

EXECUTIVE SUMMARY

**Photovoltaic for Schools Pilot Program Contract with
Florida Power & Light (FPL)
Maplewood Elementary School**

PROJECT OVERVIEW:

Type of Contract:	Donation of Photovoltaic Solar System
Architect:	NA
Contractor:	Florida Power & Light (FPL)
Notice to Proceed Date:	NA
Bid Amount (Original Contract Amount):	N/A

GENERAL OVERVIEW:	<p>Florida Power and Light (FPL) and The School Board of Broward County, Florida (SBBC) entered into a Photovoltaic (PV) for Schools Pilot Program Agreement for the following schools: Blanche Ely High, Board approved 8/21/12; Panther Run Elementary, Board approved 8/21/12; Attucks Middle, Board approved 9/19/12; Tropical Elementary, Board approved 9/19/12; New Renaissance Middle, Board approved 12/4/12; McNab Elementary, Board Approved 10/1/13; Parkway Middle, Board Approved 10/1/13; Stranahan High, Board Approved 10/1/13, and Welleby Elementary, Board Approved 10/1/13. Exhibit 3 represents a photo of the PV installed at McNab Elementary School.</p> <p>These PV Systems are donated by FPL at no cost to SBBC. The nine schools stated above were selected in 2012/2013 and approved to receive a PV System each. The main purpose of this program is to educate on the practical applications of a PV System and to reduce energy consumption.</p> <p>On December 19, 2014, FPL Senior Customer Manager, Greg Vayda, contacted the District's Environmental Conservation Utility Management Department inquiring if SBBC would be interested in continuing our participation in the Photovoltaic (PV) for Schools Pilot Program and to continue to benefit from the educational value they bring to the District. The previous nine schools approved to receive PV Systems are already installed; the designated teachers have been trained at workshops conducted by the Florida Solar Energy Center, where they learn how solar energy works, participate in hands-on lessons, and receive renewable energy curriculum materials.</p> <p>Under the program, FPL will donate two (2) 10KW solar arrays at two (2) selected locations. On January 5, 2015, SBBC's Environmental Conservation Utility Management Department provided FPL with two (2) sites comprised of one elementary school and one middle school, for preliminary review of the site location. Exhibit 3 is a sample of the 10KW to be used.</p> <p>With the assistance of the Science, Technology, Engineering and Mathematics (STEM Department), the selection was based on the school's continuous commitment to improve environmental awareness, enhancing/complementing their science curriculum needs, and ensuring that at least one school in all seven SBBC Districts will now have a solar array installed.</p>
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FPL completed the site survey at Maplewood Elementary School and found the site to be suitable for the solar array.

FPL will install, own, and maintain the solar system for a period of five years from the in-service date, and will transfer ownership to SBBC at the end of the five year period. FPL will provide teacher training and educational materials for each school where the system is installed. FPL will oversee design and construction by engineers and electrical contractors of each system. FPL will provide a five year warranty on each installation.

After the five year period, the District will be responsible for the routine maintenance of the PV Systems, which consists of semi-annual general cleaning (using a hose) of the array to remove dirt in an effort to improve the system output (this cleaning process is discussed and agreed upon with the Head Facilities Service Person during the pre-construction meetings). A semi-annual site visit will consist of inspecting the Systems to determine if they are operating properly in accordance with manufacturer specifications, including a system check of electrical connections and cleaning for each System. The amount of time estimated to perform each semi-annual inspection by a Broward Schools Electrician is 3 hours. The annual cost is estimated at \$349.68 (current rate of \$58.28 x 3 hours x 2 inspections annually).

Although the systems are donated under the premise of educational awareness for renewable energy, there is also a cost avoidance benefit to the District as well. There is not a separate meter measuring the kilowatt hours saved annually. However, a conservative estimate for total KWH saved is approximately 3,500 KWHs per month or 42,060 annually, resulting in a cost avoidance of a little over \$4,000.