IEEE Synchrophasor Certification Program

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Introduction

The certification program is developed to ensure PMUs are tested for compliance to the following standards:

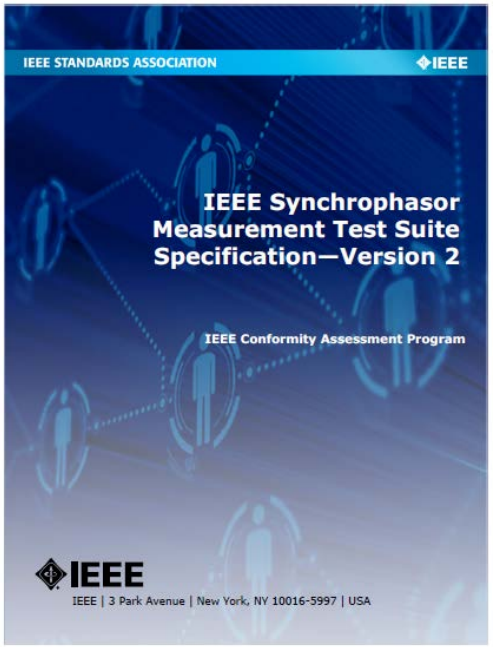
- IEEE Std. C37.118.1-2011 “Synchrophasor measurement”
  - Amended by IEEE C37.118.1a

PMUs are to be **certified**

- Utilities and end-users to require certified devices – high level of assurance the PMUs will work in a larger system
- Provide manufacturers the opportunity to demonstrate continued compliance to the standard
- NIST has developed mobile calibration procedure for PMU test systems

Test Suite Specification

- IEEE Synchrophasor Measurement Test Suite Specification (TSS) available now
  - Developed by IEEE Synchrophasor Conformity Assessment Steering Committee (SCASC)
  - Unambiguous, systematic way of testing PMUs according to IEEE C37.118.1a-2014
  - Version 2 published on September 2015
    - Modified due to findings during pilot tests
  - Available on IEEE Xplore and Techstreet
    - Search for "Synchrophasor TSS"



Test Lab Status

- Consumers Energy Laboratory
  - IEEE Authorized Laboratory
  - Lab is located in Jackson, MI
  - Audit completed in Q1, 2015
  - Participated in IEEE Pilot test program
  - Providing budgetary or formal quotes for testing
  - Currently scheduling testing – www.laboratoryservices.com
- Additional laboratories globally have contacted IEEE for participation information

Benefits

Manufacturers

- Demonstrate compliance to IEEE C37.118.1
- Utilize *IEEE certification logo*
- List your products on *IEEE certified products registry*

Utilities

- Minimize deployment time and costs
- Deploy with confidence - *Use IEEE certified PMUs*

Other Programs under Development

- **IEEE 1588 Timing and Synchronization**
  - IEEE 1588P Conformity Assessment Steering Committee (CASC) formed
    - Aaron Martin from BPA is interim Chair
  - Test Suite Specification being developed
  - Based on IEEE C37.238 Power Profile and IEC 61850-90-3
- **IEEE 1547 Conformity Assessment Program**
  - Interconnection of Distributed Energy Resources (DERs)
  - To demonstrate that installations conform to IEEE 1547.1 standard
  - Steering Committee formed
  - Pilot projects being planned
    - Raleigh Pilot

Recognition of IEEE Certified PMUs

- Schweitzer Engineering Laboratories
  - Axion SEL-2240
- Vizimax
  - PMU 010000

Thank You

- For more information or to apply for certification go to standards.ieee.org/icap