WECC DDMWG Activities

JSIS Open Session
5/12/2021
DDMWG Updates

• Synchrophasor Data Sharing Document
• Synchrophasor Data Quality Document
• External (Public) Data Sharing
Synchrophasor Data Sharing Document

• Guideline for WECC members for design, installation, and maintenance of Synchrophasor systems
• Applies to new and existing implementations
• Capture “everything you need to know” about getting system off the ground and connecting to the WECC WAN
• Non-sensitive information, open to public
Synchrophasor Data Sharing Document Topics

• Background and history of WISP
• PMU and PDC installation considerations
• Timing (GPS)
• Campus-area networks
• Data storage (archives, databases, etc.)
• Applications and their requirements
• Connecting to the WAN and partner PDC streams
Synchrophasor Data Sharing Document

• Team of contributors defined
• First draft in development, expected release for initial review by June 1
• DDMWG to review and revise in summer
• Final draft release before November JSIS meeting
Synchrophasor Data Quality Document

• Define data quality terminology and metrics
  – Retire the terms “good” and “bad”
• Discuss typical PMU installations and potential sources of error
• Troubleshooting strategies for each functional block within a system
• Discuss latency and its role in data quality assessment and troubleshooting
• Appendix with library of events observed in WECC
• May contain sensitive information, possibly restricted to WECC operating entities
Synchrophasor Data Quality Document

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External (Public) Data Sharing

• Research community provides great benefit to WECC operating entities
  – Developing new applications
  – Data mining and analytics
• Many operational tools currently in place began as research projects
• This collaboration largely relies on external data sharing
External (Public) Data Sharing

• Current DDMWG Plan:
  – Approach active members in research and vendor communities
  – Define (anonymized/masked) datasets that would be helpful for development
  – Document detailed data request
  – Submit data request
  – Release data sets to public, categorized by use case (oscillations, frequency events, line outages, ambient, etc.)
  – Based on value gained, repeat in future at regular intervals
Ongoing DDMWG Work

- PMU Registry
- Synchrophasor Data Quality Reporting
- STTP Testing and Implementation (Future)