1. Procedure Detail

1.1. Purpose

Provides guidelines for the operator-initiated blocking of ancillary service (AS) awards and the disqualification of ancillary services capacity in the HASP and before the real-time market to replace day-ahead awarded ancillary services that become unavailable due to transmission constraints, telemetry changes, generation limitations, or resource ramping constraints. The blocking of ancillary service awards and the resulting disqualification of ancillary services awarded in the IFM that are not deliverable in real-time ensures that the ancillary services awarded are available when called upon in real-time to meet reserve requirements as required by applicable NERC and CAISO reliability requirements and operational practices.. If there is insufficient time for the real-time market to replace blocked day-ahead-awarded but unavailable ancillary services, additional ancillary services must be procured in the HASP and real-time market to replace the unavailable ancillary services.

1.2. Day-Ahead Ancillary Service Blocking

Refer to CAISO Operating Procedure 1210 Day-Ahead Market, Section A.3.1.6

1.3. Real-Time telemetry failure on a resource carrying reserves

Upon the loss of telemetry from a resource providing ancillary services:

CAISO Generation Dispatcher
1. If the resource is providing regulation, • **Immediately block** regulation up and down until telemetry is restored per "Real-Time Ancillary Service Blocking/Buyback" section below. 2. **Call** the SC and **inform** them that the affected resource's telemetry has failed: • **Request** that the SC manually update (man rep) the resource's output while they attempt to restore the resource's telemetry. • **Notify** the RIG Engineering group of the loss of telemetry on the affected resource(s) as necessary if the loss of telemetry occurs repeatedly. 3. If the SC cannot or will not manually update the resource's telemetry (from their end), • **Notify** the SC that the CAISO will commence blocking/buy back all AS products on the resource until telemetry is restored. • The CAISO is to **manually maintain** the resources' output via manual value replacement. • **Create** a log in SLIC regarding the blocking/buy back of AS on the affected resource(s) at the discretion of the Generation Dispatcher.

This document is controlled when viewed electronically.
When downloaded or printed, this document becomes UNCONTROLLED.

CAISO Generation Dispatcher
4. When telemetry has been restored, • **Verify** validity of the resource's telemetry with the SC. • **Notify** RIG Engineering group that telemetry is restored on the affected resource(s) as necessary. • **Ensure** the SC has ended the OMS card regarding the unit telemetry failure or **ensure** that the blocking/forced buy back of AS on the resources is ended.

1.4. Real-time Ancillary Service Blocking/Buyback

If a resource(s) either cannot provide Ancillary Services or must have the level of AS limited due to system condition, unit issue, or software issue, then:

***Note**: This can take up to approximately 30 minutes to take effect.*

CAISO Generation Dispatcher
1. **Select** the resource(s) Resource ID in the Resource column of the RTM Operations>Generation>Reserve Management>AS Block. 2. **Enter** the amount of Spin, Non-spin (Nspin), Regulation Up (Reg Up), and Regulation Down (Reg Dn) that the resource(s) can provide. 3. **Enter** the Start and End time and dates for the AS blocking/buy back and **press** Update. 4. **Select** the reason for the constraint (Resource or Transmission) in the Constraint Type drop-down. • **Utilize** "Transmission" to indicate that the AS is not deliverable due to a transmission constraint. The "Resource" drop-down is utilized to indicate that the AS is not deliverable due to a limitation on the resource itself however this should be modeled in OMS. "Resource" should only be used if unable to utilize OMS. This field is used by Settlements for the calculation of No Pay. 5. If an OMS card was not submitted for the telemetry issue, **enter** the reason for AS blocking in SLIC, **utilizing** the "Generation Notes" template. Only one log is required per day as long as the reason for the AS blocking does not change. 6. **Enter** the SLIC log number or outage card ID into the AS Block entry in the RTM. 7. The Generation Dispatcher **should not create** any AS Buyback records starting or ending beyond today's trade date. The reason for this rule is to prevent data inconsistencies between the AS Blocking records in Day-Ahead and the separate set of AS Buyback records in Real-Time. If the condition is expected to continue or repeat tomorrow, • **Coordinate** with Day-Ahead operations prior to 09:00 for consideration of blocking the AS in tomorrow's Day-Ahead run. The Day-Ahead Operator

CAISO Generation Dispatcher
will create all forward-dated AS Block records for the Day-Ahead run and any timeframes going forward. The AS Block records in Day-Ahead will be automatically transferred to the Real-Time AS Buyback UI after Day-Ahead publishes. Performing these entries in this manner will ensure AS Blocking/AS Buyback is coordinated and consistent between Day-Ahead and Real-Time. • Should a new AS Buyback record be required after the Day-Ahead publishes for the next trade date, the Generation Dispatcher **should coordinate** with the on-shift Market Operator to review and coordinate the records in both Day-Ahead and Real-Time.

1.5. Resources with Regulation Awards Not Following AGC Set Points

If the CAISO observes a resource is not following its AGC set point and in the CAISO's judgment, this behavior poses a risk to reliability, the CAISO may block the resource from receiving regulation awards as described in Section 1.4. This block may remain in place until the resource provides evidence of repairs or corrective actions to ensure the resource will follow its set point. Thereafter, if the CAISO observes the resource repeatedly not following its set point, then the CAISO may withdraw the resource's certification to provide regulation. Examples of not following set point include but are not limited to the following:

- Resources not "ON" AGC control when regulation awards are active.
- Resources limiting AGC Availability range to impede regulation awards.
- Resources failing to follow AGC set point with unreported/unmodeled facility limitations

Note: *This block may remain in place until the resource provides evidence of repairs or corrective actions to ensure the resource will follow its set point. California ISO Customer Service staff will alert the resources Scheduling Coordinators' primary contacts of such a block within two business days requesting evidence of repairs or corrected actions. Following receipt of such evidence, Operations Management will review whether such actions are sufficient to release the resource or if more information is needed within one business day.*

1.6. Background

From time to time a resource is obligated to provide ancillary services due to an award from a market, but cannot provide the ancillary services that they are certified to provide; this could be due to a loss of telemetry (for regulation), a RIG or ICCP outage, a generator outage, a transmission outage, or a transmission limitation. If these limitations are known

in advance of D+1 then the Market Operator may block AS procurement on selected resources by utilizing the DAM AS Blocker. If the AS limitation arises in real-time then the generation dispatcher needs to utilize the RTM AS Blocker to transfer the limitation to RTM so RTM will limit procurement, not procure, or force a disqualification of Day-Ahead AS awards in RTM and so that replacement ancillary services can be procured to meet applicable NERC and CAISO reliability requirements and ensure sufficient contingency reserves are available in real-time. If additional real-time AS is needed verify that the required reserves are procured in the RTM AS Requirement Setter and/or request RMR non-spin per Operating Procedure 2310 Real-Time Reliability Must Run Unit Commitment and Dispatch.

1.7. Use of AGC Flag in ADS

Resources that have Regulation awards or schedules must stay on Automatic Generation Control until the end of the 15-minute FMM interval. Resources should not rely exclusively on the ADS AGC Flag as the sole indication that Regulation has been awarded. The ADS AGC Flag is intended as a courtesy indication and should not be considered the authoritative source for regulation awards.

Should RTPD experience a disruption that affects the production of Real-Time market awards or dispatch instructions, the CAISO may direct Market Participants to continue operating using previously established market awards until normal market operations are restored. Unless otherwise directed by the CAISO, Participating Generators providing Regulation Service should:

- Maintain AGC participation.
- Continue operating to the most recent valid Regulation award.
- Remain available to receive verbal or electronic operating instructions from the CAISO.

The CAISO may direct resources to temporarily operate using Day-Ahead Regulation awards until Real-Time market functionality is restored.

2. Supporting Information

Operationally Affected Parties

CAISO Public

References

Resources studied in the development of this procedure and that may influence some steps taken herein include but are not limited to:

CAISO Tariff	
CAISO Operating Procedure	
NERC Requirements	
WECC Criterion	
Other References	

Definitions

Unless the context otherwise indicates, any word or expression defined in the Master Definitions Supplement to the CAISO Tariff shall have that meaning when capitalized in this Operating Procedure.

The following additional terms are capitalized in this Operating Procedure when used as defined below:

None.

Version History

Version	Change	Date
3.6	Added consideration to add continuing real-time AS blocking into tomorrow's Day-Ahead. Minor format and grammar updates. Replaced A/S with AS.	3/22/18
4.0	Periodic Review: Section 1.4: Updated by adding instances when the "RESOURCE" constraint type drop down should be used. Section 1.3, Steps 2 & 4: Updated second bullet to include "as necessary." Replaced instances of ISO with CAISO.	10/21/21

Version	Change	Date
4.1	Section 1.4: Added consideration for real-time AS blocking ("system condition, unit issue, or software issue").	2/01/23
4.2	Section 1.2: Updated procedure reference. Sections 1.3 and 1.4: Updated from Generation Desk to Generation Dispatcher. Added new Section 1.5, Resources with Regulation Awards Not Following AGC Set Points and renumbered following section to 1.6. Minor formatting and grammar edits and removed history prior to five years.	9/11/23
4.3	Minor updates for clarification in Sections 1.1, 1.3 and 1.4 based on feedback of Generation Dispatcher review.	1/18/24
4.4	Updated the AS Buyback data entry workflow to limit the Generation Dispatcher to only input AS Buybacks for today's trade date.	3/29/24
4.5	Periodic Review: Section 1.5: Updated Note regarding CAISO Customer Service Staff alerting resources Scheduling Coordinators primary contacts.	7/01/24
4.6	Removed reference to WECC reserves standards; Added details regarding usage of the ADS AGC flag. Minor formatting and grammar edits.	8/27/26