



California ISO



RC West

# RC West Oversight Committee

Public Session

May 12, 2020

1:00 - 2:30 p.m. Pacific

# Agenda

Time:	Topic:	Presenter:
1:00 - 1:05	Welcome/agenda	Kristina Osborne
1:05 - 1:10	Roll call	Michelle Cathcart - Chair
1:10 – 1:30	<b>Committee Business</b> <ul style="list-style-type: none"> <li>Decisional Item: Chair &amp; Vice Chair</li> <li>Update: Finance</li> </ul>	Committee members  April Gordon
1:30 – 1:55	<b>RC West Operations Update</b> <ul style="list-style-type: none"> <li>COVID-19 Update</li> <li>Procedures Update</li> <li>RC Metrics</li> <li>CIDI/ Issue Resolution Progress</li> </ul>	Tim Beach  Michael Martin, Rachel Lucas Ginger Quintavalla
1:55 – 2:20	<b>Working Group Updates</b>	Tim Beach (RTWG) Dede Subakti (OPWG) Tricia Johnstone (DEWG) Ankit Mishra (HANA CPG) Tricia Johnstone (TWG)
2:20	<b>Public Comment</b>	
2:30	<b>Public Session Adjourned</b>	

# Oversight Committee Business

# Decisional Item: Chair and Vice Chair Elections

# Chair and Vice Chair Nominees and Election

- Chair: Benjamin Brandt, Idaho Power Corporation
- Vice-Chair: Chris Hofmann, Salt River Project

# Finance Update

April Gordon  
Director, Financial Planning and Procurement

# FINANCE: No new RC West customers; Settlements CBT available

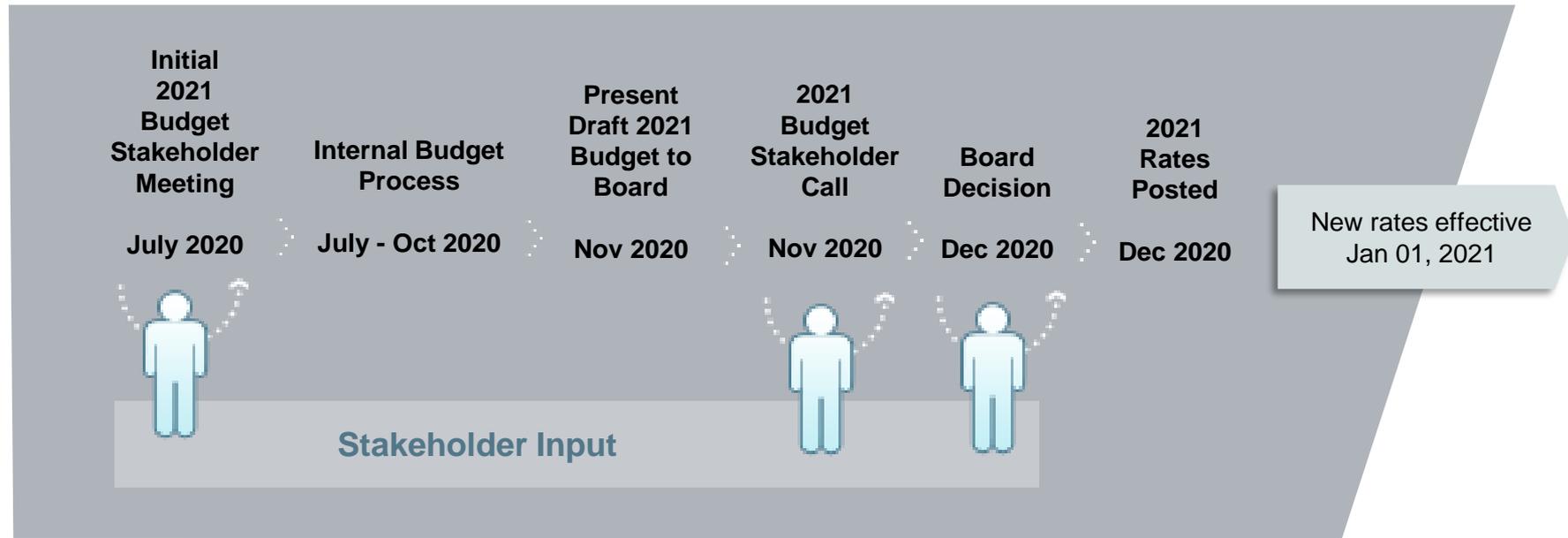
- General Updates

- No new RC West customers
- No 2020 financial adjustments

- Resources

- 2020 RC West Service Charge rates:  
<http://www.caiso.com/Documents/GridManagementChargeRatesfor2004-2020-Effective-Jan-01-2020.pdf>
- RC West Payment Calendar:  
<http://www.caiso.com/Documents/RCWestAnnualPaymentsCalendar.pdf>
- RC Customer Settlements Training Module:  
<http://www.caiso.com/participate/Pages/LearningCenter/ComputerBasedTraining.aspx>

# FINANCE: 2021 GMC Revenue Requirement process kicks off July 2020



# FINANCE: 2021 billing volumes due September 2020

<b><u>DATE</u></b>	<b><u>ACTION</u></b>
9/1/20	MRI-S portal opens to submit 2019 MWhs for 2021 RC service charges
9/30/20	RC Customer's deadline to submit 2019 NEL/NG MWh in MRI-S
10/30/20	RC West publishes Information Statements, which lists volumes provided in MRI-S for review prior to invoicing
11/30/20	RC Customer's deadline to validate volumes on Information Statement
1/4/21	RC West publishes RC Services Statement & Invoice
2/3/21	RC Customer payment due date
	» Federal entity payments are due monthly in 1/12 increments

# Update: RC West Operations

Tim Beach  
Director, Reliability Coordination

Ginger Quintavalla  
Manager, Customer Experience

Michael Martin  
Sr Advisor, Market Operations

Rachel Lucas  
Operations Compliance Analyst

# RC West Operations and COVID-19 Update

- Operations
  - Oscillation Event April 28th
- COVID-19
  - No CAISO/RC West staff have been diagnosed with the Novel Coronavirus (COVID-19)
  - COVID-19 and Antibodies testing has not been available
  - Operating measures and posture

## RC West Measures and Operating Posture

- Changed to a 5 week rotation
  - This pre-positions for lost staff
  - RCs do not rotate between control centers
  - Control Room access limited to RCs, BA Operators, IT for priority items, and cleaning staff
  - Health checks before entering
- 6 Step RC Reduced Staffing Plan
- Converted simulation room into 3<sup>rd</sup> control room
- Training sessions held remotely
- Developed sequester plan
- Coordinating with CAISO's general staff return to work plan

# RC West Return to Normal

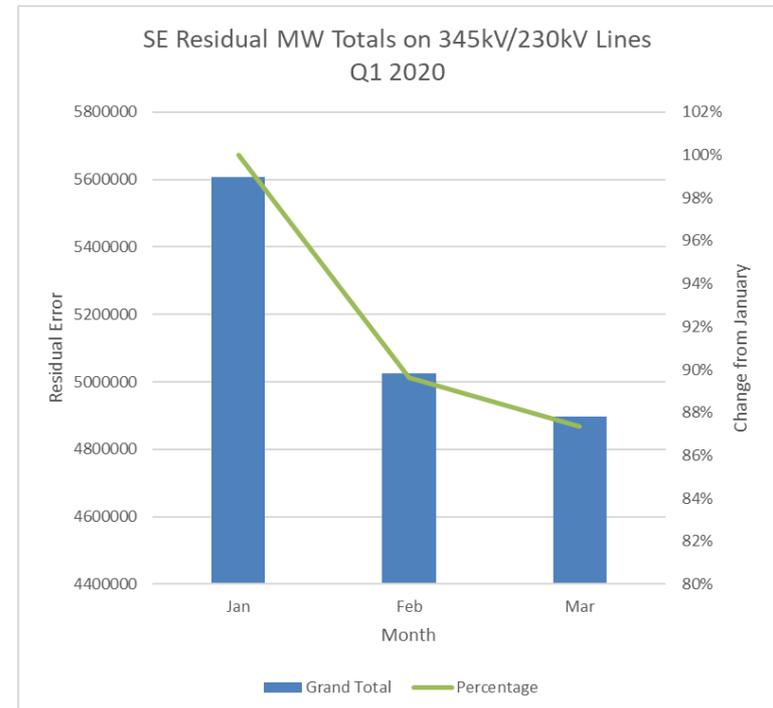
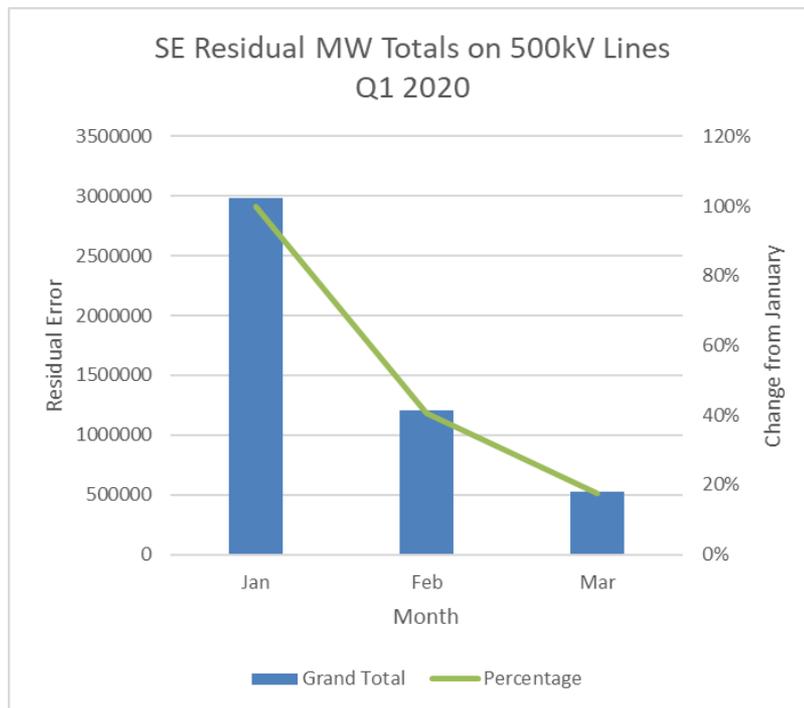
- Subject to change
- CAISO general staff population to return to work in phases starting June 1<sup>st</sup> (projected)
- Operating posture will not change
  - Control Room access restricted to Operations Staff, IT Staff to address priority items, and cleaning crew
  - Training to be held remotely
  - Control Room entry health screening to continue
  - And will remain in this operating posture until a vaccine is administered or herd immunity is known

# RC Procedures Update

- Procedures scheduled to Publish:
  - RC0460 – RC Restoration Plan and attachments – Scheduled to Publish 5/22/20
  - RC0650 - Steady-State and Dynamic System Model Validation: NERC MOD-033-1 – Scheduled to Publish 5/12/20
- Recently Published Procedures:
  - RC0550 - Reliability Coordinator Procedure Development, Maintenance and Distribution – Effective 4/30/20
  - RC0620 - Operations Planning Analysis (Next Day) – Effective 4/30/20
  - RC0410 - System Emergencies – Effective 4/21/20
  - RC0410A - EOP-011 Plan Review Checklist – Effective 4/21/20
  - RC0430 - GMD Operating Plan – Effective 4/21/20
  - RC0430A - EOP-010 Plan Review Checklist – Effective 4/21/20
  - RC0420 - Event Reporting – Effective 4/17/20
  - RC9130 - Path 61/Lugo-Victorville IROL – 4/07/20
- Procedures planned for Q2 review:
  - RC0110 Communications Protocols
  - RC0330 Coordination with Neighboring RCs
  - RC0330A List of Ties with Neighboring RCs
  - RC9000 Open Loop Guideline
  - RC9010 Unscheduled Flow Mitigation on Qualified Paths

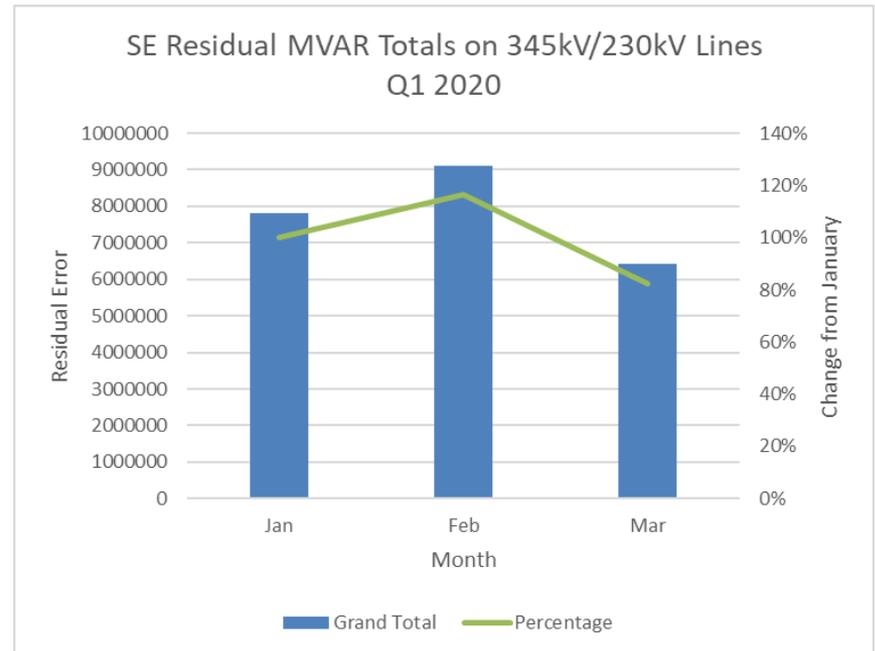
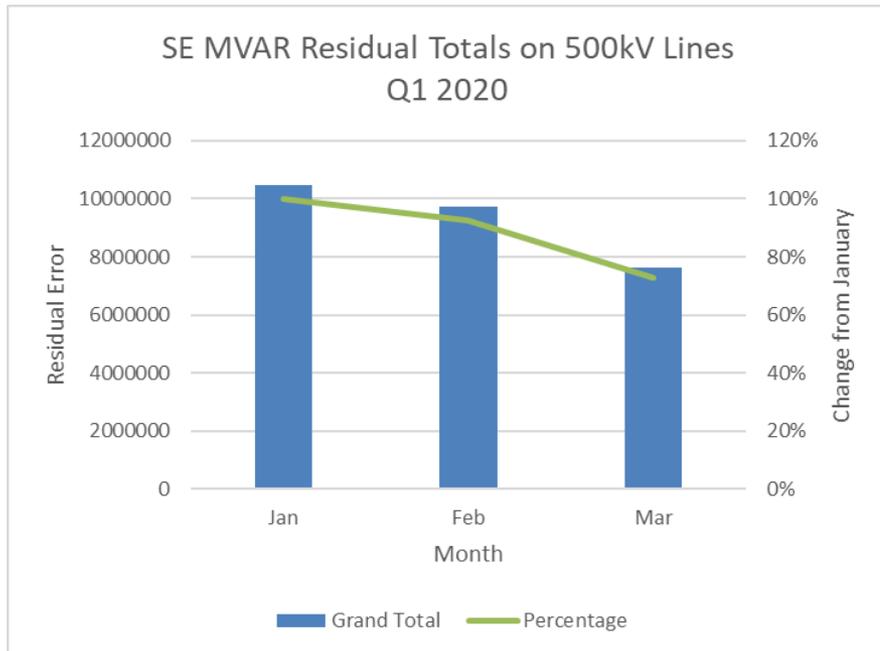
# RC Metrics Q1 – State Estimator Quality

- SE Residual Error – MW flow on 500kV, 345kV/230kV lines
- Observed significant improvement on 500kV line accuracy
- *Note: Residual flow is the difference between the calculated SE solution flow on each line compared to the actual telemetry value. This is a reflection of SE accuracy in RC West area.*



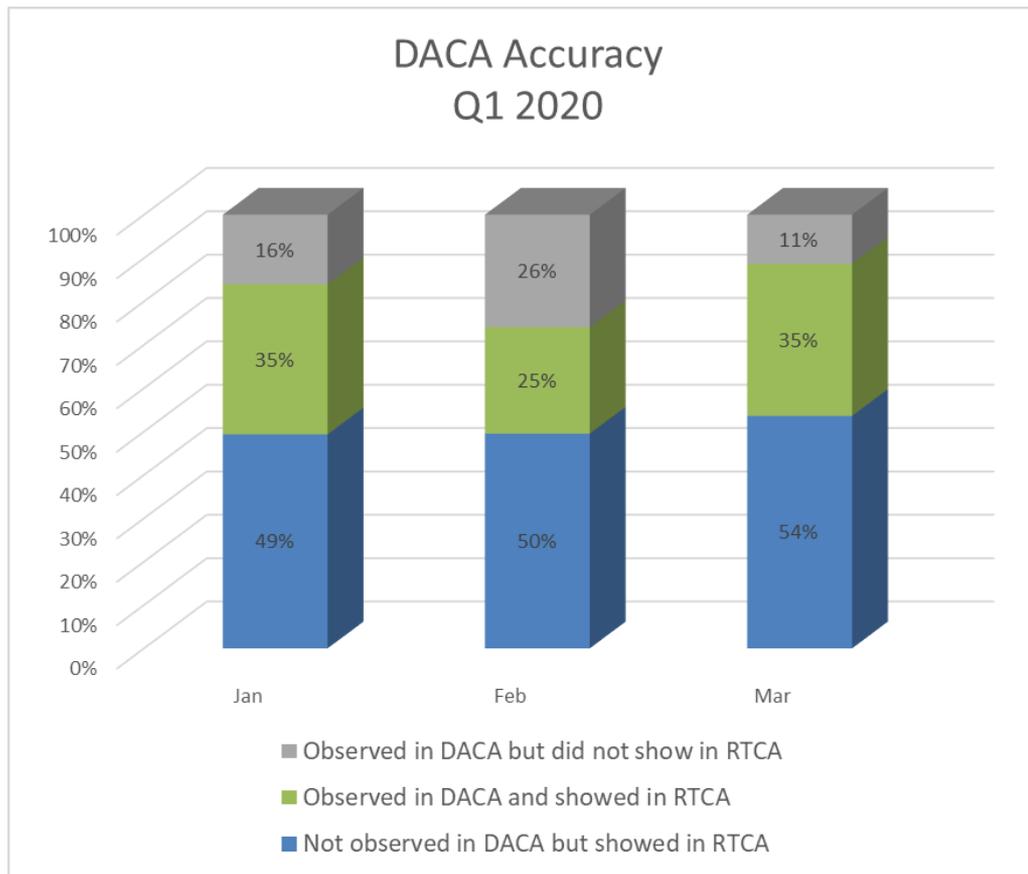
# RC Metrics Q1 – State Estimator Quality

- SE Residual Error – MVAR flow on 500kV, 345kV/230kV Facilities
- Some improvement observed in Q1 on both facilities
- *Note: Residual flow is the difference between the calculated SE solution flow on each line compared to the actual telemetry value. This is a reflection of SE accuracy in RC West area.*



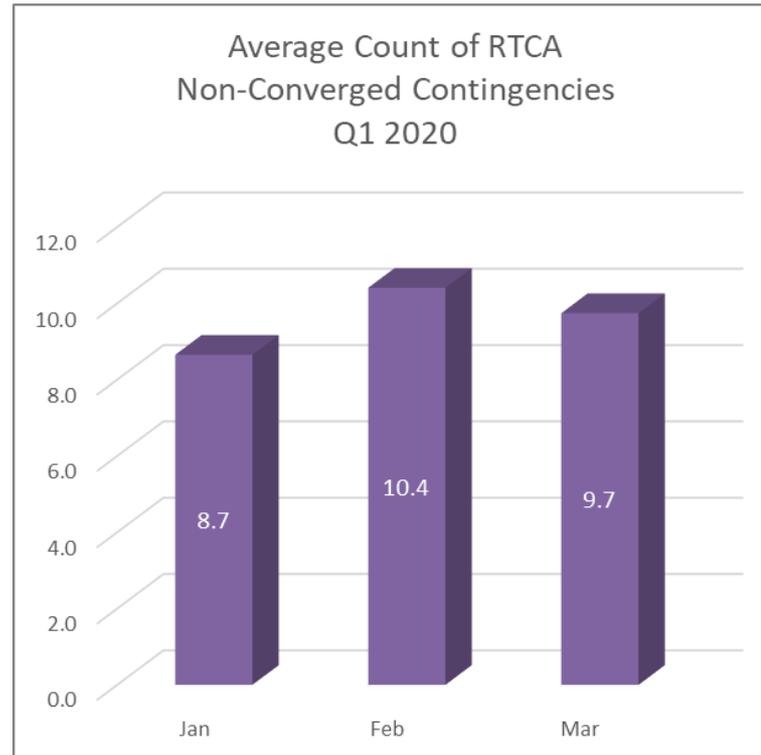
# RC Metrics Q1 – DACA Accuracy

Day Ahead Contingency Analysis (DACA) tool is designed to identify potential contingencies in the day ahead timeframe



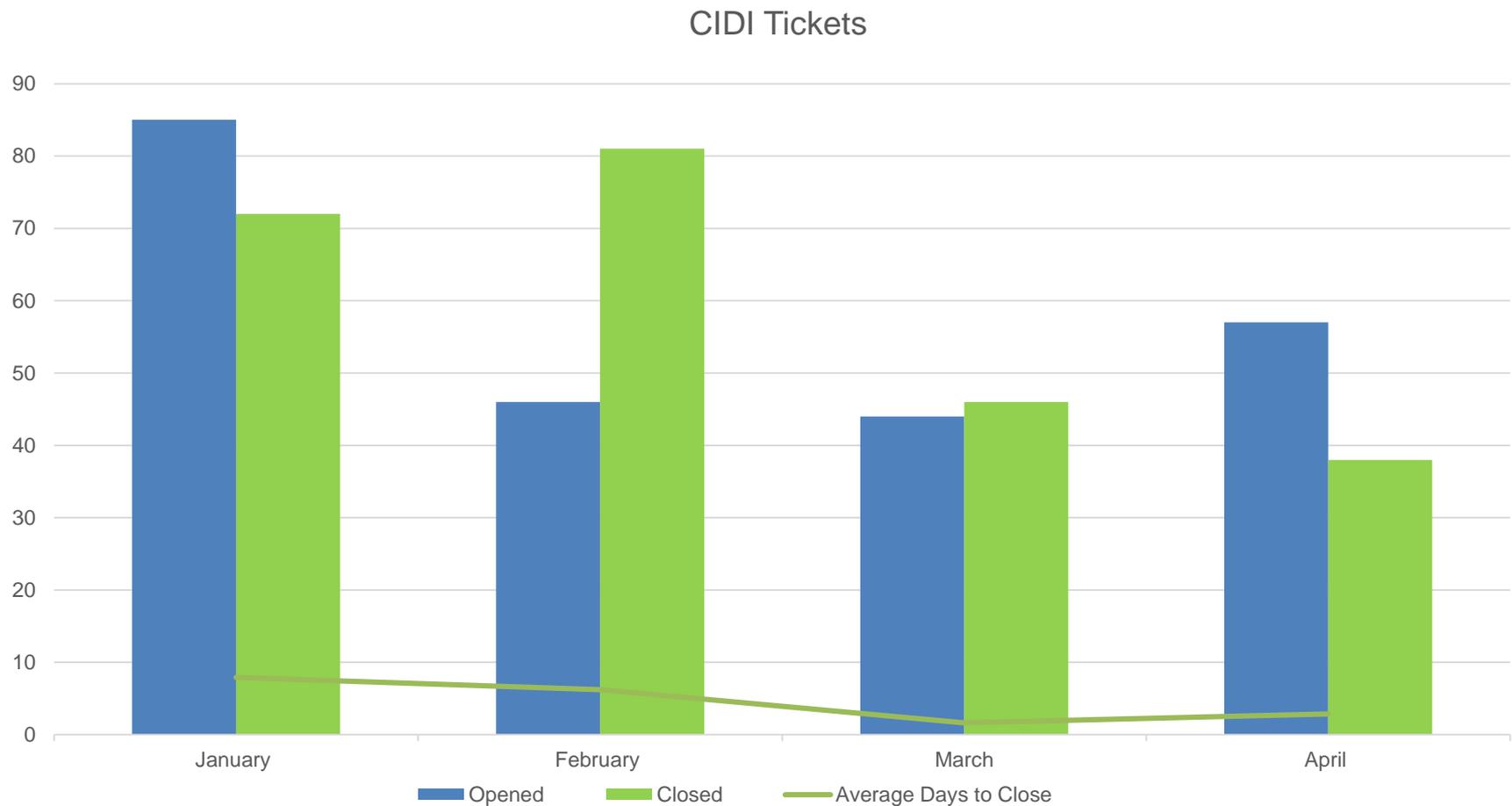
# RC Metrics Q1 – RTCA Non-Converged Contingencies

- Count of RTCA Non-Converged Contingencies in five minute intervals
- Averaging close to nine (9) non-converged contingencies every run
- *Note: Over 8,500 contingencies are solved in every RTCA solution*



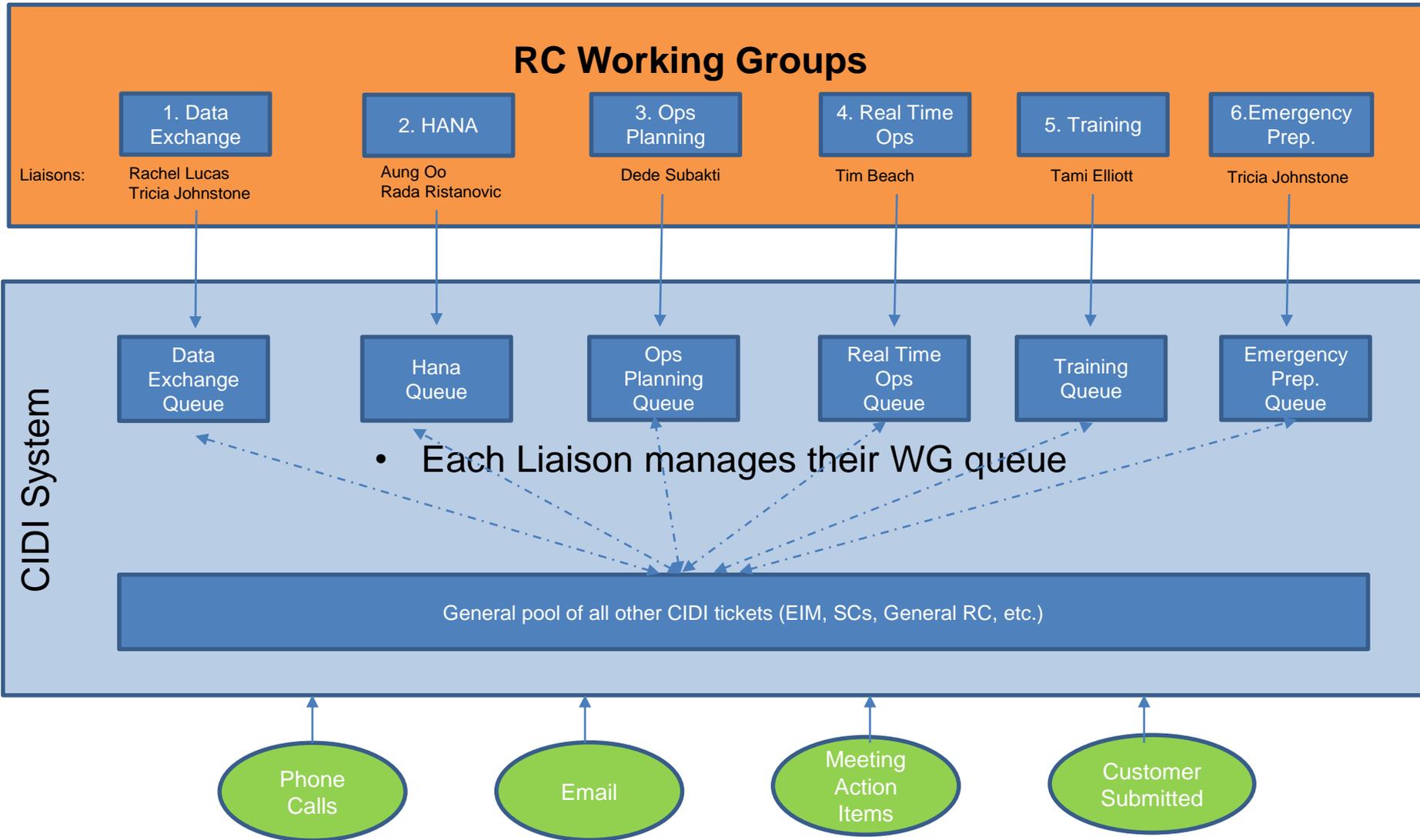
ISO Public

# RC Metrics Q1 – CIDI/Issue Resolution Progress



# RC Issue Support Structure

## RC Working Groups



# Working Group Updates

# Real-Time Operations Working Group

Tim Beach  
Director, Reliability Coordination

# RTWG Wide-Area View Situational Awareness (WAVSA) Ad-hoc Task Force

## Scope

- The intent of WAVSA is to provide a consistent platform to share overview and custom displays
- Task force is comprised of RC members, RC West operational and RC West IT staff
- The deliverable is to shepherd development of the initial display sets as well as a long-term process to manage displays review, and building
- PI Vision is a product of OSI Soft (replacement for Proc-Book)

# WAVSA-TF Next Steps

- TF-Kickoff held May 4<sup>th</sup>
- Provision TF members for PI-Vision
- TF members to develop mock-up for trail display
- RC West to replicate RC BA performance displays
- RC West to develop framework for user guide and training plan
- Next Meeting May 18<sup>th</sup>

# Operations Planning Working Group

Dede Subakti  
Director, Operations Engineering Services

# OPWG Activities

- Retirement of SDGE IROL:
  - With transmission and generation upgrade in Southern California, the cutplanes become thermally limited instead of stability limited
  - RC West and the impacted entities, have agreed to retire the SDGE IROLs and retire these procedures RC09140 and RC09150
- PRC-012 Task Force

# Transmission and Generation Upgrade in Southern California

- Synchronous Condensers (225 MVAR lagging and -121 MVA leading)
  - Santiago (3),
  - San Onofre (1),
  - San Luis Rey(2),
  - Talega (2),
  - Miguel (2)
- Suncrest SVC (-100 MVAR to 300 MVAR (capacitive))
- New 230kV TL23071 from Sycamore Canyon to Penasquitos
- New Vincent – Miro Loma 500 kV line
- New Huntington Beach 2X1 combined cycle unit
- Two phase shifters on TL23050 line

# 2020 Summer Assessment Results

- Observed Historical Import level (All Line In Service):
  - 2018 3450 MW
  - 2019 3250 MW
- Study Results for 2020:
  - Thermal limit happens around 3300 MW (N-1 loss of Miguel bank overload the other bank and for the loss of TL50002 overload S Line
  - Based on Cascading test, there is no thermally limited IROL as well.
  - SDGE/CENACE N-1-1 stability limit is found at 4150 MW
- Conclusion:
  - No IROL was established based on summer assessment
  - Retire procedure RC9140 and RC9150
  - CAISO BA to update Procedure 7820 to reflect mitigation and monitoring for thermal limitation

## PRC-012: New RAS Review Process

- RC West is coordinating with other RCs through WECC RAS RS
- Interim process of submission submit to [ISORC@caiso.com](mailto:ISORC@caiso.com) with Subject “PRC-012 RAS submission” one month prior to WECC RAS RS
- During 2020, all submission will be forwarded to WECC RAS RS
- Permanent process is being developed via this PRC-012 Task Force

# PRC-012 Task Force Status

- Comments Review and Discussion of three new Procedures
  - RC0690
  - RC0690A
  - RC0690B
- Next Steps:
  - RC West post draft proposed process and checklist on RC Portal > Working Groups > Operations Planning > Joint DEWG/OPWG
  - Drafts available for comment period 5/4-5/18
  - Next PRC-012 webinar will discuss further details based on comments

# Potential Future Work for OPWG

- Annual review and update to:
  - RC0610: SOL Methodology
  - RC0620: OPA Process
  - RC0630: Outage Coordination Process

# Data Exchange Working Group

Tricia Johnstone  
Director, Operations Compliance and Controls

# IRO-010 Data Specification – proposed updates

- RC0120 – IRO-010 Guidance
  - Expanded 6.1 to include default Load Pfixed and Qfixed values
- RC0120A – IRO-010 Specification
  - Added new request - 6.25 for the Dynamic Model for Transient Stability Analysis
    - Same GE PSLF format that is being submitted to WECC base case development, with mapping between the EMS model and the GE PSLF dynamic model
  - Effective date of 9/1/2020

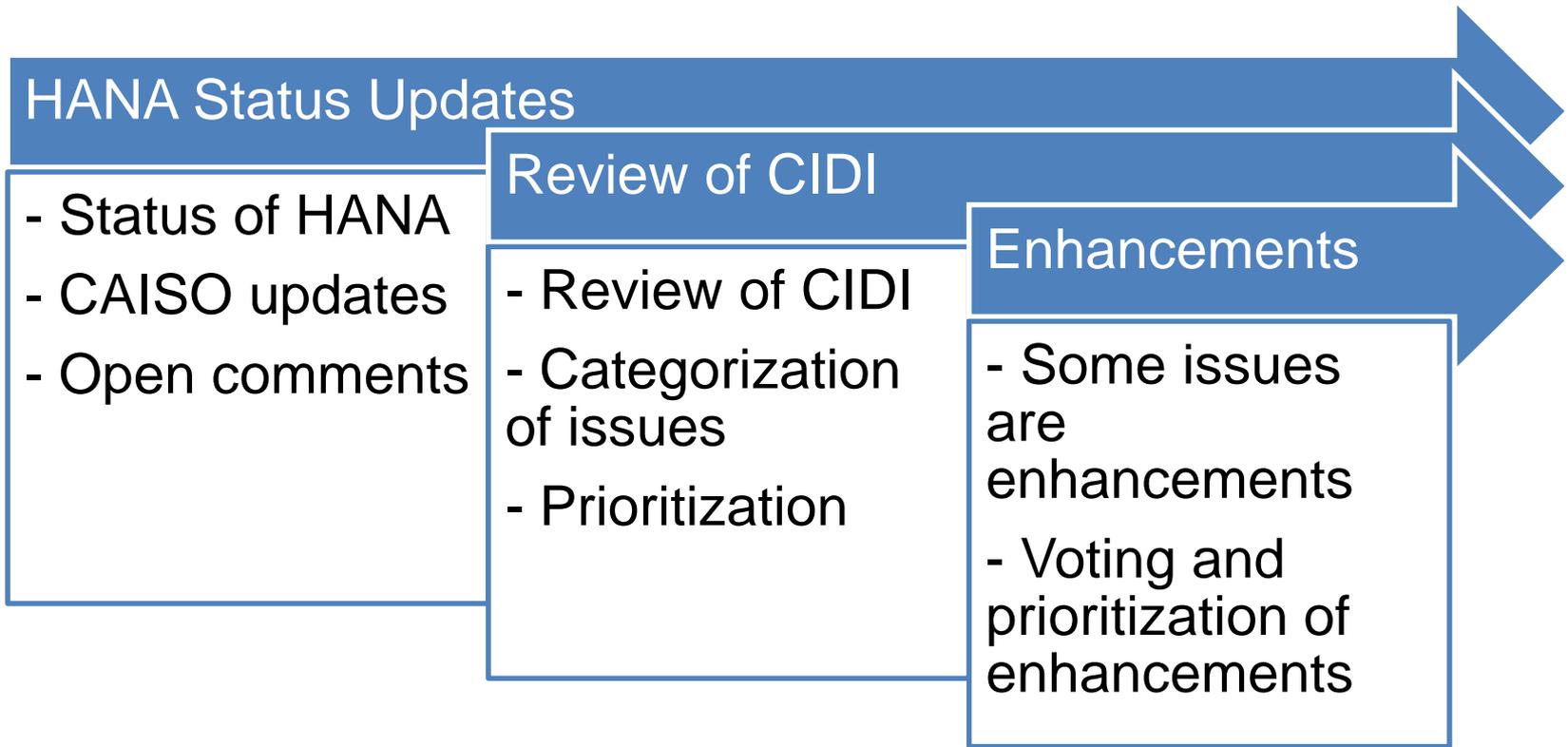
# Model Process Updates

- FNM Monthly Model process working well
- March and April models implemented successfully
- Timelines, Tools, Templates and Scoping clarifications
- All model changes are processed through RIMS tool
- Model Validation enhancements from vendors to improve model quality
- Western Interconnection Model data library
- Solution Quality  $\leftrightarrow$  Model Data validation

# HANA Customer Partnership Group

Ankit Mishra  
Sr Advisor, EMS Power Technology Engineer

# HANA CPG Activities



# Training Working Group

Tricia Johnstone  
Director, Operations Compliance and Controls

# TWG Activities

- **Delayed – 2020 TOP Restoration Drills**
  - Northwest Area A: every Tues for 6 weeks- Jul 21 to Aug 25
  - Southwest Area B: every Wed for 6 weeks- Sep 16 to Oct 21
  - California Area C: every Fri for 6 weeks- Sep 18 to Oct 23
- **2020 GOP Restoration Exercises**
  - March 13 (completed)
  - September 9
- **Scheduling 2021 Restoration Exercises**
- **Soliciting input re: additional training topics**

# Upcoming Working Group and Oversight Committee Meetings

Working Group	Dates
Data Exchange	April 16, <b>Sept 17</b>
Emergency Prep. & Power System Restoration	<b>June 17</b>
HANA CPG	March 17, April 21, <b>May 19</b> , June 16, July 21, Aug 18, Sept 15, Oct 20, Nov 18, Dec 15
Operations Planning	Jan 23, April 21, <b>Jul 23</b> , Oct 22
Oversight Committee	Feb 27, <b>May 12</b> , Aug 19, Nov 10
Real-Time Operations	Jan 21, Feb 18, March 17, April 21, <b>May 19</b> , June 16, July 21, Aug 18, Sept 15, Oct 20, Nov 18, Dec 15
Training	Feb 6, <b>May 7</b> , Aug 6, Nov 12

# Future Agenda Items

- Determine agenda topics for next public session on August 19, 2020 (webinar)

# New RC West Regulatory Liaison

- Welcome Commissioner Mary Throne, Wyoming Public Service Commission

# Open for Public Comments

# Public Session Adjourned