



Photovoltaic for Schools Pilot

Program Standards

**Florida Power & Light Company
Photovoltaic for Schools Pilot**

Program Standards

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Program Objectives

Description of purpose of program

The Photovoltaic (PV) for Schools Pilot Program is designed to reduce energy consumption and the growth of coincident peak demand. Its other purpose is to educate future generations on the practical application of a PV system by providing systems and educational materials to selected schools in each public school district in FPL's territory.

Measures included in program

The measure included in this program is a PV system consisting of solar electric panels, mounting hardware, grid-interactive inverter(s), associated equipment, and an on-line data acquisition system to be used by the schools in their renewable energy education curriculum.

Output to the customers

Each school will receive a PV system, teacher training and educational materials, in addition to the reduced energy consumption and technical assistance on the operation of the PV system.

Customer Requirements

Customer / premise eligibility

All existing K-12 public schools served by FPL are eligible.

Eligible rates

All metered commercial/industrial retail rate schedules are eligible.

Dwelling / building type

All public school building types are eligible for this program.

Age of dwelling / building type

All existing public school buildings are eligible for this program.

Restriction from re-participation and exceptions

An individual school is eligible for only one solar installation during the duration of the pilot program.

Other customer requirements

The school district must provide a sufficiently sized, accessible, unshaded area to accommodate the PV system. The participating school must have, and be willing to maintain, a science teaching position at that school trained to present curriculum related to the PV installation. Prior to the installation of the PV system, the school district must submit an application and a Net Metering Interconnection Agreement as per Rule 25-6.065, Net Metering of Customer-owned Renewable Generation

(Interconnection Agreement). The school district must partner with FPL to select and approve the specific schools and commit to facilitating the installation of the PV system within the funding year. The school must supply an internet connection through the school's internet system to provide monitoring information to the classrooms, the school district and FPL.

FPL will own and repair the PV system for the first five years following installation. At the end of the five year period, FPL will transfer ownership to the school district and all responsibility for the operation and maintenance of the system.

Contractor Requirements

Licensing requirements

The contractor must meet any and all applicable legal licensing requirements of the State of Florida and local municipalities for the work being performed.

Other contractor requirements

FPL will select the licensed contractor to construct each system. The selected contractor will be responsible for all work performed and maintenance for the first five years of the system operation. The contractor must comply with all FPL requirements and must commission and certify each system.

Eligible Equipment Requirements

Definition of system

A PV system consists of solar panels of approximately 5 kW or 10 kW direct current (DC) ratings, mounting hardware, grid-interactive inverter(s), associated cabling, and an on-line data acquisition system to be used to transmit educational information to the school districts through the schools' internet system.

Accreditation of ratings

The PV system components shall be tested and listed by a nationally recognized testing and certification laboratory for continuous interactive operation with an electric distribution system in compliance with the applicable codes and standards of IEEE 1547, IEEE 1547.1, and UL 1741.

Additional equipment requirements

All installed systems must have at least a five year warranty on equipment and installation beginning on the in-service date.

Installation Requirements

Specific installation requirements

The PV system will be installed using a design approved by FPL. The installations must comply with all local, state and federal statutes, codes, ordinances, and accepted engineering practices.

Fees or charges

There are no fees or charges to be paid by the customer for systems installed under this program.

Other installation requirements

If the customer requires a fence around the PV system, then the cost of purchasing and installing the fence will be the responsibility of the school district. Following installation, FPL will provide each school with copies of applicable warranties, system design schematics, manuals, maintenance instructions, and provide basic instructions on the operation of the system. In addition to the PV system, FPL will provide classroom PV instruction kits, training for one or more teachers and instructions for school maintenance personnel regarding the operation and maintenance of the system.

Reporting Requirements

All program charges such as payroll & benefits, material and supplies, outside services, advertising, vehicles, other and rebate costs shall be reported as part of the Energy Conservation Cost Recovery True-Up and Projection filings.

FPL will evaluate the energy and demand impacts through the use of engineering modeling analyses. This modeling will be calibrated with onsite metering research in a manner that most cost-effectively meets the overall impact evaluation objectives. For a statistically valid sample, FPL will analyze individual hourly energy and demand impacts, engineering and system design variations and their impact on energy and demand; analyze the billing impacts to customers while analyzing the data based on system size and configurations; and plan to meter the actual energy performance. FPL will monitor the installed costs over the life of the pilot program.