 was 15,743 MW.<sup>6</sup> With anticipated increases in flexible requirements in 2019 when the FRACMOO2 could first be implemented, over 90% of all flexible resources would likely be needed to satisfy the load serving entities' (LSEs) RA requirements.

The CAISO observes that changes to the EFC eligibility criteria are necessary to establish “meaningful value” for faster starting resources.<sup>7</sup> However, the Proposal lacks adequate data to support the requirement that flexible resources have a start-up time of less than 4.5 hours. During the stakeholder meeting, the CAISO referenced generator calls claiming that many gas-fired generators contemplate early retirement, but the CAISO provided no data, such as average annual costs and revenue, to indicate the extent or urgency of the problem.<sup>8</sup> A drastic reduction in eligible resources would shift RA contracting from the lowest cost resources to the gas-fired plants that the CAISO seeks to prevent from uneconomic retirement. Given the reduced MWs of flexible capacity available under the proposed EFC eligibility criteria, nearly all of the gas-fired resources would receive contracts, and it is likely that those contracts would reflect increased prices due to the limited supply of flexible capacity. In addition, existing contracts for flexible capacity extending beyond 2018 may lose their value, thereby exposing ratepayers to additional costs.

Gas-fired generators can already expect to see increased contracting following the anticipated adoption of Effective Load Carrying Capability (ELCC) modeling in the CPUC's RA program.<sup>9</sup> Adoption of ELCC modeling will reduce current solar capacity available for RA and will further reduce the capacity value associated with future solar generation. Additionally, the closure of the Once-Through-Cooling (OTC) plants by the end of 2020 would shift contracting to other available RA resources. The OTC closures come shortly after the CAISO's proposed

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<sup>3</sup> The CAISO calculates a resource's flexible capacity and assigns an EFC value.

<sup>4</sup> Proposal, p. 18.

<sup>5</sup> Ibid.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

<sup>8</sup> May 8, 2017, Stakeholder meeting.

<sup>9</sup> Anticipated in June 2017.

change for 2019, raising the question of whether disqualifying resources with longer start-up times provides any meaningful benefit.

ORA does not support the proposal to require start-up times of less than 4.5 hours in order to qualify for EFC, given the absence of data indicating a need for the proposed change and the potential for significant cost impacts for ratepayers. Stakeholders should be able to examine the costs of the CAISO's proposed EFC eligibility change and consider alternative solutions along with the impact of other changes already underway. For example, the CAISO has recently proposed modifications to its rules for the capacity procurement mechanism (CPM) for retiring resources. The CAISO should provide data on using CPM for a limited number of plants for a short-term period to determine if it would be less costly than creating a start-up time limitation that eliminates 16,860 MW of EFC.

## **2. Minimum run-time less than 4.5 hours**

In addition to eliminating slow start resources from EFC eligibility, the CAISO also proposes to eliminate resources with run-times of less than 4.5 hours from eligibility to provide flexible capacity.<sup>10</sup> This reduction will remove another 1,332 MW from the current pool of flexible resources and leave only 17,042 MW of available flexible capacity.<sup>11</sup> If adopted, the requirement for a minimum run time of 4.5 hours would mean that by 2019, nearly all remaining gas-fired resources would receive RA capacity contracts. Current projections indicate a possible shortage of available flexible capacity by 2020 with the two modified criteria.<sup>12</sup>

ORA does not support the proposal to require resources to have a minimum run time of less than 4.5 hours without additional support for its need and potential benefits ahead of the 2020 closure of the OTC plants.

## **3. Category 3 flexible capacity resources must be available seven day per week**

ORA supports the proposed extension of super-peak resource availability requirements to seven days a week. Currently, the super-peak flexible capacity Must Offer Obligation (MOO) only requires resources be available on non-holiday weekdays. However, analysis from the CAISO and the Department of Market Monitoring (DMM) shows that many of the largest three-hour net-load ramps occur on weekends.<sup>13</sup> The CAISO proposes to extend the MOO to seven days a week without changing the requirement to provide a minimum of 5 dispatches per month. ORA supports this proposal to align the availability of super-peak resources with demonstrated grid needs.

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<sup>10</sup> Proposal, pp. 18-19.

<sup>11</sup> Ibid., p. 19.

<sup>12</sup> Ibid.

<sup>13</sup> Ibid., p. 20.

## Future considerations

The ISO identified the following six objectives for long-term RA enhancements:

- 1) Provide for the efficient retention and retirement of resources needed to maintain reliable grid operations by aligning resource adequacy requirements with operational needs;
- 2) Simplify RA procurement and showing processes through alignment with system and local capacity provisions;
- 3) Enhance requirements to more closely differentiate particular resource attributes of flexible capacity needed to maintain operational reliability and achieve state policies;
- 4) Align long-term planning and annual RA processes to ensure the long-term planning objectives and assumptions are properly reflected through RA procurement and vice versa;
- 5) Provide opportunities for internal and external resources to qualify to supply flexible capacity if they are able meet the specified requirements; and
- 6) Solutions should be scalable regardless of number of LSEs or size of LSEs

ORA responds to the above proposals with the exception of item 3, for which ORA has no comment at this time.

### **1) Provide for the efficient retention and retirement of resources needed to maintain reliable grid operations by aligning resource adequacy requirements with operational needs**

FRACMOO2 should focus on providing the operational attributes necessary for grid reliability and not expand the scope of the initiative to encompass the “efficient retention and retirement of resources.”<sup>14</sup> The potential uneconomic retirement of resources could create reliability challenges in future years; however, other proceedings can more effectively provide analysis and craft policies that address potential uneconomic retirements. Instead, ORA recommends that the CAISO participate in a joint effort with the CPUC and the California Energy Commission (CEC), along with adequate stakeholder engagement, to consider uneconomic retirement issues. Specifically, since the FRACMOO2 initiative feeds into the CPUC’s legislatively-mandated RA program, the RA proceeding provides the appropriate venue for addressing issues beyond the FRACMOO2 effort to define the operational attributes necessary for grid reliability and determine of the quantity needed.

The CAISO recognizes that “[p]art of the basis for the RA program and associated capacity payments is the need to ensure that sufficient capacity resources are under contract

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<sup>14</sup> Ibid., pp. 10-11.

for the upcoming year.”<sup>15</sup> The CAISO further states that resources necessary for flexibility need to start receiving signals and revenue streams to prevent uneconomic retirement. The CPUC annually revises and regularly enforces the RA program to ensure its successful operation. To date, the CAISO has only produced a preliminary analysis of potential uneconomic retirements.<sup>16</sup> ORA suggests that further analysis, with stakeholder engagement, should be produced prior to instituting changes that will influence the economics of the market. Furthermore, associated ratepayer impacts must to be part of these studies. For example, ORA is concerned that the CAISO has proposed short-term modifications designed to alter “eligibility criteria in order establish meaningful value” for specific types of resources without complete and vetted data supporting the proposed modifications.<sup>17</sup> It remains unclear if a significant uneconomic retirement problem exists, and if so, the extent and timing of the problem. Furthermore, the proposed eligibility criteria changes may not be effective in changing the market dynamics or the best method of addressing uneconomic retirements.

## **2) Simplify RA procurement and showing processes through alignment with system and local capacity provisions**

ORA recommends that modifications designed to simplify RA procurement and showing processes should be considered in the CPUC’s legislatively-mandated RA proceedings and not under the auspices of the CAISO FRACMOO2 initiative. The CAISO proposal currently seeks inclusion of this issue in a future FRACMOO2 initiative, but notes that detailed collaboration with the CPUC would be required to simplify RA processes and align the provisions.<sup>18</sup> This objective should be eliminated from the FRACMOO2 proceeding as it does not belong within the scope of FRACMOO2.

## **4) Align long-term planning and annual RA processes to ensure the long-term planning objectives and assumptions are properly reflected through RA procurement and vice versa**

A durable definition of flexible capacity is necessary to inform the CPUC’s IRP. The CAISO proposal expresses concern that the IRP studies may be relying on assumptions that are invalidated when the annual RA market procures resources that may not be useful in the

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<sup>15</sup> Ibid., p. 10.

<sup>16</sup> CAISO 2016-2017 Transmission Plan, March 17, 2017, pp. 206-210.

<sup>17</sup> Proposal, p. 17.

<sup>18</sup> Ibid., p. 11.

future.<sup>19</sup> The CAISO plans to develop a long-term proposal that ensures “long-term planning objectives and assumptions are properly reflected through RA procurement and vice versa.”<sup>20</sup> However, this approach is unnecessary if the necessary attributes of flexible resources have been clearly defined.

The IRP studies rely on the CAISO to determine the operational needs of its market and define flexibility so it can be properly modeled in the long-term. The CAISO should provide critical assumptions about the resource characteristics necessary to maintain grid reliability and provide flexibility by developing a durable definition of flexible capacity. Once the necessary attributes of flexible resources have been clearly defined, the IRP studies and annual RA procurement would be able to incorporate that information in each proceeding and an additional feedback loop between the IRP studies and annual RA procurement would not be necessary. Both processes would work together to ensure the appropriate resources are procured to meet the CAISO’s defined needs in the short and long-term.

The CPUC is currently working on developing assumptions and scenarios for its IRP studies that will inform the LSE-specific IRPs. Adoption of IRPs is expected in late 2018<sup>21</sup> and then work would begin again for the next set of IRPs. If the CAISO waits another year to begin working on a durable definition of flexibility, it would be unlikely that the necessary information would be available in time for use in the next set of IRPs. The CAISO should develop a durable definition of flexible capacity so that, as soon as possible, short and long-term procurement will be based on valid assumptions of flexible capacity needs.

##### **5) Provide opportunities for internal and external resources to qualify to supply flexible capacity if they are able meet the specified requirements**

ORA supports the proposal to provide opportunities for imports to qualify to supply flexible capacity. Currently, import resources are prohibited from providing flexible capacity, but the Federal Energy Regulatory Commission (FERC) previously instructed the CAISO to assess the feasibility of expanding eligibility for flexible resources adequacy capacity to include imports.<sup>22</sup> Imports do not have minimum operating levels, so they would not exacerbate the need for flexibility and they can be fast ramping. ORA supports allowing imports to provide flexible capacity as soon as possible, because they could be used to support the integration of renewables into the CAISO market. The CAISO has not provided information regarding the

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<sup>19</sup> Ibid., p. 13.

<sup>20</sup> Ibid., p. 4.

<sup>21</sup> Rulemaking 16-02-007, Joint Scoping Memo And Ruling Of Assigned Commissioner and Administrative Law Judge, May 26, 2016, p. 16.

<sup>22</sup> 149 FERC ¶ 61,042 United States of America Federal Energy Regulatory Commission, California Independent System Operator Corporation Docket No. ER14-2574-000, October 14, 2014, p. 32.

amount of flexible capacity that can be provided by imports but, in general, offering an additional competitive source of flexibility would reduce overall costs of flexible resource adequacy for ratepayers.

The CAISO states that it cannot implement the system changes necessary to allow import resources to provide flexible capacity in time for a short-term solution.<sup>23</sup> Currently, the CAISO envisions CAISO Board approval in the second quarter of 2018,<sup>24</sup> which means any changes adopted by the FRACMOO2 initiative would not be effective until 2019. It is not clear why the CAISO cannot allow imports to qualify to supply flexible capacity by 2019. The CAISO should explain the scope of the work necessary to allow imports to provide flexible capacity, and the time needed to complete the work.

The CAISO's proposals for changes to qualifications for providing flexible capacity would lead to only 17,042 MW of eligible flexible capacity.<sup>25</sup> While this amount of EFC is higher than forecasted 2018 and 2019 flexible capacity needs (as currently defined), the CAISO does not expect its proposal to be sustainable beyond 2019.<sup>26</sup> The CAISO's proposed changes would increase the need for flexible capacity, which increases the urgency for the CAISO to develop requirements for allowing imports to provide flexible capacity.

Additionally, the CAISO should begin working on requirements for allowing imports to count for flexible capacity as soon as possible in order to inform long-term planning. Imports can be a valuable source of flexibility and could mitigate the need to build flexible capacity in the long-term. However, future IRP proceedings cannot properly account for the benefits of imports ten years into the future because the CAISO does not currently allow imports to count for flexibility. The CAISO proposes to take a long-term approach to consider the ways that imports can help meet flexibility needs. This all-inclusive long-term approach is not necessary to use imports as a short-term, least regrets solution to providing flexibility, and does not provide the information needed for long-term planning now. The CAISO can start by establishing requirements for imports to provide flexibility now and work to expand those opportunities going forward, but it should not delay in allowing imports to qualify to supply flexible capacity.

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<sup>23</sup> Proposal, p. 13.

<sup>24</sup> Ibid., p. 5.

<sup>25</sup> Ibid., p. 19.

<sup>26</sup> Ibid.

## 6) Solutions should be scalable regardless of number of LSEs or size of LSEs

Concerns over an increasing number of LSEs and the concept of providing scalable solutions for LSEs should be considered in the CPUC's RA proceeding where the California legislature mandated the creation and administration of the RA program.<sup>27</sup>

### Other

#### The Initiative's Schedule and Access to Information Fail to Allow for Sufficient Stakeholder Input.

The CAISO's schedule for developing its proposed short-term solutions may unnecessarily delay adoption of changes to the CPUC RA requirements in the annual RA proceeding and limit CPUC stakeholder discussion. The CAISO plans to post a draft final proposal with a meeting and comments due in September 2017 and seek adoption by the CAISO Board in the second quarter of 2018.<sup>28</sup> The CAISO has not discussed raising its proposals for consideration within the CPUC annual RA proceeding, despite the fact that it is the purview of the CPUC to establish RA requirements.<sup>29</sup> It is also not clear what the CAISO plans to do with the FRACMOO2 draft final proposal before presenting it to the CAISO Board. If the CAISO makes changes to the proposal, it should present changes to stakeholders to allow transparent discussion.

Additionally, the CAISO does not address any release of data, analysis, or studies to support its proposals. In the January 2017 comments on the Supplemental Issue Paper, multiple parties asked for supporting data and analysis to inform FRACMOO2.<sup>30</sup> ORA expressed concerns with the CAISO's analysis and methodology and asked for consideration of market solutions to provide signals for flexible resources.<sup>31</sup> The CAISO selected a few proposals to simply state that it "does not believe any of the proposals are capable of being completed in an expeditious manner either due to policy gaps or implementation complexity."<sup>32</sup> The CAISO provided no further explanation regarding potential policy gaps, or specific details regarding the

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<sup>27</sup> See Public Utilities Code Section 380.

<sup>28</sup> Proposal, p. 5.

<sup>29</sup> Ibid.

<sup>30</sup> Comments of Pacific Gas & Electric Company on FRACMOO2, January 6, 2017, p. 2. Comments of Southern California Edison on FRACMOO2, January 6, 2017, pp. 1-2. Comments of San Diego Gas & Electric on FRACMOO2, January 6, 2017, p. 3. Comments of California Large Energy Consumers Association on FRACMOO2, January 6, 2017, pp. 3-4.

<sup>31</sup> Comments of ORA on FRACMOO2, January 6, 2017, pp. 2-4.

<sup>32</sup> Proposal, p. 7.

complexity in implementation of those proposals. ORA recommends that the CAISO provide documentation responding to the parties' comments.

Currently, development of the CAISO's proposals lacks transparency and does not include working group discussions that would allow stakeholders to discuss any supporting data. ORA recommends that the CAISO establish working group meetings to hold ongoing discussions with stakeholders regarding the CAISO's data and analysis to inform its proposals.

#### The CAISO's Proposal Should Allow Least Cost Market Solutions.

The CAISO proposes modifications to the flexible capacity eligibility rules, with a focus on identifying resource characteristics that help minimize renewable portfolio standard (RPS) curtailment.<sup>33</sup> However, the CAISO's approach emphasizes protecting a subset of flexible resources to minimize RPS curtailment without considering the costs of its EFC eligibility proposals.

FRACMOO2 should define flexible resources based on attributes necessary for reliable grid operation, while the IRP focuses on optimizing portfolios to reduce GHG emissions at the least possible cost. This would include consideration of optimizing renewable curtailment.<sup>34</sup> Currently, utilities with renewable contracts that allow economic curtailment only curtail those resources when the value of curtailing is greater than the value of the lost Renewable Energy Credit (REC). The CAISO should define its need for flexibility based on grid operations and allow the market to determine least cost dispatch of flexible generation or economic curtailment. The CPUC and CEC are responsible for ensuring that LSEs meet RPS compliance and should determine how LSEs should meet RPS requirements.

#### The CAISO Should Provide Additional Analysis On Market Based Solutions.

The CAISO states that by removing long-start and long-run resources from flexible capacity eligibility, it will ensure a fleet of fast ramping resources while minimizing the associated Pmin burden.<sup>35</sup> However, the CAISO has provided insufficient analysis to show that its proposed restrictions of eligible flexible capacity represent the best approach. For example, the CAISO's concern with long-start resources reflects the market's failure to dispatch those resources in the day-ahead market, and not whether they can provide flexibility once

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<sup>33</sup> Ibid., p. 3.

<sup>34</sup> Administrative Law Judge's Ruling Seeking Comment on Staff Proposal on Process for Integrated Resource Planning, R.16-02-007, May 16, 2017, Staff Proposal, p. 37.

<sup>35</sup> Ibid., p. 19.

dispatched.<sup>36</sup> It shows that the energy market is not able to accurately forecast day-of needs or capture the uncertainty those forecasts in order to dispatch those long start resources.

Parties had previously raised the question of whether market mechanisms could incentivize dispatch and procurement of the appropriate resources, rather than unilaterally determining ineligibility.<sup>37</sup> Using the energy market to dispatch the proper set of resources to provide flexibility, rather than contracting the pool of resources that could provide flexibility, would allow the energy market to arrive at the least-cost solution to meeting flexibility needs. This would minimize ratepayer costs by allowing procurement from a broader set of competitive flexible resources and relying on the market to address operational needs through least-cost dispatch of resources. It would also avoid the inefficiency of administratively set procurement targets that may lead resources to self-schedule instead of providing flexibility in the market.<sup>38</sup> The CAISO should first provide analysis on insufficient dispatch of resources and discuss potential market solutions instead of simply banning these resources from providing flexibility.

ORA appreciates the opportunity to comment on the CAISO's Revised Straw Proposal.

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<sup>36</sup> Ibid., p. 15.

<sup>37</sup> Comments of PG&E on FRACMOO2, January 6, 2017, pp.2-3. Comments of SCE on FRACMOO2, January 6, 2017, pp.2-4.

<sup>38</sup> Comments of SCE on FRACMOO2, January 6, 2017, p. 3.