PV System Plan Process

Contractor Logs in at the PV System Design web site. Only trained contractors with correct licensing can access the full permit process

An FSEC-hosted database of UL listed modules and inverters is linked to the web interface

Basic site specific information is input by the user address, roof type, roof dimensions, building orientation, etc

The website form allows contractor to select a compatible combination of modules and inverters to create the desired system capacity

Module measurements are accessed from the database and the maximum allowable array dimensions are checked against the available roof area

The user can iterate through options by selecting different module and inverter combinations (if roof area is a constraint, a more efficient module can be selected)

The electric three-line diagram is displayed on-screen as equipment is selected and system sizing parameters are adjusted

Calculations are performed to determine the electrical characteristics of the system and determine the balance of system (BOS) requirements (wire sizes, conduit, breakers, etc)

The user selects an array mounting system from a list of options that has been filtered to allow only those suitable for the roof type, array layout, wind zone, and other structural requirements

Calculations are performed to verify the wind loads and determine the mounting rail spacing and number of point attachments required to meet the code

The output from the process is a final design that includes the electrical and structural diagrams with details and other documentation to complete a permit package in .PDF format

The finalized system package is assigned an alpha-numeric unique identifier for tracking and archiving

Links are provided to partner jurisdictions that have an electronic permitting system that can accept the permit package to complete the process

Alternatively, the user can print out the package for submitting at the permit office

The code official can log in with credentials to verify or retrieve the permit package using the unique identifier

The user can also access the permit package at any time and print copies for installers in the field if needed

Field inspectors can access the permit package using the id number - this can even be done remotely while at the site using a laptop or tablet computer