



June 9, 2022

Jason Shen

SolaX Power Network Technology (Zhe jiang) Co., Ltd.  
No.288 Shizhu Road, Tonglu Economic Development Zone  
Zhejiang, China, 310000

Subject: Evidence of inverter support for IEEE 2030.5/Rule 21 CSIP Phase 2 and Phase 3 Function 1 and 8 Functionality

Dear Jason Shen,

This letter confirms that CSA Group witnessed the Appendix C testing listed in Resolution E-5000 from the California Public Utilities Commission Draft dated July 11, 2019 (as modified by Resolution E5036) under the CSA project 80122710. The Resolution requires the verification of five test cases for inverters that do not directly implement IEEE 2030.5 client functionality. During the tests, the inverter is to be connected to a SunSpec Certified IEEE 2030.5/CSIP gateway. The five tests are listed below and specified in the SunSpec IEEE 2030.5/CSIP test procedures:

- Inverter Status (BASIC-028)
- Inverter Meter Reading (BASIC-029)
- Basic Inverter Control – Volt/Var (BASIC-006)
- Basic Inverter Control – Fixed Power Factor (BASIC-008)
- Basic Inverter Control – Volt-Watt (BASIC-011)

The tests were performed on the Grid Support Utility Interactive Power Conversion System on 17/12/2021 with the Fuda Data Collector, (<https://sunspec.org/wp-content/uploads/2021/09/SunSpec-Delta-certificate-CS-000041.pdf>) model number VCB-5103 to connected to Grid Support Utility Interactive Power Conversion System model number A1-HYB-7.6K-G2 bearing the serial number AH2076E7001001 which is used to represent the inverter models below:

SolaX Power Network Technology (Zhe jiang) Co., Ltd. Model Numbers

- A1-HYB-3.8K-G2, A1-HYB-5.0K-G2, A1-HYB-6.0K-G2, A1-HYB-7.6K-G2
- A1-AC-3.8K-G2, A1-AC-5.0K-G2, A1-AC-6.0K-G2, A1-AC-7.6K-G2
- A1-SMT-3.8K-G2, A1-SMT-5.0K-G2, A1-SMT-6.0K-G2, A1-SMT-7.6K-G2



The inverter under test was subjected to testing conditions as follows:

- The inverter was operating during test harness verification procedure
- The Fuda Data Collector was given stimuli in the form of IEEE 2030.5 commands (Inverter Status, Inverter Meter Reading, Volt/VAR, Fixed Power Factor, and Volt/Watt) sent from an IEEE 2030.5 server that were subsequently translated to signals understood by the inverter.
- The inverter parameters were verified: a) to change during the test cases for Volt-VAR, Fixed Power Factor, and Volt-Watt and b) report monitored data during the test cases for Inverter Status and Inverter Meter Reading. Based on this procedure, the requirements from Appendix C of the resolution were verified.

Very truly yours,

Tested By,

Test Engineer Name: *Xueji Dong*  
Test Engineer Title: Certifier  
SunSpec ATL name: CSA Group