

SYNCHROPHASOR STANDARDS UPDATE, October 2018

- P60255-118-1 Measuring Relays and Protection Equipment - Part 118-1: Synchrophasor for Power System – Measurements
 - Dual logo – IEEE and IEC
 - Approved by both entities
 - Expected publication in November 2018

SYNCHROPHASOR STANDARDS UPDATE, October 2018

- P60255-118-1 (continued)
 - This revision clarifies requirements and simplifies definitions from C37.118.1
 - Testing for certification only required at 1 reporting rate
 - Adds optional certification Annexes
 - Accuracy & extended measurement ranges
 - Bandwidth determination
 - Introduces requirements for synchrophasors from sample values (for next revision)

SYNCHROPHASOR STANDARDS UPDATE, October 2018

- C37.242 Guide for Synchronization, Calibration, Testing, and Installation of Phasor Measurement Units (PMUs) for Power System Protection and Control
 - Originally published in 2013 (fast tracked from 3 NASPI reports)
 - Testing section was made obsolete by IEEE TSS which triggered the early revision
 - Guide should be ready for vote to go to sponsor ballot by the JTCM in January

SYNCHROPHASOR STANDARDS UPDATE, October 2018

- C37.118.2 Standard for Synchrophasor Data Transfer for Power Systems
 - Simplify some features and remove ambiguities
 - Remove unused features
 - Add some needed features (currently working on the details of the new, needed features)

SYNCHROPHASOR STANDARDS UPDATE, October 2018

- PC37.247 Standard for Phasor Data Concentrators for Power Systems
 - To replace C37.244 Guide for Phasor Data Concentrators
 - Has gone through recirculation ballot #1
 - Technical comments remain to be resolved so will need another recirculation ballot

SYNCHROPHASOR STANDARDS UPDATE, October 2018

- IEEE 2664 Streaming Telemetry Transfer Protocol
 - New standard
 - PAR (Project Authorization Request) has been approved by IEEE SA
 - Outline for document in development
 - Majority of material exists in reports
 - Expect 1st draft in about a year

SYNCHROPHASOR STANDARDS UPDATE, October 2018

- IEEE Report on Standard Mapping between C37.118.2 and IEC61850
 - Working group doing final clean up
 - Working group vote is needed for publication
 - Expected by JTCM meeting in January

IEEE Phasor Measurement Unit Conformity Assessment Program

- IEEE Certification of PMU's gives Manufacturers the opportunity to demonstrate conformance to IEEE C37.118.1a – 2014
- Three certified PMUs to the 2014 version of C37.118 on the ICAP Certified Registry.



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IEEE Certification Registry Link: <https://standards.ieee.org/products-services/icap/certification-registry/index.html>

- Revision of the *IEEE Synchrophasor Measurement Test Suite Specification* (TSS) underway to align with revisions to the IEEE C37.118 standard.
- IEEE PMU Certification Pricing guide available online for testing and certification fees. http://standards.ieee.org/about/icap/icap_form.html
- Consumers Energy (Jackson, MI) was the first ICAP Accredited Lab and offers complete testing capabilities to the TSS
 - More Info on Consumers Energy at www.laboratoryservices.com
- For more information about this program or any other ICAP related questions please contact Jason Allnut <J.Allnut@ieee.org>



SYNCHROPHASOR STANDARDS UPDATE, October 2018

Upcoming IEEE Working Group meetings

**IEEE PES JTCM (Joint Technical
Committee Meeting)**

January 13-17, 2019

**Hyatt Regency Orange County
Garden Grove, California**

www.pestechical.org

