

# Performance Requirements, Standards & Verification Task Team

- Task Team Co-Leaders:
  - David Bertagnolli, New England ISO
  - Jim O'Brian, Duke Energy
  - Farnoosh Rahmatian, NuGrid Power
- Task Team Support: Teresa Carlon/PNNL

## PRSVTT Update – 03/23/2016

### Three paper presentations

- Making dynamic simulations output comparable to synchrophasor measurements of PMUs
  - By Dr. Anurag Srivastava, H. Lee, M. Zhou & P. Banerjee (Washington State University), Dr. Evangelos Farantatos and Mahendra Patel (EPRI)
  - Highlights the importance of understanding the limited bandwidth of various PMUs when used for “dynamic” model validation and simulations
- A smart PMU with edge processing
  - By Charles H. Wells (OSisoft, LLC), Sushrutha Ravish (National Instruments) and Raymond de Callafon (UCSD)
  - Flexible system including smart filters for event detection at the PMU level.
- Goodness of fit
  - By Dr. Harold Kirkham (PNNL)
  - Can add accuracy quality measure(s) to synchrophasor data at the PMU

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### Ongoing Work

1. Synchrophasor data “during” faults – Krish Narendra
  - Both measurement and communication aspects
2. Non-streaming Distribution PMUs – Ray Hayes
  - For basic applications (not requiring micro-PMU performance)
  - Non real-time and/or on-demand data exchange needs
  - Metering and power quality applications
    - Synchronized metering?
3. Instrument transformers behind PMUs – Farnoosh Rahmatian
  - Survey of what is present behind “today’s” installed PMUs
  - The survey template is ready – will initiate the survey in April
  - Particularly interested in CTs/PTs/CVTs connected to PMUs installed through SGIG projects

## PRSVTT Update – 03/23/2016

- Standards Updates
  - CD for IEEE/IEC 60255-118-1 (synchrophasor measurement standard) to be published by IEC this month
  - Task Force at IEEE PES PSRC has started for revising C37.242-2013 (Guide for Synchronization, Testing, Calibration and Installation of PMUs)
  - Task Force at IEEE PES PSRC to start in May 2016 to decide whether to revise IEEE Std. C37.118.2-2011

## PRSVTT Update – 03/23/2016

### New business and proposals

1. Study of occasional sync losses for PMU data
  - Prof. Yilu Liu to present on FNET/PMU study at the next PRSVTT meeting
2. Possible need for time-quality bits interpretation and extensions?
  - Coming up within PSRC
3. Old item: Guide on “Application Requirements and Benefit Metrics”
  - This work might have had significant overlap with the effort on [The Value Proposition for Synchrophasor Technology](#).
  - Consider re-opening/completing this item

