Compliance of Enphase Microinverters with CPUC E-4920

Background

In September of 2017 California's Investor-Owned Utilities (IOUs) implemented CPUC Electric Rule 21, which requires advanced grid functionality (AGF) for smart inverters. Currently in Phase 1, Rule 21 has requirements for frequency and voltage ride-through, inverter soft start, Volt/VAR control and other behavioral aspects of grid-support utility-interactive inverters. Recently CPUC E-4920 was circulated by the IOUs, outlining that PV interconnection applications submitted after July 26, 2018 must have the reactive power priority setting activated as the default Volt/Var function or reactive power priority (RPP) mode.

Certification of Compliance

Enphase IQ-Series and S-Series Microinverters are compatible with and NRTL certified to this requirement. UL issued a letter stating that IQ-Series and S-Series Microinverters are certified to the requirements of E-4920, and Enphase has provided this letter to the California IOUs. While the California Energy Commission (CEC) is considering whether to publish a new list of compliant inverters, Enphase has shared proof of compliance with the utilities to avoid a potential delay in PV system interconnections.

How to Comply

Enphase IQ and S-series Microinverters are already capable of this functionality but must be programmed for CPUC Rule 21 and E-4920 through application of a grid profile. A grid profile is a collection of settings that defines acceptable operating parameters for Enphase Microinverters. A number of grid profiles are available to installers, including a soon to be released grid profile for CPUC E-4920: *CA Rule21 201807 VV w/RPP*. This grid profile can be selected either during installation using the Enphase Installer Toolkit mobile app, or remotely, through the activation screen in Enlighten Manager.

How to Show Proof of Compliance

Installers can provide proof of compliance during a utility audit using either the Installer Toolkit app or the Reports tab in Enlighten Manager. This report can then be shown to a utility ESR to show evidence of the trip settings for the various CA Rule 21 parameters, including RPP thresholds.

Additional Information

For more information on selecting a grid profile or obtaining a summary report, see "*Getting Started: How to implement and demonstrate Rule 21 compliance*" and our CA Rule 21 page.