

# Performance Requirements, Standards & Verification Task Team

- Task Team Co-Leaders:
  - Jim O'Brian, Duke Energy
  - Farnoosh Rahmatian, NuGrid Power
- Task Team Support:
  - Teresa Carlon, PNNL



#### Four presentations

- 1. IEEE Conformance Assessment Program
  - Presented by Jason Allnutt (IEEE SA ICAP)
  - PMU Certification to C37.118.1a-2014 is available now
  - Test Suite for C37.238 (Power Profile for Precision Time Protocol IEEE 1588) is under development
- 2. Nyquist and the PMU -
  - Presented by Frank Tuffner for Harold Kirkham
  - Examined and challenged the anti-aliasing requirements and language of the C37.118.1-2014 standard
  - Heavily challenged paper!



#### Four presentations (cont'd)

- 3. Model of Parameterized PMU Estimation Error
  - Presented by Jeff Zhao (UTK), Allen Goldstein (NIST) & Tom King (ORNL)
  - Impact of PMU output error
  - Model of 4 types of PMU measurement errors
  - Based on 9 basic PMU testing results
  - Usage: Application verification, PMU model for simulation, Self-reporting error PMU
- 4. PMU Application Requirements Task Force (PARTF) update
  - Framework is progressing well



### **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 Goodnessof-Fit info).
- 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 in April
  - Particularly interested in CTs/PTs/CVTs connected to PMUs installed through SGIG projects
  - Working on list of participants



## Standards Updates

- Second CD for IEEE/IEC 60255-118-1 (synchrophasor measurement standard) is going through comments resolution process
  - Should finalize addressing all comments in about 2 months.
  - Then will decide whether to go for CD or CDV
- WG C28 at IEEE PES PSRC is moving forward revising C37.242-2013 (Guide for Synchronization, Testing, Calibration and Installation of PMUs)
  - Have monthly conference calls
  - Target to publish shortly after 60255-118-1 release



- Standards Updates
  - PC37.247, PDC Standard is progressing
    - PAR needs to be extended at the end of this year
  - PSRC C23
    - Next PSRC meeting is in May, in Albuquerque, NM
  - GPA STTP new Task Force at PSCCC



# PRSVTT Discussions – 03/22/2017

Had discussions on the future of PRSVTT





