

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Forward Resource Adequacy Procurement Obligations.

Rulemaking 19-11-009
(Filed November 7, 2019)

**NOTICE OF EX PARTE COMMUNICATION BY
THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

Pursuant to Article 8.2 of the California Public Utilities Commission (Commission) Rules of Practice and Procedure, the California Independent System Operator Corporation (CAISO) hereby files this notice of written *ex parte* communications in the above captioned proceeding.

On February 4, 2020, the CAISO sent the attached matrix summarizing its existing tariff requirements for import resources to the service list of docket R.19-11-009.

Respectfully submitted

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February 4, 2020

ATTACHMENT

Existing Tariff Requirements for Import Resources

From: L&R Filings
Sent: Tuesday, February 4, 2020 4:16 PM
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Subject: CAISO Matrix of Tariff Requirements - Import Resources
Attachments: 2020-01-28_Imports-Matrix.pdf

Pursuant to party discussions at the December 17, 2019 prehearing conference in this proceeding, the CAISO developed the attached matrix summarizing existing CAISO tariff requirements for import resources. The CAISO prepared this matrix to provide interested parties a common understanding of those requirements as they discuss potential prospective rule changes related to how capacity outside the CAISO balancing authority area may provide Resource Adequacy capacity. The content of this matrix is meant to be consistent with the CAISO tariff. In the event of any inconsistency, the CAISO is bound to operate pursuant to its tariff. This email has been sent to the entire service list in R.19-11-009 and the CAISO will file the email and the attached matrix as a written ex parte communication consistent with the CPUC's Rules of Practice and Procedure.

Due to the size of the service list, the matrix is being sent in batches.

Legal & Regulatory



California ISO

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	Pseudo-Ties	Resource-Specific System Resources (Dynamically Scheduled)	Resource-Specific System Resources (Non-Dynamically Scheduled)	Non-Resource-Specific System Resources (Dynamically Scheduled)	Non-Resource-Specific System Resources (Non-Dynamically Scheduled)
Count of Resource Type (as of 12/31/2019)	10	32	0	0	10,395
IFM Bidding Requirement (if RA)	Must bid energy & A/S for full RA amount if resource physically capable.[§40.6.1(1)]. If Extremely Long-Start, then comply with Extremely Long-Start Commitment Process and then follow IFM and RUC obligations for trading days on which it is committed.[§40.6.1.1(c)].	Must bid energy & A/S for full RA amount if resource physically capable.[§40.6.1(1)]. If Extremely Long-Start, then comply with Extremely Long-Start Commitment Process and then follow IFM and RUC obligations for trading days on which it is committed.[§40.6.1.1(c)].	Must bid energy & A/S for full RA amount if resource physically capable.[§40.6.1(1)]. If Extremely Long-Start, then comply with Extremely Long-Start Commitment Process and then follow IFM and RUC obligations for trading days on which it is committed.[§40.6.1.1(c)].	Must bid energy & A/S for full RA amount if resource physically capable.[§40.6.1(1)]. If Extremely Long-Start, then comply with Extremely Long-Start Commitment Process and then follow IFM and RUC obligations for trading days on which it is committed.[§40.6.1.1(c)].	Must bid energy & A/S for full RA amount if resource physically capable.[§40.6.1(1)]. If Extremely Long-Start, then comply with Extremely Long-Start Commitment Process and then follow IFM and RUC obligations for trading days on which it is committed.[§40.6.1.1(c)].
RUC Bidding Requirement (if RA)	Must bid in RUC for RA capacity not reflected in IFM schedule; optimized at zero dollar bid and ineligible for RUC payment. [§40.6.1(4)]	Must bid in RUC for RA capacity not reflected in IFM schedule; optimized at zero dollar bid and ineligible for RUC payment. [§40.6.1(4)]	Must bid in RUC for RA capacity not reflected in IFM schedule; optimized at zero dollar bid and ineligible for RUC payment. [§40.6.1(4)]	Must bid in RUC for RA capacity not reflected in IFM schedule; optimized at zero dollar bid and ineligible for RUC payment. [§40.6.1(4)]	Must bid in RUC for RA capacity not reflected in IFM schedule; optimized at zero dollar bid and ineligible for RUC payment. [§40.6.1(4)]
Real-Time Market Bidding Requirement (if RA)	Must rebid full RA capacity to real-time market for hours in which there is any day-ahead award. [§40.6.2(a)] But if short start or medium start unit, then must rebid full RA capacity to real-time market regardless of day-ahead awards. [§40.6.2(b)]	Must rebid full RA capacity to real-time market for hours in which there is any day-ahead award. [§40.6.2(a)]	Must rebid full RA capacity to real-time market for hours in which there is any day-ahead award. [§40.6.2(a)]	Must rebid full RA capacity to real-time market for hours in which there is any day-ahead award. [§40.6.2(a)]	Must rebid full RA capacity to real-time market for hours in which there is any day-ahead award. [§40.6.2(a)]
ISO Generated Bid if RA Obligation not Met?	Yes.[§40.6.8].	Yes.[§40.6.8].	Yes.[§40.6.8].	Yes but only for the day-ahead market.[§40.6.8(f)].	Yes but only for the day-ahead market.[§40.6.8(f)].
Eligible to Provide Flexible RA Capacity	Yes.[§40.10.3.6].	Yes.[§40.10.3.6].	No.[§40.10.3.6].	Yes.[§40.10.3.6].	No.[§40.10.3.6].
Subject to Exceptional Dispatch (regardless of RA status)?	Yes.[App.N, §1.2.1.3]	Yes. [§34.11.1]	Yes under limited cases.* [§§34.11.1 & 42.1.5]	Yes. [§34.11.1]	Yes under limited cases.* [§§34.11.1 & 42.1.5]
Subject to <i>Operating Instruction</i> from ISO (regardless of RA status)?	Yes.[§4.2.1 & App.N, §1.2.1.3]	Yes. [App.M, §1.5.7]^	No.	Yes. [App.M, §1.5.7]^	No.
Obligated to follow <i>Dispatch Instruction</i> (regardless of RA status)?	Yes.[§4.2.1 & App.N, §1.2.1.3]	Yes.[§4.2.1]	No. [§§11.31 & 34.13.2--can decline but subject to specific settlement charge for declining]	Yes.[§4.2.1]	No. [§§11.31 & 34.13.2--can decline but subject to specific settlement charge for declining]
Subject to ISO Local Market Power Mitigation?	Yes.	No.	No.	No.	No.
Eligible to Provide Ancillary Services?					
	<i>Spinning Reserves & Non-Spinning Reserves</i>	Yes. [§8.3.2]	Yes. [§8.3.2]	Yes. [§8.3.2]	Yes. [§8.3.2]
	<i>Regulation</i>	Yes. [§8.3.2]	Yes. [§8.3.2]	Yes. [§8.3.2]	No. [§8.3.2]
	<i>Operating Reserves</i>	Yes. [§8.3.2]	Yes. [App.M, §1.6]	Yes. [§8.3.2]	Yes. [App.M, §1.6]
Can the resource be an aggregation of units?	Yes, provided they meet other applicable requirements for the resource type.	Yes, provided they meet other applicable requirements for the resource type.	Yes, provided they meet other applicable requirements for the resource type.	Yes, provided they meet other applicable requirements for the resource type.	Yes, provided they meet other applicable requirements for the resource type.
Does ISO require telemetry?	Yes. [§7.6.1(d) & App.N, §1.2.1.10]	Yes. [§4.12.3; App.M, §1.3]	Yes. [§4.12.3]	Yes. [App.M, §1.3]	No.
Does ISO require ISO-certified meter at the resource location?	Yes.	No--PI tag data used for meter data.	No--PI tag data used for meter data.	No--Etag data in WIT used for meter data.	No--Etag data in WIT used for meter data.
Does the ISO have the Following Parameter in its Systems?					
	<i>Default Energy Bid</i>	Yes -- calculated in ECIC	Yes -- calculated in ECIC	Yes -- calculated in ECIC	No.
	<i>Reference Levels for Commitment Costs</i>	Yes -- calculated in ECIC	Yes -- calculated in ECIC	Yes -- calculated in ECIC	No.
	<i>Physical Unit Parameters (e.g., Pmax, Pmin, Ramp Rate, Heat Rate)</i>	Yes -- stored in Master File	Yes -- stored in Master File	No.	Yes -- stored in Master File
Meets tariff definition of "Generating Unit?"	Yes.	No.	No.	No.	No.
			Relevant Tariff Definitions		
			<i>Dispatch Instruction</i> defined as: "An instruction by the CAISO for an action with respect to specific equipment, or to a resource for increasing or decreasing its Energy Supply or Demand to a specified Dispatch Operating Target pertaining to Real-Time operations."	<i>Operating Instruction</i> defined as: "A command by operating personnel responsible for the Real-time operation of the interconnected Bulk Electric System to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System or the facilities of a Participating Generator. An Operating Instruction will be communicated consistent with the practices described in NERC Reliability Standard COM-002-4."	
			<i>Dynamic Schedule</i> defined as: "A telemetered reading or value which is updated in Real-Time and which is used as an Interchange Schedule in the CAISO Energy Management System calculation of Area Control Error and the integrated value of which is treated as an Interchange Schedule for Interchange accounting purposes."	<i>Pseudo-Tie</i> defined as: "A functionality by which the output of a generating unit physically interconnected to the electric grid in a Native Balancing Authority Area is telemetered to and deemed to be produced in an Attaining Balancing Authority Area that provides Balancing Authority services for and exercises Balancing Authority jurisdiction over the Pseudo-Tie generating unit."	
			<i>Dynamic System Resource</i> defined as: "A System Resource that has satisfied the CAISO's . . . requirements for submitting a Dynamic Schedule . . ."	<i>System Resource</i> defined as: "A group of resources, single resource, or a portion of a resource located outside of the CAISO Balancing Authority Area, or, for purposes of scheduling and operating the Real-Time Market only, outside of an EIM Entity Balancing Authority Area, or an allocated portion of a Balancing Authority Area's portfolio of generating resources that are either a static Interchange Schedule or directly responsive to that Balancing Authority Area's Automatic Generation Control (AGC) capable of providing Energy and/or Ancillary Services to the CAISO Balancing Authority Area or, for purposes of scheduling and operating the Real-Time Market only, to an EIM Entity Balancing Authority Area, provided that if the System Resource is providing Regulation to the CAISO it is directly responsive to AGC."	

* Section 34.11.1 allows for "a manual Exceptional Dispatch in the Real-Time for Non-Dynamic System Resources that have not been or would not be selected by the RTM for Dispatch, but for which the relevant Scheduling Coordinator has received a HASP Block Intertie Schedule." Also, where the ISO "concludes that it may be unable to comply with the Applicable Reliability Criteria" it may "take such steps as it considers to be necessary to ensure compliance, including the negotiation of contracts through processes other than competitive solicitations." [§42.1.5]. This may include procuring imported energy. Such procurement is not pursuant to an exceptional dispatch but sometimes is viewed informally as a voluntary exceptional dispatch.

^ Operating Instruction can be issued "either directly or through the Host Balancing Authority Area for emergency or contingency reasons, or to ensure the CAISO's compliance with [NERC or WECC policies]. However, such operating orders may be issued only within the range of the CAISO-accepted Energy and Ancillary Services, Bids for a given Operating Hour (or the applicable "sub-hour" interval)." [App.M, §1.5.7]