Performance Requirements, Standards & Verification Task Team

- Task Team Co-Leaders:
  - Jim O’Brien, Duke Energy
  - Farnoosh Rahmatian, NuGrid Power

- Task Team Support:
  - Teresa Carlon, PNNL
Ongoing Work

1. Synchrophasor data “during” faults – Krish Narendra
   ▪ Both measurement and communication aspects
   ▪ An 18-page draft is available for internal review (also including Goodness-of-Fit info).
   ▪ Nuwan Perera will take lead to complete report.

2. Instrument transformers behind PMUs – Farnoosh Rahmatian
   ▪ Survey of what is present behind “today’s” installed PMUs
   ▪ The survey template is revised and ready – will initiate the survey soon
   ▪ Particularly interested in CTs/PTs/CVTs connected to PMUs installed through SGIG projects
Presentation

Generator Control System Performance Monitoring using PMU Measurements

Presented by Christoph Lackner (RPI)

- Objective is to use disturbance and ambient PMU to monitor control performance
- The goal is to automate the monitoring process to track changes in the recorded performance, such that equipment operation issues can be identified before equipment starting to fail.
This presentation focuses on the applicability of the P and M class synchrophasor data for fault analysis.

The synchrophasor data captured from an industrial PMU implemented as per IEEE C37.118.1a-2014 was used for this analysis.

- Simulated data from a Real Time Digital Simulator (RTDS)
- Field reported events