

# WECC JSIS Update for NASPI Meeting

4/13/2021

Hongming Zhang
JSIS Chair

#### Joint Synchronized Information Subcommittee (JSIS)

- JSIS reports to both Operating Committee (OC) and Reliability Assessment Committee (RAC).
- JSIS and associated work groups (WGs) aim to support
  - The creation and management of a secure synchronized-data measurement-exchange network for the Western Interconnection.
  - The definition of associated data analysis; monitoring tools; and real-time local, sub-grid, and regional controls for better planning and operation, and improved reliability of the Western Interconnection.
  - Implementation and operational use of Synchrophasor applications and real-time transient stability assessment tools in control rooms.



#### Oscillation Analysis Work Group (OAWG)

- RC West/CAISO, SPP and BPA consolidated PMU input channels and control parameters on the Mode Meters in the control centers.
  - Three Mode Meter results will be compared and validated regularly for both normal and event cases.
  - BC Hydro is validating the oscillation analysis software.
  - SCE, SDGE, PGAE, SRP run oscillation analysis tools.
- Continued bi-monthly meetings to review recent oscillations injected by hydro, thermal units and inverted based resources et al:
  - Hydro unit ramping up & down, Solar PV Var control
  - PSS controller setting, Arc Furnace load fluctuating



#### **Oscillation Analysis Work Group (OAWG)**

- Plan to have a demo of oscillation source location software during the 2021 meetings.
  - Having real cases to test on rather than simulated events.
    Particularly, following up on the large oscillation events,
    OAWG would see what the cause of the event is identified
    by the software.
  - Explore possibility of sharing anonymous oscillation event PMU data for vendor to test or demo its oscillation source localization tools.
  - Look for support from RC West, SPP and entities.



#### Data Delivery Management Work Group (DDMWG)

- Held bi-monthly meetings to review PMU data quality and registration management and use cases.
- Activated the historical event repository @WECC site (secured).
  - Selected the events being 11/01/2020 and 11/31/2020 to post the data focusing on frequency events and oscillations.
- Looked for public PMU data sets being anonymized.
- Developed the introductory document to get new Synchrophasor systems up and running correctly.



#### **Transient Stability Analysis Work Group (TSAWG)**

 TSAWG focused on real-time or online transient stability analysis tool implementation and dynamic simulation improvements.

#### Topics include:

- Developing best practices in using and implementing a TSA tool
- Update mapping WECC \*.dyd file to EMS network models
- o RC real-time System Inertia tracking and evaluating
- Converting RAS/SPS models from PowerWorld to TSAT by scripts



### May-2021 JSIS Meeting Schedule

• 2021 1<sup>st</sup> JSIS Public meeting will be held on Webinar only, including four sessions:

Day 1: May 12 (9:00 AM- 2:00 PM)

- 1. PMU Delivery Management and Data Analytics
- 2. Oscillation Event Analysis and Oscillation Source Locating

Day 2: May 13 (9:00 AM- 2:00 PM)

- 3. Transient Stability Assessment Tools & Models
- 4. New Technology R&D Activities

Free Registration via the WECC website:

Webinar <u>link</u>, Password: WECC | Dial-in Number: 1-415-655-0003, Attendee Access Code: 133 755 4844.





Electric Reliability and Security for the West

## **Contact:**

Hongming Zhang
Hongming.Zhang@NREL.gov

