November 21, 2014

Memorandum on Small PV System and Module Certification

The FSEC PV System Certification Program provides exemptions for certain PV systems that integrate small PV modules in low-power packaged systems, such as:

- calculators
- outdoor LED yard or sign lighting
- vehicle supplemental charging (e.g., a Nissan Leaf with the PV option)
- gate openers

These small systems would not be covered by the scope of the National Electrical Code, which is limited to "the practical safeguarding of persons and property from hazards arising from the use of electricity." [NEC 90.1(A)]

Systems meeting **ALL THREE** of the criteria below do not require approval through the FSEC PV System Certification program:

- Systems operating at a maximum voltage of 30V, maximum operating currents of 10A, and a maximum circuit power of 240W
- Systems with a limited, dedicated load (e.g., an LED lamp or water pump)
- Systems without a connection to the serving electric utility

PV Modules that are used solely in exempt PV Systems are also exempted from the FSEC PV Module Certification.

This memo presents an interpretation of the NEC language as it pertains to the FSEC PV Certification Program. It is not intended to overrule any local Authorities Having Jurisdictions (AHJs), who may interpret the NEC as applying to certain small PV systems.

Any questions may be directed to pvsystem@fsec.ucf.edu.