

**Comments of the Public Advocates Office**  
**Resource Adequacy Enhancements**

Submitted by	Organization	Date Submitted
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**Please provide your organization’s overall position on the RA Enhancements fourth revised straw proposal:**

- Support
- Support w/ caveats
- Oppose
- Oppose w/ caveats
- No position

The Public Advocates Office appreciates the opportunity to provide feedback on the scope of issues presented in the fourth revised straw proposal, but continues to oppose the implementation of an Unforced Capacity (UCAP) system as proposed in this initiative.<sup>1</sup> The California Independent System Operator (CAISO) has not demonstrated that the purported benefits of a UCAP system outweigh the complexity and expense of implementing the UCAP system, including the proposal to adjust the Planning Reserve Margin and other necessary changes. The CAISO has not yet demonstrated that the increased ratepayer costs due to additional RA procurement to meet higher RA requirements resulting from the UCAP system would result in commensurate reliability benefits. The Public Advocates Office recommends that the CAISO explore alternatives to UCAP or modifications to the Resource Adequacy Availability Incentive Mechanism (RAAIM) in order to avoid an unnecessary and expensive change to RA requirements.

**Please provide your organization’s comments on the following issues and questions.**

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<sup>1</sup> The CAISO seeks to implement a UCAP system to address current issues of its performance incentive mechanism and substitution capacity programs. UCAP would obviate the need for most, if not all of the aspects of those programs since it includes assumptions of outage rates and availability and would be coupled with other supplemental changes. The UCAP is essentially the same as Net Qualifying Capacity (NQC) but is discounted by forced outage rate assumptions of individual resources. Also, the CAISO currently proposes to use NQC concurrently with the UCAP system for some requirements. Fourth Revised Straw Proposal, p. 7.

## 1. System Resource Adequacy

Please provide your organization's feedback on the System Resource Adequacy topic as described in section 4.1. Please explain your rationale and include examples if applicable.

- a. Please provide your organization's feedback on the System RA Showings and Sufficiency Testing topic as described in section 4.1.1. Please explain your rationale and include examples if applicable.

The CAISO proposes to conduct a UCAP portfolio deficiency test for each month of the year based on the load-serving entities' (LSE) monthly system RA showings in order to assess whether the system RA showing for a given month is sufficient to ensure a reliable CAISO grid.<sup>2</sup> The CAISO does not propose to conduct an annual portfolio analysis of system RA because California Public Utilities Commission (Commission) jurisdictional entities are currently only required to show 90% of year-ahead system RA requirements for the five summer months.<sup>3</sup>

The current year-ahead system RA showing for Commission-jurisdictional LSEs is completed by October 31<sup>st</sup> of the year prior to the RA compliance year and requires LSEs to have procured at least 90% of their Commission requirement by that time.<sup>4</sup> The remaining 10% of procurement to reach the 100% month-ahead requirement must be met approximately 45 days prior to each RA showing month.<sup>5</sup> This timeline gives LSEs several months, up to the showing deadline for each future month, to procure the remaining capacity required by the Commission and the CAISO between the 90% year-ahead showing and the 100% month-ahead showings. The CAISO's proposed UCAP portfolio deficiency test would review LSE system RA showings only on a month-ahead basis. As a result, LSEs could be unaware of any CAISO-determined UCAP RA deficiencies until 45 days before compliance is required. In addition to the proposed UCAP requirements, LSEs would still be required to meet current Commission and possibly other CAISO requirements using the current NQC measurement scale.

The uncertainty of monthly LSE UCAP requirement deficiencies and the short timeframe available to procure additional capacity to cure any deficiency would likely significantly increase ratepayer costs. Procurement to meet an upcoming month's UCAP RA requirements would be conducted in an expedited manner and in a market in which the supply of capacity is becoming more constrained.<sup>6</sup> It is likely that last-minute purchases in a constrained capacity market would result in higher prices due to supply-side market power concerns.<sup>7</sup>

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<sup>2</sup> CAISO, RA Enhancements Fourth Revised Straw Proposal, March 17, 2020 (Fourth Revised Straw Proposal), p. 9.

<sup>3</sup> Fourth Revised Straw Proposal, p. 9.

<sup>4</sup> This Commission-required showing is currently required to use the Net Qualifying Capacity (NQC) system rather than CAISO's proposed UCAP system.

<sup>5</sup> Commission: 2020 Filing Guide for System, Local and Flexible RA Compliance Filings, October 17, 2019, p. 7. See: <https://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442462872>.

<sup>6</sup> The Commission has identified that "it appears there is currently sufficient capacity on the system, and compliance with RA requirements is possible, [but] we can expect that the market will continue to tighten." Commission, The State of the RA Market – Revised, January 13, 2020, p. 41. See: <https://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442463739>.

<sup>7</sup> These concerns include capacity supply scarcity and potential higher costs of procuring capacity contracts in an expedited manner and the possibility of having to select marginally more expensive resources that were rejected in

In anticipation of these potential procurement issues, the CAISO proposes to develop up-front UCAP-related procurement requirements similar to the Commission's maximum cumulative capacity buckets, to guide collective procurement of a resource portfolio with the best possibility for an LSE of passing the UCAP portfolio assessment.<sup>8</sup> The Public Advocates Office stresses the importance of up-front requirements and notification to LSEs of potential procurement requirements. For example, the current requirement that LSEs must procure 90% of anticipated system RA needs could be used to anticipate UCAP requirements to minimize potential ratepayer impacts if the CAISO adopts a UCAP methodology. The 90% requirement allows for adjustments to forecasts due to factors like load migration, as well as a reasonable buffer since the annual forecast of needs is indeed a forecast and can misstate actual month-ahead needs.

- b. Please provide your organization's feedback on the Planned Outage Process Enhancements topic as described in section 4.1.2. Please explain your rationale and include examples if applicable.

Under the current Planned Outage Substitution Obligation (POSO) process, resource owners can work with the CAISO to schedule a planned maintenance outage for their resource.<sup>9</sup> This process incentivizes early submission of planned outages. Resource owners with the earliest planned outage submissions have the greatest likelihood of implementing their planned outages without substitution requirements. If the CAISO does not approve a resource owner's request for a planned outage, the planned outage either must be delayed or be submitted as a forced outage accompanied with substitute capacity to avoid RAAIM penalties. The CAISO seeks to eliminate RAAIM<sup>10</sup> and remove obligations for resources owners to provide substitute capacity during an outage to the greatest extent possible.<sup>11</sup>

The CAISO presents two stakeholder proposals as options to address planned outage substitutions. Under Option 1, the CAISO would no longer allow most planned outages between June 1 and October 31 and would increase system RA requirements for other months to create a planned outage reserve margin.<sup>12</sup> Under Option 2, the CAISO would act as a facilitator between sellers and buyers to procure voluntary substitute capacity in a competitive manner for each planned outage on a day-by-day as-needed basis.<sup>13</sup>

The Public Advocates Office opposes the introduction of a UCAP system and its related proposals to remove substitute capacity requirements. However, if the CAISO nevertheless

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earlier solicitations due to costs. The CAISO's Department of Market Monitoring (DMM) found that several local RA areas are not structurally competitive as recently as 2018, and recommends that system-wide market power be addressed. See CAISO 2018 Annual Report on Market Issues & Performance, May 2019, pp. 161 and 263, and CAISO DMM Analysis of System Level Market Power, June 7, 2019, pp. 14-15, available at: [http://www.caiso.com/Documents/Presentation-AnalysisOfSystemLevelMarketPowerDMM-June7\\_2019.pdf](http://www.caiso.com/Documents/Presentation-AnalysisOfSystemLevelMarketPowerDMM-June7_2019.pdf)

<sup>8</sup> Fourth Revised Straw Proposal, p. 11.

<sup>9</sup> Fourth Revised Straw Proposal, p. 13.

<sup>10</sup> Fourth Revised Straw Proposal, p. 3.

<sup>11</sup> Fourth Revised Straw Proposal, p. 14.

<sup>12</sup> Fourth Revised Straw Proposal, pp. 15-16.

<sup>13</sup> Fourth Revised Straw Proposal, pp. 17-19.

implements the UCAP system, it should adopt Option 2. Option 2 would be significantly more cost efficient than Option 1, since it would only require procurement of capacity on days when capacity is actually needed to maintain reliability. The Public Advocates Office recommends that the design of Option 2 seek to minimize ratepayer costs and mitigate against any potential gaming strategies allowing generators to withhold capacity from the RA market in order to obtain higher prices as substitute capacity.

The CAISO states that if it selects Option 2, it plans to address policy issues and develop the design with stakeholders in a future proposal in this initiative.<sup>14</sup> Currently, the CAISO proposes that under Option 2, “(a)ll resources that have submitted a planned outage request prior to RA showing submission that are then included on an RA showing will automatically be included in this market as substitute capacity demand.”<sup>15</sup> The Public Advocates Office recommends that the CAISO consider whether substitute capacity is needed for every planned outage. The CAISO proposes to compare supply, demand, and reliability needs but does not state whether it will determine if planned outages for any particular time would need any substitution.<sup>16</sup> For example, there may be requests for a net of 500 MW of planned outages for a particular day, but if the grid can operate reliably without those 500 MW of RA resources, substitution capacity may not be needed. The CAISO should consider waiving any required substitute capacity for planned outages under Option 2 if there is no need for the substitute capacity, similar to the current design of the POSO.<sup>17</sup> Allowing the potential for planned outages without substitute capacity when there is no need for it will minimize ratepayer costs while maintaining reliability.

The CAISO should not select Option 1 because it would increase RA requirements for seven months of the year to provide a reserve that may or may not be fully, or even partially, utilized. This option would require LSEs to procure additional RA capacity across those months, raising ratepayer costs for procurement that may not be necessary to maintain reliability. The CAISO does not propose an amount or a methodology to derive a planned outage reserve margin, but it would likely be equal to or above historical volumes of planned outage. The CAISO shows that planned outages for these off-peak months in 2018 and 2019 ranged from approximately 2,000 MW to 3,500 MW.<sup>18</sup> The CAISO uses this range to create a hypothetical reserve of 3,000 MW to describe the system through an example.<sup>19</sup> An additional reserve of 3,000 MW for seven months in a year could increase system RA requirements by roughly 9.4% for those months<sup>20</sup> and cost ratepayers approximately \$64,890,000 per year.<sup>21</sup> While some portion of those costs

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<sup>14</sup> Fourth Revised Straw Proposal, p. 17.

<sup>15</sup> Fourth Revised Straw Proposal, p. 17.

<sup>16</sup> This determination is mentioned in the Proposal but does not include consideration of the need for substitute procurement. Fourth Revised Straw Proposal, p. 18.

<sup>17</sup> Fourth Revised Straw Proposal, p. 13.

<sup>18</sup> Fourth Revised Straw Proposal, p. 15.

<sup>19</sup> Fourth Revised Straw Proposal, p. 16.

<sup>20</sup> 3,000 MW more for each effected month ranges from an 8.2% to 9.9% increase. Commission, 2018 RA Report, August 2019, p. 15.

<sup>21</sup> The weighted average price of all Commission-jurisdictional LSE RA contracts is \$3.09/kW-month, or \$3,090/MW-month.  $(\$3,090/\text{MW-month}) * (3,000 \text{ MW reserve}) * (7 \text{ months}) = \$64,890,000 \text{ per year}$ . This figure assumes new RA procurement would have to be conducted at average 2018-2022 contract term prices; this figure

would be utilized to procure necessary substitute capacity, the CAISO's figure on planned outage rates appears to show that actual planned outages would generally be lower than 3,000 MW for each day of each month, meaning the additional capacity and associated ratepayer costs would be unnecessary.<sup>22</sup>

Additionally, Option 1 would prevent all planned outages from June to October except for "off-peak and/or short-term opportunity outages."<sup>23</sup> The goal of this feature is to maximize available capacity during high-demand months. However, it also incentivizes the delay of possibly critical maintenance and could lead resource owners to operate an unsafe resource since the alternative would be to take a forced outage resulting in de-rating the UCAP of the resource for future years. It is important to maintain flexibility for units to conduct maintenance outages for safety, or for operational necessity. For example, Diablo Canyon had a planned outage in September 2019 for refueling.<sup>24</sup>

- i. Please provide your organization's feedback on when bids should be submitted and how and when they could be changed under Option 2: CAISO procures all planned outage substitution capacity, and what are the implications of doing so under any proposed option.

The Public Advocates Office has no feedback concerning this topic at this time.

- ii. Please provide your organization's feedback on whether or not the Planned Outage Substitution Capacity Bulletin Board is necessary and, if so, why given the effort to develop and maintain.

The Public Advocates Office has no feedback concerning this topic at this time.

- c. Please provide your organization's feedback on the RA Import Provisions topic as described in section 4.1.3. Please explain your rationale and include examples if applicable.

The Public Advocates Office does not support the CAISO's proposed changes to RA import provisions. The CAISO's proposal essentially mirrors the recommendations CAISO provided in its Track 1 proposal in Commission Rulemaking (R.) 19-11-009.<sup>25</sup> The CAISO is seeking solutions to address "concerns about the reliability, dependability, and affordability of resource

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may be lower if existing owned capacity is shown as RA, or may be higher if a marginal price (85<sup>th</sup> percentile or higher) is used. See Commission, 2018 RA Report, August 2019, p. 25, for the weighted average price.

<sup>22</sup> Fourth Revised Straw Proposal, p. 15.

<sup>23</sup> Fourth Revised Straw Proposal, p. 16.

<sup>24</sup> Pacific Gas and Electric Company, Currents, September 23, 2019. Available at: <https://www.pgecurrents.com/2019/09/23/diablo-canyon-power-plant-begins-planned-maintenance-refueling-outage-on-unit-2/>.

<sup>25</sup> Fourth Revised Straw Proposal, p. 21.

adequacy imports.”<sup>26</sup> The CAISO’s proposal here and in the RA proceeding would increase ratepayer costs by disallowing non-resource specific imports that have historically delivered energy, without ensuring that the remaining import resources would provide a similar benefit. The CAISO’s proposal would require source-specific showings, but would fail to address bidding behavior that would avoid actual dispatch. Thus, the CAISO’s proposal would fail to mitigate any market power or abusive bidding behavior while decreasing the pool of resources able to qualify for RA through additional requirements.<sup>27</sup> The CAISO should wait until the Commission decides upon the Track 1 proposals in the RA proceeding and adjust its proposal to ensure consistency with the Commission’s adopted requirements.

## **2. Backstop Capacity Procurement Provisions**

Please provide your organization’s feedback on the Backstop Capacity Procurement Provisions topic as described in section 4.2. Please explain your rationale and include examples if applicable.

- a. Please provide your organization’s feedback on the Capacity Procurement Mechanism Modifications topic as described in section 4.2.1. Please explain your rationale and include examples if applicable.

The Public Advocates Office has no feedback concerning this topic at this time.

- b. Please provide your organization’s feedback on the Making UCAP Designations topic as described in section 4.2.2. Please explain your rationale and include examples if applicable.

The Public Advocates Office has no feedback concerning this topic at this time.

- c. Please provide your organization’s feedback on the Reliability Must-Run Modifications topic as described in section 4.2.3. Please explain your rationale and include examples if applicable.

The CAISO proposes to remove the RAIM which is used, in part, to incentivize the performance of Reliability Must-Run (RMR) resources.<sup>28</sup> The CAISO seeks stakeholder input on a replacement incentive mechanism for RMR resources and suggests that performance targets could be tailored to each RMR agreement rather than using the same mechanism for all RMR resources.<sup>29</sup>

The Public Advocates Office supports the adoption of a penalty and incentive mechanism in the pro forma RMR agreement that can be modified for each RMR resource through negotiations of

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<sup>26</sup> Fourth Revised Straw Proposal, p. 21.

<sup>27</sup> Comments of the Public Advocates Office on RA Proposals for Imports, March 6, 2020, pp. 5-6.

<sup>28</sup> Fourth Revised Straw Proposal, p. 37.

<sup>29</sup> Fourth Revised Straw Proposal, pp. 37-38.

the annual RMR process. RMR contracts are infrequent,<sup>30</sup> so it should not be onerous to tailor RMR agreements to each RMR resource.

The performance threshold of RMR resources should be adapted to historical availability as recommended by the CAISO.<sup>31</sup> If a UCAP system is implemented, the performance of the resource will inherently account for historical availability, and a threshold range of performance may or may not be appropriate.

The CAISO states that without RAAIM, an incentive tool “might not be self-funding given the limited number of RMR units, and any collected penalties could be returned to the parties assessed the costs for the RMR designation.”<sup>32</sup> The Public Advocates Office agrees that RMR units should not receive incentive payments since the CAISO also proposes to eliminate RAAIM (and the associated penalties and incentives) for all other market resources. Rather, availability and performance for all UCAP resources<sup>33</sup> would be incentivized by an increased UCAP rating, including RMR.<sup>34</sup> However, a financial penalty system for RMR performance may be necessary since the resource is at risk of retirement. A change in the next-year UCAP value may not be an effective penalty or incentive since the resource owner intends to retire the unit in the near term.

- d. Please provide your organization’s feedback on the UCAP Deficiency Tool topic as described in section 4.2.4. Please explain your rationale and include examples if applicable.

The CAISO proposes to “incentivize entities to show above individual UCAP requirements” through the use of a UCAP Deficiency Tool.<sup>35</sup> This tool would collect a financial penalty from LSEs that were deficient on their UCAP RA showings and distribute those penalty revenues “to entities that show above their UCAP, in proportion to the total amount shown above requirements for all entities.”<sup>36</sup> In other words, an LSE that showed far more RA resources than its requirements would collect a greater share of penalty revenue than an LSE that was only slightly above its RA requirement.

The Public Advocates Office opposes the feature of this tool that would financially reward LSEs in proportion to the amount of surplus RA shown to the CAISO. LSEs would be incentivized to withhold RA rather than sell-off surplus RA capacity to LSEs with deficient RA showings. Responding to this concern raised in the last draft proposal, the CAISO states that “this seems unlikely” since deficient LSEs “would be willing to pay a price close to the soft offer cap to

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<sup>30</sup> Three RMR agreements were active in 2019 and two in 2020. See ISO Board of Governors Memorandum, November 7, 2018 and September 11, 2019: <http://www.caiso.com/Documents/Update-Results-RMRContractExtensions-2019-Nov2018.pdf> and <http://www.caiso.com/Documents/Decision-ConditionalApproval-ExtendRMRContracts-2020-Memo-Sep2019.pdf>.

<sup>31</sup> Fourth Revised Straw Proposal, p. 38.

<sup>32</sup> Fourth Revised Straw Proposal, p. 38.

<sup>33</sup> Solar and wind resources that use Effective Load Carrying Capability would maintain their current counting methodology rather than UCAP.

<sup>34</sup> The UCAP calculation would reduce or increase a resource’s capacity rating depending on historical availability.

<sup>35</sup> Fourth Revised Straw Proposal, p. 38.

<sup>36</sup> Fourth Revised Straw Proposal, p. 39.

procure that [surplus] capacity” and that surplus LSEs would desire to sell excess capacity rather than anticipate a payment through the UCAP Deficiency Tool.<sup>37</sup> However, this statement appears to ignore that multiple entities in fact experienced deficiencies in local RA capacity despite there being sufficient overall capacity to meet reliability needs.<sup>38</sup> Therefore, LSEs are already holding excess capacity rather than selling off RA, even without the incentive payment the CAISO’s proposed UCAP Deficiency Tool would provide.

It is reasonable for LSEs to possess a minimal surplus of RA capacity in order to maintain a slight buffer in case monthly RA requirements change mid-year or for other uncertainties.<sup>39</sup> In addition, RA contracts may be difficult to shape precisely to requirements; for example, if a resource insists on selling all of its capacity, rather than a portion of its capacity. These two factors may lead to coincidental and small surplus RA showings that the CAISO’s proposed Tool would reward significantly differently. The total penalty paid by deficient LSEs would be distributed to the surplus LSEs proportional to their excess RA showings; if one surplus LSE has a single megawatt over its showing and another LSE has two megawatts over showing, the latter would receive twice the reward as the former. This could influence LSEs to increase the amount of RA retained to address uncertainties since the CAISO would reward that LSE proportionally. Since LSEs address risk through these buffers, they would be reluctant to sell off the excess capacity to deficient LSEs.

The CAISO should rely on other non-fiscal features of its proposal to incentivize RA showings rather than financially rewarding the hoarding of RA. The CAISO should modify the proposed UCAP Deficiency Tool to evenly distribute incentive payments to LSEs with surplus RA showings with no consideration of the proportion those LSEs are above their own RA requirements. This would reward showing above requirements without incentivizing withholding of RA capacity.

3. Please provide your organization’s feedback on the implementation plan, including the proposed phases, the order these policies must roll out, and the feasibility of the proposed implementation schedule, as described in section 5. Please explain your rationale and include examples if applicable.

The CAISO currently plans to implement the majority of UCAP changes for the 2023 RA compliance year. The Commission recently issued a proposed decision that, if adopted, would implement a Central Procurement Entity (CPE) to begin procuring local RA for the 2023 compliance year.<sup>40</sup> Implementing changes for the 2023 RA compliance year allows for

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<sup>37</sup> Fourth Revised Straw Proposal, p. 39.

<sup>38</sup> The Commission found that 42 Commission-jurisdictional LSEs sought waivers for local RA requirements, citing “tightness in the market and inability to find available capacity.” Since the CAISO did not conduct backstop procurement in any local area, it would seem that net requirements were met and that some LSEs held RA capacity beyond their requirements. State of the RA Market – Revised, January 13, 2020, p. 35.

<sup>39</sup> Such a buffer is currently determined by LSEs subject to review by the Commission for Commission-jurisdictional LSEs. However, the Power Charge Indifference Adjustment (PCIA) Phase 2 Working Group 3 considered, but ultimately did not formalize the determination of such a buffer. PCIA Phase 2 – Working Group 3, Working Session #2, July 25, 2019.

<sup>40</sup> The Proposed Decision may be heard by the Commission no sooner than May 7, 2020. Commission Rulemaking 17-09-020, Proposed Decision of March 26, 2020.



coordination between the CAISO and Commission to make any adjustments to UCAP and CPE procurement concurrently. The Public Advocates Office encourages the CAISO to continue to monitor implementation plans at the Commission and explore enhancements and coordination that would facilitate efficient RA procurement in a UCAP environment.

4. Please provide your organization's feedback on the proposed decisional classification for this initiative as described in section 6. Please explain your rationale and include examples if applicable.

The Public Advocates Office has no feedback concerning this topic at this time.

#### **Additional comments**

Please offer any other feedback your organization would like to provide on the Resource Adequacy Enhancements fourth revised straw proposal.

The Public Advocates Office has no additional feedback at this time.