

April 10, 2015

The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

Re: California Independent System Operator Corporation
Docket Nos. ER14-2574-002 and ER14-2574-003
Flexible Resource Adequacy Capacity Requirement Amendment
Filing In Response To Order Initiating Briefing Procedures

Dear Secretary Bose:

The California Independent System Operator Corporation ("CAISO") submits this filing in response to the Federal Energy Regulatory Commission's February 25, 2015 Order<sup>1</sup> initiating briefing procedures to obtain additional information for the Commission's consideration of the request for rehearing by the Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California ("Six Cities").

In lieu of submitting a brief, the CAISO proposes tariff modifications to resolve the rehearing issue before the Commission. The modifications will: (1) limit the must-offer obligation of a use-limited combination resource to the flexible capacity amount shown for the combination on the monthly flexible resource adequacy capacity plan; and (2) add a provision that allows either resource in the combination to meet the must-offer obligation, with the qualification that only one resource in the combination can submit bids each day. The CAISO coordinated with the Six Cities in developing the revised tariff language and understands that the revisions address the concerns raised in the Six Cities' request for rehearing.

# I. Background

In this proceeding, the CAISO submitted proposed tariff modifications to: (1) expand its resource adequacy requirements with provisions for resources to provide flexible resource adequacy capacity; (2) establish must-offer obligations to ensure that flexible resource adequacy capacity is economically bid into the CAISO markets and can be optimally dispatched by the CAISO; and (3) extend its capacity procurement

California Indep. Sys. Operator Corp., 150 FERC ¶ 61,138 (2015) (February 25 Order).

mechanism to allow backstop procurement of flexible capacity in the event of a cumulative deficiency.

By Order dated October 16, 2014,<sup>2</sup> the Commission accepted the proposed tariff revisions, subject to a requirement that the CAISO submit a compliance filing that would, among other things, revise the flexible capacity category provisions to allow a combination of use-limited resources to be eligible to provide flexible capacity in the peak-ramping or super-peak ramping flexible capacity categories, as well as the base-ramping category already recognized in the tariff language.<sup>3</sup>

On November 14, 2014, Six Cities filed a request for rehearing of the Commission's approval of tariff provisions proposed by the CAISO that apply a must-offer obligation to both resources in a use-limited combination up to their respective flexible resource adequacy capacity amounts. Six Cities argued that the must-offer obligation should be modified as follows:

Provided that one of the resources in the combination can satisfy the criteria for a Flexible RA category on a given day (*e.g.*, two starts in a day for a Category 1 combination), the must-offer obligations for a resource combination should be commensurate with the level of Flexible RA credit received by the combination, and the Scheduling Coordinator(s) for the resources in a combination should be able to satisfy the must-offer obligation for any day by submitting economic bids for either resource up to the level of the Flexible RA credit.<sup>4</sup>

In the February 25 Order, the Commission initiated briefing procedures to obtain information about the CAISO's ability to dispatch the flexible resource adequacy capacity of use-limited resources in a combination, the CAISO system changes that would be required to accommodate Six Cities' request, the reliability impact, or other burden or harm that would result from modifying the must-offer obligation as Six Cities proposed, and any other relevant information. The February 25 Order directed the parties to file briefs within 30 days.

On March 20, 2015, Six Cities and the CAISO jointly submitted a motion requesting deferral of the briefing schedule to allow additional time to collaborate and develop tariff language to resolve the concerns raised in Six Cities' request for rehearing. The joint motion indicated that the CAISO and Six Cities expect to file the revised tariff language on or before April 10, 2015.

<sup>&</sup>lt;sup>2</sup> California Indep. Sys. Operator Corp., 149 FERC ¶ 61,042 (2014).

The CAISO submitted the required compliance filing, which the Commission conditionally accepted by order dated February 24, 2015, subject to a further compliance filing to on two matters unrelated to the instant filing. The CAISO submitted the second compliance filing on March 26, 2015.

<sup>&</sup>lt;sup>4</sup> *Id.* at p. 8.

On March 26, 2015, the Commission issued a Notice of Extension Time that deferred the briefing schedule to April 16, 2015.

# II. Proposed Tariff Modifications on Compliance

In response to the Commission's February 25 Order, the CAISO proposes to make the following tariff changes in a subsequent compliance filing if directed by the Commission.

The CAISO proposes to limit the must offer obligation of a use-limited combination resource to the flexible capacity MW amount shown for the combination on the monthly resource adequacy plan.

# Section 40.10.3.2(b)(4) – Base Ramping Resources

Both resources in the combination The combined resource shall be subject to the must-offer obligation up to their in Section 40.10.6.1(e)(2) for the Flexible RA Capacity amounts shown on the monthly Resource Flexible RA Capacity Plan for the combination.

# Section 40.10.3.3(b)(4) –Peak Ramping Resources

Both resources in the combination The combined resource shall be subject to the must-offer obligation up to their in Section 40.10.6.1(e)(2) for the Flexible RA Capacity amounts shown on the monthly Resource Flexible RA Capacity Plan for the combination.

## Section 40.10.3.4(b)(4) – Super-Peak Ramping Resources

Both resources in the combination The combined resource shall be subject to the must-offer obligation up to their in Section 40.10.6.1(e)(2) for the Flexible RA Capacity amounts shown on the monthly Resource Flexible RA Capacity Plan for the combination.

The CAISO proposes to add a provision that allows either resource in a uselimited combination to meet the must-offer obligation; however, only one resource in the combination can submit bids each day.

# Section 40.10.6.1 Day-Ahead and Real-Time Availability

- (e) Use-Limited Resources.
  - (1) A Use-Limited Resource providing Flexible RA Capacity must be capable of responding to Dispatch Instructions and, consistent with its use-limitations, must submit Economic Bids for Energy for the full amount of its Flexible RA Capacity in the Day-Ahead Market and the Real-Time Market for the Trading Hours applicable to the resource's Flexible Capacity Category for that month for the Trading Hours that it is capable of being economically dispatched.

(2) 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.

As a result of these proposed changes, the CAISO is removing the requirement that both resources in the combination bid the full amount of the flexible capacity commitment of the combined resource and replacing it with a must-offer provision that allows either resource to meet the applicable daily bidding requirement for the combined resource. The requirement that only one resource in the combination submit bids per day maintains consistency with the obligation of other flexible resource adequacy capacity resources. The proposed changes, therefore, are reasonable and address the concerns raised by Six Cities on rehearing.

# III. Materials Provided In This Compliance Filing

The following documents, in addition to this transmittal letter, support this filing:

Attachment A Clean pro forma sheets of the currently effective tariff

showing the revisions described in this filing

Attachment B Sheets showing, in black-line format, the changes to the

currently effective tariff described in this filing

#### IV. Conclusion

The CAISO respectfully requests that the Commission accept this filing in response to the Commission's February 25 Order. The CAISO will make the proposed tariff changes in a subsequent compliance filing if directed by the Commission.

Respectfully submitted,

By: /s/ Beth Ann Burns

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Dated: April 10, 2015

# Attachment A – Clean Tariff Records Response To Order Initiating Briefing Procedures in ER14-2574 California Independent System Operator Corporation

#### 40.10.3.2 Flexible Capacity Category-- Base Ramping Resources

- (a) **Resource Criteria.** Base ramping resources must meet all of the following criteria, except as provided in Sections 40.10.3.2(b) and (c) --
  - (1) The resource must be capable of providing Flexible RA Capacity to the CAISO Markets through Economic Bids for Energy and Economic Bids for Ancillary Services that are not flagged as Contingency Only in the Day-Ahead Market, if and to the extent the resource is certified to provide Ancillary Services, submitted daily for the 17-hour period from 5:00 a.m. through 10:00 p.m.;
  - (2) The resource must be capable of providing Energy for a minimum of six hours up to its full Effective Flexible Capacity value including PMin;
  - (3) The resource must be capable of being available seven days a week;
  - (4) The resource must be able to provide the minimum of (i) two Start-Ups per day for every day of the month or sixty Start-Ups per month, or (ii) the number of Start-Ups allowed by its operational limits, including minimum up and minimum down time; and
  - (5) The resource must not have annual or monthly limitations on the number of Start-Ups or the amount of energy produced that, on a daily basis, are lower than the requirements in Section 40.10.3.2(a)(1) through (4).

- (1) A Use-Limited Resource may be included in this category if it meets the criteria in Section 40.10.3.2(a), except that use-limited resources providing Flexible RA Capacity are not required to submit bids for Ancillary Services in the Day-Ahead Market or the Real-Time Market.
- (2) A Load Serving Entity may include in this category a combined resource consisting of two Use-Limited Resources that do not individually meet the minimum operational and availability requirements but in combination meet the criteria in Section 40.10.3.2(a).
- (3) The Flexible RA Capacity amount for the combined resource will be less than or equal to the lowest Effective Flexible Capacity value shown on the Resource Flexible RA Capacity Plan for a resource in the combination.

- (4) The combined resource shall be subject to the must-offer obligation in Section 40.10.6.1(e)(2) for the Flexible RA Capacity amount shown on the monthly Resource Flexible RA Capacity Plan for the combination.
- (c) Non-Generator Resource. A Non-Generator Resource that elects to provide Flexible RA

  Capacity may be included in this category if it meets the criteria in Section 40.10.3.2(a). A Non
  Generator Resource that elects to provide Flexible RA Capacity and Regulation Energy

  Management is not eligible to be included in this category.

#### 40.10.3.3 Flexible Capacity Category -- Peak Ramping Resources

- (a) **Resource Criteria.** Peak ramping resources must meet all of the following criteria, except as provided in Sections 40.10.3.3(b) and (c) --
  - (1) The resource must be capable of providing Flexible RA Capacity to the CAISO Markets through Economic Bids for Energy and Economic Bids for Ancillary Services that are not flagged as Contingency Only in the Day-Ahead Market, if and to the extent the resource is certified to provide Ancillary Services, which must be submitted daily for a five-hour period to be determined by the CAISO on a seasonal basis;
  - (2) The resource must be capable of providing Energy for a minimum of three continuous hours up to its full Effective Flexible Capacity value including PMin;
  - (3) The resource must be capable of being available seven days a week.
  - (4) The resource must be capable of at least one Start-Up per day; and
  - (5) The resource must not have annual or monthly limitations on the number of unit Start-Ups or the amount of energy produced that, on a daily basis, are lower than the requirements in Section 40.10.3.3(a)(1) through (4).

- (1) A Use-Limited Resource may be included in this category if it meets the criteria in Section 40.10.3.3(a), except that use-limited resources providing Flexible RA Capacity are not required to submit bids for Ancillary Services in the Day-Ahead Market or the Real-Time Market.
- (2) A Load Serving Entity may include in this category a combined resource consisting of two

- Use-Limited Resources that do not individually meet the minimum operational and availability requirements but in combination meet the criteria in Section 40.10.3.3(a).
- (3) The Flexible RA Capacity amount for the combined resource will be less than or equal to the lowest Effective Flexible Capacity value shown on the Resource Flexible RA Capacity Plan for a resource in the combination.
- (4) The combined resource shall be subject to the must-offer obligation in Section 40.10.6.1(e)(2) for the Flexible RA Capacity amount shown on the monthly Resource Flexible RA Capacity Plan for the combination.
- (c) Non-Generator Resource. A Non-Generator Resource that elects to provide Flexible RA Capacity may be included in this category if it meets the criteria in Section 40.10.3.3(a). A Non-Generator Resource that elects to provide Flexible RA Capacity and Regulation Energy Management is not eligible to be included in this category.
- (d) **Base Ramping Resource.** A resource that meets the qualifications of the Flexible Capacity Category for base ramping resources also qualifies to be included in this category as a peak ramping resource; however, a resource that meets only the qualifications of a peak ramping resource does not qualify as a base ramping resource.

#### 40.10.3.4 Flexible Capacity Category -- Super-Peak Ramping Resources.

- (a) **Resource Criteria.** Super-peak ramping resources must meet all of the following criteria, except as provided in Sections 40.10.3.4(b), (c) and (d) --
  - (1) The resource must be capable of providing Flexible RA Capacity to the CAISO Markets through Economic Bids for Energy and Economic Bids for Ancillary Services Bids that are not flagged as Contingency Only in the Day-Ahead Market, if and to the extent the resource is certified to provide Ancillary Services, which must be submitted each weekday that is not holiday, for a five-hour period to be determined by the CAISO on a seasonal basis;
  - (2) The resource must be capable of providing Energy for a minimum of three continuous hours up to its full Effective Flexible Capacity value including PMin;
  - (3) The resource must be capable of being available on weekdays that are not holidays, as

- defined in the Business Practice Manual;
- (4) The resource must be capable of at least one Start-Up per day; and
- (5) The resource must be capable of responding to at least five CAISO dispatches per month, during the five-hour period of the must offer obligation, for the resource to Start-Up.

- (1) A Use-Limited Resource may be included in this category if it meets the criteria in Section 40.10.3.4(a), except that use-limited resources providing Flexible RA Capacity are not required to submit bids for Ancillary Services in the Day-Ahead Market or the Real-Time Market.
- (2) A Load Serving Entity may include in this category a combined resource consisting of two Use-Limited Resources that do not individually meet the minimum operational and availability requirements but in combination meet the criteria in Section 40.10.3.4(a).
- (3) The Flexible RA Capacity amount for the combined resource will be less than or equal to the lowest Effective Flexible Capacity value shown on the Resource Flexible RA Capacity Plan for a resource in the combination.
- (4) The combined resource shall be subject to the must-offer obligation in Section 40.10.6.1(e)(2) for the Flexible RA Capacity amount shown on the monthly Resource Flexible RA Capacity Plan for the combination.
- (c) Non-Generator Resource. A Non-Generator Resource may be included in this category if it meets the criteria in Section 40.10.3.4(a) and is not registered in the CAISO's Master File as a Regulation Energy Management resource.
- (d) **Non-Generator Resource, Regulation Energy Management.** A Non-Generator Resource that is a Regulation Energy Management resource may be included in this category if it meets the following criteria --
  - (1) The resource must be capable of providing Regulation Energy Management to the CAISO Markets through Economic Bids for Regulation Up and Regulation Down submitted daily for a 17-hour period from 5:00 a.m. through 10:00 p.m.;

- (2) The resource shall not submit bids to provide Energy;
- (3) The resource must be capable of being available seven days a week;
- (4) The resource must be capable of unlimited Start-Ups per day; and
- (5) The resource must be registered as a Non-Generator Resource providing Regulation Energy Management in the CAISO's Master File.
- (e) Base Ramping and Peak Ramping Resources. A resource that meets the qualifications of the Flexible Capacity Category for base ramping resources or peak ramping resources also qualifies to be included in this category as a super-peak ramping resource; however, a resource that meets only the qualifications of a super-peak ramping resource does not qualify as a base ramping resource or a peak ramping resource.

\* \* \*

#### 40.10.6.1 Day-Ahead and Real-Time Availability

- (a) **Must-Offer Obligation.** The Scheduling Coordinator for a resource supplying Flexible RA Capacity must submit Economic Bids for Energy for the full amount of the resource's Flexible RA Capacity, and Economic Bids for Ancillary Services that are not flagged as Contingency Only in the Day-Ahead Market for the full amount of the resource's Flexible RA Capacity that is certified to provide Ancillary Services, in the Day-Ahead Market and the Real-Time Market for the applicable Trading Hours that is capable of being economically dispatched as follows, except as provided in Section 40.10.6.1(e) through(h) --
  - (1) Flexible Capacity Category for base ramping resources the 17-hour period from 5:00 a.m. to 10:00 p.m., seven days a week;
  - (2) Flexible Capacity Category for peak ramping resources the five-hour period determined for each season by the CAISO's Flexible Capacity Needs Assessment, seven days a week; and
  - (3) Flexible Capacity Category for super-peak ramping resources the five-hour period determined for each season by the CAISO's Flexible Capacity Needs Assessment, weekdays, except holidays and as provided in Section 40.10.6.1(h), until the resource receives during the five-hour period of the must offer obligation and responds to five

CAISO dispatches for Start-Up during the month, after which the resource will not be subject to a must-offer obligation as a super-peak ramping resource for the remainder of that month; however, any other must-offer obligations for Resource Adequacy Capacity will still apply.

- (b) Availability Requirement. During the period of the applicable must-offer obligation, a Flexible RA Capacity Resource must be operationally available except for limitations specified in the Master File, legal or regulatory prohibitions or as otherwise required by this CAISO Tariff or by Good Utility Practice.
- (c) Co-optimization. Through the IFM co-optimization process, the CAISO will utilize available Flexible RA Capacity to provide Energy or Ancillary Services in the most efficient manner to clear the Energy market, manage congestion and procure required Ancillary Services.
- (d) Participation in RUC. A Flexible RA Capacity Resource must participate in the RUC to the extent that the resource has available Flexible RA Capacity that is not reflected in an IFM Schedule. Resource Adequacy Capacity participating in RUC will be optimized using a zero dollar (\$0/MW-hour) RUC Availability Bid. Flexible RA Capacity selected in RUC will not be eligible to receive a RUC Availability Payment.

- (1) A Use-Limited Resource providing Flexible RA Capacity must be capable of responding to Dispatch Instructions and, consistent with its use-limitations, must submit Economic Bids for Energy for the full amount of its Flexible RA Capacity in the Day-Ahead Market and the Real-Time Market for the Trading Hours applicable to the resource's Flexible Capacity Category for that month for the Trading Hours that it is capable of being economically dispatched.
- 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.

- (f) Short, Medium or Long Start Units.
  - (1) Short Start Units or Medium Start Units providing Flexible RA Capacity that do not have an IFM Schedule or a RUC Schedule for any of their Resource Adequacy Capacity for a given Trading Hour are required to participate in the Real-Time Market consistent with the provisions in Section 40.6.3 that apply to Short Start Units providing RA Capacity.
  - (2) Long Start Units providing Flexible RA Capacity that do not have an IFM Schedule or a RUC Schedule for any of their Resource Adequacy Capacity for a given Trading Hour are required to participate in the Real-Time Market consistent with the provisions in Section 40.6.7 that apply to Long Start Units providing RA Capacity.
  - (3) If availability is required under Section 40.6.3 or 40.6.7, the Scheduling Coordinator for the resource must submit to the RTM for that Trading hour for which the resource is capable of responding to Dispatch Instructions: (i) Energy Bids for the full amount of the available Flexible RA Capacity, including capacity for which it has submitted Ancillary Services Bids; and (ii) Ancillary Services Bids for the full amount of its Flexible RA Capacity that is certified to provide Ancillary Services, and for each Ancillary Service for which the resource is certified, including capacity for which it has submitted Energy Bids.
- (g) Extremely Long-Start Resources. Flexible RA Capacity Resources that are Extremely Long-Start Resources must be available to the CAISO by complying with the Extremely Long-Start Commitment Process under Section 31.7 or otherwise committing the resource upon instruction from the CAISO, if physically capable. Once an Extremely Long-Start Resource is committed by the CAISO, it is subject to the provisions of Section 40.10.6 regarding Day-Ahead Availability and Real-Time Availability for the Trading Days for which it was committed.
- (h) Non-Generator Resources, Regulation Energy Management. Non-Generator Resources providing Flexible RA Capacity and Regulation Energy Management must submit Bids for Regulation Up and Regulation Down for Trading Hours in the 17-hour period from 5:00 a.m. to 10:00 p.m., seven days a week and shall not submit Bids for Energy or other Ancillary Services.

# Attachment B – Marked Tariff Records Response To Order Initiating Briefing Procedures in ER14-2574 California Independent System Operator Corporation

#### 40.10.3.2 Flexible Capacity Category-- Base Ramping Resources

- (a) **Resource Criteria.** Base ramping resources must meet all of the following criteria, except as provided in Sections 40.10.3.2(b) and (c) --
  - (1) The resource must be capable of providing Flexible RA Capacity to the CAISO Markets through Economic Bids for Energy and Economic Bids for Ancillary Services that are not flagged as Contingency Only in the Day-Ahead Market, if and to the extent the resource is certified to provide Ancillary Services, submitted daily for the 17-hour period from 5:00 a.m. through 10:00 p.m.;
  - (2) The resource must be capable of providing Energy for a minimum of six hours up to its full Effective Flexible Capacity value including PMin;
  - (3) The resource must be capable of being available seven days a week;
  - (4) The resource must be able to provide the minimum of (i) two Start-Ups per day for every day of the month or sixty Start-Ups per month, or (ii) the number of Start-Ups allowed by its operational limits, including minimum up and minimum down time; and
  - (5) The resource must not have annual or monthly limitations on the number of Start-Ups or the amount of energy produced that, on a daily basis, are lower than the requirements in Section 40.10.3.2(a)(1) through (4).

- (1) A Use-Limited Resource may be included in this category if it meets the criteria in Section 40.10.3.2(a), except that use-limited resources providing Flexible RA Capacity are not required to submit bids for Ancillary Services in the Day-Ahead Market or the Real-Time Market.
- (2) A Load Serving Entity may include in this category a combined resource consisting of two Use-Limited Resources that do not individually meet the minimum operational and availability requirements but in combination meet the criteria in Section 40.10.3.2(a).
- (3) The Flexible RA Capacity amount for the combined resource will be less than or equal to the lowest Effective Flexible Capacity value shown on the Resource Flexible RA Capacity Plan for a resource in the combination.

- (4) Both resources in the combination The combined resource shall be subject to the mustoffer obligation up to their in Section 40.10.6.1(e)(2) for the Flexible RA Capacity amounts
  shown on the monthly Resource Flexible RA Capacity Plan for the combination.
- (c) Non-Generator Resource. A Non-Generator Resource that elects to provide Flexible RA

  Capacity may be included in this category if it meets the criteria in Section 40.10.3.2(a). A Non
  Generator Resource that elects to provide Flexible RA Capacity and Regulation Energy

  Management is not eligible to be included in this category.

## 40.10.3.3 Flexible Capacity Category -- Peak Ramping Resources

- (a) **Resource Criteria.** Peak ramping resources must meet all of the following criteria, except as provided in Sections 40.10.3.3(b) and (c) --
  - (1) The resource must be capable of providing Flexible RA Capacity to the CAISO Markets through Economic Bids for Energy and Economic Bids for Ancillary Services that are not flagged as Contingency Only in the Day-Ahead Market, if and to the extent the resource is certified to provide Ancillary Services, which must be submitted daily for a five-hour period to be determined by the CAISO on a seasonal basis;
  - (2) The resource must be capable of providing Energy for a minimum of three continuous hours up to its full Effective Flexible Capacity value including PMin;
  - (3) The resource must be capable of being available seven days a week.
  - (4) The resource must be capable of at least one Start-Up per day; and
  - (5) The resource must not have annual or monthly limitations on the number of unit Start-Ups or the amount of energy produced that, on a daily basis, are lower than the requirements in Section 40.10.3.3(a)(1) through (4).

- (1) A Use-Limited Resource may be included in this category if it meets the criteria in Section 40.10.3.3(a), except that use-limited resources providing Flexible RA Capacity are not required to submit bids for Ancillary Services in the Day-Ahead Market or the Real-Time Market.
- (2) A Load Serving Entity may include in this category a combined resource consisting of two

- Use-Limited Resources that do not individually meet the minimum operational and availability requirements but in combination meet the criteria in Section 40.10.3.3(a).
- (3) The Flexible RA Capacity amount for the combined resource will be less than or equal to the lowest Effective Flexible Capacity value shown on the Resource Flexible RA Capacity Plan for a resource in the combination.
- (4) Both resources in the combination The combined resource shall be subject to the mustoffer obligation up to their in Section 40.10.6.1(e)(2) for the Flexible RA Capacity amounts
  shown on the monthly Resource Flexible RA Capacity Plan for the combination.
- (c) Non-Generator Resource. A Non-Generator Resource that elects to provide Flexible RA Capacity may be included in this category if it meets the criteria in Section 40.10.3.3(a). A Non-Generator Resource that elects to provide Flexible RA Capacity and Regulation Energy Management is not eligible to be included in this category.
- (d) **Base Ramping Resource.** A resource that meets the qualifications of the Flexible Capacity Category for base ramping resources also qualifies to be included in this category as a peak ramping resource; however, a resource that meets only the qualifications of a peak ramping resource does not qualify as a base ramping resource.

#### 40.10.3.4 Flexible Capacity Category -- Super-Peak Ramping Resources.

- (a) **Resource Criteria.** Super-peak ramping resources must meet all of the following criteria, except as provided in Sections 40.10.3.4(b), (c) and (d) --
  - (1) The resource must be capable of providing Flexible RA Capacity to the CAISO Markets through Economic Bids for Energy and Economic Bids for Ancillary Services Bids that are not flagged as Contingency Only in the Day-Ahead Market, if and to the extent the resource is certified to provide Ancillary Services, which must be submitted each weekday that is not holiday, for a five-hour period to be determined by the CAISO on a seasonal basis;
  - (2) The resource must be capable of providing Energy for a minimum of three continuous hours up to its full Effective Flexible Capacity value including PMin;
  - (3) The resource must be capable of being available on weekdays that are not holidays, as

- defined in the Business Practice Manual;
- (4) The resource must be capable of at least one Start-Up per day; and
- (5) The resource must be capable of responding to at least five CAISO dispatches per month, during the five-hour period of the must offer obligation, for the resource to Start-Up.

- (1) A Use-Limited Resource may be included in this category if it meets the criteria in Section 40.10.3.4(a), except that use-limited resources providing Flexible RA Capacity are not required to submit bids for Ancillary Services in the Day-Ahead Market or the Real-Time Market.
- (2) A Load Serving Entity may include in this category a combined resource consisting of two Use-Limited Resources that do not individually meet the minimum operational and availability requirements but in combination meet the criteria in Section 40.10.3.4(a).
- (3) The Flexible RA Capacity amount for the combined resource will be less than or equal to the lowest Effective Flexible Capacity value shown on the Resource Flexible RA Capacity Plan for a resource in the combination.
- (4) Both resources in the combination The combined resource shall be subject to the mustoffer obligation up to their Section 40.10.6.1(e)(2) for the Flexible RA Capacity amounts
  shown on the monthly Resource Flexible RA Capacity Plan for the combination.
- (c) **Non-Generator Resource.** A Non-Generator Resource may be included in this category if it meets the criteria in Section 40.10.3.4(a) and is not registered in the CAISO's Master File as a Regulation Energy Management resource.
- (d) **Non-Generator Resource, Regulation Energy Management.** A Non-Generator Resource that is a Regulation Energy Management resource may be included in this category if it meets the following criteria --
  - (1) The resource must be capable of providing Regulation Energy Management to the CAISO Markets through Economic Bids for Regulation Up and Regulation Down submitted daily for a 17-hour period from 5:00 a.m. through 10:00 p.m.;

- (2) The resource shall not submit bids to provide Energy;
- (3) The resource must be capable of being available seven days a week;
- (4) The resource must be capable of unlimited Start-Ups per day; and
- (5) The resource must be registered as a Non-Generator Resource providing Regulation Energy Management in the CAISO's Master File.
- (e) Base Ramping and Peak Ramping Resources. A resource that meets the qualifications of the Flexible Capacity Category for base ramping resources or peak ramping resources also qualifies to be included in this category as a super-peak ramping resource; however, a resource that meets only the qualifications of a super-peak ramping resource does not qualify as a base ramping resource or a peak ramping resource.

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#### 40.10.6.1 Day-Ahead and Real-Time Availability

- (a) **Must-Offer Obligation.** The Scheduling Coordinator for a resource supplying Flexible RA Capacity must submit Economic Bids for Energy for the full amount of the resource's Flexible RA Capacity, and Economic Bids for Ancillary Services that are not flagged as Contingency Only in the Day-Ahead Market for the full amount of the resource's Flexible RA Capacity that is certified to provide Ancillary Services, in the Day-Ahead Market and the Real-Time Market for the applicable Trading Hours that is capable of being economically dispatched as follows, except as provided in Section 40.10.6.1(e) through(h) --
  - (1) Flexible Capacity Category for base ramping resources the 17-hour period from 5:00 a.m. to 10:00 p.m., seven days a week;
  - (2) Flexible Capacity Category for peak ramping resources the five-hour period determined for each season by the CAISO's Flexible Capacity Needs Assessment, seven days a week; and
  - (3) Flexible Capacity Category for super-peak ramping resources the five-hour period determined for each season by the CAISO's Flexible Capacity Needs Assessment, weekdays, except holidays and as provided in Section 40.10.6.1(h), until the resource receives during the five-hour period of the must offer obligation and responds to five

CAISO dispatches for Start-Up during the month, after which the resource will not be subject to a must-offer obligation as a super-peak ramping resource for the remainder of that month; however, any other must-offer obligations for Resource Adequacy Capacity will still apply.

- (b) Availability Requirement. During the period of the applicable must-offer obligation, a Flexible RA Capacity Resource must be operationally available except for limitations specified in the Master File, legal or regulatory prohibitions or as otherwise required by this CAISO Tariff or by Good Utility Practice.
- (c) Co-optimization. Through the IFM co-optimization process, the CAISO will utilize available Flexible RA Capacity to provide Energy or Ancillary Services in the most efficient manner to clear the Energy market, manage congestion and procure required Ancillary Services.
- (d) Participation in RUC. A Flexible RA Capacity Resource must participate in the RUC to the extent that the resource has available Flexible RA Capacity that is not reflected in an IFM Schedule. Resource Adequacy Capacity participating in RUC will be optimized using a zero dollar (\$0/MW-hour) RUC Availability Bid. Flexible RA Capacity selected in RUC will not be eligible to receive a RUC Availability Payment.

- A Use-Limited Resource providing Flexible RA Capacity must be capable of responding to Dispatch Instructions and, consistent with its use-limitations, must submit Economic Bids for Energy for the full amount of its Flexible RA Capacity in the Day-Ahead Market and the Real-Time Market for the Trading Hours applicable to the resource's Flexible Capacity Category for that month for the Trading Hours that it is capable of being economically dispatched.
- 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.

- (f) Short, Medium or Long Start Units.
  - (1) Short Start Units or Medium Start Units providing Flexible RA Capacity that do not have an IFM Schedule or a RUC Schedule for any of their Resource Adequacy Capacity for a given Trading Hour are required to participate in the Real-Time Market consistent with the provisions in Section 40.6.3 that apply to Short Start Units providing RA Capacity.
  - (2) Long Start Units providing Flexible RA Capacity that do not have an IFM Schedule or a RUC Schedule for any of their Resource Adequacy Capacity for a given Trading Hour are required to participate in the Real-Time Market consistent with the provisions in Section 40.6.7 that apply to Long Start Units providing RA Capacity.
  - (3) If availability is required under Section 40.6.3 or 40.6.7, the Scheduling Coordinator for the resource must submit to the RTM for that Trading hour for which the resource is capable of responding to Dispatch Instructions: (i) Energy Bids for the full amount of the available Flexible RA Capacity, including capacity for which it has submitted Ancillary Services Bids; and (ii) Ancillary Services Bids for the full amount of its Flexible RA Capacity that is certified to provide Ancillary Services, and for each Ancillary Service for which the resource is certified, including capacity for which it has submitted Energy Bids.
- (g) Extremely Long-Start Resources. Flexible RA Capacity Resources that are Extremely Long-Start Resources must be available to the CAISO by complying with the Extremely Long-Start Commitment Process under Section 31.7 or otherwise committing the resource upon instruction from the CAISO, if physically capable. Once an Extremely Long-Start Resource is committed by the CAISO, it is subject to the provisions of Section 40.10.6 regarding Day-Ahead Availability and Real-Time Availability for the Trading Days for which it was committed.
- (h) Non-Generator Resources, Regulation Energy Management. Non-Generator Resources providing Flexible RA Capacity and Regulation Energy Management must submit Bids for Regulation Up and Regulation Down for Trading Hours in the 17-hour period from 5:00 a.m. to 10:00 p.m., seven days a week and shall not submit Bids for Energy or other Ancillary Services.

## **CERTIFICATE OF SERVICE**

I hereby certify that I have served the foregoing document upon the parties listed on the official service list in the captioned proceeding, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, CA, this 10th day of April, 2015.

/s/ Sarah Garcia Sarah Garcia