New Resource Implementation (NRI) Stakeholder Fair
May 1st, 2024

Welcome
Our presentation will begin shortly.
Today’s Presenters: Andrew Brown, Chandra Wagner
NRI Team: Andrew Brown, Chandra Wagner, Beverly Cline, Nura Nasser
Housekeeping

- Keep yourself muted to minimize background noise
- Unmute to ask verbal questions or write questions in the chat pod
- Raise your hand using WebEx interactivity tools

The information contained in these materials is provided for general information only and does not constitute legal or regulatory advice. The ultimate responsibility for complying with the ISO FERC Tariff and other applicable laws, rules or regulations lies with you. In no event shall the ISO or its employees be liable to you or anyone else for any decision made or action taken in reliance on the information in these materials.
Today’s Objectives

Goals of the NRI Process

- What goals is the CAISO trying to achieve with the NRI Process?
- What is currently impacting these goals?
- How can the customer help reach these goals?

Current Standards and Processes

- Starting the NRI process
- Timelines
- Deliverables
- Pre-requisites
- How these relate to NRI goals

Future Look Ahead

- What improvements are in the pipeline to achieve these goals
Section 1: NRI Process Goals and Impacts

NRI Process Goals
Current Impacts
Things to Have Before Starting
New Resource Implementation Goals

Our Goal: Efficiently implement reliable resources into the CAISO market through effective resource validation and integration.

• Verify each new resource enters the market correctly, following FERC and NERC standards, and the CAISO Tariff and BPMs, with the ability to operate reliably.
  ❖ **Reliable operation is key to the CAISO’s core responsibility as a balancing authority.**

• Provide a clear, process for customers to enter the market following the above referenced standards.

• Provide support for customers participating in the market.

• Manage a fair environment where new resources can enter the market and operate commercially.
  ❖ **The CAISO is committed to moving projects in an orderly manner from initial request to Commercial Operation. We want to help!**
Increase in number of projects entering the NRI process.

Rapidly increasing complexity of new projects.

Increase in energy demands and resource adequacy requirements.

FERC Order 2023 and the increase in pressure to shorten the timeline to COD.

*This data includes resources that have achieved their Commercial Operation Date as of January 10, 2024. Data beyond January 10th is generation information that is estimated based on the best available information to the CAISO. Also note that the data includes pseudo-tie and dynamic resources as they are considered to be within the CAISO BAA and can be shown for resource adequacy.
Before Starting the NRI Process

- Have an executed Interconnection Agreement.
- No open MMAs or anticipated MMAs during the NRI Process.
- Resources should be construction ready.
- Review FNM schedule and Bucket timelines to ensure that project schedule is feasible.
  - Projects should not count on expedited reviews or escalations to reach project milestones
- Achieving CAISO commercial operations approval means your project is ready to operate in the market. Make sure your construction and contractual schedules line up with this.
  - Resource Adequacy timelines are not factored into the NRI process
Before Starting the NRI Process

Completion Timelines

• Average time to complete is between 6-9 months but projects should analyze their agreements, equipment and construction requirements, and CAISO timelines prior to starting the process.

• Estimated time to complete an NRI project can vary based on various factor including, but not limited to:

  • FNM Schedule
  • Document completeness
  • Project complexity

  • Project type
  • IA requirements
  • Construction and equipment status

  • Transmission impacts
  • Market impacts
  • PPA requirements
  • Process changes
Section 2: Process Overview

High Level Flow Diagrams
Process Review Presentation Structure
You may be familiar with this high level process image, so let’s dig a little deeper.
High Level NRI Process Flow

1. RIMS/NRI Project needed?
   - Yes: RIMS Creation Process → Model Build Assignment Process → Model Build Deployment → Design and Construction → Cold Commissioning, Testing, and PTO Requirements (Includes Backfeed)
   - No: WEIM/SCME/DERA Project Process

   WEIM/SCME/DERA Project Process:
   - Bucket 1: Model Build Submission
   - Bucket 2: Meter, Data and Reg. Contracts Start
   - Bucket 3: Market Preparation
   - Bucket 4: Sync Readiness
   - Bucket 5: Final Equipment Verification
   - Bucket 6: Commercial Operations Readiness
   - COD Approval Process and 72 Hour Testing

Sync:
- Sync Approval Process
- Test Energy Process
- Hot Commissioning and Commercial Operations Preparation

Design and Construction

Point to Point Testing
Section 3: Getting Started

Determining Your Timeline
How to Start
Process by Project Type
RIMS Access
Determining Your Timeline:
The Full Network Model (FNM) Build Schedule

• Project schedules are dependent on the FNM schedule. These dates **cannot** be circumvented for any reason, so plan accordingly!
• Visit our [Network and Resource Modeling](#) page for up to date schedules, scopes, and guides!

<table>
<thead>
<tr>
<th>FNM Label</th>
<th>Customer Model Document Submission Deadline</th>
<th>ISO Publishes Final Scope</th>
<th>Late Model Scope Change Request Deadline</th>
<th>Production Deployment</th>
<th>Earliest project creation Implementation Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>24M10_DB131</td>
<td>7/31/2024</td>
<td>8/21/2024</td>
<td>9/16/2024</td>
<td>Week of 10/21/2024</td>
<td>11/5/2024</td>
</tr>
</tbody>
</table>

Bucket 1 must be **accepted** by

Last chance to request modeling changes. Submitting requests does not guarantee you’ll be in that model build.

Model goes live

Earliest possible Sync date
If your resource will participate in Resource Adequacy (RA) you will need to consider RA application (NQC and EFC) timelines in your project schedule.

Projects must go COD before submitting RA applications.
Determining Your Process:  
Process by Project Type

RIMS Process Projects
- New Resources Entering the CAISO BA (ISOME and SCME metering schemes)
- Dynamic Transfer (Dynamic and Pseudo Tie)
- Qualifying Facility (QF) Conversions
- Meter Maintenance
- RIG Reconfiguration

NRI Inbox Process Projects
- New SCME WEIM Resources
- Updates to existing SCME WEIM Projects
- Updates to existing SCME Projects within the CAISO BA
- Existing ISOME Resources transitioning to SCME
- Distributed Energy Resource Provider (DERP)
How to Start:
Two Processes

RIMS Process

Determine project type and process needs
Navigate to the NRI webpage
Complete correct Project Details form for your project type
Submit (by RIMS or NRI email depending on step 1)

Use:
- RIMS Quick Start Guide
- RIMS Project Details Form
- Create RIMS Project

NRI Inbox Process

Process via RIMS:
- RIMS Project Details Form (v16)
- Will require access from a UAA
- Deliverables must be uploaded to RIMS
- Changes to project details can be made through RIMS

Process via NRI Inbox:
- Project Details Form (v9b)
- No UAA access required
- Deliverables are submitted through email
- Changes to project details require an emailed, updated Project Details Form.
How do you get access to your project in RIMS?

Your UAA can provide you access to RIMS

- A UAA is User Access Administrator for the new project’s owner company.
- After you create a new RIMS project, your UAA needs to request access the application access page:
  - Every new RIMS project must have a UAA request access, regardless of if they are a UAA for other projects for the customer company.
  - The User Access Administrator Agreement is used to grant access and can be found by navigating to the CAISO website > Participate > Application Access.
- Access requests require a project code
- UAA Application can take up to 7 calendar days to process

Submit a CIDI ticket or reach out to UAARequests@caiso.com if you have more questions!
Section 4: Buckets, Deliverables, and Sub-Processes

**Buckets 1 through 2:** Modeling Assignment  
**Buckets 2 through 3:** Registering Resource with CAISO  
**Buckets 3 through 4:** Test Energy Preparation  
**Buckets 5 through 6:** Sync to COD
Buckets 1 through 2: Modeling Assignment

- **Bucket 1**: Model Build Submission
  - RIMS Creation Process
  - Model Build Assignment Process

- **Bucket 2**: Meter Docs and Reg Contracts Start
  - Market Registration
  - LGIA Equipment Verification

- **Bucket 3**: Market Preparation
  - Sync Approval Process
  - Test Energy Process

- **Bucket 4**: Sync Readiness
  - Cold Commissioning, Testing, and PTO Requirements (Includes Backfeed)
  - Hot Commissioning and Commercial Operations Preparation

- **Bucket 5**: Final Equipment Verification
  - COD Approval Process and 72 Hour Testing

- **Bucket 6**: Commercial Operations Readiness
  - COD

**Model Build Deployment**

**Design and Construction**
The submissions in Bucket 1 dictate how your resource will be modeled and able to participate in the market. Multiple CAISO business units work together to make sure projects are accurately modeled. It is crucial that during this step:

1. The designs submitted should be issued for construction and as accurate as possible.
2. You work with your PTO and Queue Management, if you have a 3-part agreement, to confirm equipment, POIs, and other design details are accurate to the IA and PTO model submissions.

Any late changes to these deliverables or the project design can delay your project’s timelines by requiring re-modeling. Plan accordingly!

ISO Project code is required to order ANIRA router with AT&T

Submit Deliverables
- Single Line Diagram
- Three Line Diagram
- Communication Block Diagram
- RIG Details Form
- Generator Dynamic Model File
- Generator Positive Sequence Load Flow Data
- Network Application Information
- Topographical Map
- Site Information Form

Order ANIRA ECN/Set up IP address

ISO Project code is required to order ANIRA router with AT&T

Resubmittal will reset the review timeline.

Model Build Assignment Process (Model Build Submission to Publish Final Scopes)

CAISO Review

Accepted?

Yes

CAISO Builds Model Scope

CAISO Assigns Model Build

CAISO Publishes Final Model Build Scopes

Customer Receives RIG Points List and Resource ID

No

CAISO Provides Comments

Client Resubmits

ISO Project code is required to order ANIRA router with AT&T

Any late changes to these deliverables or the project design can delay your project’s timelines by requiring re-modeling. Plan accordingly!

15 business day review

Resubmittal will reset the review timeline.
Buckets 2 through 3: Market Preparation

Bucket 3: Market Preparation

Bucket 2: Meter Docs and Reg Contracts Start

Design and Construction

Cold Commissioning, Testing, and PTO Requirements (Includes Backfeed)

Hot Commissioning and Commercial Operations Preparation

Sync

Bucket 4: Sync Readiness

LGA Equipment Verification

Market Registration

Model Build Deployment

Bucket 5: Final Equipment Verification

Sync Approval Process

Test Energy Process

Bucket 6: Commercial Operations Readiness

COD Approval Process and 72 Hour Testing

Bucket 7: Commercial Operations Preparation

RIMS

Creation Process

Bucket 1: Model Build Submission

Model Build Assignment Process

Point to Point Testing

Bucket 3 does include meter and telemetry documentation that is not represented as a specific, separate process on this flow chart. Those documents will be covered in the Test Energy Preparation section with Point to Point Testing.
One of the many processes in Bucket 3 is Regulatory Contracts Execution and SC Association. The model build assignment models the project in CAISO’s systems like EMMS, but this process is what allows it to operate in the market through the Full Network Model.

**Quick tips:**
- Start GRDT as early as possible and work with your SC to complete it.
- Meter Service Agreements should include Meter Exemptions. Submit Meter Exemptions now to avoid delays at COD.
- These are all completed in Bucket 3 and must be accepted by your Bucket 3 deadline, but they cannot all be completed at the same time.
- Pay attention to the order of submittal and acceptance and remember the review timelines!
- SC Association must be effective 7 days before Sync. SC Association to effective date process is 11 business days from submittal. Resubmittals due to errors will reset this timeline. Carefully review letters before submittal!
Market Preparation Part 2:
LGIA Equipment and Configuration Compliance Verification

- During Bucket 3, you will submit documentation to verify your project’s equipment has met LGIA requirements. These are the Control and Protection submittals.
- This consists of 3 submittals that will be reviewed against the LGIA, any MMAs, and NERC, FERC, and CAISO Tariff requirements.
  - There should not be any MMAs in progress when this is submitted.
  - MMAs could cause a need for resubmittal.

<table>
<thead>
<tr>
<th>Control Protection</th>
<th>Control Protection Inverter</th>
<th>Control Protection Inverter Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>• SLD and 3LD showing relays, meter, CTs, and PTs</td>
<td>• Excel Template called “Generating Facility Data – Attachment A to Appendix 1”</td>
<td>• Report from the inverter manufacturer with the following information:</td>
</tr>
<tr>
<td>• Circuit breaker trip and close control circuits (typically DC) for all circuit breakers</td>
<td>• Project information on first tab must match RIMS</td>
<td>• Whether momentary cessation or reactive current injection is used</td>
</tr>
<tr>
<td>• Bill of material for all protective relays</td>
<td>• Tab 3, “I-a. Short Circuit Data Table”, must be completed with SLG, LL, and 3LG data</td>
<td>• Anti-islanding status</td>
</tr>
<tr>
<td>• Complete list of relay settings for all protective relays</td>
<td></td>
<td>• Startup ramp rate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Shutdown ramp rate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Model number of the inverters</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Inverter maximum rated output</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Total number of inverters to be installed at the project site.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tips for Submission</strong></td>
<td><strong>Tips for Submission</strong></td>
<td><strong>Tips for Submission</strong></td>
</tr>
<tr>
<td>• Only include documentation listed above. Submitting more than is requested will lengthen review and make submitting more challenging.</td>
<td>• This is the same submittal used for Interconnection Requests and MMA updates.</td>
<td>• Submission should be a PDF file.</td>
</tr>
<tr>
<td>• RIMS can only accept about 10MB files. You may break up submission into multiple files, use naming called out in the NRI Guide.</td>
<td>• Make sure you are using the latest template version. Version can be found on the “Instructions” Tab.</td>
<td>• Latest pro forma GIAs no longer permit use of momentary cessation. If momentary cessation must be used, a supporting explanation should be provided.</td>
</tr>
<tr>
<td>• Submit with linked table of contents or index page. If you need to break up the file, include the linked TOC or index page at the top of each submittal.</td>
<td>• Do not include “Q” in the queue number. Queue number should be the number only.</td>
<td>• For reactive current injection, report must include the voltage settings at which the inverter will enter this mode, the time the inverter takes to return to normal (P priority) mode following the clearance of the disturbance, and also the K factor that is used. The CAISO prefers reactive current injection with K factor equal to 2.</td>
</tr>
<tr>
<td>• Relay settings must be submitted as PDF files.</td>
<td></td>
<td>• High Voltage Ride Through (OVRT) and Low Voltage Ride Through (LVRT) should be 1.1 pu and 0.9 pu, respectively.</td>
</tr>
<tr>
<td>• The ISO recommends getting relay setting approval prior to relay programming and testing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Provide a linked TOC or index for the relay settings as well or submit separate files for each relay.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Submit all of these at the same time. Control and Protection submittals will not be approved until all 3 parts are received.
Buckets 3 through 4:
Test Energy Preparation
Test Energy Preparation Part 1: Pre-Sync Meter and Telemetry Verification

Metering and Telemetry work is not specifically tied to a Bucket but occurs mainly between Bucket 3, Bucket 4, and Sync. EDAS will discuss more details but key points for the process:

- Model build must be deployed before P2P. Avoid scheduling P2Ps before or the week of deployment. EDAS cannot see your RIG prior to full model deployment.
- ECN must be live and pretesting must be completed and confirmed to EDAS prior to scheduling an appointment.
- P2P testing is a requirement for Sync. While Sync can be requested as soon as Buckets 1-4 are complete, you should aim to have P2P completed before Bucket 4.
- P2P testing is crucial to verifying CAISO equipment and resource readiness.

Model Build Assignment Process (Model Build Submission to Publish Final Scopes)

Equipment Procurement and Construction

Start

- Single Line Diagram
- Three Line Diagram
- Communication Block Diagram
- RIG Details Form
- Meter Configuration Worksheet
- 24 Hour Contact Form
- CPS Agreement
- ECN Agreement

Orange highlighted deliverables are submitted during Bucket 3, after Resource ID is received.

Ensure Meter/RIG Related Docs are Approved, Accurate, and Up to Date

Blue highlighted deliverables are not tied to a specific bucket. IC is responsible for the Metering Overview and should review the points list for accuracy prior to pretesting.

Model Build Deployment

Includes source devices

CAISO Performs Communications Check

Communications check successful?

Yes

Confirm Appointment

Sync Approval Process

Request Sync Approval

No

Perform P2P Testing

Complete Required Metering Documentation

Complete Construction and PTO Sync Approval Requirements

Complete Buckets 3 and 4

Request Sync Approval

Bucket 5 and COD processes

Activities occurring in tandem for reference
Consider these do’s and do not’s before scheduling P2P

**Do**

- Ensure all meter and RIG related documentation is submitted, approved, and up to date. (List in flow diagram below).
- Install ECN, meters, RIG, and all required source devices prior to scheduling P2P.
- Be flexible with scheduling, you likely will not be able to get the exact date you want.
- Build pretesting into your project schedule. Meters, RIG, and source devices need to be pretested in order to be P2P ready. A notification should be sent to EDAS confirming pretesting, otherwise your appointment can be canceled.
- Review the BPMs for Telemetry and Metering. And reach out to EDAS if you have questions on scaling, polarity, or any other data expectations prior to pretesting. Ideally, as soon as you receive the CAISO Points List.

**Do Not**

- Avoid requesting appointments too early (ie before successful pretesting). One, this bogs down our appointment calendar, preventing any flexibility and making scheduling or rescheduling your appointment challenging. Two, attempting to complete a P2P test when your resource is not ready just because you have an appointment will not help your project’s timeline. Partial P2Ps will not be accepted. Multiple retests will only cause delays of Sync and review of RIG and Meter related deliverables.
- Do not rely on non-originating/reporting devices, like a PPC, to force points or dropouts. This can lead to issues during the 72 hour test before COD and cause your project significant delays.
- Don't forget to pretest quality!
- For BESS projects, don't forget to test the BESS idle flag.
- Do not make any changes to the RIG, meters, or devices /mapping that is providing data to the RIG.
Sync cannot be requested prior to buckets 1-4 being accepted. RIMS will not allow it.
- You can request Sync before P2P testing is completed, but you will not receive full Sync Approval without P2P testing complete. Partial P2Ps do not count as complete.

Bucket 4 is the PTO Sync Approval Letter. This approval is granted after you have met all PTO requirements for synchronization and connecting to the grid.
- Sync is not the same as backfeed. The CAISO NRI process does not grant backfeed approval. Majority of the time, backfeed is something you need in place in order to complete PTO sync approval requirements.

In Service vs Initial Synchronization. In Service typically refers to backfeed or your in service date with the PTO. Initial Synchronization is approval from CAISO to start test energy (trial operations) to the grid.
- Once you request Sync, it is sent to the relevant business units for review.
  - Which business units you need approval from will depend on varying project details factors like project type/IA type and size.
Test Energy Preparation Part 2b:
Sync Request Business Unit (BU) Review

EDAS and Ops Readiness reviews encompass verification of metering, telemetry, accuracy of build, resource’s visibility in CAISO systems, and more.

Once all other Business Units have provided their approval, a final review is completed by Ops Readiness Director Group and final Sync Approval is provided.

The Market Participant Asset Implementation (MPA) sector of the Model and Contract Implementation (MCI) group checks that all NRI-related prerequisites are complete.

Queue Management checks to make sure all LGIA requirements for Sync are met including things like the Transmission Checksheet and verifying no MMAs are currently in progress.

At this point, the Scheduling Coordinator can start the Test Energy Process as laid out in Operating Procedures 5320 and 5320A, found on the Operating Procedures webpage. This will be covered in more detail during the Grid Operations presentation later today.
Buckets 5 through 6: Trial Operations to Commercial Operations

- **Bucket 1:** Model Build Submission
- **Bucket 2:** Meter Docs and Reg Contracts Start
- **Bucket 3:** Market Preparation
- **Bucket 4:** Sync Readiness
- **Bucket 5:** Final Equipment Verification
- **Bucket 6:** Commercial Operations Readiness

- **Sync Approval Process**
- **Test Energy Process**
- **COD Approval Process and 72 Hour Testing**

**Model Build Deployment**
- Point to Point Testing
- Cold Commissioning, Testing, and PTO Requirements (Includes Backfeed)
- Hot Commissioning and Commercial Operations Preparation

**Design and Construction**
- Cold Commissioning, Testing, and PTO Requirements (Includes Backfeed)
- Hot Commissioning and Commercial Operations Preparation
Buckets 5 through 6 Part 1: Final Equipment Documentation Verification

<table>
<thead>
<tr>
<th>Metering and Telemetry</th>
<th>LGIA Equipment and Configuration Compliance</th>
<th>Test Energy Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documents:</td>
<td>Documents:</td>
<td>Documents:</td>
</tr>
<tr>
<td>Meter Site Verification Sheet (MSVS)</td>
<td>Certified Relay Test Reports (FinalControl ProtectionReport)</td>
<td>Test Energy Schedule</td>
</tr>
<tr>
<td>Point of Receipt Calculation (PORCalc)</td>
<td>Distribution Compensation Factor Supporting Documentation (DCF)</td>
<td></td>
</tr>
</tbody>
</table>

**Submission Tips:**
- QC, QC, QC. Most common reasons for MSVS rejections are due to small errors like typos.
- A PORCalc document must be submitted for each meter associated with the project.
- DCF submittal is documentation from the Utility Distribution Company (UDC) or Distribution Provider verifying DCF compensation.
- Meter documentation should be submitted together to avoid reviewing delays.

**Process Tips:**
- Tested settings should match settings submitted in Bucket 3. If settings are changed, resubmittal of settings will be needed. This could cause COD Delays.
- Like the ControlProtection submittals in Bucket 3, submit with a linked index or table of contents page. If file is too large, file may be split.

Flowchart:
- Meter Documentation (EDAS) Review
  - Peer to peer metering scheme?
    - Yes
    - No
  - UDC or Distribution Provider Connected?
    - Yes
    - No
  - DCF Required?
    - Yes
    - No
  - MSVS sent for signature?
    - Yes
    - No
  - Meter installer, inspector, programmer, and IC execute?
    - Yes
    - No
  - Information Accurate?
    - Yes
    - No
  - Meter documentation accepted?
    - Yes
    - No
- Do settings match Bucket 3 submittals?
  - Yes
  - No
- Submittal verifies relays have been adequately tested?
  - Yes
  - No
- Final Control and Protection Review
  - Bucket 5 Accepted
Commercial Operations for Markets (COM)

What it means: Grants projects partial commercial operation for market participation to allow the project to operate in the market while participating in trial operations with test energy for remaining megawatt capacity.

When to request: Projects with a block implementation plan

- COM Plan
- PTO COD Approval Letter
- COM Request
- COM Declaration
- Increase MWs
  - PTO COD Approval Letter
  - COD Declaration
- Full MW CODs
  - PTO COD Approval Letter
  - COD Declaration

Full Commercial Operations (COD)

What it means: Resource has commenced generating electricity for sale

When to request: Projects who will enter the market with entire MW capacity

- PTO COD Approval Letter
- COD Request
- COD Declaration
- Increase MWs
  - PTO COD Approval Letter
  - COD Declaration
- Full MW CODs
  - PTO COD Approval Letter
  - COD Declaration

- Process applies to COD and COM.
  - The difference is that COM must come with submittal of a COM Plan detailing how the project’s commercial and test MWs will be broken out.

- COD cannot be requested prior to buckets 1-5 being accepted.

- PTO COD Approval Letter should be submitted with the COD Request.
  - This approval is granted after you have met all PTO requirements for COD and connecting to the grid.
  - If requesting COD, there should be no conditional limitations on the project (such as a network upgrade).

- Like Sync, once you request COD, it is sent to the relevant business units for review.
  - Which business units you need approval from will depend on varying project details factors like project type/IA type and size.

- COD means the project is complete and ready to operate in the market. You should not request COD until the project has completed all testing and requirements for operating reliably in the market.
This chart references "COD". Commercial Operations Request Review and Declaration process is the same for COD and COM.

The MPAI sector of the MCI group checks that all NRI-related prerequisites are complete.

Queue Management checks to make sure all LGIA requirements for Sync are met including things like the Transmission Checksheet and verifying no MMAs are currently in progress.

10 business days

EDAS performs the 72 hour test. 72 hours consecutive of good data must be observed. This verification is crucial to project operations. If a resource passes the 72 hour test but then has a telemetry issue, this can trigger retesting of the 72 hour data.

Re-checks of 72 hour data will occur after IC has submitted confirmation of the issue being resolved. CAISO still needs 72 consecutive hours of good data to pass.

COC review is the final metering check that grants the Metering Certificate of Compliance. All meter documentation and meter data is reviewed at this stage. It is possible that more information or re-submittal of documentation will be requested. This can affect review timelines.

Once all other Business Units have provided their approval, a final review is completed by Ops Readiness Director Group, then the Market Services Director Group. These approvals trigger the final COD approval.

Resource is COD

COD must be declared with the COD Declaration Letter in order for resource to be commercially operational in the market.

CAISO still needs 72 consecutive hours of good data to pass.

10 business days
After achieving COD or COM, resources may participate in the RA program by:
- Submitting NQC requests in CIRA to be able to show generic RA.
- Submitting EFC requests in CIDI to be able to show flex RA.

Please allocate two weeks for this process (most cases are process within a week).

Please refer to the following for more details:
- Reliability Requirements Business Practice Manual
- Reliability Requirements webpage
Tips for Success and RIMS Reminders

Start Early

• Start agreements early and build in time for reviews and resubmittals into your schedules
• Identify updates as soon as possible
• Identify your UAA as soon as you start the NRI process

Keep Up with Rules and Guides

• Check the NRI webpage for updates frequently
• Use BOTH the NRI Guide and the NRI Checklist
• Attend Stakeholder meetings
• Sign up for Notifications on our website (Daily Briefing covers documentation updates!)

Keep Project Info Current

• Keep dates current and accurate
• Keep email distributions lists current
• Pay attention to Bucket due dates
• Check Bucket Notes and FNM updates often
• Review previously submitted documents for accuracy before Sync and COD in case of any changes

Reach Out with Questions

• Include project code(s) in all communications (emails and CIDI tickets)
• Other helpful information you can include are Resource IDs (once assigned) and Queue Numbers
• Utilize contact methods such as CIDI and email
New Resource Implementation Webpage:
California ISO - New Resource Implementation (caiso.com)
NRI Checklist:
NRI Guide:
New Scheduling Coordinator and Resource Owner Reference Guide:
Full Network Model Webpage:
California ISO - Network and Resource Modeling (caiso.com)
Operating Procedure 5320 and 5320A:
RIMS Quick Start Guide:
UAA and Application Access Webpage:
California ISO - Application access (caiso.com)
Metering and Telemetry Webpage:
California ISO - Metering and telemetry (caiso.com)
Future Enhancement Pipeline and Wrap Up

Future Enhancements Pipeline
Wrap Up
Q&A
What are working on to improve our ability to reach NRI goals?

- CAISO Website and documentation refreshes
- SCME and DERA project processes moving to RIMS
- NRI Post COD Survey
Today we covered:

1. The goal of the NRI process to efficiently implement new, reliable resources in the CAISO market.
2. Current factors implementing success of these goals.
3. Our current standards and processes and how they work achieve NRI goals.
4. Future enhancements the CAISO is working on to evolve the process and accommodate this ever changing and growing industry.

Wrap Up

Summary, Q&A

Have NRI Process specific questions? Reach out to NewResourceImplementation@caiso.com or fill out a CIDI ticket and reference NRI in the subject.
Thank you for your participation!

For more detailed information on anything presented, please visit our website at: www.caiso.com or send an email to: NewResourceImplementation@caiso.com.

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