Guidelines for Rule 21 Section L.7 "Type Testing Procedures Not Defined in Other Standards"

The following guidelines are relevant to Rule 21 Section L.7 to be used for qualifying equipment as "Certified Equipment," as defined under Rule 21 Section L.2.a, for which certification national standards have not been published for such piece of equipment.

- 1. A public-facing directory of primary Points of Contact at utilities and a list of Original Equipment Manufacturers (OEMs) should be published specifically for the purpose of facilitating engagement and communications pertaining to Type Testing. Each utility should designate, and differentiate, if necessary, their Points of Contact for (i) Type Testing for equipment for which an interconnection application using the equipment has not been submitted, and (ii) Type Testing for equipment for which one or more interconnection applications using the equipment have already been submitted to the respective utility.
- 2. OEMs should seek to proactively enroll in the publicly available list of OEMs, via a subscription/un-subscription form managed by a single entity, to update their contact information and to include pending release of new products, product variants, use cases, or configurations. OEMs should be encouraged to maintain their information updated and to reach out to the utility contacts up to three to six months in anticipation of any upcoming interconnection requests proposing to use their products as to provide sufficient time for review, testing, and certification of new equipment or systems, as may be applicable.
- 3. OEMs should be proactive at reaching out to IOUs when they believe Type Testing will be required on any of their products. In any proactive outreach to utilities, OEMs should strive to provide relevant documentation regarding the new product, configuration, or use case to inform the utilities' review and testing determinations. Such documentation could include technical specifications; narrative descriptions of the role and function of the new product, configuration, or use case; suggested features or functionality that utilities might wish to test; and the OEM's anticipated or target dates for 1) NRTL testing and certification, 2) utility Type Testing, if needed, and 3) commercial availability. Utilities should acknowledge receipt of an OEM's outreach within 10 business days.
- 4. Utilities may at their discretion require Type Testing to test system-level functionality of non-certified equipment or for certified system for which individual system components may have been tested and certified by a NRTL to applicable standards (such as inverters), but system-level functionality may not have been explicitly tested and certified by a NRTL due to non-existence of applicable standards to test and certify the required system-level functionality.
- 5. If a utility determines Type Testing is needed, either based on its own initiative, upon review of an interconnection application, or following OEM's outreach, the utility should make personnel available to engage the relevant OEM to communicate, discuss and determine the planning, development and execution of the Type Testing required. If the OEM proves incommunicative or cannot otherwise be engaged, the utility has the discretion to conduct the Type Testing requirements through coordination with the applicant customer or the installer. Completion of the Type Testing is required prior to approval of any interconnection application using the equipment (or the applicable functionality) that is the subject of the Type Testing.
- 6. If a utility determines Type Testing is required, the utility should inform the other utilities and offer them the opportunity to participate in the Type Testing activities, as to avoid redundant efforts, when permitted or allowed by the OEM, the installer, or the customer, as applicable.

- 7. Upon determination that Type Testing is required, the designated lead utility will schedule a "scoping meeting" with the OEM, installer, customer and other utilities, as applicable, to discuss and agree on Type Testing objectives, agree to test procedures, and coordinate the date, time, and location of the Type Test. The utility and OEM (or applicable parties) should develop and reach a consensus on finalized testing procedures prior to the scheduled date of testing in order establish transparency on how the certified equipment will be evaluated, and what the passing criteria will be during testing.
- 8. It is highly preferred to conduct Type Testing in the OEM's laboratory facilities (or laboratory arranged by the OEM) given the complex testing for normal and abnormal configuration/operations.
- 9. If field testing is required, or if laboratory testing is not possible, OEMs, in tandem with relevant third parties (installers, developers, contractors, etc.), should be responsible for identifying optimal field sites and/or host customers for testing. OEMs should then work in tandem with utilities and third parties to communicate test schedules and procedures with the host and oversee test activities.
- 10. Nothing in these guidelines inhibits the discretion of utilities to require new or additional Type Testing for similar or related products or features, or to adjust testing plans as new information arises.
- 11. Type Testing experience with new products could be brought by utilities to the attention of CPUC Energy Division staff if, in the opinion of the utility, discussion with stakeholders on any specific categories of products, configurations, or system-level functionalities that are not covered by existing standards could bring value on Type Testing procedures to be performed in the future.

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Original Equipment Manufacturer (OEM) Contact:

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