



# Pre- Commercial Resource Performance October 2025

*Presenter: Kelsey Ajax– Manager, Model & Contract Implementation and Drew Thompson Grid Operations*

# Objectives

Common Operational Challenges

Discuss Pre- COD Resource  
Performance Process

Discuss New Procedure 5320B Pilot  
Testing



# Operational Challenges

# Resource Performance Issues

- Growing number of new resources on the fleet
- Requires additional monitoring and manual corrective action by operators
- Encourage to review last years NRI Stakeholder Meeting
  - OMS Submission
  - Testing Process





# Pre-Commercial (Pre-COD) Resource Testing



- Communications
  - Scheduling Coordinator (SC) must have good communications with CAISO and the resource (GOP) during testing.
  - Coordinate any changes to the approved test plan with CAISO.
- Telemetry
  - CAISO must have good quality data from the resource during testing or testing will be denied, rescheduled, or terminated.
- Control of Resource (***Must have control of resource(s) at all times***)
  - Ramping (ability to ramp to a 5 minute dispatch instruction)
    - Batteries (NGRs) have distinct ramp rates for operating in a consuming mode (charging) or in a generating mode (discharging).
    - Solar testing to develop forecasting models.

# Overall Expectations for Communications and Performance

- Communications for Reliability
  - The CAISO will not approve testing unless sufficient transmission capacity is available to support test schedule.
    - Studies will be performed and testing may need to be rescheduled.
- Performance for Reliability
  - If resource is causing a reliability situation on the Grid, then an Operating Instruction will be issued from CAISO to come offline within 10 minutes until further notice.

***(Must have control of resource(s) at all times)***



## Common Resource Performance Process

Not Following  
Test Schedules  
or Dispatch  
Instructions

Oscillations

Not Ramping

*Ensuring adequate knowledge transfer from commissioning teams to crews handling the resource operations post-commercial*



# Resource Performance Process

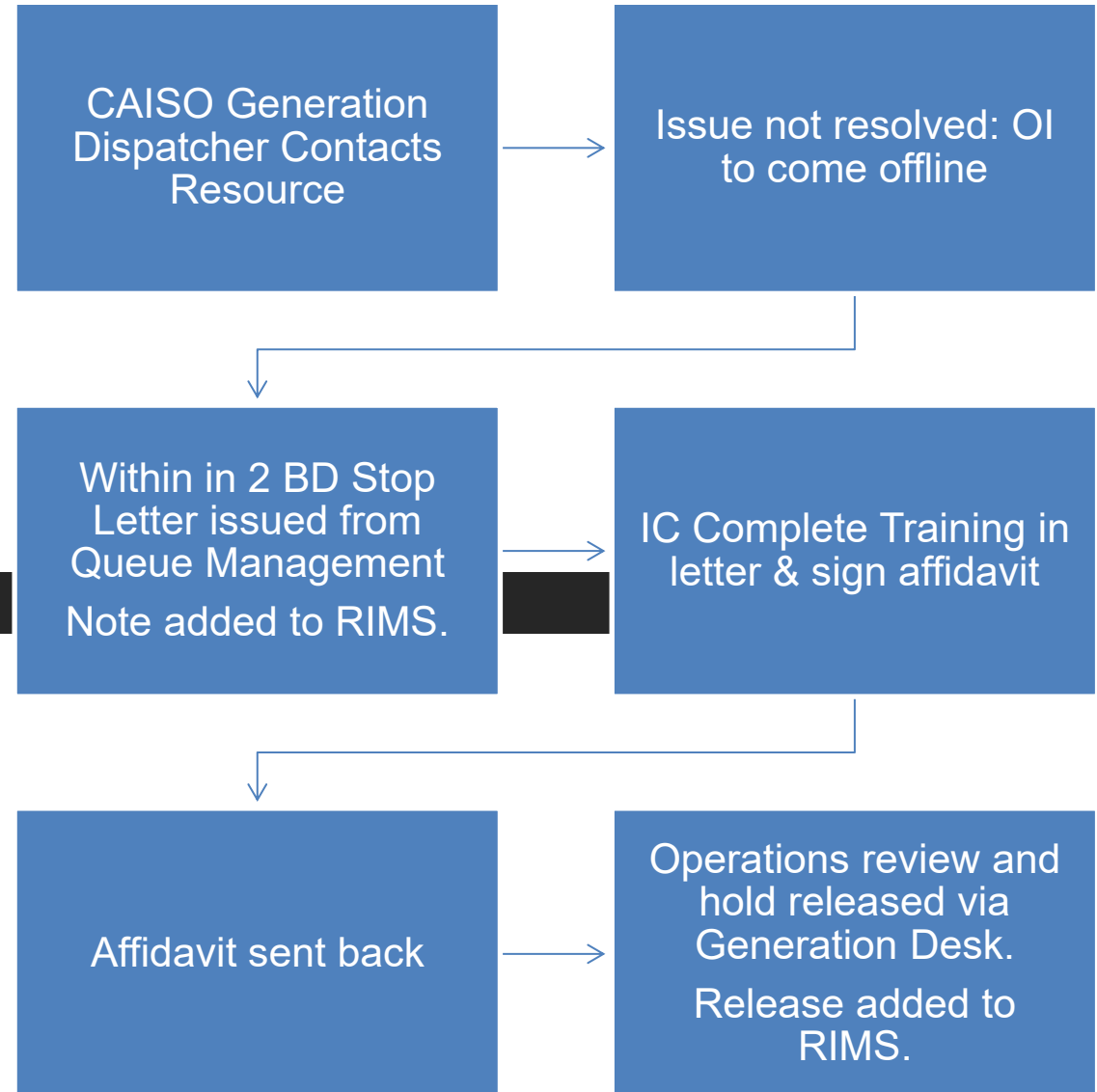
Pre-COD Resource Performance Issue Process (OP5320 Section 4)



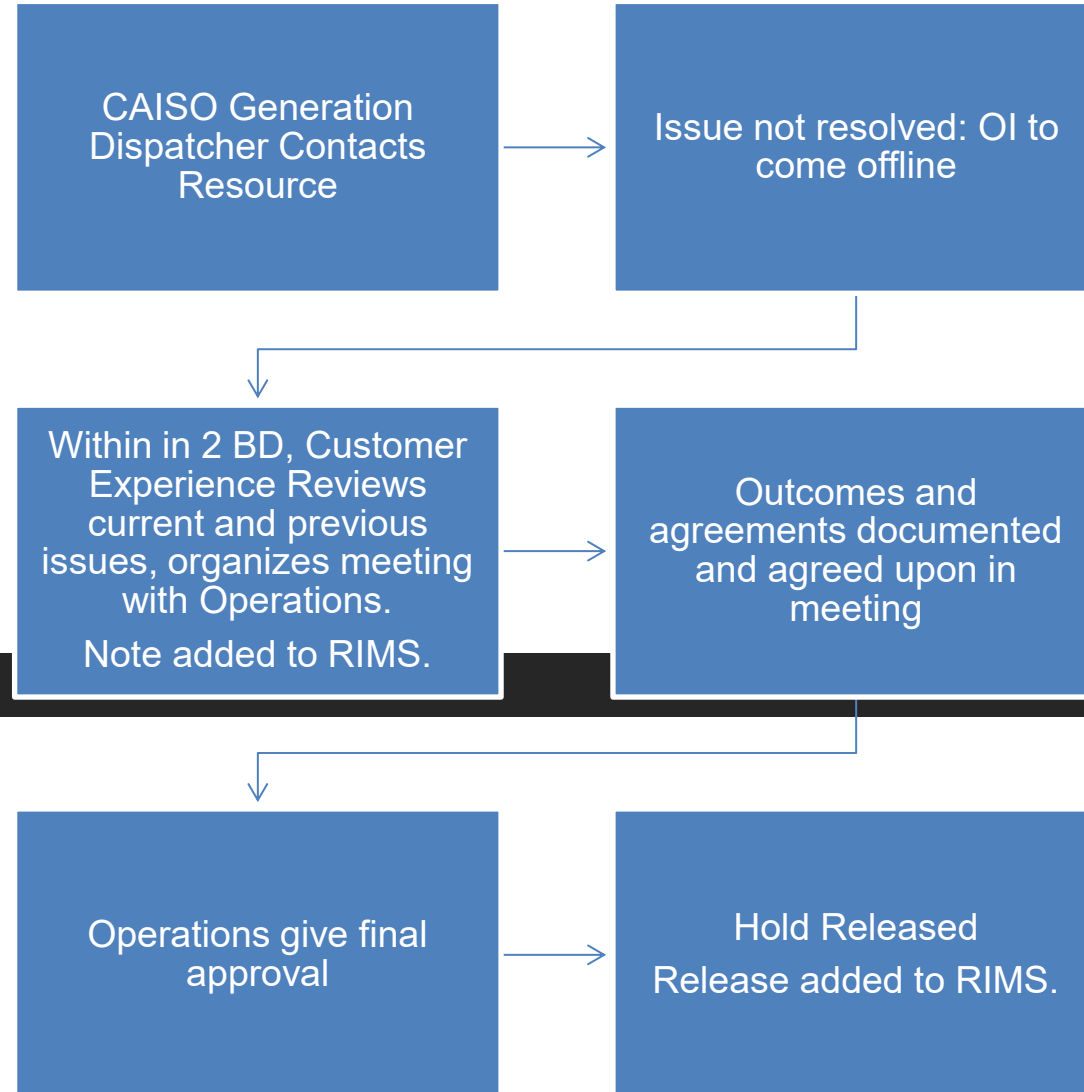
# Pre-COD Process: 1<sup>st</sup> Offender



Resource Performance Expectations of Dispatch and Operating Instructions



# Pre-COD Performance Issues: Repeat Offender



\*Note: These repeat issues are taken very cautiously and need to be thoroughly investigated.





# Pre-Commercial Performance Test Pilot : OP5320B

New Process

# Operational Readiness: Performance

## • Collaboration


- Allows opportunity to work through resource concerns upfront while commissioning team on-site.
- Early issue detection enables smooth integration and optimal performance
- IC/CAISO Hands on Resource trouble shooting

## • Validates Resource Readiness

- Validating ADS integration before commercial operation
- Confirming OMS submission accuracy

## • Ensures Grid Stability:

- Resources can respond accurately and reliably to dispatch signals

 California ISO	Operating Procedure	Procedure No.	5320B
		Version No.	1.0
		Effective Date	4/25/25
Pre-Commercial Automated Dispatch System (ADS) Resource Test Procedure		Distribution Restriction: None	

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### Purpose

The Pre-Commercial Automated Dispatch System (ADS) Test serves a crucial purpose in the resource integration process. This test is designed to verify and ensure that newly integrated resources possess the capability to accurately interpret and follow dispatch operating levels transmitted through the ADS. By conducting this test, system operators can confirm that the resources are responsive to real-time dispatch instructions, which is essential for maintaining grid stability and efficiency. The test evaluates the resource's ability to receive, process, and execute ADS signals promptly and accurately, thus validating its readiness for commercial operation within the power system.

### 1. Responsibilities

Generation Dispatcher	Generation Dispatcher approval is required for the test. A detailed description of the test, including start and end times, MW Schedule, and location of resource must be provided to the Generation Dispatcher.
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# Operational Readiness: Pre-Check



To participate in the Pre-Commercial ADS Resource Test, CAISO will be performing a variety of checks prior to the test:

- ✓ Synch approved
- ✓ No active resource performance issues
- ✓ CAISO Telemetry Standards: Critical Points must be accurate and stable prior to test.
- ✓ EMS Model Visibility: The resource must be visible on the CAISO Energy Management System (EMS) for monitoring and dispatch purposes.
- ✓ Scheduling Coordinator Requirements: Scheduling Coordinators must maintain accurate outage cards reflecting the resource's available capacity approved for commercial operation.



# CAISO and IC Pre-Check

- **New Test**
  - Ensure benefits to both parties
- **CAISO/IC Pre-Check Call**
  - Allows opportunity to work through resource concerns upfront while commissioning team on-site.
  - Early issue detection enables smooth integration and optimal performance
  - Validate Application access
  - Review outage card submission

## —● Resource testing & performance guidelines

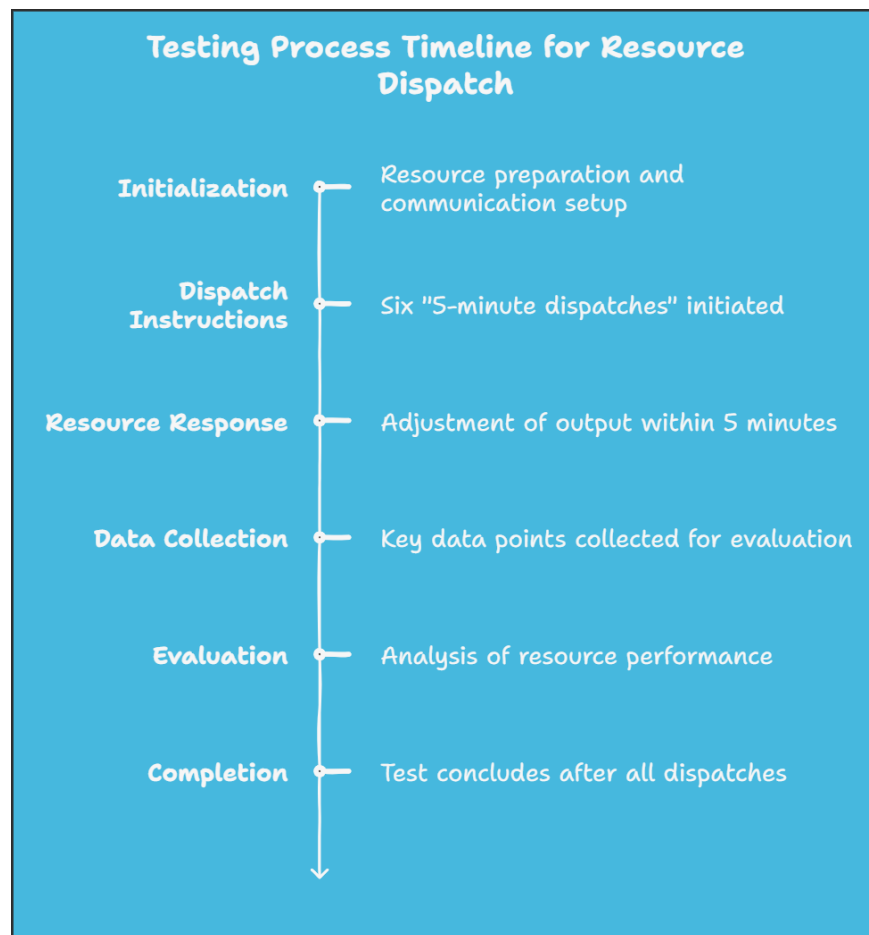
The ISO provides guidelines for Operating Instructions compliance testing in Resource Testing Guidelines 5330, "Resources Providing Energy, Capacity, or Ancillary Services". Requirements are summarized in the tabs below.

[Click each tab](#) to learn more.



Resource Performance Expectations of Dispatch and Operating Instructions

# Test Procedure



- The Pre-Commercial ADS Resource Test consists of six 5-minute dispatch instructions, delivered through the Automated Dispatch System (ADS).
  - Test designed to have the resource dispatched varying levels
  - Charge and discharge if applicable.
  - Validating ramping capabilities
- The resource under test is expected to respond to these dispatches as accurately and promptly as possible.
- The total test duration is approximately 30 minutes.

# Key Stakeholders

CAISO EDAS Test  
Administrator

Scheduling Coordinator

Resource  
Owner/Operator/  
Commissioning Team

- Perform pre-check and hold tailgate
- Creating and initiating the test dispatches in the real-time market.
- Reviewing test and providing results

- Manages outage cards
- Ensures resource availability
- Verifies dispatch instructions and communicates with the CAISO.

- Ensures the resource is technically prepared for the test, responds to dispatches, and provides necessary data.



#### 4) Review Resource Owners/Operators Desk Reference Guide

Use this [Interactive desk reference guide](#) that provides links to training, knowledge articles, process documents, checklist, etc. regarding effective interactions with your SCs and the Q.

If you have questions, please submit either through the [CIDI application](#) or [Contact us page](#). If you have a project code, please include it (i.e. 19GEN1234) in the subject field in CIDI. If submitting your question(s) through Contact us, please select "Other" from the subject drop down and include the project code, if you have one, in the comment field.

CAISO.com > Generation and Transmission > Generation > New Resource Implementation

Resource Owners / Operators

Current Version

Resource Owners / Operators Desk Reference Guide

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Resource Performance

Scheduling Coordinator Responsibilities

New Resource Implementation

Wrap-Up

This section provides several helpful links related to bringing new resources online, metering and resource testing.

Pre-Commercial Automated Dispatch System (ADS) Resource Test

Operating Procedure 5320B – ADS Resource Testing

The **Pre-Commercial ADS Test** process outlined in Operating Procedure 5320B – ADS Resource Testing ensures that newly integrated power resources can accurately interpret and respond to real-time dispatch signals before gaining commercial operation date (COD) approval. It verifies their ability to execute

Resource Owners / Operators

Current Version

Resource Owners / Operators Desk Reference Guide

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Resource Performance

Scheduling Coordinator Responsibilities

New Resource Implementation

Wrap-Up

**Responsibilities**

Successful execution of the Pre-Commercial ADS Resource Test involves collaboration between several key stakeholders:

**Resource Owner / Operator / Commissioning Team**

The Resource Owner/Operator/Commissioning Team ensures the resource is technically prepared for the test, responds to dispatches, and provides necessary data. It is the responsibility of the Generation Dispatcher to provide required approval before testing can be conducted. The test request provided to the Generation Dispatcher must include details such as start/end times, MW schedule, and resource.

**Energy Data Acquisition Specialists (EDAS) Test Administrator**

The CAISO Energy Data Acquisition Specialists (EDAS) Test Administrator is responsible for creating and initiating the test dispatches in the Real-Time Market. Confirm pre-test requirements and update the Real-Time Generation Dispatches as test details including

## Next Steps

- This test is currently being utilized as a voluntary pilot program
- Long term goal to make this a new performance related requirement for all resources
  - Ensure CAISO works through process of new test prior to rollout
  - Participation encouraged
- More detailed information can be found in OP5320B and in the Resource Owner/Operator Interactive Guide



Questions?

# Closing Remarks

- **NRI Feedback Themes**
  - **Communication:** Structure change
  - **Documentation:** GRDT, Helpful Links
  - **Timelines:** C&P, COD Approvals
  - **RIMS:** Hybrid 2C; looking forward
- **Control and Protection:**
  - **Submission Guidance**
- **Metering and Telemetry:**
  - **Responsibilities**
  - **NRI submission guidance, Telemetry Exemptions**
  - **Documentation:** P2P and 72 Hour Check Procedures
- **Pre-COD Resource Performance**
  - **Clarify Process**
  - **Documentation:** Pre-COD resource performance process
  - **User Support/Documentation:** 5320B



*We appreciate your collaboration as we strive to continuously improve for our customers and the reliability of the system.*



# Thank you for your participation!

For more detailed information on anything presented, please visit our website at: [www.caiso.com](http://www.caiso.com) or send an email to: [CustomerReadiness@caiso.com](mailto:CustomerReadiness@caiso.com).

For resource specific questions or concerns, please submit a CIDI ticket.