

Webinar Q&A

IEEE 1547-2018 ADOPTION UPDATES

On June 17th, 2021, QualityLogic held a webinar to provide the latest updates on timelines for UL 1741 SB approval and our guesstimates on actual regulatory requirements as well as the company's 1547.1 test tools. These are answers to the questions that came up during the presentation.

1. What's the required setup (HW) to employ this IEEE 1547 testing tool for prototype EVSE validation?

1547.1 evaluates the inverter functionality to ensure that it meets 1) the safety and functional requirements of IEEE 1547-2018 and 2) the Interoperability requirements of IEEE 1547-2018. The test set-up using the QualityLogic 1547.1 test tools is the same as traditional inverter testbeds with the addition of a Windows-based system to host the 1547.1 test tool. The rest of the testbed is standard inverter testing equipment consisting of the inverter, a grid simulator, a DC simulator, and monitoring equipment.

2. Using a gateway to translate the commands from an IEEE2030.5 master (test tool) into SunSpec Modbus parameters, would it be possible to run the interop tests only once? What about sending only on IEEE2030.5 protocol but reading the IEEE2030.5 and the SunSpec Modbus?

You have two options. You can run the interop or type test using IEEE 2030.5 and have the (local) gateway

convert them to SunSpec Modbus to your inverter. Or, if you will support the SunSpec Modbus 700 series model, you can use the QualityLogic test tool and run the interop (and type tests) thru SunSpec Modbus..

3. Do the NRTLs allow data from the Automated Test Equipment implementation to support certification?

That is up to the NRTLs. We would hope they would since they are planning to use our test tools. If an NRTL uses our test tools to manage the output data, then it will by default be accepting that data for their inverter evaluation.

4. After a DER is certified, to what authority does one submit the certification?

UL 1741 SB is recognized as part of the UL 1741 family of safety standards under the Occupational Safety and Health Administration Nationally Recognized Test Lab Program (NRTL). Labs that are qualified by OSHA to conduct the UL 1741 certification testing are the authorities that issue the certificate of compliance.

5. I understood that you can conduct the Rule 21 / CSIP Tests and the IEEE1547 conformant tests with the same tool, correct?

CSIP and 1547.1 FTS are separate test suites that can be executed from the same application interface that you're used to. 1547.1 FTS can be programmed into the same license dongle you have, or on a new dongle if you wish to separate the two.

6. Your client tester tool was used to translate IEEE2030.5 to the inverter's protocol. Which protocol was used, and which are supported?

Our test tool supports use of 2030.5, SunSpec Modbus 700 and DNP3 (coming later this year) to communicate with the target inverter.

7. If data is compiled in Automated ops, can that data be used for certification?

See question 3 above. Note that our test tools do not attempt to evaluate the pass/fail of a specific test (at this time). Rather they produce test results that a qualified tester can use to make the determination.

8. How is the design of test tool licenses and what are the costs?

The 1547.1 test tools are licensed as single-user perpetual licenses secured by a USB Dongle that enables their use on a specific machine. Pricing is confidential and we are happy to provide a quotation to prospective customers.

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