

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking on the
Commission's Own Motion to
Improve Distribution Level
Interconnection Rules and
Regulations for Certain Classes of
Electric Generators and Electric
Storage Resources

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Consider
Streamlining Interconnection of
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21.

R.17-07-007
July 13, 2017

**TESLA, INC.'S RESPONSE IN SUPPORT OF THE PETITION OF THE CALIFORNIA
SOLAR AND STORAGE ASSOCIATION TO MODIFY RESOLUTIONS E-5000, E-5036,
AND E-5357 TO ADOPT IEEE 2030.5.100 TEST PROCEDURES FOR SMART
INVERTERS**

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Pursuant to Commission's Rules of Practice and Procedure, Tesla respectfully submits this brief response in support of the California Solar and Storage Association's Petition to adopt IEEE 2030.5.100 Test Procedures for Smart Inverters as part of the overarching transition from CSIP v2.1 to IEEE 2030.5.1 as the industry approach to implementing a standardized smart inverter profile.

As an inverter manufacturer, Tesla has a keen interest in ensuring that the regulatory framework governing smart inverters is credible, transparent, and standardized. Although we

recognize and appreciate the circumstances that led the Commission to adopt the current regulatory regime, pursuant to which SunSpec is charged with the responsibility for establishing and maintaining the Common Solar Inverter Protocol (CSIP) test procedures, Tesla is aligned with CALSSA that it is time to transition this responsibility away from SunSpec and pass it to IEEE, recognizing that IEEE is developing standardized test procedures with an expected publication date of June 2028.

Tesla appreciates the gap that SunSpec has filled to date. As CALSSA correctly observes in its Petition, “At the time Resolution E-5357 was adopted, IEEE had not yet established a project to develop test procedures for IEEE 2030.5 or CSIP, leaving SunSpec as the only viable testing framework”¹. SunSpec is to be commended for stepping up and assuming this important responsibility. That notwithstanding, the decision to go with SunSpec as the entity charged with developing CSIP testing standards was one born of necessity and came with a number of drawbacks relative to a framework where these testing procedures are developed and maintained by a Standards Development Organization (SDO), like IEEE. Because SunSpec is not an SDO, it is not bound by the procedural and other requirements as IEEE (or other SDOs) per American National Standards Institute (ANSI) Accreditation requirements, which mandates formal due process, documented consensus, and a structurally balanced membership pool. This has substantive implications on the ability interested stakeholders to participate in the development of standards and test procedures and on the credibility/applicability of those standards and test procedures as articulated in CALSSA’s Petition. In order to participate in SunSpec’s process one has to be a paying member of SunSpec. Furthermore, SunSpec appears

¹ CALSSA Petition, pg. 3.

to have fairly broad discretion in terms of what entities it ultimately allows to join and while we are not arguing that SunSpec's approach to membership has or would necessarily bias their process and work product in any particular way, the mere fact that they can exercise such discretion may call the objectivity of their standards and testing procedures into question. Furthermore, to the degree some jurisdictions may require standards and associated testing procedures to be developed by an accredited SDO, leaving the current regime intact raises to the specter of manufacturers having to comply with two, potentially conflicting testing standards if, in California, they are required to continue to rely on the SunSpec CSIP test procedures while other jurisdictions rely on IEEE and the 2030.5.100 test procedures that it is developing. Finally, the SunSpec CSIP certification program is not accredited under the ANSI National Accreditation Board (ANAB) for third-party certification bodies. The SunSpec CSIP program is not certified to ISO/IEC 17065, which is the international standard that defines requirements for entities that certify products, processes, and services. ISO/IEC 17065 includes requirements that cover impartiality, structural competence, resources, and certification process. As such, the SunSpec CSIP certification program does not qualify as an accredited third-party certification program. Transitioning from SunSpec CSIP testing procedures to those being developed by IEEE will ensure greater harmonization and efficiency across global markets. The IEEE, as an accredited SDO, operates its own certification program called the IEEE Conformity Assessment Program (ICAP). Once the requirements from IEEE 2030.5.100 are completed, the certification program can be managed by the ICAP.

Tesla also supports the transition timeline CALSSA has proposed in its petition. We agree that providing 18 months from when IEEE publishes its 2030.5.100 test procedures before inverters need to conform to IEEE 2030.5.1 is appropriate and provides nationally recognized

testing laboratories sufficient time to modify their testing processes to the new test procedures and manufacturers sufficient time to test their equipment pursuant to these updated procedures and processes.

For all these reasons, Tesla strongly supports CALSSA's Petition and encourages the Commission to grant the relief requested therein.

Respectfully submitted,

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