



California ISO

Reliability Coordinator West Oversight Committee

Public Session

August 22, 2019

1:00 – 2:30 p.m. PDT

Agenda

Time:	Topic:	Presenter:
1:00 – 1:05	Welcome/agenda	Kristina Osborne – CAISO
1:05 – 1:10	Roll call	Michelle Cathcart - Chair
1:10 – 1:20	Briefing: July customer survey results	Joanne Serina - CAISO
1:20 – 1:40	Discussion: July customer onboarding experience	Members
1:40 – 1:55	Update: RC Operations <ul style="list-style-type: none"> • Ongoing RC operations • Expanded footprint readiness and certification effort • RC metrics development 	Tim Beach – RC West Nancy Traweek – CAISO Tim Beach, Dede Subakti - CAISO
1:55 – 2:10	Updates: Customer Onboarding <ul style="list-style-type: none"> • Customer readiness for shadow ops • HANA onsite training 	Joanne Alai - CAISO
2:10 – 2:20	Update: Technology <ul style="list-style-type: none"> • HANA timeline • Network model • Transition to new EMS platform 	Ankit Mishra- CAISO
2:20 – 2:25	Future agenda items	Members
2:25 – 2:30	Public comment	
	Public session adjourns	
	Executive session	

Briefing: July Customer Survey Results

Joanne Serina

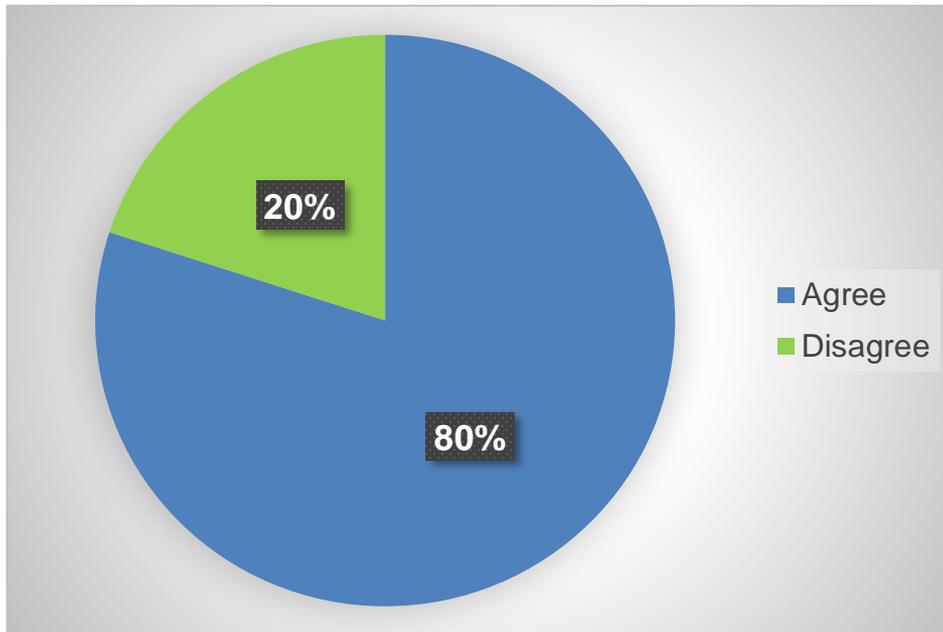
Executive Director, Customer Service and Stakeholder Affairs

RC West Customer Survey

- Survey sent to July 1 customers ~ 50 recipients
- Received 11 responses
- Survey consisted of:
 - 5 onboarding related questions
 - 1 open feedback
- Objective was to solicit feedback to improve readiness for Nov. 1 customer launch

Survey Results & Feedback

Organizational readiness for July 1 launch

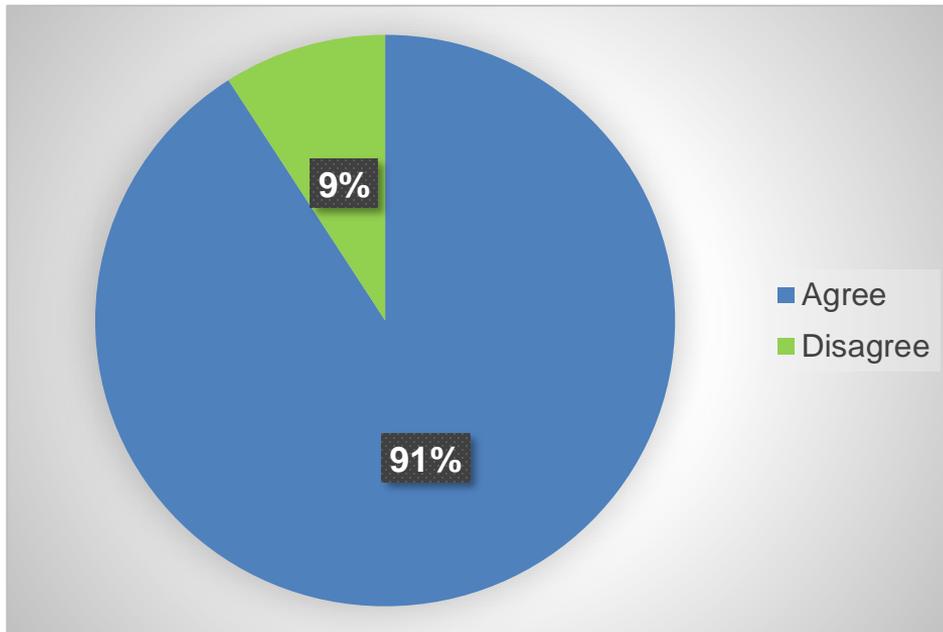


Feedback:

- Network Model Challenges
- Recognition of differences between new RC customers and existing ISO customers
- Earlier availability of production environment

Survey Results & Feedback

Effectiveness of onboarding meetings

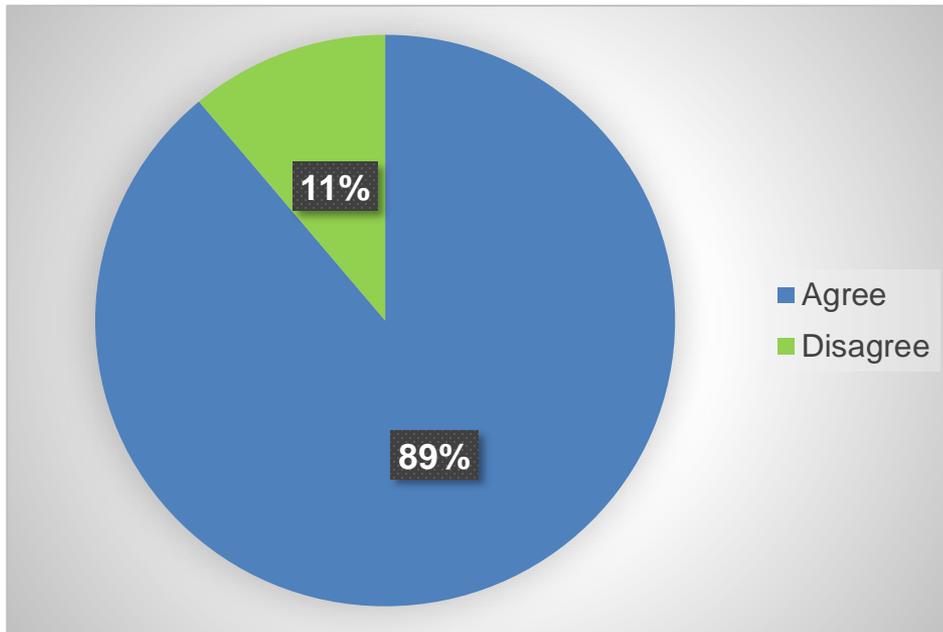


Feedback:

- Very positive overall
- Late notification of changes to requirements

Survey Results & Feedback

Effectiveness of Computer Based Training

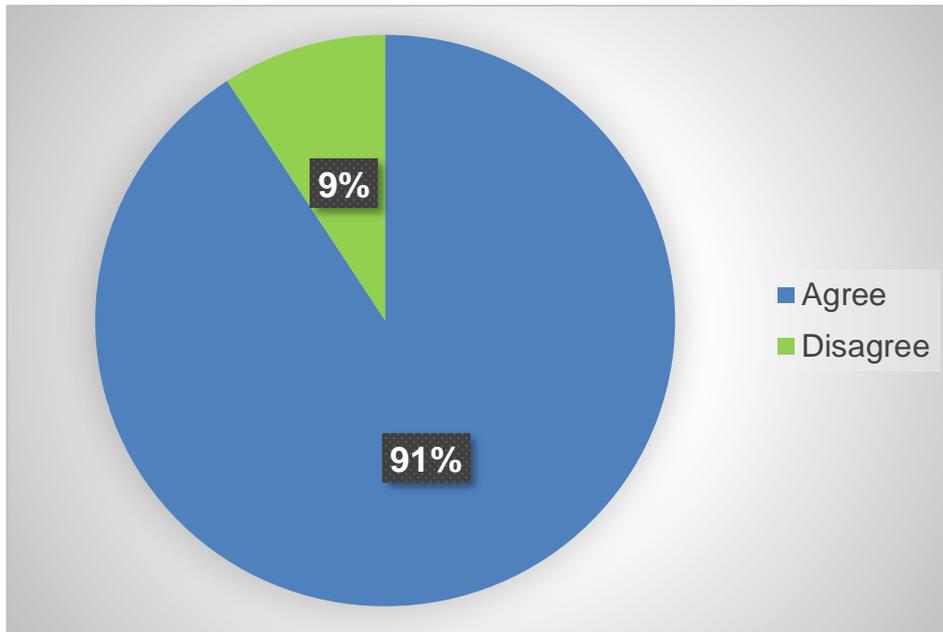


Feedback:

- Overall effective
- Some modules more effective than others depending on the audience

Survey Results & Feedback

Ability to share or disseminate information

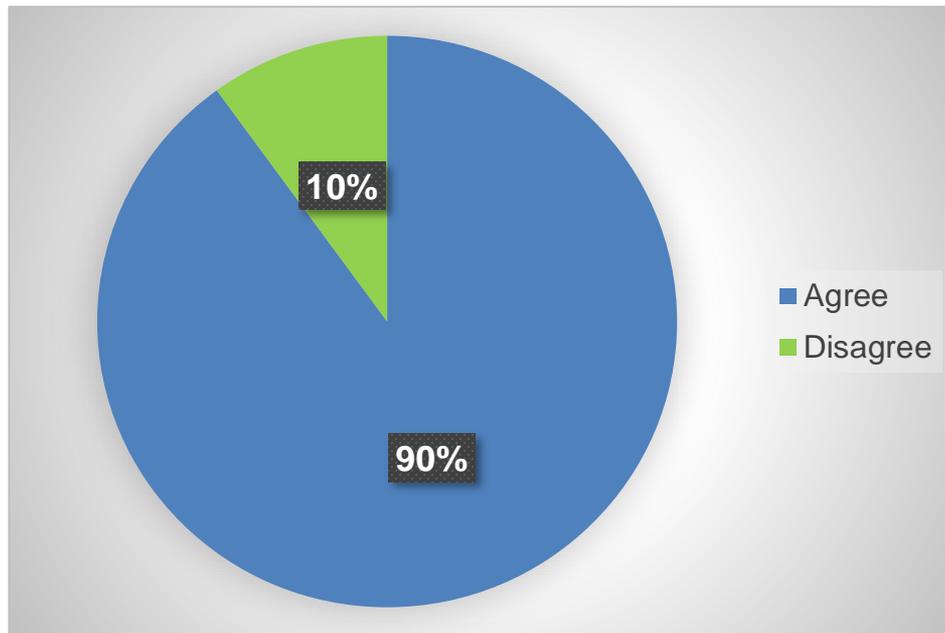


Feedback:

- Overall positive

Survey Results & Feedback

Effectiveness of e-mail communication



Feedback:

- Overall positive

General Improvement Themes

- Network modeling issues and versioning
- Response time to CIDI tickets
- More robust upfront planning
- Distinction between certain types of customers

Improvements

Several things we have done to improve....

- Expanded onboarding checklist
- Held some EIM entity specific meetings
- Improved segregation of information
- Implementation of improvements in Resource Implementation Mgmt. System (RIMS)

Discussion: July Customer Onboarding Experience

RC West Oversight Committee Members

Update: RC Operations

Tim Beach
Director, RC West Operations

RC West Operations

- Tucker Fire
 - Threat to all three COI lines
 - PACI lines removed from service for safety
 - Potential Open Loop scenario
 - Reduced COI transfer
 - Implemented USF for Path 66 (steps 3 and 4)
 - Declared Transmission Emergency
 - Multiple EEA's declared due to lost energy transfer
 - Coordinated with Peak, BPA, CAISO BA, APS to disable WECC-1 RAS

Procedure Update

- Notification for Real-Time Events (RC0130)
 - RTWG reviewing SOL Exceedance reporting guideline
- 21 Seams, IROL, and Transmission Operating Guides
 - Recent activity
 - NEW/WAPA-UGP guide
 - 12/3 version completed
 - 11/1 near completion
 - EPE/PNM guide complete
 - Updated Oregon Export IROL to include notifying neighboring RC's.
 - Draft Inter-area Oscillation Operating Guide

RC West Phase 2 Certification Update

- Site Visit Conducted – July 30 – August 1 2019
- No Bucket 1 Items
- Bucket 2 Items – Must be closed prior to Go-live 11/1/2019
 - Complete transition of EMS from ABB to Siemens for the expanded footprint
 - Grid Messaging System expanded footprint verification
 - Complete review of TOP restoration plans
 - Minor updates to documentation
- Follow-up Site Visit Scheduled for September

Development of RC West Metrics - Principles

- Three principles:
 - Provide enhanced reliability services to our customers and demonstrate that enhanced level of service
 - Provide feedback to our customers to help them assess the quality of data they are providing to the RC
 - Assess how our operators are performing the RC function

Development of RC West Metrics - Overview

- Three types of potential metrics:
 - Metrics for enhanced reliability services similar to Peak's
 - Metrics for data input quality based on IRO-010 data requirements to support RC services
 - Metrics for internal RC West that measure the cross-department performance of the RC Operator, Operations Engineer and the IT Professional and IT computer systems
 - Metrics are designed to reflect positively as human and computer system processes improve, and negatively if performance declines
- 2020 will be a year of Baselineing measures

Development of RC West Metrics - Examples

- Measure RC proactivity in certain events to ensure Interconnection reliability
- Measure RC communications during Operating Instructions and significant events
- Measure State Estimator and RTCA solution accuracy and availability
- Measure the accuracy of Next-Day studies and data input needed to support Next-Day studies
- Track critical computer-system availability.

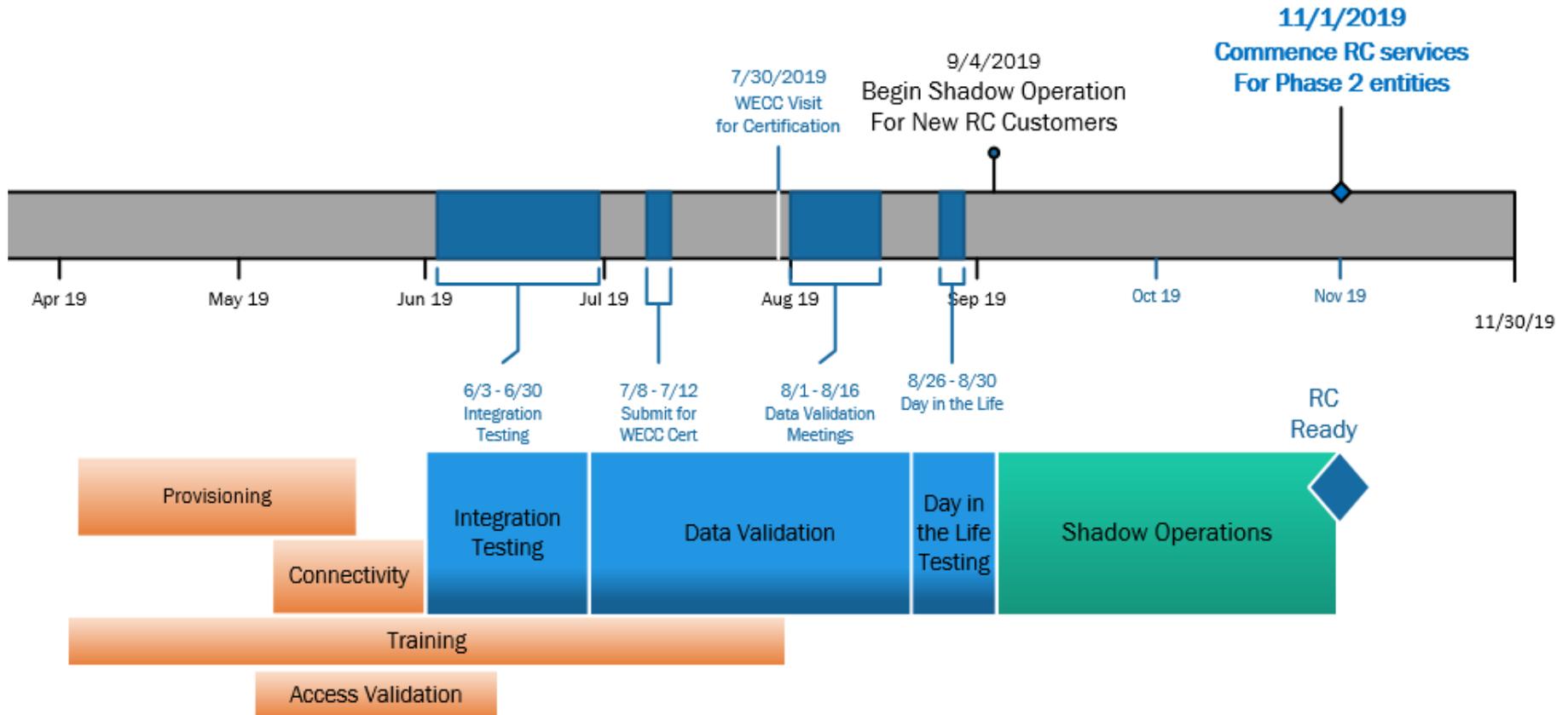
Development of RC West Metrics – Examples

- Percentage of five-minute intervals SE Convergence failures
- Percentage of lines, transformers and voltage buses that solve within designated residual target
- Load forecast percentage error (by BA) between Day Ahead and Real Time
- Percentage of Real Time Contingency Analysis (RCTA) violations identified in Day Ahead Contingency Analysis (DACA) process
 - Percentage of RCTA violations not identified in DACA
- Count of RTCA violations deemed invalid (e.g., Modeling error, Incorrect Limit, RAS)
- Count of Phone Logs reviewed for 3-Part Communication, Matching Log Entry and Professionalism
- Monthly average (in minutes) between time when an actual exceedance occurs and the RC West first communication
- Monthly average (in minutes) between time when an actual exceedance occurs and exceedance was mitigated
- Availability percentage of Critical Information Systems (EMS, RTCA)

Update: Customer Onboarding

Joanne Alai
RC Project Manager

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%	On Track	90%	Next model update goes to prod 9/19.
3	Operating Procedures	2 Testing Preparation	Complete	100%	On Track	90%	Near completion: RC0120B - IRO-010 spec for Neighboring RCs.
4	Operating Guides	2 Testing Preparation	Complete	100%	On Track	95%	Minor updates to existing guides
5	Messaging	3 Customer Testing	Complete	100%	On Track	90%	Completed GMS test with all Nov customers. Some follow-up tests required.
6	RC Customer Integration	3 Customer Testing	Complete	100%	On Track	75%	Data Validation and Day in the Life testing in progress
7	Shadow Operations	4 Shadow Operations	Complete	100%	On Track		Transition plan posted. Shadow Ops begins 9/4.
8	Executive Statement	4 Shadow Operations	Complete	100%	On Track		Communicating expectation to Nov customers. Due no later than 10/1/19.

Customer Readiness for Shadow Operations

- Readiness for Certification and Successful Shadow Operations
 - Network model updates
 - Data Submission Validation – technical readiness
 - Day in the Life Testing – process readiness

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.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

HANA Training

- Training continues through end of August – 10 dates
 - 2x per week from August 5 - 23
 - 4x the week of Aug 26
- Overall feedback has been positive
- How to videos in development
 - HANA Visualization
 - In review, target release with edits for week of 9/1
 - HANA Study - in progress

Update: Technology

Ankit Mishra

EMS Lead, Power Systems Technology Operations

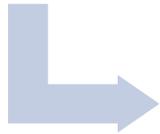
HANA Timeline Review

Now Available

- HANA Base (Read Only RTCA)
- July Customers are in Production
- November Customers in Stage (Shadow Ops)

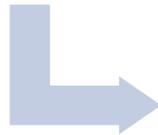
Now August

- HANA Hands On Training



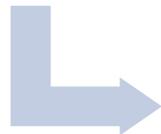
September

- HANA Visualization and Study available for testing



October

- Customer Validation/Production data in RC West Shadow Operations



November

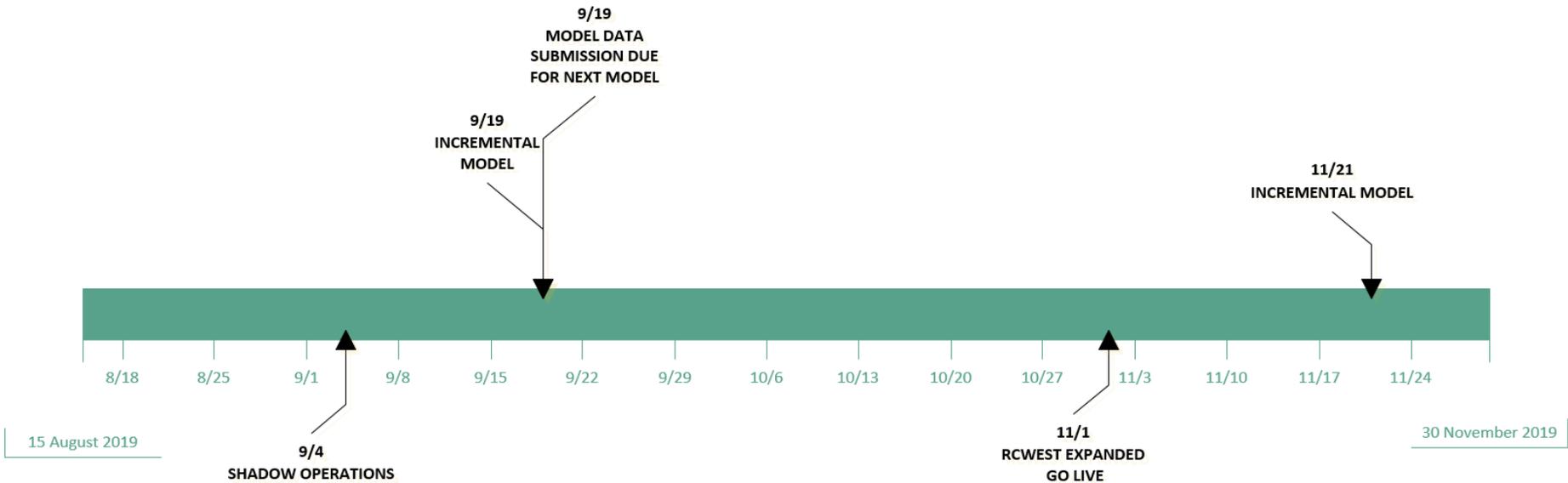
- RC West Phase 2 Go-Live!



December

- Peak HAA terminated

Network Model Build



Transition to New EMS Platform

	Date
EMS Certification Review	9/5/2019
Production EMS Cutover Date	9/25/2019

The ISO is currently completing 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 cut-over scenario testing

Future Agenda Items

- Determine agenda topics for next public session on September 24, 2019 (in person and webinar).

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