Capacity Procurement Mechanism Soft Offer Cap

Straw Proposal

July 24, 2019

Market & Infrastructure Policy
Table of Contents

1. Introduction ........................................................................................................................................... 3
2. Stakeholder Process .............................................................................................................................. 3
3. Energy Imbalance Market Classification ............................................................................................. 5
4. Background ............................................................................................................................................. 5
5. Proposal .................................................................................................................................................. 7
   5.1 CPM Soft Offer Cap .......................................................................................................................... 8
   5.2 Future Enhancements to the Soft Offer Cap .................................................................................... 10
   5.3 Changes to 12-month Designations ................................................................................................ 11
   5.4 Bids above the Soft Offer Cap ........................................................................................................ 18
6. Next Steps .............................................................................................................................................. 19
1. Introduction

The purpose of this initiative is to review the soft offer cap that applies to bids in the competitive solicitation process used for capacity procurement mechanism (CPM) designations, examine compensation and mitigation for 12-month CPM designations, and include changes from the RMR-CPM enhancements initiative for CPM bids above the soft offer cap.

The CAISO published an issue paper on June 17, 2019 and received comments regarding the scope of this initiative. Since the issue paper’s release, the CAISO held a web conference to identify the scope of the CPM Soft Offer Cap initiative. This straw proposal provides an overview of issues within the scope of CPM Soft Offer Cap initiative along with initial proposals on how to address those issues. The proposed scope and initial set of solutions identified were influenced by comments received through the stakeholder process. The following outlines the topics in-scope of the CPM Soft Offer Cap initiative:

- Updating the Soft Offer Cap
- Assessing payment for 12-month CPM designations
- CPM bids above the soft offer cap

2. Stakeholder Process

Figure 1 below shows the status of the straw proposal within the overall CPM Soft Offer Cap stakeholder process. The CAISO is at the “Straw Proposal” stage in the CPM Soft Offer Cap stakeholder process.

The purpose of the straw proposal is to present the scope and solutions of issues related to the CPM soft offer cap. After publication of the straw proposal and a stakeholder call, the CAISO will hold a teleconference call to discuss the paper on August 6. An outline of the key dates for the initiative is included in Table 1.
Figure 1: Stakeholder Process for CPM Soft Offer Cap Stakeholder Initiative

Table 1: Stakeholder Initiative Timeline

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Issue Paper</td>
<td>5/30/2019</td>
</tr>
<tr>
<td>Stakeholder Call</td>
<td>6/17/2019</td>
</tr>
<tr>
<td>Stakeholder Written Comments Due</td>
<td>7/1/2019</td>
</tr>
<tr>
<td>Post Straw Proposal</td>
<td>7/24/2019</td>
</tr>
<tr>
<td>Stakeholder Call</td>
<td>8/6/2019</td>
</tr>
<tr>
<td>Stakeholder Written Comments Due</td>
<td>8/20/2019</td>
</tr>
<tr>
<td>Revised Straw Proposal</td>
<td>Sept 2019</td>
</tr>
<tr>
<td>Draft Final Proposal</td>
<td>Nov 2019</td>
</tr>
<tr>
<td>Stakeholder Meeting</td>
<td>Dec 2019</td>
</tr>
<tr>
<td>Stakeholder Written Comments Due</td>
<td>Dec 2019</td>
</tr>
<tr>
<td>Board of Governors Meeting</td>
<td>Spring 2020</td>
</tr>
</tbody>
</table>
3. Energy Imbalance Market Classification

For this initiative, the ISO will seek approval from only the Board of Governors. The ISO believes this initiative falls outside of the scope of the Energy Imbalance Market (“EIM”) Governing Body’s primary and advisory roles because the initiative does not seek changes to either rules of the real-time market or generally applicable rules of all markets. Rather, the initiative seeks modifications to the ISO’s backstop capacity procurement authority to ensure that reliability requirements are met in the ISO’s balancing authority area. These proposed changes will not apply to EIM balancing authority areas. The ISO seeks stakeholder feedback on this EIM classification of the initiative.

4. Background

The ISO relies on capacity procured through the resource adequacy framework to operate the grid reliably. Resources procured as resource adequacy capacity are required to be available to the ISO to meet the load-serving and reliability needs of the grid. Occasionally, there are resources that want to retire but cannot as they are essential to maintaining grid reliability. When this happens, the ISO can use its reliability must-run (RMR) authority to retain these essential reliability resources and defer their retirement until new resources are built or transmission is enhanced. There are also situations when resources or capacity procured through the resource adequacy program are not sufficient to meet the load-serving and reliability needs of the grid. If this happens and if additional capacity is not procured to cure the deficiency, the ISO relies on its CPM authority to procure the needed capacity to meet the needs of the grid.

The CAISO attempts to first use bids from the competitive solicitation process from non-resource adequacy capacity when making CPM designations. Resource owners have the opportunity to bid capacity, for total or partial output from a specific resource, into this process. This process is not mandatory, and non-resource adequacy capacity is under no obligation to bid into the competitive solicitation process. However, if a bid for capacity is accepted and awarded a CPM designation, the resource is obliged to accept the CPM award and the associated obligations. These obligations include a must offer obligation and making the awarded capacity subject to the ISO’s Resource Adequacy
Availability Incentive Mechanism (RAAIM) tool, which provides financial incentives for resources to meet their resource adequacy obligations.¹

The principle behind the competitive solicitation process is that any resource owner with excess non-resource adequacy capacity will bid their excess capacity, up to the resource’s net qualifying capacity (NQC) value, into the competitive solicitation process for the opportunity to sell additional capacity under a CPM designation. Competition from multiple resource owners should generate competitive bids. Theoretically, this level may be going forward fixed cost (GFFC) for a resource, less expected market revenues – considering potential market uncertainty, potentially inclusive of some portion of additional near-term capital additions necessary to operate the resource, plus a reasonable return.

CPM designations in local capacity areas can be more challenging given specific resources may be needed to reliably operate the grid in that particular area. If such a designation is necessary, the ISO may face a situation where only a few resources, or potentially a single resource, can satisfy the constraint. Because a small number of resources may have the potential and effectiveness needed to reliably operate the grid in that area, there may be no additional bids in the competitive solicitation process that can meet the need and the available resource would be designated at any bid price. This would effectively give the resource market power for its capacity.

Market power mitigation for the competitive solicitation process is provided through a soft offer cap. The soft offer cap is a proxy for the system marginal capacity cost and serves as a “safe harbor” capacity value that owners are allowed bid up to, and receive that value if designated for a CPM award.² The resource owner does not have to justify any bid at or below the soft offer cap to receive that payment for a CPM designation. Currently, the soft offer cap is set at $75.67/kW-year, or $6.31/kW-month.

The soft offer cap was set four years ago in the capacity procurement mechanism replacement initiative. At that time, rules for updating the soft offer cap were established. The soft offer cap was set as a subset of the fixed costs, representing going

¹ RAAIM is a bidding incentive mechanism that has a 96.5% target availability with a +/- 2% dead band, assessed on a monthly basis. Resources that bid into the market less frequently than 94.5% of intervals are charged the RAAIM penalty price, while resources that bid more frequently than 98.5% of intervals are eligible to receive an incentive payment.

² Resources are able to bid above the soft offer cap, but these costs need to be verified by the ISO, prior to awarding a CPM designation.
forward fixed costs, for a new resource. These costs include insurance, ad valorem, and fixed operations and maintenance costs, but not capital and financing costs or taxes. Additionally, the costs were set using a hypothetical mid-cost 550 MW advanced combined cycle resource with duct firing capability.\(^3\) The values used to calculate the soft offer cap were taken from a California Energy Commission (CEC) study for the cost of new generation, which was published at about the same time.\(^4\) The initiative also established rules that the ISO would evaluate if the soft offer cap adequately reflects in the going forward fixed cost of the reference resource, and may consider changing the reference resource.

## 5. Proposal

This proposal includes four primary policy decisions summarized below.

The ISO proposes leaving the soft offer cap at its current level.

In May, the CEC published a report detailing the cost of new generation in California. The CEC updated the cost figures from the prior report originally used by the ISO to set the soft offer cap value. The latest update includes minor changes to the going forward fixed costs for a large mid-cost combined cycle resource. Although the model used by the CEC is complicated and many input assumptions contributed to the minor change in cost, the most significant factor was an assumption about the size of the mid-cost combined cycle resource. The recent study evaluated a 700 MW combined cycle resource versus the prior study that evaluated a 550 MW combined cycle resource. Thus, the actual change in the going forward fixed costs are insignificant. Additionally, a combined-cycle resource with these characteristics has not been built in California in recent years and is unlikely to be built in the future. These factors, and noting that an update following the same methodology used to initially set the soft offer cap applying values from the new 700 MW resource would result in an overall change to the soft offer cap of less than 10%. Thus, the ISO proposes to leave the soft offer cap at the current rate of $75.67/kW-Year ($6.31/kW-month).

\(^3\) The CEC cost of new generation study includes costs for a low-cost, mid-cost and high cost case for the resources studied.

The ISO may consider other options to determine a soft offer cap in the future.

The analysis the ISO used initially to set the soft offer cap was based on cost estimates included in the CEC report on the cost of new generation in California. Those estimates were for a large combined cycle resource. Some stakeholders pointed out that a combined cycle resource is unlikely to be the marginal resource built on the system in the future, and this particular class of resource may not be representative of a typical resource that receives a CPM designation in the future. Currently, the ISO is not proposing to make adjustments to the technology of the reference resource used to calculate the soft offer cap. However, as the grid and fleet evolve, it may be prudent to change some of the assumptions about how the soft offer cap is set in the future.

The ISO proposes a 3-pivotal supplier test for 12-month designations.

During this stakeholder initiative and the RMR-CPM enhancements initiative, the ISO received comments indicating concern about market power for resources awarded 12-month CPM designations. In response, the ISO is proposing to include a three pivotal supplier test and to extend full cost of service contracts to resources awarded 12-month CPM designations that fail the pivotal supplier test.

The ISO will file changes for CPM bids above the soft offer cap.

In the RMR-CPM initiative, the ISO proposed changes to bids above the soft offer cap. These changes included moving away from bidding full cost of service to going forward fixed costs plus 20%, which is consistent with the methodology used to set the soft offer cap. The changes in this proposal do not affect the changes already proposed and vetted in the CAISO’s RMR-CPM enhancements initiative. The CAISO will file those changes concurrently with the tariff amendments that are part of this initiative.

Other Changes

The ISO identified some tariff clarifications in the RMR-CPM enhancements initiative and will include those tariff changes as part of the tariff amendments resulting from this initiative.

5.1 CPM Soft Offer Cap

The ISO has an obligation to review the soft offer cap every four years. The ISO proposes to maintain the soft offer cap at $75.67/kW-Year.

CEC Cost of New Entry Study
The soft offer cap was initially set based on figures from the 2014 draft CEC report for Estimated Cost of New Renewable and Fossil Generation in California.\(^5\) This report included analysis for a hypothetical new mid-cost 550 MW advanced combined cycle resource with duct firing capability, and this resource was used to set the soft offer cap. The soft offer cap was initially comprised of the components making up going forward fixed costs and included: insurance, ad valorem, and fixed operations and maintenance costs. The calculation for the soft offer cap includes these values plus a 20% adder. A summary of these components from this study and the calculated soft offer cap are shown in the first row of Table 2 and result in a total soft offer cap of about $76/kW-year.

**Table 2: Soft Offer Cap Calculation**

<table>
<thead>
<tr>
<th>CEC Report Year</th>
<th>Resource Capacity (MW)</th>
<th>Insurance ($/kW-yr)</th>
<th>Ad Valorem ($/kW-yr)</th>
<th>Fixed O&amp;M ($/kW-yr)</th>
<th>GFFC ($/kW-yr)</th>
<th>SOC ($/kW-yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>550</td>
<td>$8.09</td>
<td>$11.74</td>
<td>$43.23</td>
<td>$63.06</td>
<td>$75.67</td>
</tr>
<tr>
<td>2018</td>
<td>700</td>
<td>$7.10</td>
<td>$10.03</td>
<td>$41.77</td>
<td>$58.90</td>
<td>$70.68</td>
</tr>
</tbody>
</table>

In May 2019, the CEC updated the estimated cost of new generation report.\(^6\) The new report includes changes to modelling inputs used to calculate the total costs for new generation including labor rates, inflator series, tax rates, and interconnection costs. It also includes analysis for a hypothetical new 700 MW advanced combined cycle resource with duct firing, instead of a 550 MW resource used in the prior report. The going forward fixed costs (GFFC) for the 700 MW resources are included in the second row of Table 2 above. The calculation for the soft offer cap using this resource is approximately $71/kW-year, or lower than the current soft offer cap by about $5/kW-year or a 7% decrease from the current value.

A number of factors compel the ISO to leave the current soft offer cap unchanged for this evaluation period. First, the difference in rates from the 2014 study to the 2018 study changed very little. Second, although a number of inputs changed that did impact

---

\(^5\) Estimated Cost of New Renewable and Fossil Generation in California, California Energy Commission, Table 56, May 2014: [https://ww2.energy.ca.gov/2014publications/CEC-200-2014-003/CEC-200-2014-003-SD.pdf](https://ww2.energy.ca.gov/2014publications/CEC-200-2014-003/CEC-200-2014-003-SD.pdf). Figures from this table were converted from energy to capacity values to arrive at inputs used to compute the initial soft offer cap.

the calculation of the soft offer cap, the single largest change was updating the size of the hypothetical resource from 550 MW to 700 MW. This change caused total costs to be spread over a larger resource, reducing the incremental cost of capacity. This minor and explainable difference indicates that the going forward fixed costs for a new combined cycle resource did not materially change over the past five years. Further, there have been very few new gas generators added to the system, and no 700 MW combined cycle resources.

**Stakeholder Comments**

Calpine notes that the costs for the formulation of the soft offer cap have not significantly changed and states that the CEC study does not suggest that an update is necessary. PG&E supports updating the soft offer cap based on the new CEC study.

### 5.2 Future Enhancements to the Soft Offer Cap

Several stakeholders – including Independent Energy Producers, Gridwell, CPUC, and Middle River Power – asked that the ISO re-evaluate what proxy resource is used to set the soft offer cap. These comments included suggestions to consider the marginal resource that is most likely to be built on the system and a representative resource that may receive a CPM designation.

The initial representative resource selected for use in setting the soft offer cap was the result of an internal settlement, where parties agreed that the 550 MW combined cycle resource, which had costs available in the CEC report, would be sufficient for use as the soft offer cap value.

The ISO makes CPM designations to backstop for RA deficiencies, ensuring there are sufficient resources to reliably operate the system. The process for designating capacity for a CPM, including the competitive solicitation process (CSP), is meant to be an efficient way to procure needed capacity. This market solicitation allows resource owners who have eligible capacity to bid into the competitive solicitation process and receive designations based on the least cost available capacity that meets the CAISO’s reliability need. When there is sufficient competition, the CSP construct results in an efficient outcome where the ISO meets reliability needs at the least cost. Under these conditions, it is reasonable to expect that resource owners bid capacity at prices that reflect their true costs. These costs may include:

- Going forward fixed costs
- Major maintenance
Market power mitigation is implicit in the current soft offer cap design. The cap prevents resources that do have market power from bidding arbitrarily high prices and extracting market rents above the cap through the CPM process. However, this cap does not prevent the exercise of all market power, and still allows opportunities for the exercise of market power for bids below the soft offer cap. The CPM soft offer cap should represent the cost components outlined above for a marginal resource that may receive a CPM designation. This mechanism also allows for the ISO to make a designation above the soft offer cap, with the requirement that those costs are justified at the time of the designation. The competitive solicitation process and resulting prices and compensation is administratively easy to oversee, as all resources are simply paid their bid price, whereas offers awarded above the soft offer cap need to be reviewed by the ISO which is administratively burdensome.

5.3 Changes to 12-month Designations

The competitive solicitation process allows resources to bid for potential CPM awards. When the ISO determines that a CPM designation is necessary, the designation is awarded to the resource with the least cost bid in the competitive solicitation process that addresses the reliability need. In theory when there is sufficient competition between resource owners the competitive solicitation process will generally drive bids to a competitive solution, where resource bids reflect going forward fixed costs, expected market revenues, and acceptable rates of return.

If there are few resources or limited providers, there may be few or no bids in the competitive solicitation process, which could result in designs being made at or near the soft offer cap, rather than at a competitive prices. Stakeholders have voiced concerns that CPM designations may be made to resources where there is little competition in the competitive solicitation process. Similar concerns were raised in the recent RMR-CPM enhancements initiative. This could result in CPM designations made at or near to the soft offer cap. Further, stakeholders voiced that the greatest concern was for resources that were awarded 12-month designations with limited competition and concerns were less for designations that were shorter in duration. This may be reasonable, as these fixed costs are accounted for and accumulated over a 12-month

---

7 http://www.caiso.com/informed/Pages/StakeholderProcesses/ReliabilityMust-Run_CapacityProcurementMechanismEnhancements.aspx
period, where destinations made for shorter time horizons likely continue to encounter all of these costs, but receive compensation for a window shorter than 1 year.

The ISO proposes a 3 pivotal supplier test for 12-month designations.

The ISO proposes that any 12-month CPM designation to procure for an annual RA deficiency be subject to a 3 pivotal supplier test. This test will examine the capacity available for CPM designation by all potential suppliers. If the residual amount of capacity, after removing the 3 largest potential suppliers, is greater than or equal to the amount of capacity for which the ISO is making a designation, then the competitive solicitation process will be deemed competitive. However, if that amount of residual capacity is not available, or there are not 3 suppliers available with capacity, then the competitive solicitation process will be deemed uncompetitive. If the competitive solicitation process is deemed competitive, then a CPM designation will made according to the existing rules currently in place for CPM. If, on the other hand, the competitive solicitation process is deemed uncompetitive, the ISO will make a designation through the alternate process described below.

Process for full cost of service CPM designation

The ISO will continue to make designations for shortfalls in RA procurement to meet the reliability needs of the grid. If the competitive solicitation process for an annual CPM designation is deemed uncompetitive, the ISO will select the necessary resource and make a full cost of service CPM designation offer to that resource. The full cost of service CPM designation will only be available to resources that are uncompetitive in the annual process.

The ISO will solicit estimations for full cost of service data for each of the potential eligible resources if there are multiple resources that could satisfy the reliability need. Values provided will serve as an upper bound on the compensation that the resource could receive from the full cost of service CPM designation, with the cost of service compensation being subject to approval by FERC as part of a filed rate schedule by the resource owner. Resources owners will have a 5 business day response window to provide a good-faith estimate of their resource’s costs to the ISO. In the event that a resource owner does not provide this cost information within the response window, the resource owner will not be eligible to receive a CPM designation from the ISO. Given

---

8 Resource owners will be designated at the ultimate parent company level, similar to how the 3-pivotal supplier test is carried out for local market power mitigation.

9 Designations may also be made for multiple resources, if those resources are needed for reliability. For simplicity in this document the ISO assumes that designations will be for a single resource.
the short timeframe provided for such a designation, the ISO may conduct outreach with resource owners prior to such designations to allow additional time for owners to develop cost data for later submission to the ISO.

After receiving estimated cost data for these resources, the ISO will extend a full cost of service CPM designation to a resource. The ISO will consider a number of factors when making this decision including the ability to meet the reliability need, cost, operating characteristics, and other considerations. The ISO will have sole discretion over which resource is selected for the CPM designation.

After the ISO extends a full cost of service CPM designation to a specific resource, the resource owner will have the opportunity to accept or reject the offer. If the offer is rejected and there is additional capacity that could meet the reliability need, the ISO will designate the next best resource to cure the deficiency. This process may continue as long as there are additional resources to meet the reliability need. Once there is no additional capacity that the ISO can procure to meet the reliability need, then no further designations will be made. This designation process is outlined in Figure 2 below.

![Decision chart for annual CPM designations](chart)

**Figure 2:**
Decision chart for annual CPM designations

**Compensation and credit allocation**
Resources that are awarded a full cost of service CPM designation will be paid full cost of service. This compensation is meant to mirror the compensation that is awarded to RMR resources. This compensation avoids the problem of ‘overpaying’ resources that the ISO needs to procure to reliably operate the grid. This compensation will follow Schedule F of the pro forma RMR agreement, including but not limited to the following items:

- Operations and Maintenance Expenses
- Depreciation Expenses
- Return and Income Tax Allowance
- All variable costs from operating in the market\(^{10}\)

The resource owner is expected to execute an RMR agreement with the ISO and file it at FERC as a rate schedule for cost of service rate recovery. The ISO expects to use the RMR agreement currently filed and under review at FERC for such CPM designations, provided FERC approves the filing. Following the CPM designation and consistent with the current process for negotiating RMR agreements, resource owners are expected to provide documentation and supporting information to the ISO in a timely manner that reasonably supports the cost of service recovery for the CPM designated resource. The ISO will cooperate and support the resource owner to file a contract at FERC effective no later than January 1 of the upcoming year.

This compensation paradigm allows the ISO to access the full capabilities of the resource receiving the award, and only pays the cost associated with that resource, and not additional costs. This paradigm is different than the current CPM process where compensation is set through the competitive solicitation process, and does not consider what a resource’s true costs may be. This compensation paradigm also does not allow a resource to collect an arbitrary quantity of revenue through the energy and ancillary service markets. Compensation for a full cost of service CPM would only allow a resource to recover actual variable costs that the resource is exposed to while operating.

Although the compensation structure is similar to the compensation for RMR resources, there are several differences between the two constructs. First, the full cost of service CPM is voluntary while RMR designations made by the ISO are mandatory. Second,

\(^{10}\) If capital additions are required resources will also follow the Schedule L process to include these annualized costs with the full cost of service CPM agreement.
there is no requirement that a resource with a full cost of service designation provide the ISO of a notice to retire, which is required for RMR resources.

The ISO will not make full cost of service CPM designations to partial resources. The full cost of service paradigm does not extend to partial resource designations because the fixed costs cannot be allocated to partial resources. To illustrate this, if a designation is made to a small portion of a resource, the resource would need to pay the fixed costs to maintain the entire resource in order to have the ability to offer the small portion of capacity into the market. Prevailing market prices, for the portion that was not awarded a designation may not be great enough to compensate the resource owner for these costs despite accruing them to meet the ISO obligation. Because the ISO is procuring the entire resource, the ISO will require that all capabilities of the resource will be available for use. Further, all attributes that the resource is able to provide will also be credited to the load serving entities that are allocated costs for the full cost of service CPM procurement. The ISO will only make designations for a full cost of service CPM if the ISO requires at least a substantial portion of the resource to reliably operate the grid. For example, the ISO would not extend a 150 MW cost of service CPM designation for a 10 MW need.

Costs for this resource will be allocated similar to how costs are allocated for CPM designations today. Today, if there is a designation for a need – including local, system or flexible – the ISO first allocates costs to individually deficient load serving entities, then on a load ratio share basis to all applicable load serving entities. Costs for cost of service CPM designations would be allocated in the same way. As noted credit, where possible, for the local, system and flexible resource attributes will be awarded in the same ratios to load serving entities.11

Example:

Suppose there are three load serving entities in a local area, and there is a reliability need identified after the RA procurement process. In this example LSE 1 shows all capacity to meet their assigned requirement, but LSE 2 and LSE 3 show less than their requirements by 20 MW and 30 MW respectively. In this case there is a local deficiency of 50 MW, as the aggregate requirement in the area is 300 MW and the total shown capacity is only 250 MW. Further, suppose that there is only one resource in the local

11 Because allocations may be made close to the start of the year, and showings are due 45 days prior to the start of the month, it may not be possible for credit to be awarded with enough time to be included in January or February monthly showings. In general the ISO will attempt to allocate credit for any full cost of service CPM as quickly as possible, once the designation is finalized.
area that is eligible for backstop procurement, and that resource has 75 MW of capacity. Currently, the ISO will review bids in the competitive solicitation process and make a 50 MW CPM designation to the available resource at their CSP bid. This proposal would instead trigger a full cost of service CPM designation for all 75 MW of capacity from the resource.\(^\text{12}\)

Cost allocation for the full cost of service CPM will follow the rules that are currently in place for local deficiencies. First load serving entities that are short will be allocated initial costs to resolve deficiencies. In this case 50 MW of the cost will be allocated to LSE 2 and LSE 3. These load serving entities will receive 40% and 60% of this portion of the allocation, respectively. The remainder of the allocation will be applied on a load ratio share basis to all of the load serving entities in the local area. In this case, requirements for all three areas are the same, so the costs for the residual 25 MW will be allocated evenly between LSE 1, LSE 2, and LSE 3. As illustrated in this example, costs for the allocation may go to LSEs that do not have deficient showings, unlike the current cost allocation for CPM designations.

### Figure 3: Backstop Allocation Example

<table>
<thead>
<tr>
<th>LSE</th>
<th>Req. (MW)</th>
<th>Shown (MW)</th>
<th>Shortage (MW)</th>
<th>Initial Allocation</th>
<th>Residual Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100</td>
<td>100</td>
<td></td>
<td>100/300 * 25 MW</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>100</td>
<td>80</td>
<td>20</td>
<td>20/50 * 50 MW</td>
<td>100/300 * 25 MW</td>
</tr>
<tr>
<td>3</td>
<td>100</td>
<td>70</td>
<td>30</td>
<td>30/50 * 50 MW</td>
<td>100/300 * 25 MW</td>
</tr>
<tr>
<td>TOTAL</td>
<td>300</td>
<td>250</td>
<td>50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**BACKSTOP:** 50 MW

### Bidding requirements

These resources will generally be required to bid 24x7 similar to RMR resources. Further, these resources will be required to bid in at variable costs, which will include all variable costs to operate, major maintenance adders and opportunity cost adders. If major maintenance adders are not already in place and are applicable to the resource,

\(^\text{12}\) Payments under these two paradigms are different and may be difficult to compare. The 50 MW CPM designation is for less capacity but may be at a price as high as the soft offer cap and total costs will also include market rents earned by the resource. The full cost of service CPM designation will be a payment for the full cost of service for the entire resource but will not include market rents.
the established process of applying and receiving approval for adders with the department of market monitoring can be followed. Additionally, if opportunity cost adders are applicable and not already in place, the resource owner will apply for such adders with the ISO through the established process. Once these adders are established the resource receiving the full cost of service CPM designation will be required to bid these into the market.

If the resource receiving the full cost of service CPM designation does not submit bids, for any reason, the ISO may generate and insert bids for that resource. Bid insertion rules will follow the same rules applicable for similar RA resources. For example, use limited resources currently do not have bids inserted, but resources that are not use limited would have bids automatically inserted. If these rules are changed in the future consideration should be given for the treatment of resources receiving full cost of service CPM designations.

Resources receiving full cost of service CPM designations will be subject to RAAIM, the mechanism that is used by the ISO to incentivize resources to be available in the market. Because the ISO is making a full cost of service payment to these resources, and essentially purchasing all of the attributes of the resource, they should also be subject to the same penalty as RA resources.

These bidding requirements are generally consistent with existing bidding requirements for RA resources, and are consistent with the proposed rules for RMR resources outlined in the RMR-CPM enhancements initiative.13

**Stakeholder Comments**

Many of the stakeholder comments filed for the issue paper include some concern over market power in the competitive solicitation process and some supported implanting a 3 pivotal supplier test or something comparable. CPUC noted that the two annual CPM designations made in 2018 were near the soft offer caps and that they went to units that they likely did not have competition the completive solicitation process. SDG&E noted that two different CPM designations may be made, that could have very different cost structures based if a 3-pivotal supplier test is adopted. SCE, PG&E and 6 Cities supported implementation of a test and Calpine did not oppose it. PG&E and 6 Cities called for further action and asked the ISO to consider implementing a similar tool for CPM designations that were shorter in duration. Calpine and SCE indicated that full cost of service was appropriate compensation, with SCE caveating that the all of the benefits

13 Ibid.
from the resource would need to be available to the system when these designations are made.

MRP argued that there is little incentive for a resource to turn down an RA contract in hopes of receiving a CPM designation from the ISO. Gridwell argued that introducing additional mitigation into the process could have adverse effects.

Calpine asked the ISO to consider the resource ownership versus resource control when conducting the 3 pivotal supplier test. NRG asked the ISO to consider differences between local and system CPM designations, if ownership concentration or scarcity was driving prices, and to review the purpose of the current ‘safe harbor’ soft offer cap. IEP indicated that resource scarcity and resource adequacy procurement practices were significant problems, and argued for a soft offer cap price reflective of that market scarcity.

ISO Response

The ISO agrees that many of the recent designations for CPM have been made at or near the soft offer cap, and that the local designations and potential future local designations may not pass the 3 pivotal supplier test and therefore may be deemed uncompetitive. The principle for the capacity procurement mechanism is not to incentivize new resources to enter the market, rather it is to make sure that the ISO has all of the resources needed to reliably operate the grid. Ideally, all resources needed to reliably operate the grid would be procured through the RA process, and the ISO would not need to do any backstop procurement. However, if backstop procurement is necessary then the principle for compensation should be to match costs incurred, including potential opportunity costs, for that resource providing these services to the ISO.

Currently the ISO is considering implementing a 3 pivotal supplier test for the annual CPM process, but not for of the more granular CPM designation timeframes. The ISO is currently considering only resource ownership, rather than resource control when considering the 3 pivotal supplier test.

5.4 Bids above the Soft Offer Cap

In the recent RMR-CPM enhancements initiative, the ISO considered changing the compensation for CPM designations made at prices above the soft offer cap. In that initiative the ISO considered the existing structure for all CPM compensation and stakeholder feedback on the issue. The draft final proposal of this document included an explicit proposal for compensation for CPM bids above the soft offer cap. The ISO is not currently planning to change from that proposal at this time. However, the tariff language changes associated with bids above the soft offer cap will be filed at FERC with
whatever changes ultimately are proposed from this initiative. This is in an effort to avoid submission of piecemeal improvements to the CPM tool to FERC for approval.

The ISO currently compensates CPM resources that have costs exceeding the CPM soft-offer cap price based at the full cost of service, similar to the compensation for RMR resources. The current FERC-approved formula uses Schedule F of Appendix G of the RMR tariff and allows the resource to keep all market rents earned. The Schedule F methodology does not allow major maintenance capital additions to be considered in the compensation. Several stakeholders believe that allowing such resources to keep all market rents earned in addition to this compensation is excessive.

In the RMR-CPM enhancements initiative the ISO proposed to change the pricing formula for a resource that submits a competitive solicitation process bid above the soft-offer cap price to an approach where the resource can file at FERC based on the going forward fixed cost of the resource using the same cost categories discussed above and the same 20% cost adder that used for the CPM reference resource in addition to retaining all market rents earned. In addition to this proposal, the ISO proposes to include a separate sheet when filing at FERC that will allow resources to only have compensation equal to going forward fixed costs – without the 20% cost adder – and retention of market rents. If the filing is rejected the commission will have the opportunity to adopt the alternate language before rejecting the entire filing.

6. Next Steps

In this straw proposal, the CAISO identified the scope of issues it will take on for CPM Soft Offer Cap. The CAISO will host a stakeholder meeting on August 8, 2019 to review the straw proposal and receive comments from stakeholders by August 20, 2019.