



California ISO | RC West

Model Validation Working Group MOD-33 Update

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RC WEST LUGO-VICTORVILLE IROL RETIREMENT

- New 500 kV line Delanie – Colorado River line
- N-1-1 thermal limited Lugo –Victorville IROL retirement
- Impact: FAC -14 R5 requires RC to share SOL/IROL limits with Planning Coordinators

MOD-33 CASE UPDATE

- One WECC Planning Cases has been uploaded – Mica Gen Trip in BCRC area
- Case conversion from RC WestEMS case to WECC planning case in progress

TOOL UPDATE

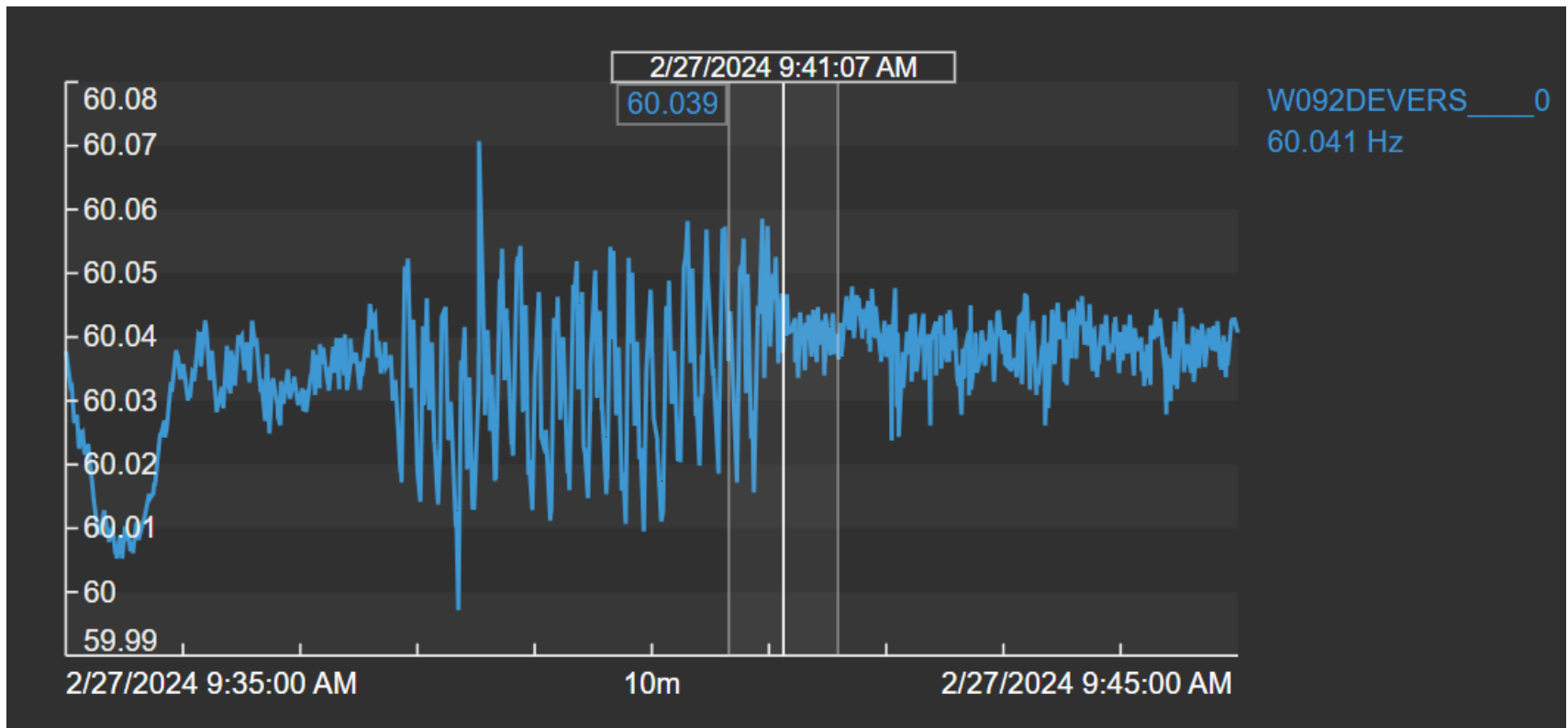
- RTDMS Tool – PMU data based tool to detect local and inter-area oscillation
 - SCE Devers PMU setup in production to capture renewable related oscillation
 - Work on RTDMS performance improvement for oscillation less than 0.1 HZ based on real time March 30th, 2024 Devers area renewable energy oscillation event



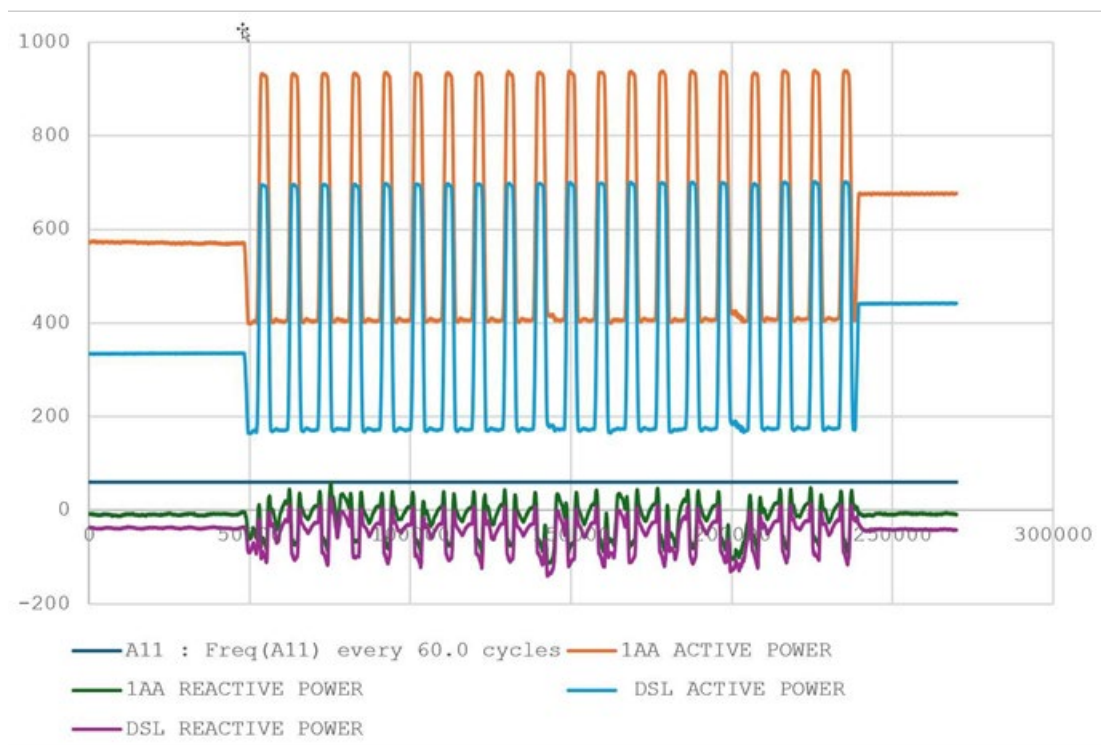
Event Analysis #1

- BPA noticed an oscillation from 09:38-09:41 on 02/27/2024 along the N-S modes
- BPA inserted Fort Rock Series Comp at 0941 which likely mitigated the issue
- BCRC/BPA indicate >20% damping

System Frequency



Fault Recording from SCE



Preliminary Root Cause Analysis

- Real time telemetry problem at 07:00 AM PT was Observed at Desert Sunlight 1 BESS.
- The reboot of Desert Sunlight 1 BESS RIG triggered the power swing event.
- BESS site deviation between power setpoint (SP) and actual power charge and discharge feedback (FB)
- Incorrect BESS controls logic configuration amplified the deviation and initiated the high magnitude power swings

Event Analysis #2

- 03252024 1455 The Vincent 500 kV South Bus and 500/230 kV 4AA Bank relayed OOS causing a loss of approximately 659 MW of solar generation from various resources. ACE went from a pre-disturbance value of 83 MW to a low of -1056 MW.
- At a time of 1528 PPT frequency deviated from 59.986 Hz to a minimum of 59.929 Hz. Due to large ACE swings in CA area.
- 1528 PACE Jim Bridger 2 tripped offline rejecting 170 MW. ETR and cause unknown.
- 1542 CAISO has changed/modified the AGC control bands in an attempt to mitigate the large ACE control swings happening for the last 15-20 minutes. Some of the battery resources on AGC were hunting and the revised AGC control bands stopped it.

System Frequency



Q&A?