PANASONIC NORTH AMERICA HEADQUARTERS-NEWARK Rooftop Mounted Solar Installation

CHALLENGE

As the principal North American subsidiary of Panasonic Corporation, Panasonic Corporation of North America opened its new state-of-the-art sustainable headquarters in Newark on its 54th anniversary. The 340,000-square-foot building was constructed in 13 months with the official ribbon cutting on September 17, 2013. With the goal to reduce its carbon footprint by 50 percent, Panasonic aimed for and achieved Leadership in Energy and Environmental Design gold certification for new construction, as well as LEED platinum certification for interiors.

Among the metrics realized by Panasonic to secure the highest level of LEED certification included energy savings, water efficiency, CO2 emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts. An essential part of attaining LEED status involved the installation of a 55kW solar system strategically implemented with a phased construction process to avoid any interference in the construction of the main building.

Generating approximately 56,000 kWh per year, the system includes 234 HIT solar panels, 234 microinverters, nearly 3,000 feet of steel and aluminum support structure, and almost 1 mile of wire. The building integrated design utilizes a custom steel support and aluminum racking design to minimize penetrations and ensure the integrity of the roof long term. Electrical conduits and runs are also tucked inside the building envelope, reducing environmental exposure and again, taking advantage of the building integrated approach. Taken together, the design creates a thoughtfully clean and professional installation that is both aesthetically pleasing and easier to maintain.

The (234) microinverters installed represents the largest PowerOne microinverter installation as of the system commissioning date. Together with the installation of a performance monitoring system, Panasonic is able to monitor performance of each individual panel. This type of discrete measurement and implementation allows Panasonic to utilize the system long term as a unique test canvas, as it creates and tests new solutions for customers.

For more information, call 877.438.7881 or ecosolutions@us.panasonic.com

OVERVIEW

Design and install solar module, inverters and support structures

Design and install performance monitoring system

SOLUTION

- (234) 235W HIT photovoltaic solar modules
- (234) PowerOne microinverters
- Power generation monitoring system
- Custom raised mounting structure for rooftop installation

Project Completion Date: November 2013

