

Reliability Services Initiative – Phase 2:

Draft Final Proposal

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CAISO/M&IP/IP/KMeeusen

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1. Executive summary

Reliability Services Initiative – Phase 2 (RSI2) focuses on a variety of issues that pertain to Resource Adequacy (RA) issues and processes not directly connected to the definition of the flexible capacity product, but which are necessary to effectively administer the RA program. Specifically, the ISO will cover six issues in RSI2.¹ These issues, along with a brief summary of the ISO's proposals, include:

- 1) Clarify Local Regulatory Authority interaction and process alignment The California ISO (ISO) proposes to develop a default template detailing the information it needs regarding the Local Regulatory Authority's (LRA) RA program. If an LRA's programs or RA allocations differ from the default templates, an LRA may overwrite the default data with the details of its program. The ISO will then use this information to validate a Load serving Entities' (LSE) RA showing. If the LRA does not overwrite the default templates, the ISO will use the default information to validate LSE RA showings. This information includes, inter alia, the planning reserve margin and capacity credit structure, as well as the allocation of local and flexible RA requirements. For local the ISO uses an allocation based on LSEs that serve load in each Transmission Access Charge (TAC) area in accordance with the Load Serving Entity's proportionate share of the LSE's TAC area load at the time of the CAISO's annual coincident peak demand set forth in the annual peak demand forecast for the next RA compliance year. For flexible capacity, the default allocation will be based on an LSE's contribution to the flexible capacity requirements as identified through the annual Flexible Capacity Technical needs study. Additionally, the ISO will establish a deadline of 30 days prior to due date of annual RA showings to receive this data for year ahead showings and 55 days prior to the operating month for monthly RA showings.
- 2) <u>Substitution for flexible capacity resources on planned outage</u> The ISO proposes substitution timelines for flexible capacity resources on planned outages similar to those proposed in the Reliability Services Initiative Phase 1 (RSI1) stakeholder initiative for RA resources. Further, the ISO proposes that this substitute capacity confirm, as part of the substitution, the resource is capable of meeting the must-offer obligation for the duration of the resource outage. This is comparable to the requirement for flexible capacity on forced outages established in RSI1.
- 3) Separate local and system RA for purpose of forced outage substitution The ISO reviewed the local capacity requirements study methodology to determine if it is possible to allow capacity in a local capacity area procured for system capacity under an LRA's RA program to substitute that capacity with system RA capacity. The ISO proposes to allow capacity in a local area procured for system RA that goes on forced outage to be substituted with system capacity. The ISO will develop RA showings and supply plans

¹ In the second revised straw proposal, the ISO proposed applying RAAIM availability charges to resources that alter Masterfile parameters, impacting their qualification for a given flexible capacity category. As discussed in greater detail, below, the ISO will defer this element to the Commitment Cost Enhancements – Phase 3 initiative.

that specifically designate the capacity that is used to meet local capacity requirements. Any capacity included on local RA showings will also count towards meeting the LSE's system requirement.

- 4) Process to update EFC list during the year The ISO provides greater clarity about how a Scheduling Coordinator (SC) may update a resource's Effective Flexible Capacity (EFC) value after the ISO has published the final EFC listing for the upcoming year. The previous proposal included modifications to the "nature-of-work" outage cards when a use-limited RA resource is no longer available. For ease of stakeholder discussion and tracking of related initiatives, this topic has been migrated over to the Commitment Cost Enhancements – Phase 3 initiative process.²
- 5) <u>Address the RAAIM exemption currently in place for combined flexible</u> <u>capacity resources</u> – Currently, combination flexible capacity resources are exempt from RAAIM. The ISO proposes to eliminate this exemption. In order to apply RAAIM to combination flexible capacity resources, the ISO proposes to create a quasi-resource³ for the two resources in the combination. This quasi-resource is used only for purposes of calculating RAAIM charges or payments and has no other implications on the combination.
- 6) <u>Streamlining monthly RA showings</u> LSEs are required to submit annual RA showings by October 31 and monthly RA showings 45 days prior to the operating month. The ISO is proposing to automatically roll LSEs' RA showings from the annual showing into the monthly showings. If an LSE's showing changes or if the monthly RA requirements change, the SC can submit new information into the monthly RA showings before 45 days prior to the operating month. If no action is taken by the LSE by 45 days prior to the operating month. If no action is taken by the LSE by 45 days prior to the operating month. If no action is taken by the LSE by 45 days prior to the operating month, the ISO will use the annual showing to for all RA assessments. Although the ISO proposes to automatically roll annual RA showings into monthly showing, the ISO does not propose to automatically roll resource supply plans into the monthly showings. As is currently allowed, SCs for RA resources may still enter supply plans at the same time that they are submitted in the year ahead showing.

The ISO is currently planning for a fall 2017 release to implement all aspects of RSI2.

2. Changes to proposal and stakeholder comments

2.1 Changes to Proposal

² For more information on the Commitment Cost Enhancements Phase 3 initiative, please see the latest proposal located at

http://www.caiso.com/informed/Pages/StakeholderProcesses/CommitmentCostEnhancementsPhase3.aspx

³ In the second revised straw proposal, the ISO referred to this concept as a pseudo resource. However, to avoid potential confusion with pseudo-tied resources, the ISO will use the term quasi-resource to describe this concept.

The changes that the ISO has made to the proposal in response to stakeholder comments are summarized below. Additional discussion of these changes is provided in section 2.2, below.

- 1. The ISO is now proposing to take the RSI2 proposal to the June Board of Governors meeting.
- 2. Regarding <u>LRA interaction and process alignment</u>, the ISO proposes to develop default templates for specifying the general RA framework and local and flexible capacity allocations. The ISO will no longer require an LRA to provide information. Instead, under the revised proposal, an LRA may provide the ISO with information that will overwrite the default information if its RA program differs from the default information. LRAs can update both the RA framework information and the RA allocation information annually or monthly. The LRA is not required to take any action if it does not wish to alter the default values.
- 3. Regarding <u>separate local and system RA for purpose of forced outage substitution</u>, the ISO provides additional clarity on the treatment of local resources for planned outages. The ISO has modified its proposal to create local RA showing and supply plans, thus allowing MWs of capacity to be local or system instead of requiring whole resources to be either a local or system resource.
- 4. Regarding <u>RAAIM treatment of use-limited resources</u>, which was formerly a sub-subject within the proposal discussed in section 5.4 of the second revised straw proposal regarding Masterfile changes and RAAIM availability, the ISO has migrated this discussion to the Commitment Cost Enhancements Phase 3 stakeholder initiative.⁴ This decision was made in response to stakeholder comments regarding the difficulty to understand the ISO's proposal as a whole when related topics are discussed in separate initiatives.
- 5. Regarding <u>Masterfile changes and RAAIM availability</u>, in section 5.5 of the second revised straw proposal the ISO proposed to apply RAAIM to resources that change master file parameters that impact a resources ability to qualify for given flexible capacity category. Given the interactions with this policy and policies being developed in other stakeholder initiatives, the ISO will also defer this element to the Commitment Cost Enhancements Phase 3 stakeholder initiative. At this time, the ISO will address this issues through the treatment resource characteristics. Specifically, in Commitment Cost Enhancements Phase 3 the ISO will propose that once a resource has made and RA commitment, the ISO will reject Masterfile changes that are inconsistent with that commitment.

⁴ The Commitment Cost Enhancement – Phase 3 stakeholder initiative can be found at <u>http://www.caiso.com/informed/Pages/StakeholderProcesses/CommitmentCostEnhancementsPhase3.aspx</u>

 Regarding <u>streamlining the monthly RA showings</u>, the ISO provides additional information regarding the implications for penalties associated with missing or late information and clarifies why it does not propose to allow supply plans to also roll through.

2.2 Stakeholder Comments

In its August 19, 2015 straw proposal, the ISO requested stakeholder comments on each of the items identified above. While many stakeholder comments seek additional clarifications, others propose alternative options for the ISO to consider. The following summarizes stakeholder comments on each topic and the ISO's response.

Stakeholder comments on the second revised straw proposal were generally supportive of the ISO's proposed changes. However, some stakeholders seek additional detail about the ISO's proposal with respect to local regulatory process alignment and local RA and outage rules. Also, there were additional comments made on other topics. A matrix of stakeholder comments and the ISO's responses is included in Appendix A. The following provides an overview of these items and the ISO's responses.

- (1) <u>Clarify Local Regulatory Authority interaction and process alignment</u> CDWR requested additional information and opportunities to update the ISO proposed template. CPUC staff questions the need for any annual information and or any application of any of the ISO default rules on CPUC jurisdictional LSE. SDG&E suggests that the information requested by the ISO is insufficient to achieve the desired outcome. To address these comments the ISO will allow for updates to templates and allocation of RA obligations or both monthly and annual RA showings. Finally, the ISO has clarified that LRAs will not be required to provide data, but will be afforded opportunities to overwrite ISO default information. This is further discussed in Section 5.1.
- (2) <u>Substitution for flexible capacity resources on planned outage</u> Six Cities requested the ISO make minor conforming and clarifying edits to this section. The ISO has made revisions consistent with Six Cities' request. The revisions are contained in section 5.2.
- (3) Separate local and system RA for purpose of forced outage substitution Several parties, including CDWR, SCE, and Calpine, request additional details regarding outage substitution. As noted in the Executive Summary, the ISO has modified this aspect of the proposal to allow MW, not whole resources, to be designated as local RA capacity. The ISO has provided detailed examples of the substitute capacity obligations for local RA capacity. The ISO provides additional discussion of this revision as well as the examples in section 5.3.
- (4) <u>Process to update EFC list during the year</u> CLECA and the CPUC staff seek clarification on the application of the use-limited resources outage cards. The CPUC staff requests additional review of the connection between the ISO's proposal and other ongoing

stakeholder initiatives such as Commitment Cost Enhancements – Phase 3. In order to add clarity to the discussion, the ISO will address the application of the use-limited resources outage cards in the Commitment Cost Enhancements – Phase 3 stakeholder initiatives. The ISO will provide additional discussion of the connections at the upcoming January 26 stakeholder meeting. All of these comments are addressed in greater detail in section 0.

- (5) <u>Masterfile changes and RAAIM availability</u> Six Cities requests that the ISO allow resources that may be exposed to RAAIM charges due to Masterfile parameter changes be permitted to provide substitute capacity to avoid these charges. Given the interactions with this policy and policies being developed in other stakeholder initiatives, the ISO will also defer this element to the Commitment Cost Enhancements Phase 3 stakeholder initiative. At this time, the ISO will address this issues through the treatment resource characteristics. Specifically, the ISO will propose that once a resource has made and RA commitment, the ISO will reject Masterfile changes that are inconsistent with that commitment. Therefore, the ISO the ISO has deleted this section of the proposal.
- (6) <u>Address the RAAIM exemption currently in place for combined flexible</u> <u>capacity resources</u> – SCE requests additional examples of combination resource treatments. The ISO believes the example provided, along with the descriptions, provide sufficient detail for the treatment of combined flexible capacity resources. Six Cities suggests that existing tariff language may need to be modified to implement the ISO's proposal. The ISO will examine the need for such changes during the tariff development process. Additional discussion of the proposal is provided in section 5.5.
- (7) <u>Streamlining monthly RA showings</u> CDWR seeks additional clarifications about the implementation of the ISO's proposal. The ISO provides clarification to these questions in Appendix A. The ISO also discusses other reporting requirements and why no changes are required. This discussion is provided section 5.6.
- (8) <u>Other comments</u> Stakeholders offered comments on matters not already addressed above or comments to the issue paper. These comments include the following:
 - a. The CPUC staff requests the ISO clarify the linkages between aspects of the RSI2 initiative and other ongoing initiatives. To clarify the linkages, the ISO has migrated the discussion regarding the application of the use-limited resources outage cards to the Commitment Cost Enhancements Phase 3 initiative. Further, as described above, the ISO is deferring RAAIM treatment for use-limited resources and Masterfile changes to Commitment Cost Enhancements Phase 3 to eliminate the interdependencies between initiatives to the extent possible. The ISO will discuss these linkages at the upcoming stakeholder meeting as part of this initiative.

3. Plan for Stakeholder engagement

The ISO is targeting the March 2016 for ISO Board of Governors meeting for approval of this stakeholder initiative. The current schedule for RSI2 is shown below.

Date	Reliability Services Initiative – Phase 2
June 25, 2015	Issue paper posted
July 2, 2015	Stakeholder call on issue paper
July 10, 2015	Comments due on issue paper
August 19, 2015	Straw proposal posted
August 26, 2015	Stakeholder meeting on straw proposal
September 9, 2015	Comments due on straw proposal
October 7, 2015	Revised straw proposal posted
October 14, 2015	Stakeholder call on revised straw proposal
October 24, 2015	Comments due on revised straw proposal
November 13, 2015	Second revised straw proposal posted
November 20, 2015	Stakeholder call on second revised straw proposal
December 9, 2015	Comments due on second revised straw proposal
January 26, 2016	Draft final proposal posted
February 2, 2016	Stakeholder call on draft final proposal
February 16, 2016	Comments due on draft final proposal
TBD	Additional proposal iteration if needed
June 28-29, 2016	Board of Governors

4. Background

The western energy landscape continues to evolve, presenting new challenges and opportunities such as (1) integrating more distributed energy resources, renewable resources, and innovative new technologies, (2) expanding the ISO's Energy Imbalance Market, and (3) increasing regional coordination. Passage of Clean Energy and Pollution Reduction Act of 2015 SB 350 and a 50 percent Renewable Portfolio Target illustrates that more changes are forthcoming. The ISO is tasked with maintaining grid reliability as the energy landscape changes. Although this new landscape holds the promise of a cleaner energy future, it also brings with it the challenge of maintaining reliability while managing a greater number of resources, a more diverse resource portfolio, and more variable loads and resources. If sufficient system, local, and flexible capacity are available to the ISO's day-ahead and real-time markets through forward procurement, then the ISO will have the tools necessary to make a cleaner and more reliable energy future a reality.

The RA framework was originally designed to ensure that the ISO has access to sufficient capacity to maintain grid reliability under peak load conditions each month. After this initial ground work was put in place, the RA framework was enhanced to include a locational component. Although ensuring local resource adequacy was not envisioned at the onset of the RA program, it was a reasonable and necessary evolution of the program to maintain reliability. Similarly, with the increased penetration of variable energy resources throughout California, the ISO identified a need to enhance the RA program to include physical attributes for flexible capacity to ensure the ability to maintain grid reliability under rapidly changing conditions. The ISO and CPUC took the initial steps to address flexible capacity needs in 2013 -14 in the ISO's Flexible Resource Adequacy Criteria and Must Offer Obligation (FRACMOO) stakeholder initiative⁵ and the CPUC's RA proceeding.⁶ Including local and flexible capacity in the RA program demonstrates that the program must consider more than just peak load, and in particular, must recognize and adapt to changing grid conditions that require specific attributes of RA capacity. In RSI1, the ISO continued enhancing the RA framework by reviewing existing tariff provisions as they pertained to resource outages and availability. Based on this review, the ISO developed the RA Availability Incentive Mechanism (RAAIM),⁷ a new availability incentive to substitute the existing Standard Capacity Product (SCP). RAAIM is a bid-based means for determining a resource's availability to the ISO, as opposed to the forced outagebased SCP tool. As part of RSI1, the ISO also redesigned the rules for replacement and

⁵ <u>http://www.caiso.com/informed/Pages/StakeholderProcesses/FlexibleResourceAdequacyCriteria-MustOfferObligations.aspx</u>

⁶ http://www.cpuc.ca.gov/PUC/energy/Procurement/RA/ra history.htm

⁷ The ISO's tariff amendments based on the RSI1a filing at FERC were approved on October 1, 2015. FERC's ruling is available at <u>http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14002770</u>

substitution of resources that go on planned and forced outages, respectively.⁸ Although RSI1 made several improvements to the availability and outage substitution and replacement rules, there are additional opportunities for improvement.

The goal of the RSI2 initiative is to continue improving aspects of the ISO's availability, outage substitution and replacement rules, and clarifying the RA process. Specifically, the ISO looks to address the following six elements of the RA program:

- 1) Develop a standardized reporting of RA requirements that an LRA and LSE can provide to the ISO detailing their specific RA program,
- 2) Develop planned outage substitute capacity rules for flexible capacity resources,
- 3) Assess the adequacy of existing planned and forced outage substitution rules for local capacity resources,
- 4) Establish a change management process for resources that require updated Effective Flexible Capacity (EFC) quantities,
- 5) Design the rules needed to apply the RAAIM to combination flexible capacity resources, and
- 6) Options to streamline the RA process and increase transparency and notification.

The ISO proposed a two phase process to address potential enhancements to the RA framework. In RSI1, the ISO undertook the initial effort to address the ISO's rules and processes surrounding RA resources. The primary enhancements adopted in RSI1 included:

- Default qualifying capacity rules for non-generator resources (NGR), distributed energy resources, and proxy demand resources
- The new RA Availability Incentive Mechanism (RAAIM) to ensure RA capacity is available to the ISO consistent with the specific category of RA capacity the resource is providing⁹
- Streamlined rules for planned and forced outage substitute capacity for system and local capacity and forced outage substitute capacity for flexible capacity resources.

The ISO originally intended that the scope of RSI2 include (1) developing a more durable flexible capacity product that built on the framework established the FRACMOO stakeholder initiative and (2) addressing other unresolved issues from the FRACMOO stakeholder initiative. The ISO has subsequently reviewed the outstanding issues from both RSI1 and FRACMOO and divided them into two distinct categories. The first category of issues pertains to enhancements to the existing flexible capacity product. The ISO will consider these issues as part of the ISO's

⁸ The ISO will submit these tariff amendments to FERC as part of the RSI1b filing.

⁹ As noted in the RSI1 Draft Final Proposal, the new RAAIM mechanism was designed to replace the existing Standard Capacity Product.

FRACMOO2 stakeholder initiative.¹⁰ The second category of issues pertains to RA issues and processes not directly connected to the definition of the flexible capacity product, but which are necessary to effectively administer the RA program. RSI2 will focus on these processes. Table 1 provides a list of specific topics that will be addressed in each stakeholder process.

Issues directly connected to the flexible capacity product definition and covered in FRACMOO2	Processes improvements necessary for administering the RA program and covered in RSI2
Review the flexible product definition and develop any additional flexible capacity needs	Clarify Local Regulatory Authority interaction and process alignment
Provision of flexible capacity by intertie resources, including EFC calculation	Substitution for flexible capacity resources on planned outage
Flexible capacity from storage resources not using the NGR model	Separate local and system RA for purpose of forced outage substitution
Flexible capacity impacts of uncontracted/merchant VERs, for which no LSE has associated flexible capacity requirements	Process to update EFC list during the year
	Address the RAAIM exemption currently in place for combined flexible capacity resources
	Options to streamline the RA process and increase transparency and notification

Table 1: Issues identified in FRACMOO or RSI1

5. Draft Final Proposal

5.1 LRA and LSE interactions and process alignment

¹⁰ Information on the FRACMOO2 stakeholder initiative can be found at <u>http://www.caiso.com/informed/Pages/StakeholderProcesses/FlexibleResourceAdequacyCriteria-MustOfferObligations.aspx</u>

The ISO has identified certain RA tariff provisions that, if further clarified, will provide additional benefits to both LRAs and LSEs. This section will first define the standard components that the ISO needs to identify to determine whether an LSE is in compliance with the ISO's RA tariff provisions, to determine overall net deficiencies, and determine proper cost allocation for any backstop procurement. Second, the ISO proposes a timeline that specifies the dates by which the ISO needs information from LRAs to overwrite the application of the ISO default tariff provisions in its determinations.

The ISO defines the timelines and processes it proposes to use to review RA showings and RA plans. The goal of the ISO proposal is not to constrain any LRA from developing or implementing an RA program or bind an LRA.¹¹ To the contrary, the goal is to provide alignment between LRA programs and the RA showings provided to the ISO. This alignment will provide LRAs and market participants clear guidance on RA requirements and a date certain by which ISO default RA tariff provisions apply unless overwritten by LRA program details. It also provides clear documentation for necessary inputs to the ISO RA compliance evaluations. Currently, year ahead RA showings are due on October 31. Clearly defining and documenting these timelines and processes allows market participants to better understand their obligations under the ISO tariff and mitigate potential deficiencies.

ISO proposal for process alignment with LRAs

LRAs may have official RA program materials¹² that outline the various facets of their RA programs. Many of these program materials are stable year-to-year. The ISO Tariff gives due weight to the LRAs' in evaluating whether jurisdictional load serving entities meet Resource Adequacy compliance obligations. The ISO tariff requires the ISO to perform a compliance evaluation of LSE RA demonstrations.¹³ It also requires the ISO to use the LRA methodologies in determining overall net deficiencies in meeting the total monthly Demand and Reserve Margin requirements and in determining proper cost allocation for any backstop procurement.¹⁴ For the ISO to effectively and efficiently (1) evaluate the LSEs' compliance with the ISO Tariff by evaluating LSE demonstrations compared to applicable local regulatory authority RA requirements,¹⁵ and (2) ensure proper cost allocation for any backstop procurement, it must receive a LRA's RA program information in a standard format. The ISO proposes to provide LRAs a standardized templates that will specify the information needed regarding an LRA's RA

¹¹ This is a concern raised in the CPUC staff comments.

¹² Official Resource Adequacy program material must be an official document that details the LRA's RA program. ¹³ ISO Tariff Section 40.7, "Compliance"

¹⁴ ISO Tariff Section 43.2.3, "SC Failure to Show Sufficient Resource Adequacy Resources"

¹⁵ This evaluation is not a final determination of LSE compliance with their LRA; LRA compliance can only be determined by the LRA itself. This evaluation is a determination that the LSE is compliant with the ISO Tariff, that the LSE has shown sufficient RA capacity relative to the RA requirements provided to the ISO by the LRA

program. This template will not change the provisions of an LRA's RA program, it will serve only to standardize the manner in which the information is provided to the ISO.

The ISO's evaluations of RA showings must be aligned with an LRA's methodology. However, without clear documentation about the LRA methodology this may not be possible, resulting in potential discrepancies between the ISO's and LRA's assessment of RA showings. Absent the information from the ISO's proposed template, the ISO will need to use its default information in fulfilling its obligations to perform an ISO tariff compliance evaluation, determine overall net deficiencies in meeting the total monthly Demand and Reserve Margin requirements, and in determining proper cost allocation for any backstop procurement.

The ISO's goal is to ensure that LRAs are easily able to overwrite the ISO default templates and provide the specific data regarding their individual RA programs while minimizing the administrative burden of doing so. Therefore, the ISO has broken the data requested into two separate submissions: an initial RA framework submission and an RA requirements submission that details the local and flexible RA obligations.¹⁶ The LRA can submit or update these templates annually and monthly.

Components and timing of the RA framework template

The RA framework template specifies the information the ISO needs regarding the requirements of the LRA RA program to confirm the LSE's compliance with applicable LRA RA requirements. The LRA would provide the following information in the template for both their annual and monthly RA showing:

- 1) Annual/monthly planning reserve margin,
- 2) Annual/monthly evaluation of the requirements the LSE must show (percentage),
- 3) Annual/monthly individual peak demand & reserve margin requirement for each LSE,
- 4) Annual/monthly individual local capacity requirement for each LSE,
- 5) Annual/monthly individual local requirements if the LRA has a different local requirement allocation,
- 6) Annual/monthly individual flexible evaluation, and
- 7) Annual/monthly individual flexible requirements if an LSE has a different flexible requirement than the ISO.

The following components are for LRA RA programs that allow the use of credits to meet peak demand & reserve margin requirements in both an annual and monthly as well as a system and local evaluation.

¹⁶ System RA showings are calculated using the load forecast provided by the CEC and the PRM and RA credit programs included in the RA framework submission and need not be submitted separately.

- 1) Annual/monthly system/local demand response eligible,
- 2) Annual/monthly system/local demand response adjustment,
- 3) Annual/monthly system/local reliability must run eligible,
- 4) Annual/monthly system/local cost allocation mechanism eligible,
- 5) Annual/monthly system/local liquidated damages eligible, and
- 6) Annual/monthly system/local other credit eligible.

The ISO will request these components through a standardized spreadsheet template to efficiently evaluate LSEs' RA showings in accordance with LRA programs. Please refer to Appendix B which shows a screenshot of a sample of a draft submission and a description of the components of the template.¹⁷ The screenshot in Appendix B constitutes the entirety of the data the ISO would currently need from the LRA.

Stakeholders stated that requiring the full configuration every year might be burdensome, especially if their program has not changed from the previous year. The ISO agrees. Therefore, once an LRA submits a RA framework template to the ISO, the ISO will overwrite the default template and values, attached in Appendix C, with the data received from the LRA and will utilize that framework until the LRA submits an update. There is no need for the LRA to resubmit this data annually. Until the ISO receives a template from an LRA, the ISO would apply the default template.

This template will be included in the ISO's BPM. The ISO has, in the past, began developing procedural changes that would be implemented in the BPM as part of the ISO stakeholder initiative process. This has two benefits. First, the stakeholder process provides clear guidance regarding the changes that will be implemented through the BPM change management process. Second, it provides the ISO and stakeholders an opportunity to start developing BPM language and/or processes and develop them over an extended period of time so the material can be ready at the start of the BPM change process. To facilitate the discussion now, the ISO has included a proposed template in the appendix of this proposal to engage stakeholders now and develop it with stakeholders in this proposal and further develop it in the next proposal, i.e., the draft final proposal, so much work can be accomplished before the start of the BPM change process. The ISO will continue working with LRAs, as has been done in the past, to continue to develop the specific form and/or documentation for this information exchange.

To implement the standard LRA configuration in a timely fashion, the ISO must receive the configuration information for the upcoming RA compliance year at least 30 days prior to the date of the annual RA filings as defined in the ISO's BPMs and t-55 days prior to the operating month. The ISO will work with the LRA to evaluate the configuration data, gather the proper

¹⁷ The ISO has posted the actual spreadsheet, along with the default values shown in Appendix C, at <u>http://www.caiso.com/Documents/LocalRegulatoryAuthorityConfigurationTemplate.xls</u>.

LRA documentation to align configurations, and implement any system updates if needed. The ISO intends to formalize in the tariff only that a schedule for updates exists, but include the actual deadline an implementation detail in its Business Practice Manuals.

Components and timing of the RA requirements data submission

Although the RA framework template only needs to be updated when an LRA implements changes to the overarching RA program, RA requirements, particularly local and flexible requirements may change monthly and may be based on LRA allocation methodologies that differ from ISO default allocation methodologies. For example, the CPUC currently allocates flexible capacity requirements based on a peak load ratio share. Therefore, the ISO must receive the following information each year:

- (1) Annual Individual Local Requirements,
- (2) Annual Individual Flexible Requirements,
- (3) Monthly Individual Local Requirements, and
- (4) Monthly Individual Flexible Requirements

The ISO proposes to apply a similar methodology for submitting these elements as it proposes for the submission of general RA framework specifications. Specifically, LRAs may provide the ISO with this information, overwriting the default ISO methodologies. Once the LRA has submitted its allocation of the RA obligations, the ISO will use those allocations for all validations. If, for any reason, the LRA changes the allocation of these RA obligations, it may submit updated information to the ISO. However, to ensure any resubmissions are properly loaded into the ISO systems, the ISO must receive such resubmissions before October 1 for year ahead RA requirements and prior to t-55 days of the operating month for monthly RA requirements.

5.2 Planned outage substitution rules for Flexible Capacity resources

Background

In RSI1, the ISO reexamined many of the core principles underlying the replacement and substitution rules for resource adequacy resources. The ISO redesigned the framework outlining the roles and responsibilities for Scheduling Coordinators representing both LSEs and resources in terms of planned outages of system RA capacity and enhanced forced outage substitution rules. The provisions developed in RSI1 significantly improved the planned and forced outage substitute capacity rules for system capacity and created rules for forced outage substitution for a flexible capacity resource. As a result of RSI1, flexible capacity on a forced outage is required to provide the ISO with capacity that is capable of meeting the must-offer obligation of the same flexible capacity category, or better, of substitute flexible capacity or be

subject to the RAAIM. As part of the current stakeholder initiative, the ISO intends to expand outage rules to cover flexible capacity resources that go on a planned outage.

ISO proposal

Substitution rules for flexible capacity resources on a planned outage

In the event of a planned outage for flexible RA capacity, the ISO will allow the scheduling coordinator for the capacity to provide planned outage substitute capacity. Any substitute capacity must comply with the flexible RA category must-offer requirements of the resource on outage. Six Cities provided comments stating that the "Same Category or Better" for flexible RA planned outages was inconsistent with the proposal it filed with FERC. Specifically, Six Cities asserts that ISO Tariff section 40.10.6 supports that Flexible RA capacity should only require that a substitute resource be capable of meeting the must-offer obligation. Upon further review of the tariff language referenced by Six Cities, the ISO finds the language in section 40.6 to be ambiguous as currently written. The ISO intent, is to ensure any substitute capacity is able to provide a comparable quality of flexible capacity to the resource going on planned outage. In the revised straw proposal, the ISO proposed a "category-or-better" requirement for any substitute capacity. Although this proposal had the benefit of eliminating the need to validate that the substitute capacity is providing a comparable level of flexible capacity, it may be overly limiting in determining what resources may be provided for flexible capacity. For example, based on feedback provided by the Market Surveillance Committee and Six Cities, requiring that a resource be qualified to provide 60 starts as required for a base flexible capacity resource would be excessive if the resource is substituted near the end of a month. Although the ISO agrees such a requirement may be overly limiting, there is still a need to ensure that the quality of the flexible capacity is maintained. For example, an SC could show a resource qualified for a given category on the first day of the month, only to substitute it with a lower quality flexible capacity resource on the second day.

The ISO notes that Section 40.10.6 defines the must-offer obligations of the flexible capacity resources shown in specific flexible capacity categories. As such, any resource providing substitute flexible capacity must provide confirmation that the substitute capacity has sufficient starts and run hours to meet the flexible capacity obligations of the resource going on planned outage. This demonstration must be made at the time the request for planned outage is made. The specific timing of this process is further clarified below. If this demonstration is not made, the ISO will reject the substitution and deny the planned outage request. Further, with respect to the rules developed in RSI1, the ISO proposes to apply a similar confirmation for flexible capacity has sufficient starts to perform comparably to the flexible capacity it is replacing given the timing and duration of the must offer obligation, and will be assessed under RAAIM for that flexible capacity category. For example, if a category one flexible capacity resource takes a one week

outage, the substitute resource would have to confirm that (1) it can start or ramp twice a day for every day of the outage (i.e. has 14 starts remaining in the month if two starts per day are required of the resource or seven if one start per day is required), (2) it will be required to economically bid all flexible capacity of the resource into the day-ahead and real-time markets from 5:00 a.m. through 10:00 p.m., and (3) the ISO will evaluate all flexible capacity from the resource according to the availability rules for the category one flexible capacity must offer obligation.

If the resource providing the substitute capacity (i.e. the new resource) also has capacity shown at a higher category than the original capacity on outage, then substitute capacity must comply with the higher category must-offer requirements for the entire resource's committed RA capacity. For example, a category 1 resource may substitute for a category 2 resource, but if the substitute resource also has a separate obligation to provide category 1 flexible capacity for a portion of its capacity because it was shown on an RA plan on that day as category 1, then it must take on the higher must-offer obligations for all of the RA capacity shown on the resource. In its decision on RSI1a, FERC affirmed this approach as just and reasonable because it reduces implementation complexity and recognizes that flexible categories were created to allow different resources to participate as flexible resources, not to reduce the obligation of resources fully capable of meeting the higher must-offer obligation.

As a point of clarification, the ISO proposes that a resource that has been shown for multiple flexible capacity categories be required to provide substitute capacity capable of meeting the must offer obligations associated with the highest flexible capacity category shown for the resource. The rationale for this is comparable to the rationale FERC agreed with in its decision on the ISO tariff amendment for the RSI1a. Specifically, the ISO stated:

[I]ntroducing multiple categories for a single resource for purposes of determining whether the resource has met the must offer obligation for each category in each hour would add enormous complexity for the CAISO to implement, track, and settle multiple categories, and would decrease transparency.¹⁸

In response, FERC stated that it "believe[s] the complexity of [the] alternatives would undermine the benefits of CAISO's proposal."¹⁹ Similar complexity is created if the ISO is forced

¹⁸ ISO RSI1a transmittal letter at p. 41. Available at

http://www.caiso.com/Documents/May29_2015_TariffAmendment_Implement_Phase1A_ReliabilityServicesInitiat ive ER15-1825.pdf

¹⁹ FERC Order Conditionally Accepting Tariff Revisions. ER15-1825-000 at paragraph 62. Available at <u>http://www.caiso.com/Documents/Oct1_2015_OrderConditionallyAcceptingTariffRevisions_ReliabilityServicesInitiative_ER15-1825.pdf</u>

to track outages and determine substitution obligations for resources shown in multiple flexible capacity resources.

It is possible that a resource may provide two categories of substitute flexible capacity at different but overlapping times during a month. For example, as shown in Figure 1 a resource may be used to substitute for flexible capacity for category 1 days 5-10 and then for category 2 for days 7-12.



Figure 1: Example of Resource substituting for multiple categories of flexible capacity

Based on the RAAIM rules established in RSI1, it is clear that the ISO will assess availability for all capacity using category 1 assessment hours for days 5 through 10. However, once a resource has been designated at a particular category, all flexible capacity shown on that resource will be designated at the highest flexible capacity category. It is the responsibility of the SC for the resource to notify the ISO that it should be converted to category two flexible capacity for days 11 and 12. Otherwise, the ISO will continue assessing the resource as a category one flexible capacity resource.

The ISO will allow a scheduling coordinator to provide flexible substitute capacity beyond the amount on outage and will not limit the amount provided to an assumed needed quantity. In the event of an outage, it is up to the scheduling coordinator to tell the ISO how much RA capacity it wants assigned to the substitute resource. The ISO will hold the substitute resource accountable for up to the provided substitute capacity value and hold the initial resource on outage accountable for the difference between the quantity shown on the resource's supply plan as RA capacity and the quantity told to the ISO that the substitute resource will provide.

For example, assume resource A was shown for 100 MW of flexible RA, has an EFC of 150 MW, and goes on outage for 50 MW. Although it may seem like the resource can still meet its flexible RA requirement, there may be other constraints on the resource that the ISO is not aware of and cannot account for in the tracking process. Therefore, the ISO will allow the scheduling coordinator to indicate a substitute value. For example, resource A can indicate resource B has a substitute capacity quantity of 20 MW. The ISO would then assess resource A under the flexible availability incentive mechanism for 80 MW (100 MW – 20 MW) and assess resource B under the flexible availability incentive mechanism for 20 MW.

Timeline for flexible capacity resources on a planned outage

The ISO proposes to apply the same timeline for flexible capacity resources on planned outages as it proposed in RSI1 for resources on planned outages. Specifically, the ISO will utilize the same timeline as in Appendix D of the RSI1 proposal, which will be in effect in 2017 that will change both the timeline and responsibilities for entities. This timeline is included in Appendix D of this document. The new planned outage substitution process, which will be filed at FERC as part of the ISO's RSI1b filing, is as follows:²⁰

Beginning at the green flag at T- 45, the ISO will validate LSE and supply RA plans for discrepancies (differences between LSE and supply plan) and for shortages (difference between LSE's monthly requirement and amount on RA plan). The ISO will ask for specific local, system, and flexible showings. These results will be made available to the LRA, LSE, and supplier. The ISO will then allow a cure period for LSEs to cure any shortages until T-25. At this point, according to tariff section 43, the ISO has the authority to backstop for deficiencies using the CPM. The only change would be the addition of the ISO asking for LSEs to specifically indicate the RA type (flexible, system, local) and the timeline the RA process occurs. The ISO proposes no other changes to the traditional monthly RA process.²¹ Currently this process begins at T-45 and is finalized at T-7. The ISO proposes that the monthly RA process now run from T-45 to T-25. The new timeline is described fully in Appendix D (*appendix omitted*).

The revised monthly RA timeline allows the ISO to fully separate the monthly RA process from the planned outage analysis process. Therefore, the second purpose of the ISO's monthly planning process - to ensure planned outages do not affect real-time reliability will be conducted entirely after the monthly RA plan process is completed at T-25. The ISO will then run the outage impact assessment [for flexible RA] and allocate any responsibility

²⁰ Reliability Services Initiative – Phase 1 at <u>http://www.caiso.com/Documents/DraftFinalProposal-ReliabilityServices.pdf</u>

²¹ The impact on the CPUC RA program is that the ISO's timeline for being able to provide supplier data and LSE shortages has moved 15 days earlier than the current timeline and the amount of time between notifying the CPUC of a shortage and doing the CPM assessment has decreased from 14 to 10 days.

to provide planned outage substitute capacity on the supplier in last in, first out ("LIFO") order. Suppliers will then provide additional capacity or risk having their planned outage cancelled or denied, and risk availability incentive mechanism penalties if the outage is denied and the resource still goes on outage. If the ISO required additional capacity for the planned outage and the supplier did not provide the additional capacity, the outage capacity will be subject to the availability incentive mechanism. The availability incentive mechanism penalty is proposed to initially be \$3.79/kW-month.

If after the supplier provides planned outage substitute capacity, the planned outage moves for any reason, [²²] the ISO will allow the supplier to release any provided planned outage substitute capacity up to the substitute capacity amount.

5.3 Planned and forced outage substitute capacity for RA resources capacity in local capacity areas

Local RA resources that go on *forced* outages must provide comparable capacity or be subject to availability incentive charges. In other words, RA resources in local capacity areas that go on a forced outage must provide substitute capacity that is also in a local capacity area or be subject to availability charges. Some stakeholders have asserted that the ISO should only require that substitute capacity come from another local capacity resource if the resource is required for local reliability issue or has been explicitly procured to provide local RA capacity. These stakeholders argue that if the capacity on outage is not needed to meet an LSE's local requirement or was not procured to provide local RA capacity, the ISO should only require substitute capacity from system resources to avoid availability charges. As part of the RSI1 initiative, the ISO committed to reviewing this policy. The remainder of this section discusses each of these issues in greater detail.

The ISO may require substitute capacity for local resources that go on *planned* outages or deny the outage. As part of this stakeholder process, the ISO will assess whether it is possible to allow for local substitute capacity as a means to allow the resource to take a planned outage.

Designating local versus system capacity and substitute capacity obligations

The ISO's current policy for RA resources located in a local capacity area that go on a forced outage is to require like-for-like substitute capacity (i.e. provide substitute capacity from another resource in a local capacity area) or be subject to RAAIM charges. The specific question before the ISO is: If an RA resource in a local area that was procured by an LSE for system capacity goes on a forced outage, could it provide substitute capacity from a system resource to avoid RAAIM charges? If such a change is warranted, the ISO must consider how potential new policies could be applied and what would be the implications of these new policies on local

²² This includes canceling the outage or changing the duration of the outage

reliability. The remainder of this section outlines the ISO's review of the LCR study process, potential new policy options, and the implications of each option. The ISO will not propose changes to the existing like-for-like substitution policy for RA resources in a local capacity area that go on a forced outage unless the alternative policy represents a pareto improvement.²³

In the straw proposal, the ISO discussed in greater detail the history and the process of the Local Capacity Area Technical study as well as the four options that had been considered to modify the existing local-for-local substitute capacity (i.e. provide substitute capacity from another resource in a local capacity area).²⁴ Based on that assessment, the ISO determined that adding an additional flag to monthly and annual RA submissions to track system and local procurement, allowing for like-for-like substitute capacity for forced outages is superior to the current policy and will improve the ISO substitution policy for local resources on forced outage. Stakeholders appear to agree with this assessment.²⁵ In the revised straw proposal, the ISO proposed to limit local designations to whole resources. However, Calpine and NRG raise additional questions regarding the potential benefits of partial resource designations (*i.e.*, part of a resource could be designated for local and another part could designated as system). The ISO initially posited that this functionality could be considered in a future enhancement. However, after further consideration, the ISO believes it is both beneficial and feasible to allow specified MWs of capacity, instead of whole resources, to be local RA. As such, the ISO will now focus on further developing this functionality in greater detail, below.

The ISO's initial proposal to focus on whole resources as either local or system was designed to better align replacement obligations with the type of capacity for which the resource was procured. Further, the proposal sought to minimize implementation complexity. However, after additional consideration, the ISO believes that focusing on whole unit local designations could create incentives that would inhibit a resource's ability to procure substitute local capacity. By definition, there are only a limited number of resources in a local area that can provide substitute capacity when another resource goes on outage. If one of those resources is procured as a system resource, it may be unwilling to provide local capacity substitution if it would then be required to convert the entire resource into a local resource. Doing so increases the potential replacement obligation for the new resource. This is particularly true if the quantity to be substituted is small relative to the amount of system capacity the resource has

²³ A pareto improvement is a change that benefit some parties while leaving no other party worse off because of the change.

²⁴ See Section 5.3 of the straw proposal in this initiative for greater detail. Available at http://www.caiso.com/Documents/RevisedStrawProposal-ReliabilityServicesPhase2.pdf

²⁵ PG&E was the only stakeholder that commented on the ISO's revised straw proposal that felt no change was required

sold. Therefore, to facilitate more efficient substitution practices, the ISO proposes to allow MWs of capacity, not whole resources, to be local capacity.

As noted above, the ISO does not currently track whether capacity has been procured to meet system or local capacity requirements. The ISO proposes to create RA showings and supply plans for both the annual and month-ahead RA showings that indicate all the MWs of capacity that are providing local RA capacity. The ISO will use this new local RA showing to determine whether an LSE is sufficient on its local RA showings. Supply plans will also include a showing that identifies the specific MW quantity of local RA capacity the resource is providing. The ISO will validate local RA showings to verify that the SCs for resources and LSEs have accounted for capacity comparably on both showings. If there is a discrepancy between the RA showing and supply plan, the ISO will notify both parties. If the discrepancy remains unresolved the ISO will maintain its current practice of defaulting to the supply plan, but notifying both parties of the discrepancy.

All MWs of capacity on local showings and supply plans will automatically count towards the LSEs system RA requirement. Therefore, there is no need to include a MW of capacity designated as local RA on the system RA showing or supply plan. Further, the sum of both the system RA plus the local RA may not exceed the NQC for a resource.

This proposal should also minimize the challenges and complexity associated with planned and forced outage substitution rules. The ISO is not proposing changes to the planned or forced outage substitution timing.²⁶ However, given the above proposal, substitution rules about how local RA resources can provide substitute capacity must be clarified. Resources identified on both a system and local RA showing that are derated have a substitution obligation first for any system capacity unless the derate impacts the resource's ability to meet its local capacity obligation. Only to the extent the derate impacts the resource's ability to meet its local capacity obligation will the SC have to replace local capacity to avoid RAAIM nonavailability charges. For example, if a 100 MW resource sells 60 MW local RA and 40 MW of system RA is derated from 100 MW to 80 MW, then the resource would be required to provide 20 MW of system RA to avoid RAAIM charges. However, if the same resource is derated 50 MW, then it would have to provide 10 MW of local substitute capacity and 40 MW of system capacity to avoid RAAIM charges.²⁷

If the substitute capacity is not on an RA showing for system or local RA, then the local capacity going on outage would submit a substitution designating the capacity of another qualified resource as substitute capacity. If the substituting resource also has system capacity,

²⁶ As noted on p. 24 of the second revised straw proposal, the ISO is not proposing any changes to the planned outage process <u>http://www.caiso.com/Documents/SecondRevisedStrawProposal-ReliabilityServicesPhase2.pdf</u>

²⁷ Any CPM designated capacity will have a replacement obligation comparable to the deficiency that lead to the CPM designation.

and the substitution is incremental to that capacity, then the substituting capacity need not make any changes to its system capacity. The additional local capacity will be added to the system capacity. For example, if a 100 MW resource located in a local area has sold 60 MW of system capacity and offers to provide an additional 25 MW of local capacity due to a forced outage of a local resource, then the resource would be subject to the must-offer obligations for 85 MW (60 MW plus 25 MW). Because this substitution is incremental, it fulfills both the system and local obligation of the capacity on outage.

The instant proposal provides significant benefits while minimizing potential for any unintended consequences that might be caused by splitting the local attribute from the associated capacity (*i.e.*, having showings for system and local RA where capacity may only be counted for local, but not system).

The ISO will only use the designated local capacity, not the total capacity of the resource, to determine if an LSE has shown sufficient local capacity to meet its local capacity requirements. This ensures LSE's cannot procure small amounts of local RA from a resource, expecting to lean on the remainder of the resource's, which may have been procured as system capacity or not at all, as counting towards the LSE's local capacity requirement. If an LSE has not designated sufficient local capacity to meet its requirement, the ISO will notify the LSE of this deficiency and provide the LSE with an opportunity to designate additional local capacity. If an LSE designates sufficient local capacity to meet is individual local RA requirement, it not be allocated CPM costs caused by an individual local deficiency. While the ISO will assess the adequacy of individual LSEs using only designated resources, the collective deficiencies in a local area would still be determined using all RA resource that impact the given local area, as is done today. This is necessary due to the need to accurately model the topology of the local area and capture all resources impact (positive or negative) on the local area.²⁸

As noted above, the ISO's standard for deciding whether to pursue a change to the existing local-for-local substitution rule for RA resources in a local capacity area that go on forced outage is that the compliance with the ISO's local reliability standards should not be degraded by changing the rules. After considering four options, the ISO believes that requiring specific local RA capacity showings is the best solution and is a pareto improvement relative to the status quo. Specifically, this option provides a mechanism by which LSEs can show the ISO the capacity it is relying on to meet its local capacity obligation. Further, for capacity procured to specifically provide system or local capacity, it more closely aligns the substitute capacity cost risk with the type of capacity for which it has been procured. Finally, the obligations for substitute capacity are clearly defined, allowing LSEs to show all local capacity they have

²⁸ The ISO is not proposing any modifications to the backstop competitive solicitation process.

procured. Therefore, the ISO proposes to create a local capacity RA showing and supply plan and require like-for-like substitute capacity for forced outages based on this designation.

Local capacity resources on planned outages

In the second revised straw proposal, the ISO noted that it will not propose any changes to the planned outage substitute capacity for local areas. However, Calpine and CPUC requested additional details about the planned outage process and why no change is needed.

All planned outages undergo both reliability and RA assessments. The ISO undertakes the reliability assessment for **all** resources requesting planned outages regardless of the resource's RA status. The reliability test accounts for all previously planned outages for both generation and transmission. If the resource outage passes the reliability test, then the ISO will conditionally approve the outage via a change in status. If the planned outage request is on an RA unit and creates a local area reliability concern substitute capacity will be requested and the outage will be conditionally approved as passing the reliability test only when comparable substitute RA capacity is offered. Once the ISO conditionally approves an outage, the ISO will then look to see whether there is sufficient system RA capacity remaining after the outage or whether additional substitute capacity is needed to fulfill system requirements. If the ISO needs the resource for local reliability, the ISO will deny the planned outage and request the SC of the resource to reschedule the outage. Allowing a resource to take a planned outage even though it has failed the ISO's reliability test, regardless of the type of capacity it has been procured for, risks degrading system reliability.²⁹

5.4 Process for updating resources' EFC and/or operational parameters

In the FRACMOO stakeholder initiative, the ISO established the methodology for calculating a resource's EFC. Specifically, the ISO will calculate a resource's EFC annually using a resource's NQC and other operational attributes of the resource. Now that flexible capacity requirements are in place, the ISO has identified a need to improve the EFC calculation and change management process. Specifically, the ISO will clarify the process by which a resource may change its EFC through the course of the year.

Updating EFC values

There are several reasons a resource may request an EFC update during the year. Examples include a resource switching from non-dispatchable to dispatchable, a new resource comes online, a resource's NQC increases. Several SCs have already contacted the ISO for EFC changes mid-year. The ISO will update a resource's EFC only upon request from the SC for the resource.

²⁹ Forcing a resource on outage after it was denied a planned outage due to failure of a reliability test is against good operating practice and the resource may be deferred to the appropriate state and federal regulatory agencies for follow-up. The ISO will work with the resource SC to reschedule the planned outage at a more appropriate time when the ISO's reliability test passes.

These updates will not be done automatically. If a non-dispatchable resource becomes dispatchable, the SC for that resource must request the ISO review the EFC for the resource after the change takes effect. This also covers changes to the NQC of a resource. The SC for a resource must request the ISO review the EFC value either at the same time or after the SC submits the request to change the NQC value. The formal request must be submitted to the Reliability Requirements mailbox at the ISO.

Using reported use-limitations

Determining flexible capacity categories

In RSI1, the ISO established a process by which SCs for use-limited resources will provide resources' use-limitations to the ISO. The use-limitations captured through this submission include any applicable monthly start-limitation for a resource. The ISO will utilize this data to determine whether a resource qualifies to provide Base, Peak, or Super-Peak flexible capacity. Specifically, the ISO will utilize the use-plans provided for each resource from the previous year to help determine the resource's flexible capacity category. If the use-limitations for a resource are expected to change for the upcoming RA year, then the SC for that resource may submit comments and supporting documentation to the ISO as part of the comment period on the draft EFC list. The use of the monthly use-limitation data ensures the ISO has more data than daily limits to base category qualifications. For example, under the current rules, a resource with one start per day, but only 15 starts per month, may qualify as a Peak flexible capacity resource. However, by accurately capturing the 15 starts per month, the ISO will be able to more properly identify the resource as eligible to provide super-peak flexible capacity.

Use-limited reached outage card RAAIM treatment

The ISO has migrated this discussion to the Commitment Cost Enhancements Phase 3 initiative.³⁰ This decision was made in response to stakeholder comments regarding the difficulty to understand the ISO's proposal as a whole when related topics are discussed in separate initiatives.

Masterfile changes and RAAIM availability

Given the interactions with this policy and policies being developed in other stakeholder initiatives, the ISO will also defer this element to the Commitment Cost Enhancements – Phase 3 stakeholder initiative. At this time, the ISO will address this issues through the treatment resource characteristics. Specifically, the ISO will propose that once a resource has made and RA commitment, the ISO will reject Masterfile changes that are inconsistent with that commitment. Although the ISO provides an overview

³⁰ For more information on Commitment Cost Enhancements Phase 3 initiative, please see the latest proposal located at

http://www.caiso.com/informed/Pages/StakeholderProcesses/CommitmentCostEnhancementsPhase3.aspx

of the proposal on this issue here, stakeholder comments on this issue should be included as part Commitment Cost Enhancements – Phase 3 stakeholder initiative.

5.5 Combination Flexible Capacity Resources RAAIM exemptions

After FERC conditionally approved the ISO's FRACMOO tariff, Six Cities sought rehearing regarding a specific provision of the must-offer obligation for "combination" flexible capacity resources. Flexible capacity combination resources allow LSEs an opportunity to meet their flexible capacity requirements with resources that may not qualify for a higher flexible capacity category combining two resources.³¹ Originally, the ISO had proposed that both resources in the combination be subject to the economic bidding must-offer obligations. Six Cities asserted that the ISO should not hold both resources in the combination to the flexible capacity must-offer obligation. As a result, the ISO agreed to clarify the tariff to state that at least one of the resources in the combination must provide economic bids during the must-offer obligation window.

In its April 10, 2015 filing to FERC submitting this revision, the ISO stated that the provision "allows either resource in a use-limited combination to meet the must-offer obligation; however, only one resource in the combination can submit bids each day."³² FERC approved the revised proposal. The revised tariff language approved by FERC ensures that at least one of the combined resources is available to the ISO for up to the EFC of the combination. However, approval of this language occurred after the ISO Board approved the RSI1 policy. As such, the ISO was not able to develop the tariff provisions and structure needed to appropriately apply the RAAIM rules to combination flexible capacity resources consistent with this new tariff language. As a result, the ISO proposed a temporary exemption from the RAAIM calculation for combination flexible capacity resources.

With the must-offer obligation for combination flexible capacity resources now clearly defined, the ISO proposes to eliminate this exemption and develop RAAIM rules that can be applied consistent with those applied to other resources within the same flexible capacity category. In the straw proposal the ISO considered an option that allowed for a limited exemption from the minimum criteria for monthly starts for a flexible capacity resource. The goal of this exemption was to provide the same functionality as was offered by the combination resource option while allowing for a simplified implementation of the RAAIM calculation.

³¹ Combination flexible capacity resources are a pair of flexible capacity resources that individually do not meet the requirements for a higher flexible capacity category, but when combined are able to meet the requirements for the higher category. For example, two resources with 30 starts per months and 2 starts per day would not qualify for the Base Ramping flexible capacity category. However, when combined, they would meet the minimum number of starts required to qualify for the flexible capacity Base Ramping flexible capacity category. Details on combination flexible capacity resources can be found in Section 40.10.3 of the ISO tariff. ³² See ISO's April 10, 2015 filing in ER14-2574 at p. 3.

However, after further consideration and review of stakeholder comments, it is not clear that the ISO's straw proposal achieved that objective. Therefore, the ISO has determined it is necessary to maintain the combination flexible capacity option and that there is no need for the limited exemption proposed in the straw proposal and has eliminated that option. Instead, the ISO proposes to develop a calculation that treats both resources in the combination as a single resource solely for the purposes of determining RAAIM charges or payments. This option is outlined below, and the ISO seeks stakeholder input on it.

Tracking the daily maximum performance from the combination flexible capacity resources

In its April 10, 2015, FERC filing in ER14-2475 RSI1, the ISO stated that RA capacity is a daily product that comes from a given MW of capacity. This means that the ISO only needs a single resource from the combination to provide that flexible capacity on any given day, and the ISO only needs to assess the availability of a single resource over the duration of a day. As such, the ISO will not consider allowing combinations of two resources to meet a single daily availability requirement as requested by SCE. Instead, the ISO proposes to assess the combined resource's availability using the maximum *daily* availability of the two resources. The ISO would calculate the combined resources' availability on a given day using the resource that was most available (*i.e.*, complied with the applicable flexible capacity must offer obligation for the most hours that day). For example, the following is a hypothetical combination flexible capacity resource:

Resource	PMax	System RA	Flexible RA ³³
Resource A	125	100	75 (combined)
Resource B	100	50	75 (combined)
Total	225	150	75

In this example, Resource A has a 100 MW system RA requirement and Resource B has a 50 MW system RA requirement. Additionally, Resource A is combined with Resource B to provide 75 MW of flexible capacity. Therefore, the must-offer obligation of Resource A is to provide 100 MW of capacity. If B is not providing flexible capacity on a given day, then 75 MW of Resource A must meet the flexible capacity must offer obligation while the remaining 25 MW of capacity would be subject to the system RA must-offer obligation. Because Resource B is shown for less system capacity than flexible capacity, it can meet both its system and flexible capacity must-offer obligation by meeting the combination flexible capacity obligation.

For a hypothetical 10 day month, the two resources have the following availability for flexible capacity:

³³ Flexible capacity combinations can only be made up of two resources and the flexible capacity offered must be the same from both resources in the combination.

Resource	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Total
Resource A	95%	93%	92%	90%	75%	0%	0%	80%	90%	97%	
Resource B	75%	80%	90%	92%	80%	90%	92%	75%	80%	50%	
Maximum	95%	93%	92%	92%	80%	90%	92%	80%	90%	97%	90.1%

It does not matter which resource is more available during a specific hour within the day, only which resource is the most available for the entire day. This is a simplified example of how the ISO will assess the flexible capacity availability for combined resources. However, the ISO must be able to calculate the total availability obligations, system and flexible, of both resources. Only the flexible capacity aspect of the resources are combined, not the system obligations. System obligations remain cumulative. As such, the appropriate way to measure the availability of the resources is to assess the *total* obligation.

In order to apply RAAIM to combination flexible capacity resources, the ISO proposes to create a guasi-resource for the two resources in the combination. This guasi-resource is used only for purposes of calculating RAAIM charges or payments and has no other implications on the bidding behavior, dispatches, or other settlements for the two resources in the combination. The need for creating this quasi-resources comes from the need to capture both the full system and flexible capacity obligations contained by the combined resources. In the example above, the total system capacity sold is 150 MW, while the flexible obligation is 75 MW. In RSI1, the ISO developed a rule that stated that RAAIM would calculate a resources availability by assessing the resource's adherence to its highest quality must offer obligation. Therefore, the ISO's RAAIM assessment uses compliance with the flexible capacity must-offer obligation for 75 MW flexible capacity first, then assess compliance for must-offer obligation for system capacity. Without the use of the quasi-resource, the RAAIM assessment would look at the compliance of each resource separately. For combination flexible capacity resource this would be seen as both resources meeting the flexible capacity must-offer obligation because if one resource meets the flexible capacity must-offer obligation, then both resources meet the obligation. In the above example, if Resource A meets flexible capacity must-offer obligation, so does Resource B. However, although it appears as though Resource B met it must-offer obligation for flexible capacity, because of the structure of the combination resource it might not have met its system level must-offer obligations. As an example, assume that Resource B goes on an outage. If the ISO were to apply the RAAIM calculation developed in RSI1 to each resource in that combination, then it would calculate the availability of the resources as follows:

Resource	Flexible Capacity	Incremental System	Total
	Availability	Capacity Availability ³⁴	
Resource A	75	25	100
Resource B	75	0	75

In the table above, Resource B has a must offer obligation for flexible capacity that is greater than the obligation for system RA. However, Resource A may be the resource that is used to meet the flexible capacity obligation for the combination. If Resource B goes on outage and Resource A is used to meet the flexible capacity requirement, then there would appear to be no need to provide substitute capacity for Resource B's outage. If Resource B goes on a forced outage, then the ISO would be short of 50 MW of system capacity. Therefore, it is necessary to develop a tool that will apply RAAIM in such a way that provides the incentive to substitute the remaining 50 MW of system capacity.

The ISO proposes to create a single quasi-resource that will capture all of the requirements of both resources. The single resource will use the sum of the system level obligations and the combined flexible capacity obligation of the two resources. As an example the above combination flexible capacity resource would have the following RAAIM requirements:

Resource	Flexible Capacity	Incremental System	Total
	Availability	Capacity Availability	
Resource C	75	75	150

Once this quasi-resource is created, using the daily available flexible capacity calculation described above, the ISO will be able to apply the RAAIM calculation as is done for all other resources. Further, for purposes of settlements, because the resources in the combination are required to have the same SC, it is not necessary to determine the specific contribution of the each specific resource in the combination. For example, the ISO would settle RAAIM charges with the SC as if the combination was a single resource providing 75 MW of flexible capacity and an additional 75 MW of system capacity. Therefore, it is not necessary to determine the applicable contributions for Resource A and/or Resource B, the calculation only needs to be done on Resource C's compliance.

5.6 Streamlining annual and monthly RA processes

³⁴ System capacity must-offer obligation is also fulfilled through the flexible capacity must offer obligation. Therefore, the RAAIM calculation for system capacity only need to assess the incremental capacity above the flexible capacity obligation.

In comments to the straw proposal, the Small POU Coalition requested the ISO streamline the RA process for small POUs. The ISO has considered this request and has determined that it is reasonable to include this request as part of the scope of RSI2. While the Small POU Coalition requested the ISO look at the process and penalties for only small POUs, the ISO believes that trying to create a delineation could be viewed as arbitrary and, further, is not necessary. The ISO is not proposing any changes to the existing penalty structure based on LSE size. However, the ISO is proposing means by which RA showings can be streamlined.

Each year, LSEs are required to submit year ahead RA showings. The ISO proposes to automatically roll all RA showings made in annual plans into the monthly RA showing for all LSEs.³⁵ In comments, the Small POU Coalition asks for clarification about the impact of the ISO's proposal for monthly plans and missing or late information. Specifically, the Small POU Coalition requests confirmation that "because the monthly plans are rolled over from the annual plan, a monthly plan update is not missing or late information. In other words, though there may be a discrepancy or deficiency in a monthly plan that requires an update, the plan would not be missing or late, since it is automatically rolled over." As a general matter the Small POU Coalition is correct that if the ISO were to implement the change as proposed, then a SC representing a LSE automatically would have a monthly RA showing in place and thus, absent other factors, would not be at risk of facing penalties under section 37.6 of the ISO tariff for a late or missing monthly RA plan.³⁶ LSEs, however, may still be subject to other charges if

³⁵ Until the implementation of this policy, LSE can enter all 12 monthly RA showings at the same time as its annual showing as is currently allowed.

³⁶ For this same reason, the ISO proposal addresses comments offered by FERC in two recent orders in which FERC considered appeals from two utilities of ISO penalties assessed for late submission of monthly RA plans. *Rancho Cucamonga Municipal Utility*, 153 FERC ¶ 61,225 (2015); *Eastside Power Authority*, 153 FERC ¶ 61,226 (2015). FERC did not grant the requests but encouraged the "CAISO, in its reliability services initiative, to consider mechanisms to address the potential for disparate treatment for different sized utilities. For example, CAISO may consider capping reliability related sanctions relative to the size of the utility or developing procedures that improve its timeliness in verifying information submissions." *Rancho Cucamonga Municipal Utility*, at P 32; *Eastside Power Authority*, at P 28. By making the required information submission a once-a-year event, rather than a 12-times-a-year event, the ISO will be more capable of verifying the timeliness of required submissions. Further, the penalties at issue in the two appeals were for failure to submit monthly RA plans. Under the ISO proposal, no utility, regardless of how much load it serves, would ever face a penalty under section 37.6 for a simple failure to submit a monthly RA plan. Because the penalty at issue in those cases would no longer exist under the current proposal, the ISO is comfortable that it has heeded FERC's guidance.

Further, it is not necessary to revise other reporting requirements such as those for demand forecasts (40.2.2.3) and submission of information needed to conduct the flexible capacity needs assessment (40.10.1.2). Currently, the CEC facilitates demand forecasts and the ISO must have the information required in section 40.10.1.2 to accurately capture changes to the flexible capacity needs forecast each year. The ISO issues a market notice out

discrepancies are unresolved or the data provided in the year-ahead showings are not sufficient to cover all month-ahead obligations. If an LSE wishes to make changes to the annual plan as part of the monthly RA showing, then it may do so as part of the monthly RA timeline. This means that ALL monthly assessments, including for discrepancies with supply plans, of RA showings for an LSE that makes no changes would be done with the showings provided in the year-ahead showings. Monthly RA plans are currently due at t-45 days before the operating month.

Although the ISO proposes to automatically roll annual RA showings into monthly showing, it is not proposing to automatically roll resource supply plans into the monthly showings. Automatically rolling over supply plans is not comparable to rolling over RA showings. In the case of rolling over RA showings, LSEs could eliminate unnecessary penalties associated with a failure to submit plans. However, for supply plans, this automation, even if requested in the year ahead timeframe, could result in unnecessary accidental penalties. For example, if an SC asks for its supply plan to be automatically rolled over and then is removed from the monthly RA showing it would need to take action to avoid penalties. As a result, the ISO declines to rollover supply plans. This ensures that resources, which will ultimately bear the substitute capacity burden, actively review their upcoming RA obligation.³⁷ If no supply plan is provided, the both the LSE and the resource SC will notified of the discrepancy. The ISO will send an informational message to LSEs notifying them that if no action is taken, then the ISO will assess the LSE's RA plans using the information provided in the year-ahead showing.

6. Next Steps

The ISO will host a stakeholder call on February 2, 2016 to discuss the contents of this draft final proposal. Stakeholders are welcome to submit written comments by February 16, 2016 to <u>initiativecomments@caiso.com</u>. Stakeholders should submit their written comments using the template that has been posted to the web page for this initiative at:

http://www.caiso.com/informed/Pages/StakeholderProcesses/ReliabilityServices.aspx.

each year informing all LSE of this data submission requirement and runs a public stakeholder process that relies on this data. All LSE will have ample public notice to be made aware of the requirements.

³⁷ An SC for a resource may actively enter monthly supply plans for the upcoming year at the same time as it enters its annual supply plan.

Appendix A: Stakeholder Comments and ISO Responses Matrix

Торіс	Name of Stakeholder	Stakeholder Comment	ISO Response
LRA RA Process Alignment	CDWR	LRAs should be permitted to update their information template on a monthly basis, if needed.	The ISO will allow monthly updates only to local and flexible RA requirements. The RA framework parameters can only be updated prior to October 1 for the upcoming RA year. This ensures stability of the system needed to validate RA showings.
	CDWR	The deadline to submit the template should coincide with the deadline to submit the annual RA plan, and any updates to the template should be due at the same time as the monthly RA and supply plan.	The ISO must conform all if its system to ensure all RA plans are properly uploaded and validated. Allowing an LRA to wait until the time as when RA showings and supply plans are due from LSEs and resources could lead to errors and incorrect validations.
	CDWR	The template should have various terms (column titles) defined/described in one of the tabs to eliminate confusion and varying interpretations in completing the template.	The definitions included in Appendix B are designed to provide the necessary definitions to help LRAs when filling out and/or updating information.
	CDWR	CDWR requests clarification for how the template will account for planning reserve margin credit for capacity provided by a Participating Load, because Participating Load is not treated as a demand response adjustment.	Participating load is a supply resource that should be shown in RA plans. The ISO has not identified a need to include participating load in the template.
	CLECA	Is this clarification of the ISO's review of the RA showings prepared by LSEs under rules established by the LRAs intended to reduce the chances of potential backstop procurement by the CAISO due to misaligned processes?	Yes. It also creates clear processes in how the ISO validates RA showings and should reduce backstop risks.
	CPUC	CPUC staff, however, question why the CAISO needs to implement default RA tariff provisions related to year-ahead RA filings, versus month- ahead RA filings, which should be sufficient. CPUC staff would appreciate an illustration of	The ISO must conform all if its system to ensure all monthly and annual RA plans are properly uploaded and validated. Other information the ISO seeks (<i>i.e.</i> local and flexible RA allocations)

	instances when the CAISO would perform backstop procurement in the year-ahead timeframe that was related to something other than local RA deficiencies. Please provide an example of this instance either in a stakeholder meeting or through a revised proposal.	may be updated monthly should the LRA elect to update the allocations on file with the ISO.
CPUC	The proposal states: "the process alignment effort will require the ISO to make a tariff change with regard to the effective date of the ISOs default provisions." CPUC Staff wish to reiterate our opposition to any tariff changes that imply that Default RA requirements would be applied to LSEs that are regulated by the CPUC. Such a provision would be in conflict with state law that specifies that the CPUC regulates non-municipal LSEs in California and sets their RA requirements.	The ISO has modified its proposal to provide LRAs numerous opportunities to provide the ISO with updates such the ISO's default provisions would not apply. The application of a date is necessary to clarify when the ISO default rules would be applied. The ISO does not see any legal conflict between the application of a date by which the ISO default rules would apply and allowing an LRA ample opportunity to submit information to the ISO that details the specific provisions of the LRA's RA provisions.
CPUC	CPUC staff believes it is not necessary to make the determination of LRA provisions-vs default provisions until the month-ahead process, and thus would advise CAISO to begin the default provision determination relative to the January month-ahead filing, not the year-ahead filing due dates. Secondly, CPUC staff recommends to CAISO that it would be clearer and more effective for LRAs to be able to provide for CAISO the actual RA obligations for each LSE, not the individual allocations and credits requiring CAISO to perform calculations.	The ISO must conform all if its system to ensure all monthly and annual RA plans are properly uploaded and validated. Other information the ISO seeks (<i>i.e.</i> local and flexible RA allocations) may be updated monthly should the LRA elect to update the allocations on file with the ISO. As noted in the draft final proposal, the ISO utilizes CEC load forecasts and the information provided by the RA framework template to calculate system RA obligations. The ISO currently utilizes a "credits" sheet on RA showings now and can continue to do so long as the ISO systems know that such credits are permissible under the LRA's RA program.

	SDG&E	SDG&E does not believe ISO's proposed template will fully achieve ISO's goals for process alignment. ISO notes in order to "ensure proper cost allocation for any backstop procurement, it must receive a LRA's RA program information each year in a standard format." However the template does not seek the relevant information to ensure proper cost allocation. The template does not distinguish whether the allocation of an LRA requirement to the LSE is based on peak load ratio share or contribution to a need.	The ISO has clarified the information that is sought, including opportunities for LRAs to update local and flexible capacity obligations.
Flexible Capacity Substitution for Planned Outages	Six Cities	Six Cities encourage the ISO to modify a portion of the language at page 18 of the Second Revised Straw Proposal. In the second paragraph on page 18, the ISO notes "[a]s a point of clarification, the ISO proposed that a resource that has been shown for multiple flexible capacity categories be required to provide substitute capacity at the highest flexible capacity category shown for the resource." (Emphasis added.) Consistent with the currently proposed general rule of allowing substitution based on the ability of the substitute resource to meet the must offer obligations of the resource on outage for the duration of the outage, the clarifying point in the second paragraph on page 18 should be modified to state that "a resource that has been shown for multiple flexible capacity categories will be required to provide substitute capacity at based on the must offer obligations associated with the highest flexible capacity category shown for the resource."	The ISO will make this revision.

Substitution for Local Capacity Resources	CDWR	The capacity from a local resource designated as system RA capacity, ideally, should be able to be replaced by any other system RA capacity. CDWR recognizes, however, that the complexity of implementing such a solution may be an issue. CDWR agrees that, at minimum, ISO should consider partial local RA resources as a further enhancement in a future initiative. In the interim, CAISO should make discretionary judgements to allow substitution by another system RA resource for a partial local RA resource outage based on ISO's reliability assessment, a concept similar to the replacement of a local RA resource on planned outage by a system RA resource.	The ISO has modified its proposal to allow for "partial local" RA treatment. Under this revised proposal, LSE would submit a local and a system RA showing. Any capacity on a local showing will automatically count towards meeting system RA requirements.
	CDWR	Future enhancement should consider scenarios with a single resource providing local, flexible category 1, flexible category 2, flexible category 3, and system RA simultaneously.	Because system/local capacity substitution is separable from flexible capacity substitution. The ISO has modified its proposal to clarify the forced outage substitution obligations for system and local capacity. There are no changes to the flexible capacity forced outage substitution rules proposed. For greater detail regarding flexible capacity forced outage substitution, please refer back to RSI I Draft Final Proposal Addendum.
	CDWR	The proposal states, "ISO provides additional clarity on the treatment of local resources for planned outages, and clarifies that resources can either be designated as local or system resources and resources cannot be designated as "partial" local". Is this statement true only for the purpose of RAAIM assessment? In the existing rules, there is no provision that a resource must either be local or system RA for	The ISO has modified its proposal to allow for "partial local" RA treatment. Under this revised proposal, LSE would submit a local and a system RA showing. Any capacity on a local showing will automatically count towards meeting system RA requirements.

	designation. A local resource can be designated for local obligation and should be able to meet system RA by any additional capacity available beyond the local capacity offered (offered local capacity to meet system RA also).	
Calpine	The ISO proposal would require Calpine to continue to substitute RA capacity sold from resources in local areas with local RA capacity, regardless of whether the substitute capacity is replacing capacity that has been sold as system or local RA capacity.	The ISO has modified its proposal to allow for "partial local" RA treatment. Under this revised proposal, a resource SC would submit a local and a system supply plan. If the resource takes a partial forced outage or derate, the substitution obligation will first be for any lost system RA capacity. Only if the outage or derate impacts the resource's ability to provide local RA will it have an obligation to replace the local capacity.
Calpine	Calpine requests clarification of the planned outage substitution rules for resources in local areas that have been sold as system RA capacity that would obtain if the ISO Revised Straw Proposal were implemented.	The ISO has modified its proposal to allow for "partial local" RA treatment. Under this revised proposal, a resource SC would submit a local and a system supply plan. If the resource takes a partial forced outage or derate, the substitution obligation will first be for any lost system RA capacity. Only if the outage or derate impacts the resource's ability to provide local RA will it have an obligation to replace the local capacity.
SCE	SCE requests that the ISO include replacement and substitution details, and any other changes needed for this local RA change, within the next version of the RSI phase 2 proposal.	The ISO has modified its proposal to allow for "partial local" RA treatment. Under this revised proposal, LSE would submit a local and a system RA showing. Any capacity on a local showing will automatically count towards meeting system RA requirements.
CPUC	Request clarification through this initiative of CAISO's current practices: i.e., will each individual outage request continue to be	This section of the paper has been reorganized to provide greater clarity on this point.

		evaluated based on whether or not the local area has sufficient capacity without the resource, regardless of how the resource was procured? The proposal states: "if the resource can reliably take the outage, then the only substitution that is required is to ensure that the PRM is maintained. If the resource going on outage is located in a local area and the outage is approved, then the substitution could be system capacity." Because of the ordering of this paragraph however, it is confusing which statement refers to current practice, and which refers to the "component of the proposal" that is being withdrawn.	
Change Management for Updated EFC	SDG&E	SDG&E again requests ISO to provide a data regarding how many resources and MWs would change categories based on ISO's proposal. How do the MWs in each category compare to the category minimum and maximum requirements for 2016?	This information was provided by the ISO in the Revised Straw Proposal.
	CDWR	There should be a mechanism that alerts (or notifies) the resource owner that changing the Masterfile parameter impacted its eligibility for a particular flexible capacity category. The resource owner then can make adjustments to the RA capacity provided by such resource.	The ISO will address this matter in CCE3.
	Dynegy	Would the ISO please further clarify the requirements for Category 1?	These details are available in the FRACMOO proposal, available at <u>http://www.caiso.com/Documents/RevisedDra</u> <u>ftFinalProposal-</u> <u>FlexibleRACriteriaMustOfferObligation-</u> <u>Clean.pdf</u> .
	Dynegy	What other parameters does the ISO look at when deciding where a resource belongs?	The complete list of parameters is currently identified in the second revised straw proposal.

	Dynegy	What is the process for resolving disputes over EFC values or category assigned?	These details are available in the FRACMOO proposal, available at <u>http://www.caiso.com/Documents/RevisedDra</u> <u>ftFinalProposal-</u> <u>FlexibleRACriteriaMustOfferObligation-</u> <u>Clean.pdf</u> . Further, dispute resolution process are defined in the tariff.
	Dynegy	What if the unit currently is a Category 1 Resource per the latest ISO EFC Report (with 1 start/day in Masterfile and down time of < 12 hours) and doesn't change any of these parameters?	If the Masterfile change does not impact the resource's ability to qualify for a category of flexible capacity or its ability to provide the quantity of EFC for which it has been shown, then there will be no RAAIM implications for the resource.
	CLECA	Regardless of use-limited status, proxy demand response resources should remain exempt from the RAAIM in months where they have met the Must-Offer Obligation and be able to use the short-term outage card	The ISO appreciates this comment but will refer to CCE3 policy, which is where this topic is being discussed. The draft final proposal, scheduled to be released in February, will address this specific concern. See <u>http://www.caiso.com/informed/Pages/Stakeh</u> <u>olderProcesses/CommitmentCostEnhancement</u> <u>sPhase3.aspx</u> for the latest CCE3 proposal.
Applying RAAIM to Masterfile Changes	Six Cities	At pages 8 and 28 of the text and page 9 of the Appendix A matrix of comments and responses, the Second Revised Straw Proposal states that a resource deemed non-available due to Masterfile changes will not be able to provide substitute capacity. Page 29 of the text states, however "[t]hese resources may provide substitute capacity to avoid exposure to RAAIM charges." For the reasons described above, the Six Cities urge the ISO to adopt the policy as expressed on page 29 and conform the other references accordingly.	The ISO will address this matter in CCE3.

Applying RAAIM to Combinations Flexible RA Resources	SCE	SCE believes it would beneficial for the CAISO to produce similar detailed examples to go over different flexible resource combinations. SCE is interested in two specific cases. First, the scenario where RAAIM penalties need to be split among the resources that make up a pseudo resource (and how the penalties are split). Second, the implications of combining two use limited resources for flexibility while still having each resource provide their full capacity for system RA.	As noted in the second revised straw proposal, for purposes of RAAIM, there is no need to differentiate between the two resources in the pseudo resource. The two resources are treated as a single resource. This is possible because both resources must have the same resource SC. The ISO believes the example provided in the second revised straw proposal covers this example.
	Six Cities	It appears that implementation of the pseudo- resource approach may require modification of currently effective tariff language relating to submission of economic bids by combined flexible resources. The currently effective language of Tariff Section 40.10.6.1(e)(2)1 states: The Scheduling Coordinator for the Use- Limited Resources designated as a combined resource under Section 40.10.3.2(b), 40.10.3.3(b) or 40.10.3.4(b) must submit Economic Bids for Energy for either resource for the full amount of the Flexible RA Capacity required by the applicable must-offer obligation; however, Economic Bids for Energy must be submitted for only one resource in the combination per Trade Day. The provision limiting submission of Economic Bids in a Trade Day to only one resource in a combination is inconsistent with the hypothetical example discussed at pages 31-32 of the Second Revised Straw Proposal and may be inconsistent with the pseudo-resource concept for application of RAAIM. Further evaluation is necessary to	The ISO will address any tariff changes needed to implement the RSI2 policy as part of the tariff development process, but appreciates the advanced notice.

		determine whether a modification of Section 40.10.6.1(e)(2) is necessary to accommodate the pseudo-resource approach.	
Streamline Monthly RA Showing Process		Will the LSE submitted revised monthly RA planThe revised LSE submission would overoverride the rolled over annual RA plan? Or, will an SC need to request ISO for "resubmittalThe revised LSE submission would over showing that has been rolled over from annual RA showing.required" flag?The revised LSE submission would over	
	CDWR	How does the ISO identify resources that are exempt from RAAIM? Under RSI, resources such as participating load, wind and solar resources are exempt from RAAIM. Will there be a flag that identifies RAAIM exemption for each resource ID? Will these resources be RAAIM exempt irrespective of use limited status or does each of these resources need to prove that it is a use limited resource?	The ISO is not proposing any changes to the RSI 1A exemptions and identification.
Other- Consideration of Other Initiatives during RSI Process	CPUC	CPUC staff strongly recommends that CAISO consider the implications of proposals being made in other initiatives when developing proposals in the RSI. There are potentially significant implications for RAAIM from proposals in the Commitment Cost Enhancements Phase 3 initiative (CCE 3). For example, under that proposal "outage tickets" won't be allowed for DR resources because they will no longer be "use limited." This means that the RSI will need to consider how to deal with this with regards to RAAIM assessments and penalties. It would not be fair to penalize DR resources with RAAIM because they cannot submit outage tickets.	The ISO has, from the start of the RSI2 stakeholder process, coordinated with other stakeholder initiatives. The ISO will include discussion on Commitment Cost Enhancements – Phase 3 and Bidding Rules as part of the next stakeholder call.

Appendix B: Standard Local Regulatory Authority Configuration Template

Sample Screenshot of a Submission of the Configuration Template

LRA 💌	Submittal Type	Month	Start Date	End Date	System PRM	System Generic factor	nd System 🔄 Ind Local	Col Sys	stem 💌 Col Loca	I 🔄 Ind Flexible	Collective Flexible
ABCD	Annual	1	1/1/2016	12/31/2030	15.00%	100%	N Y	N	Y	Y	Y
ABCD	Annual	2	2 1/1/2016	12/31/2030	15.00%	100%	N Y	N	Y	Y	Y
ABCD	Annual	3	3 1/1/2016	12/31/2030	15.00%	100%	N Y	N	Y	Y	Y
ABCD	Annual	4	1/1/2016	12/31/2030	15.00%	100%	N Y	N	Y	Y	Y
ABCD	Annual	5	5 1/1/2016	12/31/2030	15.00%	90%	Y Y	Y	Y	Y	Y
ABCD	Annual	6	5 1/1/2016	12/31/2030	10.00%	90%	Y Y	Y	Y	Y	Y
ABCD	Annual	7	7 1/1/2016	12/31/2030	10.00%	90%	Y Y	Y	Y	Y	Y
ABCD	Annual	8	3 1/1/2016	12/31/2030	10.00%	90%	Y Y	Y	Y	Y	Y
ABCD	Annual	g	9 1/1/2016	12/31/2030	10.00%	90%	Y Y	Y	Y	Y	Y
ABCD	Annual	10	1/1/2016	12/31/2030	15.00%	100%	N Y	N	Y	Y	Y
ABCD	Annual	11	1/1/2016	12/31/2030	15.00%	100%	N Y	N	Y	Y	Y
ABCD	Annual	12	2 1/1/2016	12/31/2030	15.00%	100%	N Y	N	Y	Y	Y
ABCD	Monthly	1	1/1/2016	12/31/2030	15.00%	100%	Y Y	Y	Y	Y	Y
ABCD	Monthly	2	2 1/1/2016	12/31/2030	15.00%	100%	Y Y	Y	Y	Y	Y
ABCD	Monthly	3	3 1/1/2016	12/31/2030	15.00%	100%	Y Y	Y	Y	Y	Y
ABCD	Monthly	4	1/1/2016	12/31/2030	15.00%	100%	Y Y	Y	Y	Y	Y
ABCD	Monthly	5	5 1/1/2016	12/31/2030	15.00%	100%	Y Y	Y	Y	Y	Y
ABCD	Monthly	6	5 1/1/2016	12/31/2030	15.00%	100%	Y Y	Y	Y	Y	Y
ABCD	Monthly	7	/ 1/1/2016	12/31/2030	8.00%	100%	Y Y	Y	Y	Y	Y
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ABCD	Monthly	11	1/1/2016	12/31/2030	15.00%	100%	Y Y	Y	Y	Y	Y
ABCD	Monthly	12	2 1/1/2016	12/31/2030	15.00%	100%	Y Y	Y	Y	Y	Y
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Y		N	Y		Y Y	Y	Y	N	Y	Y Y	Y
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If your LRA RA program requires an annual evaluation, the ISO will need the following:

Question	Answer Format
<i>Evaluations.</i> Does your LRA RA Program require the fol	lowing evaluation parameters?
ANNUAL PLANNING RESERVE MARGIN: What Planning Reserve Margin do you use for the annual evaluation?	Each month for a full calendar year (%)
ANNUAL EVALUATION FACTOR: In your annual peak demand & reserve margin evaluation, what is your Evaluation Factor?	Each month for a full calendar year (%) (For example, if you require 90% of the normal peak demand and reserve margin requirement, then the Evaluation Factor is 90%)
ANNUAL INDIVIDUAL SYSTEM EVALUATION: In your annual evaluation, do you evaluate the individual LSE Peak Demand & Reserve Margin requirements in each of the following months?	Each month for a full calendar year (Y/N)
ANNUAL INDIVIDUAL LOCAL EVALUATION: In your annual evaluation, do you evaluate the individual LSE local capacity requirement in each of the following months?	Each month for a full calendar year (Y/N)
ANNUAL INDIVIDUAL LOCAL REQUIREMENTS: If you have a local requirement allocation that differs from the ISO allocation of local capacity requirements for your jurisdiction LSEs, provide the following information for each LSE under your jurisdiction. The sum total requirements across all LSEs under your jurisdiction must equal the MW requirements the ISO allocated to your local regulatory authority.	Option 1: LSE – Compliance Year – Compliance Month (January- December) – TAC Area (PGE, SCE, SDG) – Local Requirement (MW) Option 2: If LRA RA program documentation relies on local allocation on a load share ratio basis: LSE – Compliance Year – Compliance Month – TAC Area (PGE, SCE, SDG) - Percentage of LRA Total Local Requirement (%)
ANNUAL INDIVIDUAL FLEXIBLE EVALUATION: In your annual evaluation, do you evaluate the individual LSE flexible capacity requirement in each of the following months?	Each month for a full calendar year (Y/N)
ANNUAL INDIVIDUAL FLEXIBLE REQUIREMENTS: If you have a flexible requirement allocation that differs from the ISO allocation of flexible capacity requirements for your jurisdiction LSEs, provide the following information for each LSE under your jurisdiction. The sum total requirements across all LSEs under your jurisdiction must equal the MW requirements the ISO allocated to your local regulatory authority.	Option 1: LSE – Compliance Year – Compliance Month - Total Flexible Capacity Need (MW) – Base Ramping Minimum (MW) – Peak Ramping Maximum (MW) – Super Peak Ramping Maximum (MW) Option 2:

Question	Answer Format
	If LRA RA program documentation relies on flexible allocation on a load share ratio basis:
	LSE – Compliance Year – Compliance Month -Percentage of LRA Total Flexible Need (%)

Credits. Does your LRA RA Program allow LSEs to use credits in your annual evaluation?

For the annual <u>peak demand and reserve margin</u> evaluation:

ANNUAL SYSTEM DEMAND RESPONSE ELIGIBLE:				
Does your LRA RA Program allow load serving entities to	Full Colondar Voor (V/N)			
count demand response towards meeting its peak demand &	Full Calendar Tear (1/10)			
reserve margin requirement?				
ANNUAL SYSTEM DEMAND RESPONSE				
ADJUSTMENT: Does your LRA RA Program allow the	Fall Calandan Van (VAI)			
planning reserve margin to be added to the DR credit in the	Full Calendar Year (Y/N)			
peak demand & reserve margin evaluation?				
ANNUAL SYSTEM RELIABILITY MUST RUN				
ELIGIBLE: Does your LRA RA Program allow load				
serving entities to count ISO-procured reliability must run	Full Calendar Year (Y/N)			
capacity towards meeting its peak demand & reserve margin				
requirement?				
ANNUAL SYSTEM COST ALLOCATION				
MECHANISM ELIGIBLE: Does your LRA RA Program				
allow load serving entities to count cost allocation	Full Calendar Year (Y/N)			
mechanism capacity towards meeting its peak demand &				
reserve margin requirement?				
ANNUAL SYSTEM LIQUIDATED DAMAGES				
ELIGIBLE: Does your LRA RA Program allow load				
serving entities to count liquidated damages contracts	Full Calendar Year (Y/N)			
towards meeting its peak demand & reserve margin				
requirement?				
ANNUAL SYSTEM OTHER CREDIT ELIGIBLE: Does				
your LRA RA Program allow load serving entities to count				
any other credits towards meeting its peak demand & reserve	Full Calendar Year (Y/N)			
margin requirement?				
For the annual local evaluation:				
ANNUAL LOCAL DEMAND RESPONSE ELICIRI E				
Does your LRARA Program allow load serving entities to				
\mathbf{D}				

Does your LRA RA Program allow load serving entities to
count demand response towards meeting its local
requirement?Full Calendar Year (Y/N)ANNUAL LOCAL DEMAND RESPONSE
ADJUSTMENT: Does your LRA RA Program allow theFull Calendar Year (Y/N)

Question	Answer Format
planning reserve margin to be added to the DR credit in the	
local evaluation?	
ANNUAL LOCAL RELIABILITY MUST RUN	
ELIGIBLE: Does your LRA RA Program allow load	Full Calandar Vaar (V/N)
serving entities to count ISO-procured reliability must run	Full Calendar Tear (1/10)
capacity towards meeting its local requirement?	
ANNUAL LOCAL COST ALLOCATION	
MECHANISM ELIGIBLE: Does your LRA RA Program	
allow load serving entities to count cost allocation	Full Calendar Year (Y/N)
mechanism capacity towards meeting its peak demand &	
reserve margin requirement?	
ANNUAL LOCAL LIQUIDATED DAMAGES	
ELIGIBLE: Does your LRA RA Program allow load	Full Colondar Voor (V/N)
serving entities to count liquidated damages contracts	Full Calendar Tear (1/10)
towards meeting its local requirement?	
ANNUAL LOCAL OTHER CREDIT ELIGIBLE: Does	Full Calendar Year (Y/N)
your LRA RA Program allow load serving entities to count	
any other credits towards meeting its local requirement?	

If your LRA RA program requires a monthly evaluation, the ISO will need the following:

Question	Answer Format
<i>Evaluations.</i> Does your LRA RA Program require the	following evaluation parameters?
MONTHLY PLANNING RESERVE MARGIN: What	
planning reserve margin do you use for the monthly	Each month for a full calendar year (%)
evaluation	
MONTHLY EVALUATION FACTOR: In your	(%)
monthly peak demand & reserve margin evaluation, what	(For example, if you require 90% of the
is your Evaluation Factor?	normal peak demand and reserve margin
	requirement, then the Evaluation Factor is
	90%)
MONTHLY INDIVIDUAL SYSTEM EVALUATION:	
In your monthly evaluation, do you evaluate the individual	Each month for a full calendar year (Y/N)
LSE Peak Demand & Reserve Margin requirements in	Each month for a fun calchair year (1/10)
each of the following months?	
MONTHLY INDIVIDUAL LOCAL EVALUATION:	
In your monthly evaluation, do you evaluate the individual	Each month for a full calendar year (Y/N)
LSE local capacity requirement in each of the following	Each month for a fun calchair your (1/10)
months?	
MONTHLY INDIVIDUAL LOCAL	Option 1:
REQUIREMENTS: If you have a local requirement	LSE – Compliance Year – Compliance Month
allocation that differs from the ISO allocation of local	(January-December) – TAC Area (PGE, SCE,
capacity requirements for your jurisdiction LSEs, provide	SDG) – Local Requirement (MW)
the following information for each LSE under your	
jurisdiction. The sum total requirements across all LSEs	Option 2:

under your jurisdiction must equal the MW requirements the ISO allocated to your local regulatory authority.	If LRA RA program documentation relies on local allocation on a load share ratio basis: LSE – Compliance Year – Compliance Month – TAC Area (PGE, SCE, SDG) - Percentage of LRA Total Local Requirement (%)
MONTHLY INDIVIDUAL FLEXIBLE EVALUATION: In your monthly evaluation, do you evaluate the individual LSE flexible capacity requirement in each of the following months?	Each month for a full calendar year (Y/N)
MONTHLY INDIVIDUAL FLEXIBLE	Option 1:
REQUIREMENTS: If you have a flexible requirement	LSE – Total Flexible Capacity Need (MW) –
allocation that differs from the ISO allocation of flexible	Base Ramping Minimum (MW) – Peak
capacity requirements for your jurisdiction LSEs, provide	Ramping Maximum (MW) – Super Peak
the following information for each LSE under your	Ramping Maximum (MW)
jurisdiction. The sum total requirements across all LSEs	Option 2:
under your jurisdiction must equal the MW requirements	If LRA RA program documentation relies on
the ISO allocated to your local regulatory authority.	flexible allocation on a load share ratio basis:
	LSE – Compliance Year – Compliance Month
	-Percentage of LRA Total Flexible Need (%)
Credits. Does your LRA RA Program allow LSEs to	o use credits in your monthly evaluation?

MONTHLY SYSTEM DEMAND RESPONSE				
ELIGIBLE: Does your LRA RA Program allow load	Each month for a full calendar year (\mathbf{V}/\mathbf{N})			
serving entities to count demand response towards	Each month for a fun calendar year (1/1)			
meeting its peak demand & reserve margin requirement?				
MONTHLY SYSTEM DEMAND RESPONSE				
ADJUSTMENT: Does your LRA RA Program allow the	Each month for a full calendar year (\mathbf{V}/\mathbf{N})			
planning reserve margin to be added to the DR credit in	Each month for a fun calendar year (1/10)			
the peak demand & reserve margin evaluation?				
MONTHLY SYSTEM RELIABILITY MUST RUN				
ELIGIBLE: Does your LRA RA Program allow load				
serving entities to count ISO-procured reliability must run	Each month for a full calendar year (Y/N)			
capacity towards meeting its peak demand & reserve	-			
margin requirement?				
MONTHLY SYSTEM COST ALLOCATION				
MECHANISM ELIGIBLE: Does your LRA RA				
Program allow load serving entities to count cost	Each month for a full calendar year (Y/N)			
allocation mechanism capacity towards meeting its peak				
demand & reserve margin requirement?				
MONTHLY SYSTEM LIQUIDATED DAMAGES				
ELIGIBLE: Does your LRA RA Program allow load				
serving entities to count liquidated damages contracts	Each month for a full calendar year (Y/N)			
towards meeting its peak demand & reserve margin				
requirement?				
MONTHLY SYSTEM OTHER CREDIT ELIGIBLE:	Each month for a full calendar year (\mathbf{V}/\mathbf{N})			
Does your LRA RA Program allow load serving entities to	Each monul for a run calendar year (1/10)			

For the monthly <u>peak demand and reserve margin</u> evaluation:

count any other credits towards meeting its peak demand & reserve margin requirement?	
For the monthly <u>local</u>	evaluation:
MONTHLY LOCAL DEMAND RESPONSE ELIGIBLE: Does your LRA RA Program allow load serving entities to count demand response towards meeting its local requirement?	Each month for a full calendar year (Y/N)
MONTHLY LOCAL DEMAND RESPONSE ADJUSTMENT: Does your LRA RA Program allow the planning reserve margin to be added to the DR credit in the local evaluation?	Each month for a full calendar year (Y/N)
MONTHLY LOCAL RELIABILITY MUST RUN ELIGIBLE: Does your LRA RA Program allow load serving entities to count ISO-procured reliability must run capacity towards meeting its local requirement?	Each month for a full calendar year (Y/N)
MONTHLY LOCAL COST ALLOCATION MECHANISM ELIGIBLE: Does your LRA RA Program allow load serving entities to count cost allocation mechanism capacity towards meeting its local requirement?	Each month for a full calendar year (Y/N)
MONTHLY LOCAL LIQUIDATED DAMAGES ELIGIBLE: Does your LRA RA Program allow load serving entities to count liquidated damages contracts towards meeting its local requirement?	Each month for a full calendar year (Y/N)
MONTHLY LOCAL OTHER CREDIT ELIGIBLE: Does your LRA RA Program allow load serving entities to count any other credits towards meeting its local requirement?	Each month for a full calendar year (Y/N)

Appendix C: ISO Default Standard Local Regulatory Authority Configuration Template

Sample Screenshot of a Default Configuration Template

Default ISO Configuration	Submittal Type	Month 🝷 S	Start Date	End Date	System PRM	System Generic factor	Ind System	🛛 Ind Local 💌	Col System 💌	Col Local 💌	Ind Flexible	Collective Flexible
ISO	Annual	1	1/1/2016	12/31/2030	15.00%	100%	Y	Y	Υ	Y	Y	Y
ISO	Annual	2	1/1/2016	12/31/2030	15.00%	100%	Y	Y	Y	Y	Y	Y
ISO	Annual	3	1/1/2016	12/31/2030	15.00%	100%	Y	Υ	Υ	Y	Y	Y
ISO	Annual	4	1/1/2016	12/31/2030	15.00%	100%	Y	Υ	Υ	Y	Y	Y
ISO	Annual	5	1/1/2016	12/31/2030	15.00%	100%	Y	Υ	Υ	Y	Y	Y
ISO	Annual	6	1/1/2016	12/31/2030	15.00%	100%	Y	Υ	Y	Y	Y	Y
ISO	Annual	7	1/1/2016	12/31/2030	15.00%	100%	Y	Υ	Υ	Y	Y	Y
ISO	Annual	8	1/1/2016	12/31/2030	15.00%	100%	Y	Υ	Υ	Y	Y	Y
ISO	Annual	9	1/1/2016	12/31/2030	15.00%	100%	Y	Υ	Y	Y	Y	Y
ISO	Annual	10	1/1/2016	12/31/2030	15.00%	100%	Y	Υ	Y	Y	Y	Y
ISO	Annual	11	1/1/2016	12/31/2030	15.00%	100%	Y	Υ	Y	Y	Y	Y
ISO	Annual	12	1/1/2016	12/31/2030	15.00%	100%	Y	Υ	Y	Y	Y	Y
ISO	Monthly	1	1/1/2016	12/31/2030	15.00%	100%	Y	Y	Y	Y	Y	Y
ISO	Monthly	2	1/1/2016	12/31/2030	15.00%	100%	Y	Y	Y	Y	Y	Y
ISO	Monthly	3	1/1/2016	12/31/2030	15.00%	100%	Y	Y	Y	Y	Y	Y
ISO	Monthly	4	1/1/2016	12/31/2030	15.00%	100%	Y	Y	Y	Y	Y	Y
ISO	Monthly	5	1/1/2016	12/31/2030	15.00%	100%	Y	Y	Y	Y	Y	Y
ISO	Monthly	6	1/1/2016	12/31/2030	15.00%	100%	Y	Y	Y	Y	Y	Y
ISO	Monthly	7	1/1/2016	12/31/2030	15.00%	100%	Y	Y	Y	Y	Y	Y
ISO	Monthly	8	1/1/2016	12/31/2030	15.00%	100%	Y	Υ	Y	Y	Y	Y
ISO	Monthly	9	1/1/2016	12/31/2030	15.00%	100%	Y	Υ	Y	Y	Y	Y
ISO	Monthly	10	1/1/2016	12/31/2030	15.00%	100%	Y	Υ	Y	Y	Y	Y
ISO	Monthly	11	1/1/2016	12/31/2030	15.00%	100%	Y	Υ	Y	Y	Y	Y
ISO	Monthly	12	1/1/2016	12/31/2030	15.00%	100%	Y	Υ	Υ	Y	Y	Y
System DR ADJ REQ	System ID	System I	DR - Syste	em RMR 🔻	System CAM	▼ System OTHER ▼	Local DR A	DJ REQ L	ocal I D. Local	DR Local	RMR Local	CAM Local OTHER
-)												
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Default Annual Standard Local Regulatory Authority Configuration:

Question	Answer Format				
<i>Evaluations</i> . Does your LRA RA Program require the following evaluation parameters?					
ANNUAL PLANNING RESERVE MARGIN: What Planning Reserve Margin do you use for the annual evaluation?	Each month for a full calendar year 15% all months				
ANNUAL EVALUATION FACTOR: In your annual peak demand & reserve margin evaluation, what is your Evaluation Factor?	Each month for a full calendar year (%) (For example, if you require 90% of the normal peak demand and reserve margin requirement, then the Evaluation Factor is 90%)				
ANNUAL INDIVIDUAL SYSTEM EVALUATION: In your annual evaluation, do you evaluate the individual LSE Peak Demand & Reserve Margin requirements in each of the following membra	Each month for a full calendar year (Y/N)				
ANNUAL INDIVIDUAL LOCAL EVALUATION: In your annual evaluation, do you evaluate the individual LSE local capacity requirement in each of the following months?	Each month for a full calendar year (Y/N)				
ANNUAL INDIVIDUAL LOCAL REQUIREMENTS: If you have a local requirement allocation that differs from the ISO allocation of local capacity requirements for your jurisdiction LSEs, provide the following information for each LSE under your jurisdiction. The sum total requirements across all LSEs under your jurisdiction must equal the MW requirements the ISO allocated to your local regulatory authority.	Y all months LSE – Compliance Year – Compliance Month (January- December) – TAC Area (PGE, SCE, SDG) – Local Requirement (MW) As determined in LCTS				
ANNUAL INDIVIDUAL FLEXIBLE EVALUATION: In your annual evaluation, do you evaluate the individual LSE flexible capacity requirement in each of the following months?	Each month for a full calendar year (Y/N) Y all months				
ANNUAL INDIVIDUAL FLEXIBLE REQUIREMENTS: If you have a flexible requirement allocation that differs from the ISO allocation of flexible capacity requirements for your jurisdiction LSEs, provide the following information for each LSE under your jurisdiction. The sum total requirements across all LSEs under your jurisdiction must equal the MW requirements the ISO allocated to your local regulatory authority.	LSE – Total Flexible Capacity Need (MW) – Base Ramping Minimum (MW) – Peak Ramping Maximum (MW) – Super Peak Ramping Maximum (MW) As determined in flexible needs study				

Question	Answer Format				
For the annual peak demand and reserve margin evaluation:					
	L				
ANNUAL SYSTEM DEMAND RESPONSE ELIGIBLE:					
Does your LRA RA Program allow load serving entities to	Full Calendar Year (Y/N)				
count demand response towards meeting its peak demand &	N				
reserve margin requirement?					
ANNUAL SYSTEM DEMAND RESPONSE					
ADJUSTMENT: Does your LRA RA Program allow the	Full Calendar Year (Y/N)				
planning reserve margin to be added to the DR credit in the	N/A				
peak demand & reserve margin evaluation?					
ANNUAL SYSTEM RELIABILITY MUST RUN					
ELIGIBLE: Does your LRA RA Program allow load	Full Calendar Year (Y/N)				
serving entities to count ISO-procured reliability must run	Y				
capacity towards meeting its peak demand & reserve margin	_				
requirement?					
ANNUAL SYSTEM COST ALLOCATION					
MECHANISM ELIGIBLE: Does your LRA RA Program	Full Calendar Year (Y/N)				
allow load serving entities to count cost allocation	N				
mechanism capacity towards meeting its peak demand &					
reserve margin requirement?					
ANNUAL SYSTEM LIQUIDATED DAMAGES					
ELIGIBLE: Does your LRA RA Program allow load	Full Calendar Year (Y/N)				
serving entities to count liquidated damages contracts	N				
towards meeting its peak demand & reserve margin					
requirement?					
ANNUAL SYSTEM OTHER CREDIT ELIGIBLE: Does					
your LRA RA Program allow load serving entities to count	Full Calendar Year (Y/N)				
any other credits towards meeting its peak demand & reserve	N				
margin requirement?					
For the annual <u>local</u> evalue	ation:				
ANNUAL LOCAL DEMAND RESPONSE ELIGIBLE:					
Does your LRA RA Program allow load serving entities to	Full Calendar Year (Y/N)				
count demand response towards meeting its local	N				
requirement?					
ANNUAL LOCAL DEMAND RESPONSE					
ADJUSTMENT: Does your LRA RA Program allow the	Full Calendar Year (Y/N)				
planning reserve margin to be added to the DR credit in the	N/A				
local evaluation?					
ANNUAL LOCAL RELIABILITY MUST RUN					
ELIGIBLE: Does your LRA RA Program allow load	Full Calendar Year (Y/N)				
serving entities to count ISO-procured reliability must run	Y				
capacity towards meeting its local requirement?					
ANNUAL LOCAL COST ALLOCATION	Full Calendar Year (Y/N)				
MECHANISM ELIGIBLE: Does your LRA RA Program	N N				
allow load serving entities to count cost allocation					

Question	Answer Format
mechanism capacity towards meeting its peak demand &	
reserve margin requirement?	
ANNUAL LOCAL LIQUIDATED DAMAGES	
ELIGIBLE: Does your LRA RA Program allow load	Full Calendar Year (Y/N)
serving entities to count liquidated damages contracts	Ν
towards meeting its local requirement?	
ANNUAL LOCAL OTHER CREDIT ELIGIBLE: Does	Full Calendar Year (Y/N)
your LRA RA Program allow load serving entities to count	Ν
any other credits towards meeting its local requirement?	

Default Monthly Standard Local Regulatory Authority Configuration:

Question	Answer Format				
<i>Evaluations.</i> Does your LRA RA Program require the following evaluation parameters?					
MONTHLY PLANNING RESERVE MARGIN: What	Each month for a full calendar year (%)				
planning reserve margin do you use for the monthly					
evaluation	15% all months				
MONTHLY EVALUATION FACTOR: In your	(%)				
monthly peak demand & reserve margin evaluation, what	(For example, if you require 90% of the				
is your Evaluation Factor?	normal peak demand and reserve margin				
	requirement, then the Evaluation Factor is				
	90%)				
	100% all months				
MONTHLY INDIVIDUAL SYSTEM EVALUATION:	Each month for a full calendar year (\mathbf{V}/\mathbf{N})				
In your monthly evaluation, do you evaluate the individual	Each month for a full calcular year (1/10)				
LSE Peak Demand & Reserve Margin requirements in	V all months				
each of the following months?	1 an montus				
MONTHLY INDIVIDUAL LOCAL EVALUATION:	Each month for a full calendar year (Y/N)				
In your monthly evaluation, do you evaluate the individual	Each month for a fun calendar year (1/10)				
LSE local capacity requirement in each of the following	Y all months				
months?					
MONTHLY INDIVIDUAL LOCAL					
REQUIREMENTS: If you have a local requirement	LSE – Compliance Year – Compliance Month				
allocation that differs from the ISO allocation of local	(January-December) – TAC Area (PGE, SCE,				
capacity requirements for your jurisdiction LSEs, provide	SDG) – Local Requirement (MW)				
the following information for each LSE under your					
jurisdiction. The sum total requirements across all LSEs	As determined in the LCTS				
under your jurisdiction must equal the MW requirements					
the ISO allocated to your local regulatory authority.					
MONTHLY INDIVIDUAL FLEXIBLE	Each month for a full calendar year (Y/N)				
EVALUATION: In your monthly evaluation, do you					
evaluate the individual LSE flexible capacity requirement	Y all months				
1 in each of the following months?					

MONTHLY INDIVIDUAL FLEXIBLE

REQUIREMENTS: If you have a flexible requirement allocation that differs from the ISO allocation of flexible capacity requirements for your jurisdiction LSEs, provide the following information for each LSE under your jurisdiction. The sum total requirements across all LSEs under your jurisdiction must equal the MW requirements the ISO allocated to your local regulatory authority. LSE – Total Flexible Capacity Need (MW) – Base Ramping Minimum (MW) – Peak Ramping Maximum (MW) – Super Peak Ramping Maximum (MW)

As determined in flexible needs study

Credits. Does your LRA RA Program allow LSEs to use credits in your monthly evaluation?

For the monthly <u>peak demana and re.</u>	<u>serve margin</u> evaluation.			
MONTHLY SYSTEM DEMAND RESPONSE				
ELIGIBLE: Does your LRA RA Program allow load	Each month for a full calendar year (Y/N)			
serving entities to count demand response towards	Ν			
meeting its peak demand & reserve margin requirement?				
MONTHLY SYSTEM DEMAND RESPONSE				
ADJUSTMENT: Does your LRA RA Program allow the	Each month for a full calendar year (Y/N)			
planning reserve margin to be added to the DR credit in	N/A			
the peak demand & reserve margin evaluation?				
MONTHLY SYSTEM RELIABILITY MUST RUN				
ELIGIBLE: Does your LRA RA Program allow load	Each month for a full calendar year (\mathbf{V}/\mathbf{N})			
serving entities to count ISO-procured reliability must run				
capacity towards meeting its peak demand & reserve	1			
margin requirement?				
MONTHLY SYSTEM COST ALLOCATION				
MECHANISM ELIGIBLE: Does your LRA RA	Each month for a full calendar year (V/N)			
Program allow load serving entities to count cost	N			
allocation mechanism capacity towards meeting its peak	1			
demand & reserve margin requirement?				
MONTHLY SYSTEM LIQUIDATED DAMAGES				
ELIGIBLE: Does your LRA RA Program allow load	Each month for a full calendar year (V/N)			
serving entities to count liquidated damages contracts	N			
towards meeting its peak demand & reserve margin				
requirement?				
MONTHLY SYSTEM OTHER CREDIT ELIGIBLE:				
Does your LRA RA Program allow load serving entities to	Each month for a full calendar year (Y/N)			
count any other credits towards meeting its peak demand	Ν			
& reserve margin requirement?				

For the monthly <u>peak demand and reserve margin</u> evaluation:

For the monthly *local* evaluation:

MONTHLY LOCAL DEMAND RESPONSE ELIGIBLE: Does your LRA RA Program allow load serving entities to count demand response towards meeting its local requirement?	Each month for a full calendar year (Y/N) N
MONTHLY LOCAL DEMAND RESPONSE ADJUSTMENT: Does your LRA RA Program allow the planning reserve margin to be added to the DR credit in the local evaluation?	Each month for a full calendar year (Y/N) N/A

MONTHLY LOCAL RELIABILITY MUST RUN	
ELIGIBLE: Does your LRA RA Program allow load	Each month for a full calendar year (Y/N)
serving entities to count ISO-procured reliability must run	Y
capacity towards meeting its local requirement?	
MONTHLY LOCAL COST ALLOCATION	
MECHANISM ELIGIBLE: Does your LRA RA	Each month for a full colordar upor (\mathbf{V}/\mathbf{N})
Program allow load serving entities to count cost	Each monul for a full calendar year (1/N)
allocation mechanism capacity towards meeting its local	19
requirement?	
MONTHLY LOCAL LIQUIDATED DAMAGES	
ELIGIBLE: Does your LRA RA Program allow load	Each month for a full calendar year (Y/N)
serving entities to count liquidated damages contracts	Ν
towards meeting its local requirement?	
MONTHLY LOCAL OTHER CREDIT ELIGIBLE:	
Does your LRA RA Program allow load serving entities to	Each month for a full calendar year (Y/N)
count any other credits towards meeting its local	Ν
requirement?	

Appendix D: Timeline for substitute capacity for flexible capacity on planned outage

