

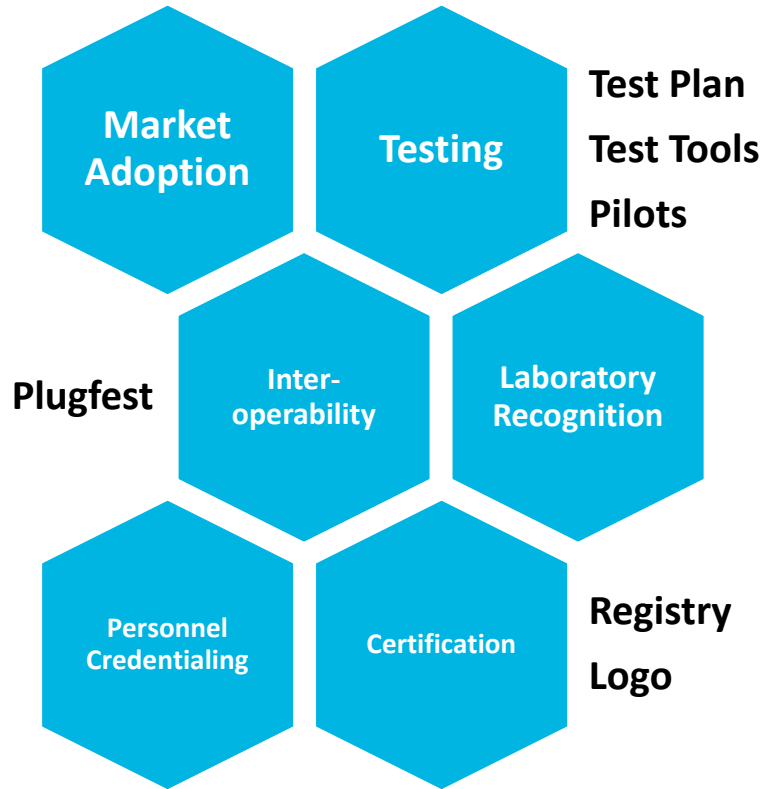
IEEE CONFORMITY ASSESSMENT PROGRAM (ICAP)

SYNCHROPHASOR CERTIFICATION

IEEE CONFORMITY ASSESSMENT PROGRAM (ICAP)

12 April 2022

WHAT IS ICAP?



- The IEEE Conformity Assessment Program (ICAP) is a division within the IEEE Standards Association (SA)
- Our charter is to facilitate, support, develop and provide resources for standards implementation efforts
- We provide committee management services, legal templates, conformity assessment expertise and stakeholder identification as well as outreach and marketing.
- *We work with stakeholders to deliver solutions that address industry gaps*
- Additional benefits for [IEEE SA Corporate members](#)

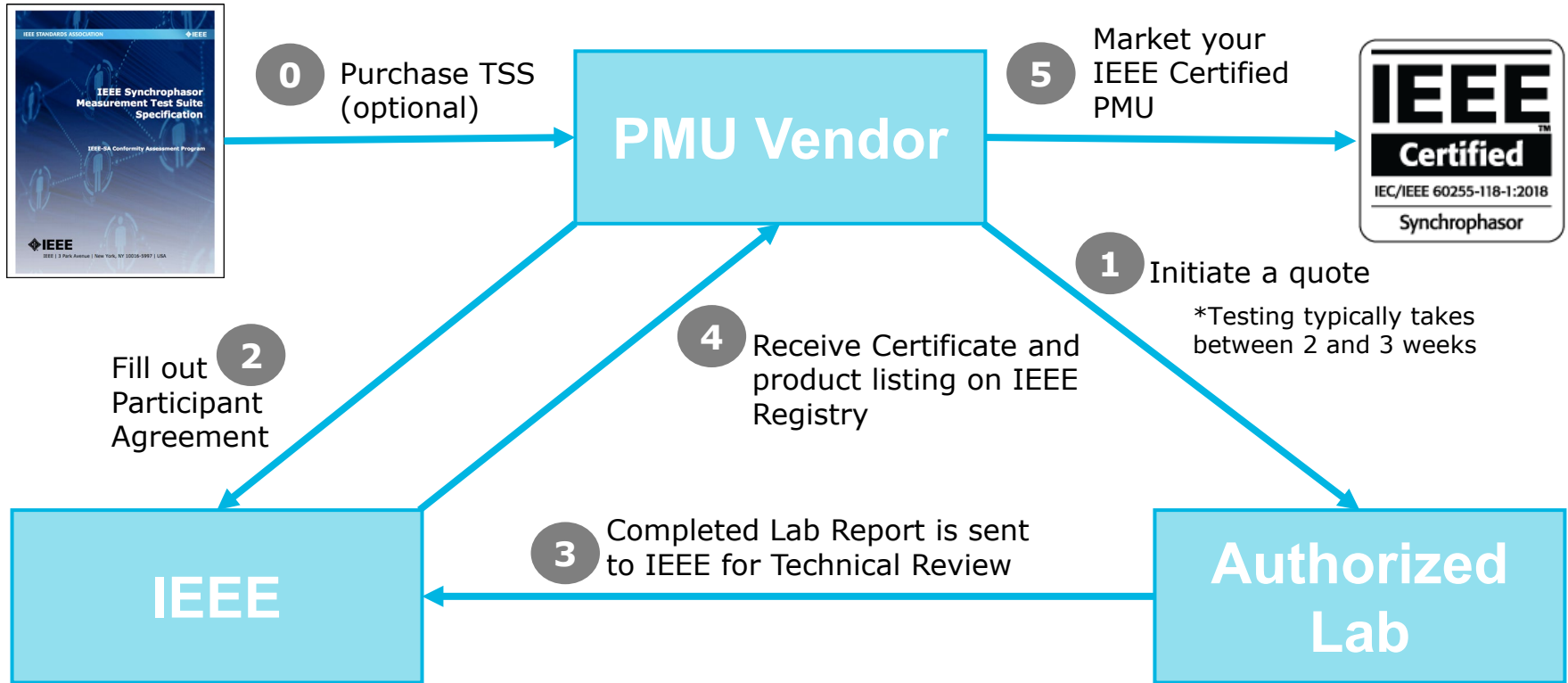
IEEE SYNCHROPHASOR CERTIFICATION PROGRAM



- Enables PMU Manufacturers to demonstrate conformance to IEC/IEEE 60255-118-1 2018.
- IEEE Certified Products [Registry](#)
- Version 3 of the IEEE Synchrophasor Measurement Test Suit Specification is published and available on [IEEE Xplore](#)
 - Aligns with the latest version of the standard – IEC/IEEE 60255-118-1
- Consumers Energy (Jackson, MI) performs testing as an IEEE Authorized PMU Testing Laboratory.
 - More Info on Consumers Energy at www.laboratoryservices.com
- [Recorded webinar](#) -“Deploy PMUs with Confidence: Assuring Data Quality Through Standards, Testing and Certification”



PMU CERTIFICATION PROCESS



PMU TESTING & CERTIFICATION APPLICATION AND PRICING GUIDE

IEEE Conformity Assessment Program Phasor Measurement Unit (PMU) Testing and Certification Pricing.

The chart below provides an overview of the IEEE PMU testing and certification fees.

PMU Configuration Type	Testing Fees	Certification Fees ¹	Scope Extension Fees ³
50Hz P Type	\$4,700	\$3,000	\$1500
50Hz M Type	\$7,000	\$4,500	\$2,250
60Hz P Type	\$7,700	\$5,000	\$2500
60Hz M Type	\$11,800	\$7,500	\$3750
Complete Test 50/60 Hz P&M Class ²	\$25,200	\$18,000	\$9000

¹Certification includes an IEEE Certificate of Compliance to the C37.118 Standard, use of the IEEE Certification Mark and listing on the IEEE Certified PMU Registry.

² Please note, a discount of 17% for total fees when a testing of all PMU Configurations Types is indicated at the beginning of the process.

³ 50% discount off each additional PMU certification of equal or lesser value is offered for applications received by October 31, 2022.

ADDITIONAL ICAP PROGRAMS

IEEE 1547 EDUCATION AND CREDENTIALING PROGRAM



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Create a credentialing program that will train and certify individuals who can verify any installed DER Interconnection (e.g., Residential, Utility-Scale, Micro-grid, etc.) for its compliance with the IEEE 1547-2018 standard and local jurisdictional requirements.



Actions Speak Louder



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powering lives



IEEE 1588 TEST SUITE SPECIFICATION (TSS) DEVELOPMENT

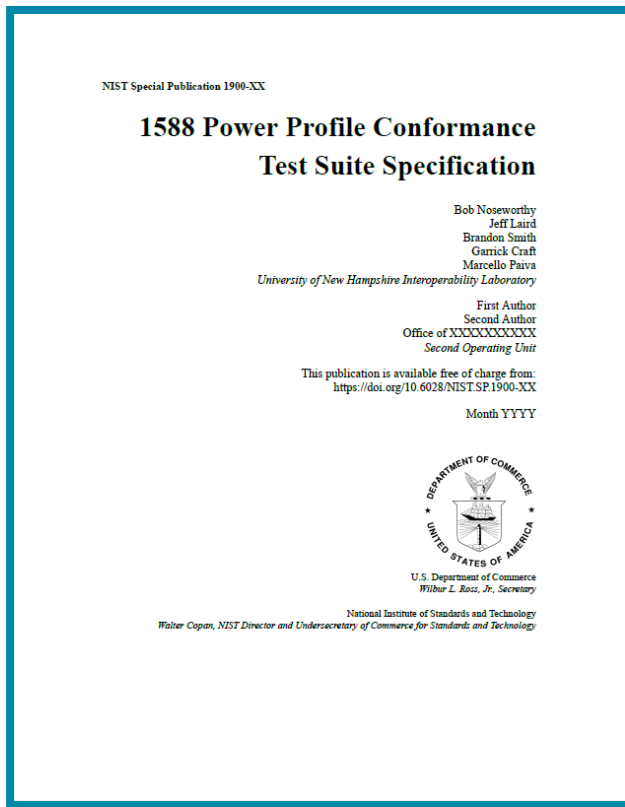
- **Power Profile Test Suite Specification (TSS) in review by IEEE 1588 Power Profile Certification Steering Committee (CSC) prior to Ballot**

Join the [IEEE 1588 Power Profile CSC](#) at this link

<https://standards.ieee.org/products-services/icap/programs/ptp-power-profile/1588P-membership-info.html>

- **PSRC Members and other stakeholders are encouraged to review and comment on the current draft**

- <https://www.iol.unh.edu/1588PowerProfileConformance>
 - A comment form is available at this link
 - Please send all comments to ptplab@iol.unh.edu
 - All comments due by November 19, 2021
- All respondents will get a final copy of the initial balloted TSS





IEEE PTP POWER PROFILE CERTIFICATION PROGRAM

- The IEEE PTP Power Profile Certification Program is based around requirements outlined in the IEEE 1588-2019, IEEE C37.238-2017, AND IEC/IEEE 61850-9-3 2016
- A detailed Test Suite Specification (TSS) has been developed and is currently going through pilot testing and is expected for publication mid-2021
 - 5 manufacturers have submitted products for pilot testing
- A committee of Industry Stakeholders leads this effort and advises ICAP on testing requirements as well as certification process details to best fit the industry's needs
- IEEE plans to launch the program and begin accepting test reports by Q3 of 2021



IEEE Certification Mark

There's interest from the industry, particularly utilities, to not only certify Grandmaster, Transparent and Boundary clock, but also Slave-Only devices. This program plans to have a solution for certifying all PTP clock types.

IEEE NUCLEAR EQUIPMENT CERTIFICATION

- The IEEE Conformity Assessment Program (ICAP) is a process designed to ensure high quality; certified parts are used for nuclear applications.
- This has been developed to support qualification to IEEE/IEC 6078-323, IEEE/IEC 60980-344 and other related standards.
- The EQ Navigator Software allows people to find qualified labs and certified products as well as standardize test plans, reports and site EQ Packages that will improve efficiency and overall quality of EQ documentation



IEEE 2621 WIRELESS DIABETES DEVICE SECURITY ASSURANCE CA PROGRAM

- Certification program based on the IEEE P2621 series of standards being developed
- Expected to convene the stakeholder committee for this effort in the summer of 2021
 - Members will consist of...
 - Device Manufacturers, Integrators, software developers
 - Test laboratories
 - Academia
 - End-user community (Healthcare Facilitators, Healthcare Device advocates, Hospitals, etc.)
 - Government Regulators
- IEEE P2621 addressed the cybersecurity of wireless diabetes devices and which will aid manufacturers in developing secure, safe devices

THANK YOU

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IEEE

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<https://standards.ieee.org/icap>