

**Attachment A – Clean Tariff Sheets**

**Tariff Amendment – Resource Adequacy Modeling and Program Design Initiative**

**California Independent System Operator Corporation**

**March 3, 2026**

## **Section 40**

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### **40.2 Information Requirements for Resource Adequacy Programs**

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#### **40.2.2 Non-CPUC Load Serving Entities and CPEs**

##### **40.2.2.1 Reserve Margin**

- (a) The Scheduling Coordinator for a Non-CPUC Load Serving Entity must provide the CAISO with the Reserve Margin(s) adopted by the appropriate Local Regulatory Authority or federal agency for use in the annual Resource Adequacy Plan and monthly Resource Adequacy Plans listed as a percentage of the Demand Forecasts developed in accordance with Section 40.2.2.3.
- (b) For the Scheduling Coordinator for a Non-CPUC Load Serving Entity for which the appropriate Local Regulatory Authority or federal agency has not established a Reserve Margin(s) or a CPUC Load Serving Entity subject to Section 40.2.1(b), the Reserve Margin for each month is the additional quantity of Qualifying Capacity above the peak Demand Forecast in the CAISO BAA for that month needed to meet a 1-day-in-ten-years loss of load expectation standard as a percent of the peak Demand Forecast in the CAISO BAA for that month. As further specified in the BPM, the CAISO determines that quantity of additional Qualifying Capacity needed based on an annual probabilistic reliability analysis conducted consistent with accepted industry practices that models system conditions and considers potential variability in relevant underlying factors, such as production from wind and solar units, Forced Outages, and forecasted consumption patterns from Load. The CAISO provides stakeholders an opportunity to provide feedback on the proposed results of the analysis and key inputs to the analysis before

finalizing the results and also provides transparency regarding the final results.

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#### **40.4.7 Submission of Supply Plans and Reports on Capacity Status**

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##### **40.4.7.4 Reports on Capacity Status**

Scheduling Coordinators of resources with NQC or EFC that are within the CAISO Balancing Authority Area and are not shown as Resource Adequacy Capacity or Flexible Resource Adequacy Capacity for their full NQC or EFC values, respectively, must provide a report to the CAISO on why the resource was not shown for its full capacity.

The report must be provided using the categories and processes defined in the BPM. The report must be made in both the year-ahead and month-ahead timeframes by the submission deadlines established for submission of the annual and monthly Supply Plans, respectively. The information provided in the report must represent a good-faith submission of the Scheduling Coordinator's intentions at the time it submits the report. Scheduling Coordinators are not required to update the report based on changes in the resource status following submission.

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#### **40.8 CAISO Default Qualifying Capacity Criteria**

##### **40.8.1 Applicability of Default Criteria**

The criteria in this Section 40.8 apply when the CPUC or Local Regulatory Authority has not established and provided to the CAISO criteria to determine the types of resources that may be eligible to provide Qualifying Capacity and for calculating Qualifying Capacity for such eligible resource types.

##### **40.8.2 General Qualifying Capacity Methodologies**

As further specified in Section 40.8.3, the CAISO applies the following methodologies to various classes of resources. Where a methodology calls for 36 months' of historical data for an individual resource but there is no resource-specific data for part of that period, then the CAISO substitutes the missing periods of data with class average data.

#### **40.8.2.1 Effective Load Carrying Capability**

The effective load carrying capability (ELCC) methodology calculates a resource's monthly Qualifying Capacity based on a percentage discount from its PMax utilizing a sequential four-step conceptual process.

Step one identifies the quantity of capacity provided to the CAISO Balancing Authority Area from each resource technology class in a probabilistic reliability analysis conducted consistent with accepted industry practices, as further specified in the BPM, that maintains a 1-day-in-ten-years loss of load expectation standard.

Step two determines a preliminary class-based discount based on the quantity of perfect capacity that would be needed to replace the capacity provided by that class of resource in the probabilistic reliability analysis as a percent of the capacity provided by that class of resource technology in the probabilistic reliability analysis. For purposes of this Section 40.8.2.1, perfect capacity is capacity from a hypothetical resource that is fully available at all times.

Step three calculates a final class-based discount. The final class-based discount scales the preliminary class-based discount based on the quantity of perfect capacity that would be needed to replace the capacity provided by all resource classes subject to ELCC in the probabilistic reliability analysis as a percent of the capacity provided by all resource classes subject to ELCC in the probabilistic reliability analysis.

Step four calculates a resource-specific adjustment to the final class-based discount. The resource-specific adjustment is based on a resource's performance over the 36-month default Qualifying Capacity evaluation period defined in the BPM compared to the performance in that period of all resources of that resource type, as further specified in the BPM.

#### **40.8.2.2 Unforced Capacity**

The unforced capacity (UCAP) methodology calculates a resource's monthly Qualifying Capacity based on a percentage discount from its PMax. The CAISO creates a separate resource-specific UCAP discount for seasons, with those seasons defined in the BPM.

For each season, the CAISO calculates a UCAP discount based on the quantity of capacity from the resource that was not on Forced Outage as a percent of the quantity of capacity that would have been available from the unit if it never had any Forced Outages. The CAISO calculates this percentage based only on Forced Outages during one of the at-risk hours on at-risk days for that season, as further specified in the BPM. The at-risk hours are the individual hours of the day during that season where reliability risks are greatest in an individual hour as determined based on projected system conditions during the period that would be covered by the resulting Qualifying Capacity value. The at-risk days are the days during that season where reliability risks were greatest across the day based on historic system conditions with the tightest supply/demand balance. The UCAP calculation does not consider a Forced Outage reported in a nature of work category relating to Generation Outages induced by transmission Outages, as further specified in the Business Practice Manual.

The UCAP discount from PMax of a resource for a year is the average of the seasonal UCAP discounts from the three prior years, weighted in the following proportions: 45 percent for seasonal UCAP from one year prior; 35 percent for seasonal UCAP from two years prior; and 20 percent for three years prior.

#### **40.8.2.3 Average Generation**

The average generation methodology calculates a resource's monthly Qualifying Capacity based on historic hourly performance in that month of the year over the 36-month default Qualifying Capacity evaluation period defined in the BPM.

#### **40.8.2.4 Performance to Dispatch**

The performance to Dispatch methodology calculates a resource's Qualifying Capacity, which is static for each month of a year, based on the average energy output during each hour a resource had a Dispatch over the 36-month default Qualifying Capacity evaluation period defined in the BPM as a percentage of the average hourly Dispatch value over those 36 months. For purposes of this calculation, a resource's energy output in an hour cannot exceed its hourly Dispatch value. The CAISO calculates a resource's

Qualifying Capacity under this methodology based on the aggregated performance of all resources under the same SCID.

#### **40.8.2.5 Reduction in Demand Per Dispatch**

The reduction in demand per Dispatch methodology calculates a resource's Qualifying Capacity, which is static for each month of a year, based on the resource's average reduction in demand on a per-Dispatch basis over the 36-month default Qualifying Capacity evaluation period defined in the BPM.

### **40.8.3 Default Criteria for Specific Resource Classes**

#### **40.8.3.1 Nuclear and Dispatchable Thermal**

Nuclear and dispatchable thermal Generating Units, other than Qualifying Facilities with Existing QF Contracts addressed in Section 40.8.3.11 below, must be a Participating Generator or a System Unit. The CAISO calculates the Qualifying Capacity of nuclear and dispatchable thermal units, other than Qualifying Facilities addressed in Section 40.8.3.11, using the UCAP methodology described in Section 40.8.2.2.

#### **40.8.3.2 Non-Dispatchable Thermal**

Non-dispatchable thermal Generating Units, other than Qualifying Facilities with Existing QF Contracts addressed in Section 40.8.3.11 below, must be a Participating Generator or a System Unit. The CAISO calculates Qualifying Capacity of non-dispatchable thermal units, other than Qualifying Facilities addressed in Section 40.8.3.11, using the average generation methodology described in Section 40.8.2.3.

#### **40.8.3.3 Wind and Solar**

As used in this Section, wind units are those wind Generating Units without backup sources of Generation and solar units are those solar Generating Units without backup sources of Generation. Wind and solar units, other than Qualifying Facilities with Existing QF Contracts, must be Participating Intermittent Resources or subject to availability provisions of Section 40.6.4. The CAISO calculates the Qualifying Capacity of all wind or solar units, including Qualifying Facilities, using the ELCC methodology described in Section 40.8.2.1. For wind and solar units, the resource-specific adjustment for performance in the ELCC methodology is based on capacity factors during the at-risk hours determined pursuant to Section 40.8.2.2.

#### **40.8.3.4 Hydroelectric – Dispatchable, Run-of-River, and Pumped Storage**

Hydroelectric Generating Units, other than Qualifying Facilities with Existing QF Contracts, must be either Participating Generators or System Units. The CAISO calculates the Qualifying Capacity of Hydroelectric Generating Units irrespective of status as a Qualifying Facility status. The CAISO calculates the Qualifying Capacity of Pumped-Storage Hydro Units using the UCAP methodology described in Section 40.8.2.2. The CAISO calculates the Qualifying Capacity of all other types of Hydroelectric Generating Units using the ELCC methodology described in Section 40.8.2.1. For dispatchable Hydroelectric Generating Units, the resource-specific adjustment for performance in the ELCC methodology is based on all Forced Outages, excluding Forced Outages reported in a nature of work category relating to Generation Outages induced by transmission Outages, as further specified in the Business Practice Manual. For Run-of-River Resources, the resource-specific adjustment for performance in the ELCC methodology is based on capacity factors during the at-risk hours determined pursuant to Section 40.8.2.2.

#### **40.8.3.5 Non-Generator Resources**

Non-Generator Resources must be either Participating Generators or System Units to qualify as Resource Adequacy Capacity. The CAISO calculates Qualifying Capacity of Non-Generator Resources using the ELCC methodology described in Section 40.8.2.1. For Non-Generator Resources, the resource-specific adjustment for performance in the ELCC methodology is based on all Forced Outages, excluding Forced Outages reported in a nature of work category relating to Generation Outages induced by transmission Outages, as further specified in the Business Practice Manual.

#### **40.8.3.6 Proxy Demand Resources**

A Proxy Demand Resource must have the ability to (i) be dispatched for at least twenty-four hours per month, (ii) be dispatched on at least three consecutive days, and (iii) respond for at least four hours per dispatch in order to qualify as Resource Adequacy Capacity. The CAISO calculates the Qualifying Capacity of Proxy Demand Resources using the performance to Dispatch methodology described in Section 40.8.2.4.

#### **40.8.3.7 Participating Loads**

The CAISO calculates the Qualifying Capacity of Participating Loads using the reduction in demand per

Dispatch methodology described in Section 40.8.2.5. Loads of Participating Loads must be available at least 48 hours, and if the Loads can only be dispatched for a maximum of two hours per event, then only 0.89 percent of a Scheduling Coordinator's portfolio may be made up of such Loads.

#### **40.8.3.8 Unit-Specific Contracts**

Unit-specific contracts with Participating Generators or System Units will qualify as Resource Adequacy Capacity subject to the verification that the total MW quantity of all contracts from a specific unit do not exceed the total Net Qualifying Capacity (MW) consistent with the Net Qualifying Capacity determination for that unit.

#### **40.8.3.9 Qualifying Facilities**

Qualifying Facilities must be subject to an effective Participating Generator Agreement or Net Scheduled Participating Generator Agreement or must be System Units, unless they have an Existing QF Contract. Except for hydro, wind, and solar Qualifying Facilities addressed pursuant to Sections 40.8.3.3 and 40.8.3.4, the Qualifying Capacity of Qualifying Facilities under Existing QF Contracts, will be based on historic monthly Generation output during the hours of noon to 6:00 p.m. (net of Self-provided Load) during a three-year rolling average.

#### **40.8.3.10 System Resources and Pseudo-Ties**

##### **40.8.3.10.1 Dynamic System Resources and Pseudo-Ties**

Dynamic System Resources and Pseudo-Ties of Generating Units to the CAISO Balancing Authority Area shall be treated similar to resources within the CAISO Balancing Authority Area, except with respect to the deliverability screen under Section 40.4.6.1 and with respect to the limitation on the Qualifying Capacity of wind and solar resources set forth in Section 40.8.3.3. However, eligibility as a Resource Adequacy Resource is contingent upon a showing by the Scheduling Coordinator that the Dynamic System Resource or Pseudo-Tie of a Generating Unit to the CAISO Balancing Authority Area has secured transmission through any intervening Balancing Authority Areas for the Operating Hours that cannot be curtailed for economic reasons or bumped by higher priority transmission and that the Load Serving Entity for which the Scheduling Coordinator is submitting Demand Bids has an allocation of import capacity at the import Scheduling Point under Section 40.4.6.2 that is not less than the Resource Adequacy Capacity provided by the Dynamic System Resource or Pseudo-Tie of a Generating Unit to the

CAISO Balancing Authority Area.

#### **40.8.3.10.2 Non-Dynamic System Resources**

For Non-Dynamic System Resources, the Scheduling Coordinator must demonstrate that the Load Serving Entity for which the Scheduling Coordinator is scheduling Demand has an allocation of import capacity at the import Scheduling Point under Section 40.4.6.2 that is not less than the Resource Adequacy Capacity from the Non-Dynamic System Resource. The Scheduling Coordinator must also demonstrate that the Non-Dynamic System Resource is covered by Operating Reserves, unless unit contingent, in the sending Balancing Authority Area. Eligibility as Resource Adequacy Capacity is contingent upon a showing by the Scheduling Coordinator of the System Resource that it has secured transmission through any intervening Balancing Authority Areas for the Operating Hours that cannot be curtailed for economic reasons or bumped by higher priority transmission. With respect to Non-Dynamic System Resources, any inter-temporal constraints, such as multi-hour run blocks, must be explicitly identified in the monthly Resource Adequacy Plan, and no constraints may be imposed beyond those explicitly stated in the plan.

#### **40.8.3.11 Reliability Demand Response Resources**

The Qualifying Capacity of a Reliability Demand Response Resource, for each month, will be based on the resource's average monthly historic demand reduction performance during that same month during the Availability Assessment Hours, as described in Section 40.9.3, using a three-year rolling average. For a Reliability Demand Response Resource with fewer than three years of performance history, for all months for which there is no historic data, the CAISO will use a monthly megawatt value as certified and reported to the CAISO by the Demand Response Provider; otherwise, where available, the CAISO will use the average of historic demand reduction performance data available, by month, for a Reliability Demand Response Resource.

#### **40.8.3.12 Distributed Generation Facilities**

- (a) Distributed Generation Facilities that meet the applicable requirements in Section 4.6 qualify as Resource Adequacy Capacity.
- (b) The CAISO will determine the Net Qualifying Capacity of each Distributed Generation Facility for each Resource Adequacy Compliance Year consistent with similar resource

classifications connected to the transmission system, as provided in Section 40.4.6.1.

- (c) The Scheduling Coordinator for individual Distributed Generation Facilities, with the same resource type and PMax values less than 0.5 MW, that seek to operate as a combined Distributed Generation Facility, must submit to the CAISO a request that the initial Net Qualifying Capacity be determined and approved as a combined Distributed Generation Facility.

#### **40.8.3.13 Facilities under Construction**

The Qualifying Capacity for facilities under construction will be determined based on the type of resource as described elsewhere in this Section 40.8. In addition, the facility must have been in commercial operation for no less than one month to be eligible to be included as a Resource Adequacy Resource in a Scheduling Coordinator's monthly Resource Adequacy Plan.

#### **40.8.3.14 Jointly-Owned Facilities**

A jointly-owned facility must be either a Participating Generator or a System Unit. The Qualifying Capacity for the entire facility will be determined based on the type of resource as described elsewhere in this Section 40.8. In addition, the Scheduling Coordinator must provide the CAISO with a demonstration of its entitlement to the output of the jointly-owned facility's Qualified Capacity and an explanation of how that entitlement may change if the facility's output is restricted.

#### **40.8.3.15 Hybrid Resources**

The default Qualifying Capacity of a Hybrid Resource is the sum of the individual Qualifying Capacity values for each component, not to exceed the facility's Interconnection Service Capacity.

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### **Section 43A**

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#### **43A.6.3 [Not Used]**

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## **Appendix A**

### **- Reserve Margin**

The percentage of a Load Serving Entity's peak Demand Forecast for which the Scheduling Coordinator for that Load Serving Entity must demonstrate procurement of Resource Adequacy Capacity, in addition to procurement of Resource Adequacy Capacity in the amount of that peak Demand Forecast.

**Attachment B – Redlined Tariff Sheets**

**Tariff Amendment – Resource Adequacy Modeling and Program Design Initiative**

**California Independent System Operator Corporation**

**March 3, 2026**

## Section 40

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### **40.2 Information Requirements for Resource Adequacy Programs**

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#### **40.2.2 Non-CPUC Load Serving Entities and CPEs**

##### **40.2.2.1 Reserve Margin**

- (a) The Scheduling Coordinator for a Non-CPUC Load Serving Entity must provide the CAISO with the Reserve Margin(s) adopted by the appropriate Local Regulatory Authority or federal agency for use in the annual Resource Adequacy Plan and monthly Resource Adequacy Plans listed as a percentage of the Demand Forecasts developed in accordance with Section 40.2.2.3.
- (b) For the Scheduling Coordinator for a Non-CPUC Load Serving Entity for which the appropriate Local Regulatory Authority or federal agency has not established a Reserve Margin(s) or a CPUC Load Serving Entity subject to Section 40.2.1(b), the Reserve Margin for each month is the additional quantity of Qualifying Capacity above the peak Demand Forecast in the CAISO BAA for that month needed to meet a 1-day-in-ten-years loss of load expectation standard as a percent of the peak Demand Forecast in the CAISO BAA for that month. As further specified in the BPM, the CAISO determines that quantity of additional Qualifying Capacity needed based on an annual probabilistic reliability analysis conducted consistent with accepted industry practices that models system conditions and considers potential variability in relevant underlying factors, such as production from wind and solar units, Forced Outages, and forecasted consumption patterns from Load. The CAISO provides stakeholders an opportunity to provide feedback on the proposed results of the analysis and key inputs to the analysis before

~~finalizing the results and also provides transparency regarding the final results, shall be no less than fifteen percent (15%) of the LSE's peak hourly Demand for the applicable month, as determined by the Demand Forecasts developed in accordance with Section 40.2.2.3.~~

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#### **40.4.7 Submission of Supply Plans and Reports on Capacity Status**

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##### **40.4.7.4 Reports on Capacity Status**

~~Scheduling Coordinators of resources with NQC or EFC that are within the CAISO Balancing Authority Area and are not shown as Resource Adequacy Capacity or Flexible Resource Adequacy Capacity for their full NQC or EFC values, respectively, must provide a report to the CAISO on why the resource was not shown for its full capacity.~~

~~The report must be provided using the categories and processes defined in the BPM. The report must be made in both the year-ahead and month-ahead timeframes by the submission deadlines established for submission of the annual and monthly Supply Plans, respectively. The information provided in the report must represent a good-faith submission of the Scheduling Coordinator's intentions at the time it submits the report. Scheduling Coordinators are not required to update the report based on changes in the resource status following submission.~~

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#### **40.8 CAISO Default Qualifying Capacity Criteria**

##### **40.8.1 Applicability of Default Criteria**

The criteria in this Section 40.8 ~~shall apply only: (i) where~~ when the CPUC or Local Regulatory Authority

has not established and provided to the CAISO criteria to determine the types of resources that may be eligible to provide Qualifying Capacity and for calculating Qualifying Capacity for such eligible resource types, and (ii) until the CAISO has been notified in writing by the CPUC of its intent to overturn, reject or fundamentally modify the capacity-based framework in CPUC Decisions 04-01-050 (Jan. 10, 2004), 04-10-035 (Oct. 28, 2004), and 05-10-042 (Oct. 31, 2005). The types of resources specified in this Section 40.8.1 will be eligible to provide Qualifying Capacity to the extent they meet the criteria for each type of resource set forth in this Section 40.8.1.

#### **40.8.2 General Qualifying Capacity Methodologies**

As further specified in Section 40.8.3, the CAISO applies the following methodologies to various classes of resources. Where a methodology calls for 36 months' of historical data for an individual resource but there is no resource-specific data for part of that period, then the CAISO substitutes the missing periods of data with class average data.

##### **40.8.2.1 Effective Load Carrying Capability**

The effective load carrying capability (ELCC) methodology calculates a resource's monthly Qualifying Capacity based on a percentage discount from its PMax utilizing a sequential four-step conceptual process.

Step one identifies the quantity of capacity provided to the CAISO Balancing Authority Area from each resource technology class in a probabilistic reliability analysis conducted consistent with accepted industry practices, as further specified in the BPM, that maintains a 1-day-in-ten-years loss of load expectation standard.

Step two determines a preliminary class-based discount based on the quantity of perfect capacity that would be needed to replace the capacity provided by that class of resource in the probabilistic reliability analysis as a percent of the capacity provided by that class of resource technology in the probabilistic reliability analysis. For purposes of this Section 40.8.2.1, perfect capacity is capacity from a hypothetical resource that is fully available at all times.

Step three calculates a final class-based discount. The final class-based discount scales the preliminary class-based discount based on the quantity of perfect capacity that would be needed to replace the capacity provided by all resource classes subject to ELCC in the probabilistic reliability analysis as a

percent of the capacity provided by all resource classes subject to ELCC in the probabilistic reliability analysis.

Step four calculates a resource-specific adjustment to the final class-based discount. The resource-specific adjustment is based on a resource's performance over the 36-month default Qualifying Capacity evaluation period defined in the BPM compared to the performance in that period of all resources of that resource type, as further specified in the BPM.

#### **40.8.2.2           Unforced Capacity**

The unforced capacity (UCAP) methodology calculates a resource's monthly Qualifying Capacity based on a percentage discount from its PMax. The CAISO creates a separate resource-specific UCAP discount for seasons, with those seasons defined in the BPM.

For each season, the CAISO calculates a UCAP discount based on the quantity of capacity from the resource that was not on Forced Outage as a percent of the quantity of capacity that would have been available from the unit if it never had any Forced Outages. The CAISO calculates this percentage based only on Forced Outages during one of the at-risk hours on at-risk days for that season, as further specified in the BPM. The at-risk hours are the individual hours of the day during that season where reliability risks are greatest in an individual hour as determined based on projected system conditions during the period that would be covered by the resulting Qualifying Capacity value. The at-risk days are the days during that season where reliability risks were greatest across the day based on historic system conditions with the tightest supply/demand balance. The UCAP calculation does not consider a Forced Outage reported in a nature of work category relating to Generation Outages induced by transmission Outages, as further specified in the Business Practice Manual.

The UCAP discount from PMax of a resource for a year is the average of the seasonal UCAP discounts from the three prior years, weighted in the following proportions: 45 percent for seasonal UCAP from one year prior; 35 percent for seasonal UCAP from two years prior; and 20 percent for three years prior.

#### **40.8.2.3           Average Generation**

The average generation methodology calculates a resource's monthly Qualifying Capacity based on historic hourly performance in that month of the year over the 36-month default Qualifying Capacity evaluation period defined in the BPM.

#### **40.8.2.4 Performance to Dispatch**

The performance to Dispatch methodology calculates a resource's Qualifying Capacity, which is static for each month of a year, based on the average energy output during each hour a resource had a Dispatch over the 36-month default Qualifying Capacity evaluation period defined in the BPM as a percentage of the average hourly Dispatch value over those 36 months. For purposes of this calculation, a resource's energy output in an hour cannot exceed its hourly Dispatch value. The CAISO calculates a resource's Qualifying Capacity under this methodology based on the aggregated performance of all resources under the same SCID.

#### **40.8.2.5 Reduction in Demand Per Dispatch**

The reduction in demand per Dispatch methodology calculates a resource's Qualifying Capacity, which is static for each month of a year, based on the resource's average reduction in demand on a per-Dispatch basis over the 36-month default Qualifying Capacity evaluation period defined in the BPM.

#### **40.8.1.1 [Not Used]**

#### **40.8.1.2 Nuclear and Thermal**

~~Nuclear and thermal Generating Units, other than Qualifying Facilities with Existing QF Contracts, addressed in Section 40.8.1.8 below, must be a Participating Generator or a System Unit. The Qualifying Capacity of nuclear and thermal units, other than Qualifying Facilities addressed in Section 40.8.1.8, will be based on net dependable capacity defined by NERC Generating Availability Data System information.~~

#### **40.8.1.3 Hydro**

~~Hydroelectric Generating Units, other than Qualifying Facilities with Existing QF Contracts, must be either Participating Generators or System Units. The Qualifying Capacity of a pond or Pumped Storage Hydro Unit, other than a QF, will be determined based on net dependable capacity defined by NERC GADS minus variable head derate based on an average dry year reservoir level. The Qualifying Capacity of a pond or Pumped Storage Hydro Unit that is a QF will be determined based on historic performance during the hours of noon to 6:00 p.m., using a three-year rolling average.~~

~~The Qualifying Capacity of all run-of-river hydro units, including Qualifying Facilities, will be based on net dependable capacity defined by NERC GADS minus an average dry year conveyance flow, stream flow, or canal head derate. As used in this section, average dry year reflects a one-in-five year dry hydro~~

~~scenario (for example, using the 4th driest year from the last 20 years on record).~~

#### ~~40.8.1.4 Unit Specific Contracts~~

~~Unit specific contracts with Participating Generators or System Units will qualify as Resource Adequacy Capacity subject to the verification that the total MW quantity of all contracts from a specific unit do not exceed the total Net Qualifying Capacity (MW) consistent with the Net Qualifying Capacity determination for that unit.~~

#### ~~40.8.1.5 Contracts with Liquidated Damage Provisions~~

~~Firm Energy contracts with liquidated damages provisions, as generally reflected in Service Schedule C of the Western Systems Power Pool Agreement or the Firm LD product of the Edison Electric Institute pro forma agreement, or any other similar firm Energy contract that does not require the seller to source the Energy from a particular unit, and specifies a delivery point internal to the CAISO Balancing Authority Area entered into before October 27, 2005 shall be eligible to count as Qualifying Capacity until the end of 2008. A Scheduling Coordinator, however, cannot have more than twenty five percent (25%) of its portfolio of Qualifying Capacity met by contracts with liquidated damage provisions for 2008.~~

#### ~~40.8.1.6 Wind and Solar~~

~~As used in this Section, wind units are those wind Generating Units without backup sources of Generation and solar units are those solar Generating Units without backup sources of Generation. Wind and solar units, other than Qualifying Facilities with Existing QF Contracts, must be Participating Intermittent Resources or subject to availability provisions of Section 40.6.4.~~

~~The Qualifying Capacity of all wind or solar units, including Qualifying Facilities, for each month will be based on their monthly historic performance during that same month during the hours of noon to 6:00 p.m., using a three year rolling average. For wind or solar units with less than three years operating history, all months for which there is no historic performance data will utilize the monthly average production factor of all units (wind or solar, as applicable) within the TAC Area, or other production data from another area determined by the CAISO to be appropriate if the unit is not within a TAC Area, in which the Generating Unit is located.~~

#### ~~40.8.1.7 Geothermal~~

~~Geothermal Generating Units, other than Qualifying Facilities with Existing QF Contracts addressed in~~

~~Section 40.8.1.8, must be Participating Generators or System Units. The Qualifying Capacity of geothermal units, other than Qualifying Facilities addressed in Section 40.8.1.8, will be based on NERC GADS net dependable capacity minus a derate for steam field degradation.~~

#### ~~**40.8.1.8 Treatment of Qualifying Capacity for Qualifying Facilities**~~

~~Qualifying Facilities must be subject to an effective Participating Generator Agreement or Net Scheduled Participating Generator Agreement or must be System Units, unless they have an Existing QF Contract. Except for hydro, wind, and solar Qualifying Facilities addressed pursuant to Sections 40.8.1.3 and 40.8.1.6, the Qualifying Capacity of Qualifying Facilities under Existing QF Contracts, will be based on historic monthly Generation output during the hours of noon to 6:00 p.m. (net of Self-provided Load) during a three-year rolling average.~~

#### ~~**40.8.1.9 Participating Loads**~~

~~The Qualifying Capacity of Participating Loads shall be the average reduction in Demand over a three-year period on a per Dispatch basis or, if the Load does not have three years of performance history, based on comparable evaluation data using similar programs. Loads of Participating Loads must be available at least 48 hours, and if the Loads can only be dispatched for a maximum of two hours per event, then only 0.89 percent of a Scheduling Coordinator's portfolio may be made up of such Loads.~~

#### ~~**40.8.1.10 Jointly-Owned Facilities**~~

~~A jointly-owned facility must be either a Participating Generator or a System Unit. The Qualifying Capacity for the entire facility will be determined based on the type of resource as described elsewhere in this Section 40.8.1. In addition, the Scheduling Coordinator must provide the CAISO with a demonstration of its entitlement to the output of the jointly-owned facility's Qualified Capacity and an explanation of how that entitlement may change if the facility's output is restricted.~~

#### ~~**40.8.1.11 Facilities under Construction**~~

~~The Qualifying Capacity for facilities under construction will be determined based on the type of resource as described elsewhere in this Section 40.8. In addition, the facility must have been in commercial operation for no less than one month to be eligible to be included as a Resource Adequacy Resource in a Scheduling Coordinator's monthly Resource Adequacy Plan.~~

#### ~~40.8.1.12 — System Resources and Pseudo-Ties~~

##### ~~40.8.1.12.1 — Dynamic System Resources and Pseudo-Ties~~

~~Dynamic System Resources and Pseudo-Ties of Generating Units to the CAISO Balancing Authority Area shall be treated similar to resources within the CAISO Balancing Authority Area, except with respect to the deliverability screen under Section 40.4.6.1 and with respect to the limitation on the Qualifying Capacity of wind and solar resources set forth in Section 40.8.1.6. However, eligibility as a Resource Adequacy Resource is contingent upon a showing by the Scheduling Coordinator that the Dynamic System Resource or Pseudo-Tie of a Generating Unit to the CAISO Balancing Authority Area has secured transmission through any intervening Balancing Authority Areas for the Operating Hours that cannot be curtailed for economic reasons or bumped by higher priority transmission and that the Load Serving Entity for which the Scheduling Coordinator is submitting Demand Bids has an allocation of import capacity at the import Scheduling Point under Section 40.4.6.2 that is not less than the Resource Adequacy Capacity provided by the Dynamic System Resource or Pseudo-Tie of a Generating Unit to the CAISO Balancing Authority Area.~~

##### ~~40.8.1.12.2 — Non-Dynamic System Resources~~

~~For Non-Dynamic System Resources, the Scheduling Coordinator must demonstrate that the Load Serving Entity for which the Scheduling Coordinator is scheduling Demand has an allocation of import capacity at the import Scheduling Point under Section 40.4.6.2 that is not less than the Resource Adequacy Capacity from the Non-Dynamic System Resource. The Scheduling Coordinator must also demonstrate that the Non-Dynamic System Resource is covered by Operating Reserves, unless unit contingent, in the sending Balancing Authority Area. Eligibility as Resource Adequacy Capacity is contingent upon a showing by the Scheduling Coordinator of the System Resource that it has secured transmission through any intervening Balancing Authority Areas for the Operating Hours that cannot be curtailed for economic reasons or bumped by higher priority transmission. With respect to Non-Dynamic System Resources, any inter-temporal constraints, such as multi-hour run blocks, must be explicitly identified in the monthly Resource Adequacy Plan, and no constraints may be imposed beyond those explicitly stated in the plan.~~

#### ~~40.8.1.13 Proxy Demand Resources~~

~~A Proxy Demand Resource must have the ability to (i) be dispatched for at least twenty-four hours per month, (ii) be dispatched on at least three consecutive days, and (iii) respond for at least four hours per dispatch in order to qualify as Resource Adequacy Capacity. The Qualifying Capacity of a Proxy Demand Resource, for each month, will be based on the resource's average monthly historic demand reduction performance during that same month during the Availability Assessment Hours, as described in Section 40.9.3, using a three-year rolling average. For a Proxy Demand Resource with fewer than three years of performance history, for all months for which there is no historic data, the CAISO will utilize a monthly megawatt value as certified and reported to the CAISO by the Demand Response Provider; otherwise, where available, the CAISO will use the average of historic demand reduction performance data available, by month, for a Proxy Demand Resource. Where a Proxy Demand Resource uses the load-shift methodology to calculate its Demand Response Energy Measurements, its Qualifying Capacity will exclude demand reduction performance from the consumption Resource ID.~~

#### ~~40.8.1.14 Reliability Demand Response Resources~~

~~The Net Qualifying Capacity of a Reliability Demand Response Resource, for each month, will be based on the resource's average monthly historic demand reduction performance during that same month during the Availability Assessment Hours, as described in Section 40.9.3, using a three-year rolling average. For a Reliability Demand Response Resource with fewer than three years of performance history, for all months for which there is no historic data, the CAISO will use a monthly megawatt value as certified and reported to the CAISO by the Demand Response Provider; otherwise, where available, the CAISO will use the average of historic demand reduction performance data available, by month, for a Reliability Demand Response Resource.~~

#### ~~40.8.1.15 Distributed Generation Facilities~~

- ~~(a) Distributed Generation Facilities that meet the applicable requirements in Section 4.6 qualify as Resource Adequacy Capacity.~~
- ~~(b) The CAISO will determine the Net Qualifying Capacity of each Distributed Generation Facility for each Resource Adequacy Compliance Year consistent with similar resource~~

~~classifications connected to the transmission system, as provided in Section 40.4.6.1.~~

- ~~(c) The Scheduling Coordinator for individual Distributed Generation Facilities, with the same resource type and PMax values less than 0.5 MW, that seek to operate as a combined Distributed Generation Facility, must submit to the CAISO a request that the initial Net Qualifying Capacity be determined and approved as a combined Distributed Generation Facility.~~

#### ~~40.8.1.16 Non-Generator Resources~~

- ~~(a) Non-Generator Resources must be either Participating Generators or System Units to qualify as Resource Adequacy Capacity.~~
- ~~(b) The CAISO will determine the Net Qualifying Capacity of each Non-Generator Resource based on the CAISO testing of the resource's sustained output over a four-hour period; however, the Net Qualifying Capacity shall not exceed the resource's maximum instantaneous discharge capability.~~

### 40.8.3 Default Criteria for Specific Resource Classes

#### 40.8.3.1 Nuclear and Dispatchable Thermal

Nuclear and dispatchable thermal Generating Units, other than Qualifying Facilities with Existing QF Contracts addressed in Section 40.8.3.11 below, must be a Participating Generator or a System Unit. The CAISO calculates the Qualifying Capacity of nuclear and dispatchable thermal units, other than Qualifying Facilities addressed in Section 40.8.3.11, using the UCAP methodology described in Section 40.8.2.2.

#### 40.8.3.2 Non-Dispatchable Thermal

Non-dispatchable thermal Generating Units, other than Qualifying Facilities with Existing QF Contracts addressed in Section 40.8.3.11 below, must be a Participating Generator or a System Unit. The CAISO calculates Qualifying Capacity of non-dispatchable thermal units, other than Qualifying Facilities addressed in Section 40.8.3.11, using the average generation methodology described in Section 40.8.2.3.

#### 40.8.3.3 Wind and Solar

As used in this Section, wind units are those wind Generating Units without backup sources of Generation and solar units are those solar Generating Units without backup sources of Generation. Wind and solar

units, other than Qualifying Facilities with Existing QF Contracts, must be Participating Intermittent Resources or subject to availability provisions of Section 40.6.4. The CAISO calculates the Qualifying Capacity of all wind or solar units, including Qualifying Facilities, using the ELCC methodology described in Section 40.8.2.1. For wind and solar units, the resource-specific adjustment for performance in the ELCC methodology is based on capacity factors during the at-risk hours determined pursuant to Section 40.8.2.2.

#### **40.8.3.4 Hydroelectric – Dispatchable, Run-of-River, and Pumped Storage**

Hydroelectric Generating Units, other than Qualifying Facilities with Existing QF Contracts, must be either Participating Generators or System Units. The CAISO calculates the Qualifying Capacity of Hydroelectric Generating Units irrespective of status as a Qualifying Facility status. The CAISO calculates the Qualifying Capacity of Pumped-Storage Hydro Units using the UCAP methodology described in Section 40.8.2.2. The CAISO calculates the Qualifying Capacity of all other types of Hydroelectric Generating Units using the ELCC methodology described in Section 40.8.2.1. For dispatchable Hydroelectric Generating Units, the resource-specific adjustment for performance in the ELCC methodology is based on all Forced Outages, excluding Forced Outages reported in a nature of work category relating to Generation Outages induced by transmission Outages, as further specified in the Business Practice Manual. For Run-of-River Resources, the resource-specific adjustment for performance in the ELCC methodology is based on capacity factors during the at-risk hours determined pursuant to Section 40.8.2.2.

#### **40.8.3.5 Non-Generator Resources**

Non-Generator Resources must be either Participating Generators or System Units to qualify as Resource Adequacy Capacity. The CAISO calculates Qualifying Capacity of Non-Generator Resources using the ELCC methodology described in Section 40.8.2.1. For Non-Generator Resources, the resource-specific adjustment for performance in the ELCC methodology is based on all Forced Outages, excluding Forced Outages reported in a nature of work category relating to Generation Outages induced by transmission Outages, as further specified in the Business Practice Manual.

#### **40.8.3.6 Proxy Demand Resources**

A Proxy Demand Resource must have the ability to (i) be dispatched for at least twenty-four hours per

month, (ii) be dispatched on at least three consecutive days, and (iii) respond for at least four hours per dispatch in order to qualify as Resource Adequacy Capacity. The CAISO calculates the Qualifying Capacity of Proxy Demand Resources using the performance to Dispatch methodology described in Section 40.8.2.4.

#### **40.8.3.7 Participating Loads**

The CAISO calculates the Qualifying Capacity of Participating Loads using the reduction in demand per Dispatch methodology described in Section 40.8.2.5. Loads of Participating Loads must be available at least 48 hours, and if the Loads can only be dispatched for a maximum of two hours per event, then only 0.89 percent of a Scheduling Coordinator's portfolio may be made up of such Loads.

#### **40.8.3.8 Unit-Specific Contracts**

Unit-specific contracts with Participating Generators or System Units will qualify as Resource Adequacy Capacity subject to the verification that the total MW quantity of all contracts from a specific unit do not exceed the total Net Qualifying Capacity (MW) consistent with the Net Qualifying Capacity determination for that unit.

#### **40.8.3.9 Qualifying Facilities**

Qualifying Facilities must be subject to an effective Participating Generator Agreement or Net Scheduled Participating Generator Agreement or must be System Units, unless they have an Existing QF Contract. Except for hydro, wind, and solar Qualifying Facilities addressed pursuant to Sections 40.8.3.3 and 40.8.3.4, the Qualifying Capacity of Qualifying Facilities under Existing QF Contracts, will be based on historic monthly Generation output during the hours of noon to 6:00 p.m. (net of Self-provided Load) during a three-year rolling average.

#### **40.8.3.10 System Resources and Pseudo-Ties**

##### **40.8.3.10.1 Dynamic System Resources and Pseudo-Ties**

Dynamic System Resources and Pseudo-Ties of Generating Units to the CAISO Balancing Authority Area shall be treated similar to resources within the CAISO Balancing Authority Area, except with respect to the deliverability screen under Section 40.4.6.1 and with respect to the limitation on the Qualifying Capacity of wind and solar resources set forth in Section 40.8.3.3. However, eligibility as a Resource Adequacy Resource is contingent upon a showing by the Scheduling Coordinator that the Dynamic

System Resource or Pseudo-Tie of a Generating Unit to the CAISO Balancing Authority Area has secured transmission through any intervening Balancing Authority Areas for the Operating Hours that cannot be curtailed for economic reasons or bumped by higher priority transmission and that the Load Serving Entity for which the Scheduling Coordinator is submitting Demand Bids has an allocation of import capacity at the import Scheduling Point under Section 40.4.6.2 that is not less than the Resource Adequacy Capacity provided by the Dynamic System Resource or Pseudo-Tie of a Generating Unit to the CAISO Balancing Authority Area.

#### **40.8.3.10.2 Non-Dynamic System Resources**

For Non-Dynamic System Resources, the Scheduling Coordinator must demonstrate that the Load Serving Entity for which the Scheduling Coordinator is scheduling Demand has an allocation of import capacity at the import Scheduling Point under Section 40.4.6.2 that is not less than the Resource Adequacy Capacity from the Non-Dynamic System Resource. The Scheduling Coordinator must also demonstrate that the Non-Dynamic System Resource is covered by Operating Reserves, unless unit contingent, in the sending Balancing Authority Area. Eligibility as Resource Adequacy Capacity is contingent upon a showing by the Scheduling Coordinator of the System Resource that it has secured transmission through any intervening Balancing Authority Areas for the Operating Hours that cannot be curtailed for economic reasons or bumped by higher priority transmission. With respect to Non-Dynamic System Resources, any inter-temporal constraints, such as multi-hour run blocks, must be explicitly identified in the monthly Resource Adequacy Plan, and no constraints may be imposed beyond those explicitly stated in the plan.

#### **40.8.3.11 Reliability Demand Response Resources**

The Qualifying Capacity of a Reliability Demand Response Resource, for each month, will be based on the resource's average monthly historic demand reduction performance during that same month during the Availability Assessment Hours, as described in Section 40.9.3, using a three-year rolling average. For a Reliability Demand Response Resource with fewer than three years of performance history, for all months for which there is no historic data, the CAISO will use a monthly megawatt value as certified and reported to the CAISO by the Demand Response Provider; otherwise, where available, the CAISO will use the average of historic demand reduction performance data available, by month, for a Reliability

Demand Response Resource.

**40.8.3.12 Distributed Generation Facilities**

- (a) Distributed Generation Facilities that meet the applicable requirements in Section 4.6 qualify as Resource Adequacy Capacity.
- (b) The CAISO will determine the Net Qualifying Capacity of each Distributed Generation Facility for each Resource Adequacy Compliance Year consistent with similar resource classifications connected to the transmission system, as provided in Section 40.4.6.1.
- (c) The Scheduling Coordinator for individual Distributed Generation Facilities, with the same resource type and PMax values less than 0.5 MW, that seek to operate as a combined Distributed Generation Facility, must submit to the CAISO a request that the initial Net Qualifying Capacity be determined and approved as a combined Distributed Generation Facility.

**40.8.3.13 Facilities under Construction**

The Qualifying Capacity for facilities under construction will be determined based on the type of resource as described elsewhere in this Section 40.8. In addition, the facility must have been in commercial operation for no less than one month to be eligible to be included as a Resource Adequacy Resource in a Scheduling Coordinator's monthly Resource Adequacy Plan.

**40.8.3.14 Jointly-Owned Facilities**

A jointly-owned facility must be either a Participating Generator or a System Unit. The Qualifying Capacity for the entire facility will be determined based on the type of resource as described elsewhere in this Section 40.8. In addition, the Scheduling Coordinator must provide the CAISO with a demonstration of its entitlement to the output of the jointly-owned facility's Qualified Capacity and an explanation of how that entitlement may change if the facility's output is restricted.

**40.8.3.15 Hybrid Resources**

The default Qualifying Capacity of a Hybrid Resource is the sum of the individual Qualifying Capacity values for each component, not to exceed the facility's Interconnection Service Capacity.

## Section 43A

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### **43A.6.3** ~~[Not Used] Non-Market and Repeated Market Commitment of Non-RA Capacity~~

~~Within ten (10) calendar days after the end of each month, the CAISO shall post a report to the CAISO Website that identifies for the prior month:~~

~~(1) Any non-market commitments of non-Resource Adequacy Capacity (irrespective of whether the capacity comes from a resource that has no Resource Adequacy obligation or has a pre-existing partial Resource Adequacy commitment); and~~

~~(2) All market commitments of non-Resource Adequacy Capacity.~~

~~The CAISO will provide a Market Notice of the availability of this report. The report will not include commitments of RMR Generation capacity, Resource Adequacy Capacity or designated CPM Capacity.~~

~~The report shall include the following information:~~

~~(a) the name of the resource;~~

~~(b) the IOU Service Area and Local Capacity Area (if applicable);~~

~~(c) the maximum capacity committed in response to the event (MW);~~

~~(d) how capacity was procured (for example, by RUC or Exceptional Dispatch);~~

~~(e) the reason capacity was committed; and~~

~~(f) information as to whether or not all Resource Adequacy Resources and previously-designated CPM Capacity were used first and, if not, why they were not.~~

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## Appendix A

### **- Reserve Margin**

~~The amount of Resource Adequacy Capacity that a Scheduling Coordinator is required to maintain in accordance with Section 40. The percentage of a Load Serving Entity's peak Demand Forecast for which~~

the Scheduling Coordinator for that Load Serving Entity must demonstrate procurement of Resource Adequacy Capacity in addition to procurement of Resource Adequacy Capacity in the amount of that peak Demand Forecast.