



California ISO

Reliability Coordinator West Oversight Committee

Public Session

September 24, 2019

12:30 – 2:30 p.m. PDT

Agenda

| Time: | Topic: | Presenter: |
|---------------|--|---|
| 12:30 – 12:35 | Welcome/agenda | Kristina Osborne – CAISO |
| 12:35 – 12:40 | Roll call | Michelle Cathcart - Chair |
| 12:40 – 1:10 | Update: RC Operations <ul style="list-style-type: none"> • Shadow ops update • RC-RC coordination • Operations and planning coordination procedure | Tim Beach – RC West Nancy Traweek – CAISO Licheng Jin - CAISO |
| 1:10 – 1:40 | Updates: Customer Onboarding <ul style="list-style-type: none"> • Shadow operations update • Post onboarding transition • HANA update | Joanne Alai – CAISO Gina Wansor - CAISO |
| 1:40 – 2:10 | Update: Technology <ul style="list-style-type: none"> • EMS update | Ken Kasparian - CAISO |
| 2:10 – 2:15 | Future agenda items | Members |
| 2:15 – 2:25 | Public comment | |
| | Public session adjourns | |
| | Executive session | |

Update: RC Operations

Tim Beach
Director, RC West Operations

Nancy Traweek
Executive Director, System Operations

Licheng Jin
Manager, Operations Planning - South

RC Operations

- RC of record events
 - EEA 3 Event
- Started shadow ops for expanded footprint
 - RC evaluating situational awareness tools and data checks
 - Oct 1 will be starting Northwest conference call
- New operating guide – Real-Time Working Group
 - Mitigating Local and Inter-Area Oscillations (RC Operating Guide)

RC-RC Coordination

- RC shared tools update
- Principle documents drafted for WIT, ECC and Shared-in-Kind tools
- Principle documents will be attached to a common MOU
- Separate but similar cost sharing agreements for each RC
 - Underway with AESO
 - BCRC and SPP to follow

WIT and ECC Principles

- WIT and ECC documents are similar in structure and content
- Specific as it relates to specific tools (WIT or ECC)
- Principle Elements
 - Administration – RC must sign MOU to and cost sharing agreement participate
 - Committee structure – RC will form an RC Executive Committee responsible for decisions of the shared tools
 - Charter to be drafted
 - Working groups to be formed or continue

WIT and ECC Principles

- Vendor Management
 - Role of the Vendor (OATI) Management
 - CAISO will be the vendor manager for both WIT and ECC
 - Provision for change order requests
- Business process and administration provisions
- Cost allocations
 - WIT – Net Energy Load
 - ECC – Cost Causation (Hybrid)
- Tool Sustainment and Modification Process
 - Role of the Working Groups, Executive Committee and Vendor Manager

Shared-in-Kind Tools Principles

- 4 Categories:
 - CAISO Hosted Processes
 - Western Interconnection EMS Full Network Model
 - Interconnection Time Monitor
 - CAISO Hosted Tools
 - Western Interconnection Forecast Data
 - Western Interconnection Outage Data
 - Grid Messaging System
 - WECC Hosted Process
 - RAS Database
 - Individual RC Applications
 - Advanced Network Applications and Analysis

Operations and Planning Coordination Procedure

Licheng Jin
Manager, Operations Planning - South
Operation Engineering Service

Background

- Prior to go live, RC West and its customers created Operations and Planning Coordination Task Force
- The Task Force created the following public procedures:
 - RC0640 Transmission Near-Term Planning Assessments: NERC IRO-017-1, R3 and R4
 - RC0650 Steady-State and Dynamic System Model Validation: NERC MOD-033-1
 - RC0660 Transmission Relay Loadability: NERC PRC-023-4
 - RC0670 NERC PRC-002-2 Disturbance Monitoring and Reporting Requirements Process
- These procedures were approved by the RC Project Steering Committee
- The process defined in these procedures needs to be followed by applicable entities in the RC West footprint

Reliability Standards Applicability

| Standards | PC | TP | TO | GO | DP |
|-----------------|----|----|----|----|----|
| IRO-017-1 R3&R4 | ✓ | ✓ | | | |
| MOD-033-1 | ✓ | | | | |
| PRC-023-4 | ✓ | | ✓ | ✓ | ✓ |
| PRC-002-2 | | | ✓ | ✓ | |

- RC West currently receives repeated questions from different entities with regards to the approved procedures

RC West's Suggestion and Request

- RC West suggests public outreach Webinars raise awareness for all PCs, TPs, TOs, GOs, and DPs
- RC West has reached out to WECC and received contact information from the WECC registered entity mapping database.
 - It includes BA/TOP mapping to GO/GOP/TO/TOP
 - The contact information likely contains corporate compliance and legal contacts
 - RC West suggests to use this contact information as basis
- In addition to utilizing the WECC registry contact, RC West requests Oversight Committee to communicate the webinar schedules to all PCs, TPs, TOs, GOs, and DPs in the corresponding operating area

Proposed Schedules

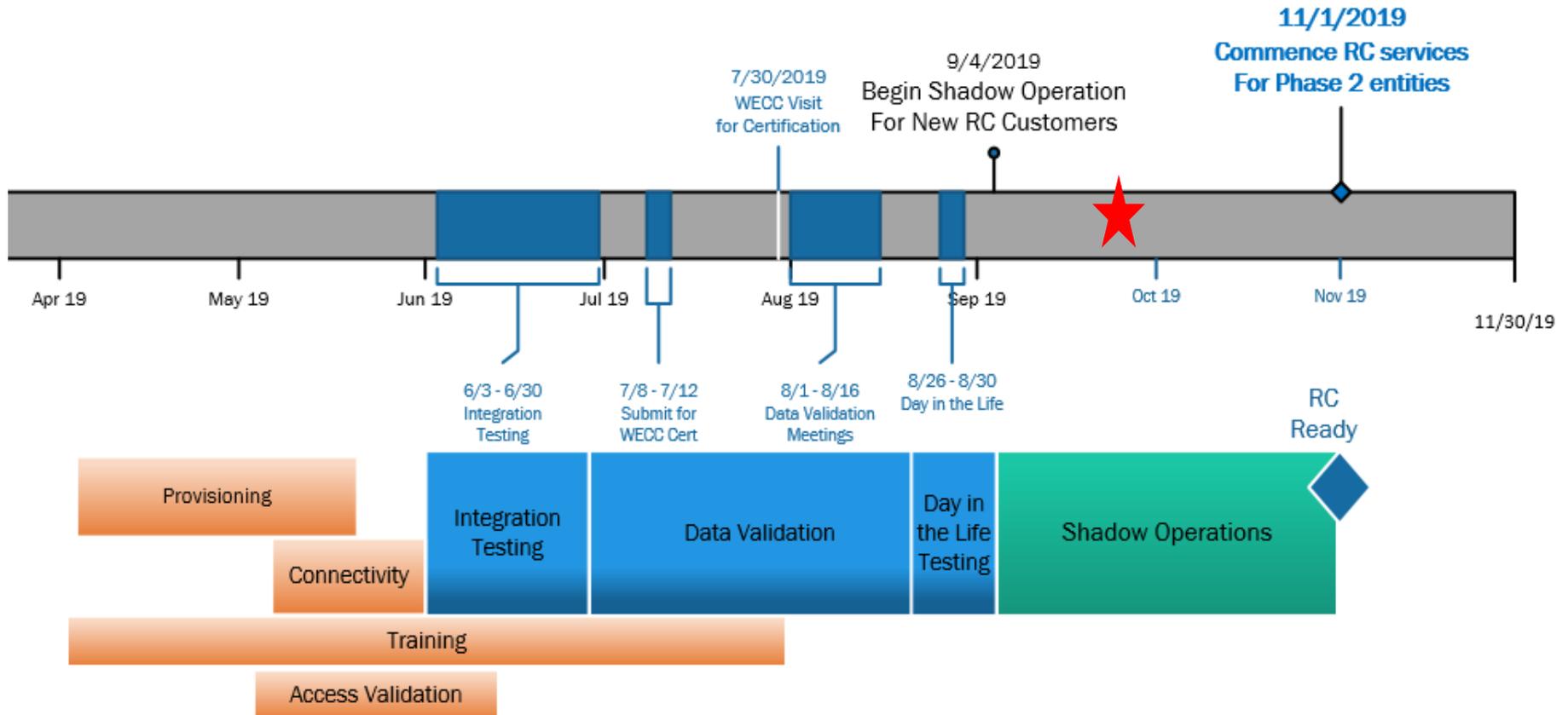
| Date | Time | Topic |
|------------|-----------|---|
| 10/08/2019 | 1-2pm PPT | RC0640 Transmission Near-Term Planning Assessments: NERC IRO-017-1, R3 and R4 |
| 10/15/2019 | 1-2pm PPT | RC0650 Steady-State and Dynamic System Model Validation: NERC MOD-033-1 |
| 10/22/2019 | 1-2pm PPT | RC0660 Transmission Relay Loadability: NERC PRC-023-4 |
| 10/29/2019 | 1-2pm PPT | RC0670 NERC PRC-002-2 Disturbance Monitoring and Reporting Requirements Process |

Update: Customer Onboarding

Joanne Alai
RC Project Manager

Gina Wansor
Sr. Client Trainer

RC Participant Onboarding Timeline – Phase 2



RC Onboarding is on track

| Readiness Criteria | Readiness Category | Timeframe | July Customers | | November Customers | | Comment |
|--------------------|---------------------------|-----------------------|----------------|------------|--------------------|------------|--|
| | | | Status | % complete | Status | % complete | |
| 1 | Agreements / Approvals | 1 Contract Readiness | Complete | 100% | Complete | 100% | |
| 2 | Network Model Integration | 2 Testing Preparation | Complete | 100% | Complete | 90% | Model update in prod 9/19. |
| 3 | Operating Procedures | 2 Testing Preparation | Complete | 100% | On Track | 95% | Near completion: RC0120B - IRO-010 spec for Neighboring RCs. |
| 4 | Operating Guides | 2 Testing Preparation | Complete | 100% | Complete | 100% | |
| 5 | Messaging | 3 Customer Testing | Complete | 100% | Complete | 100% | |
| 6 | RC Customer Integration | 3 Customer Testing | Complete | 100% | Complete | 100% | |
| 7 | Shadow Operations | 4 Shadow Operations | Complete | 100% | On Track | 33% | Shadow Ops continues |
| 8 | Executive Statement | 4 Shadow Operations | Complete | 100% | On Track | 20% | 12 of 24 received as of 9/24 |

Onboarding checklist 96% complete. Wrapping up final onboarding tasks.

Executive Statement and RC Readiness Criteria

- Per CAISO [tariff](#) and [Business Practice Manual](#) for RC Services, an ***Executive Statement of Readiness*** is to be provided by each onboarding customer and the CAISO, no later than 30 days prior to RC West becoming RC of Record (**no later than Oct 1, 2019 for November customers**).
- Email request will be sent to the Oversight Committee next week. The executive statement [template](#) is available on the RC Portal - Go to the Oversight Committee webpage / Readiness Criteria and Evidence folder.
- CAISO anticipates submitting our executive statement in early September.
- Letter confirms that the entities processes and systems have satisfied, or will have satisfied, the readiness criteria for RC Services.
- Scan and email signed letters to RCWest-OC@caiso.com

Company Logo

Address

An example of the executive statement for readiness related to RC Customer onboarding is included below.

Dear CAISO Representative,

This statement provides notice that [RC Customer]'s processes and systems have satisfied or will have satisfied the readiness criteria set forth in the Business Practice Manual for RC Services, [with or without] exception from the readiness criteria specified in the Business Practice Manual for RC Services [and that despite such exceptions the criteria will be met]. This statement is conditional on [the resolution of any known issues and] any unforeseen issues that undermine the satisfaction of the readiness criteria.

If, subsequent to this statement, [RC Customer] determines that it cannot proceed with implementation on the RC Services Date, [RC Customer] will notify the CAISO of the delay, the reason for the delay, and the proposed new RC Services Date, if it can be determined, and whether it will need to re-issue a portion or all of the readiness statement.

Sincerely,

[RC Customer]

Senior Executive

Ongoing RC West Meetings after November 1, 2019

- Oversight Committee – Monthly through 2019
- RC Working Groups
 - Real Time Working Group – Monthly
 - HANA Working Group – Frequency TBD
 - Operations Planning Working Group – Quarterly
 - Data Exchange Working Group – Frequency TBD
 - Training Working Group - Quarterly
 - ECC Working Group – New, charter being developed
 - WIT Working Group – New, charter being developed
- Technical User Group (TUG)—every other Tues 10am

Information/documentation regarding each working group on the RC Portal.

To stay informed, ensure RC Portal contacts are identified for each working group.

Post Onboarding Transition Plan

- Production Transition Plan will be posted this week and reviewed in the Thursday Onboarding meeting. It includes:
 - Production outage submission guidelines
 - Production application availability
 - Production submission windows for gen and load forecasts, contingency reserve, and outages
 - Production URLs for all RC West applications
 - Access and Provisioning checklist
 - Link to new Customer Support document

Key Transition Dates

- **October 2019**
 - 10/1 Executive statements due
 - 10/1 Production HANA Visualization and Study
 - 10/1 RC West takes lead on Shadow Operations
 - 10/3 NERC/WECC Shadow Ops visit
 - 10/14-10/20 Customers submit Prod Outages
 - 10/21-10/25 Customers submit Prod gen & load forecast, and contingency reserve.
 - 10/28-10/31 Stage environment closes. Shadow Ops wraps up in Prod.
 - 10/31 (10:39pm PT) Peak discontinues WIT service (10/31 11:59 MT, 11/1 12:59 CT)
 - 10/31 (11:00pm PT) Transfers WIT service to RC West (11/1 12:00 MT, 11/1 01:00 CT)
- **November 2019**
 - **11/1 RC West is RC of Record for expanded footprint**
 - 11/1 Western Data Sharing Pool (WDSP) in Prod
 - 11/21 Network Model update
- **December 2019**
 - 12/3 Peak shut down (including HAA, EHV Data Pool)

HANA Availability Update

- Connectivity testing
 - Most entities have completed access transition
 - 14 of 19 subscribing entities have reported connection and ability to navigate in Visualization and Study tool
 - Working with some entities on issues completing a full study
- Availability
 - Available now for testing and training development (after the model build on 9/19)
 - 10/1 Production Availability (currently already in Production, but move into Data validation phase and Production operations)

HANA Training Update

- Onsite training feedback
 - 77 attendees from 20 entities across 10 one day sessions
 - Overall, very positive feedback on training
 - The hands on, scenario based training was the highlight based on evaluations
 - Feedback on tool functionality and general questions
 - Follow up in progress (defects, certain enhancements, process updates, FAQ)
 - Post-training documents posted to HANA Working Group site

Training Update

- How to videos for HANA visualization posted on RC Portal > Training
- Webinars scheduled for October
 - Make up visualization session
 - Study follow up session
- User guide still in progress
- Study how to videos still in progress

HANA Working Group Transition - Future

- Will need to work with entities to transition the HANA Working Group (Users Group)
- Focused on HANA visualization and study so will transition this to the subscriber user base
- Regular topics and frequency TBD

Update: Technology

Ken Kasparian
Manager, Program Management Office

Final network model promotion prior to RC West Phase 2 activation

| | Date |
|---------------------------|-------------|
| DB92 production promotion | ✓ 9/19/2019 |

Transition to new EMS platform is on track

| | Date |
|-----------------------------|-------------|
| EMS Certification Review | ✓ 9/05/2019 |
| Production EMS Cutover Date | 9/25/2019 |

The ISO completed the following tasks:

- Final operational readiness and training
- Validation of custom and one-line displays
- Validation of limits and monitoring
- Configuring and migrating ICCP links
- EMS mini cutover testing
- Support plan finalized

Future Agenda Items

- Determine agenda topics for next public session on October 23, 2019 (webinar only).
 - Note: Webinar is scheduled from 9 – 11 a.m.

Note: Stakeholders can submit agenda topic suggestions for upcoming meetings. Submit to <https://www.surveymonkey.com/r/RCWOCaAgenda> at least two weeks prior to the next public meeting. Topics may or may not be discussed.

Public Comment

Public Session Adjourned