

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Synchronized Measurement Working Group Update

NASPI Fall meeting
Tim Fritch
10-19-2022

RELIABILITY | ACCOUNTABILITY



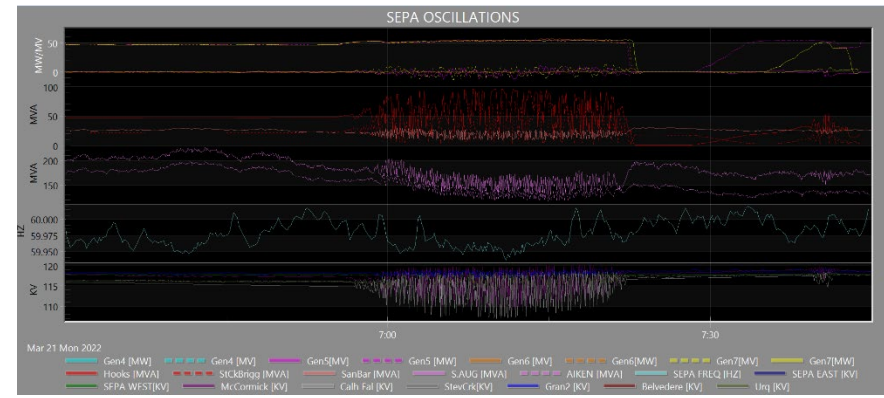
- Oscillation report subcommittee
 - Criteria and process for creating oscillation report
 - Confidentially guidelines
 - Data gathering
- Hydro Unit Oscillation Event on 3/21
 - One of the seven hydro units started oscillating due to a faulty current transformer connection
 - Finalizing report and key findings
- SMWG Scope Review and Update

NERC
NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Parameters

- Oscillation Type:** Fundamental characteristic of oscillation.
(Please choose one): Choose an item.
(Click or tap "Choose an item" to activate drop down box)
- Duration:** The time-period for the reported oscillations.
Start: Click or tap here to enter text.
Stop: Click or tap here to enter text.
Duration (UTC Only): Click or tap here to enter text.
- Repeated:** A one-time phenomenon or observed several times.
Yes: No:
a. **If Yes: How often?** Choose an item.
(Click or tap "Choose an item" to activate drop down box)
b. **If Conditional, please specify:** Click or tap here to enter text.
- Oscillation Frequency:** List dominant fundamental and harmonic (if any) frequency component(s) in observable PMU waveforms during oscillation.
List here
- Magnitude:** Overall maximum pk-pk amplitude in observable PMU active power, reactive power and voltage magnitude during oscillation.
- Oscillation frequency close to known mode(s):** Whether a fundamental or harmonic frequency is close to a known system mode to excite potential resonance conditions.
Yes: No:
a. **If Yes: Name the excited mode**
Interconnection: Choose an item. Mode: Choose an item.
(Click or tap "Choose an item" to activate drop down box)
b. **If "Other" please list here (include interconnection):** Click or tap here to enter text.
- Damping Ratio of Excited System Mode:** Click or tap here to enter text.

Oscillation Report Document | Synchronized Measurement Working Group



- October 20th SMWG Meeting (Hybrid)
 - Task Updates and Review
 - Realtime Events Review
 - 3/21 Hydro Event
 - TVA Hydro Oscillation Event
 - Integrating PMU Applications into Real-time Panel Discussion
 - Inertia Estimation
 - IEEE C37.242 Guide 2021
 - ESAMs Update
 - Utility Report-outs
 - SMWG Future Work Plan
- Spring SMWG Meeting

