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First Solar Launches New Advanced Global Power Plant Operations Center

Industry-leading O&M Capabilities Optimize Output, Revenue & Grid Integration for Customers

MESA, Ariz.--(BUSINESS WIRE)-- First Solar, Inc. (Nasdaq: FSLR) today announced the launch of its new industry-leading global Operations Center, a centralized monitoring and control center where power plants in First Solar's operations and maintenance (O&M) program can be monitored, operated and connected to utility and customer networks. The Operations Center combines First Solar's power prediction and analytical capabilities with its advanced diagnostics and plant controls in order to maximize power output and minimize maintenance costs for its customers, and to enable the world's largest solar photovoltaic (PV) power plants to integrate seamlessly with the electrical grid and contribute to grid stability.

First Solar's new industry-leading global Operations Center is a centralized monitoring and control center where power plants can be remotely monitored, operated and connected to utility and customer networks. (Photo: Business Wire)

The new, second-generation Operations Center, located in Mesa, Ariz., is fully compliant with North American Electric Reliability Corporation (NERC) standards and is designed to be scalable to accommodate the growing global fleet of PV power plants in First Solar's O&M program. First Solar currently operates for its customers 14 plants with 460 megawatts (MW) of peak generating capacity, which will increase to 23 plants with 850 MW of capacity by year-end and 27 plants with 2,200 MW of capacity in 2013.

The Operations Center and its expert staff maximize power plant availability and reduce costs for customers by preventing potential problems from occurring and quickly and efficiently fixing those that do. The Operations Center collects and processes a wide range of real-time power plant data, including electrical performance, equipment status and weather data, which are monitored and analyzed against key performance and operational parameters. Automated data analysis detects issues in the plants and automatically dispatches maintenance crews to resolve them, and proprietary algorithms developed using years of O&M data enable the system to predict potential issues and schedule preventive maintenance before a problem occurs.

A key feature of First Solar's power plant design is its advanced plant controls, which are critical for managing grid reliability and stability and can be controlled remotely from the Operations Center. Features include ramp-rate control, which limits how fast a power plant's output increases or decreases in order to minimize grid disruption; ride-through capability, which enables a power plant to operate through faults and other grid disturbances; active power control, which can be used to modulate power output; and frequency droop control, which enables a power plant to provide critical grid support when grid frequency is changing. These tools have become increasingly important as more solar generating capacity is connected to the grid.

"Our years of experience and investment have enabled us to build a proprietary system that allows us to optimize our customers' power plants to produce the maximum amount of energy and revenue under their power purchase agreements while minimizing costs and risk," said Bob Callery, Vice President of O&M. "The vast quantity of data we gather also gives us invaluable insight into the real-word performance of our products and supports the continuous improvement of our power plants."

"Predictability and reliability have become increasingly critical to utilities and grid operators as large-scale renewable power plants are connected to the grid," said Mahesh Morjaria, Vice President of Global Grid Integration. "First Solar has invested considerable time and resources to ensure our power plants integrate seamlessly into the grid and provide features that not only avoid disruptions, but also can help to actively mitigate disruptions elsewhere on the grid."

About First Solar

First Solar is a leading global provider of comprehensive photovoltaic (PV) solar systems which use its advanced thin-film modules. The company's integrated power plant solutions deliver an economically attractive alternative to fossil-fuel electricity generation today. From raw material sourcing through end-of-life module collection and recycling, First Solar's renewable energy systems protect and enhance the environment. For more information about First Solar, please visit www.firstsolar.com.

For First Solar Investors

This release contains forward-looking statements which are made pursuant to the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934. The forward-looking statements in this release do not constitute guarantees of future performance. Those statements involve a number of factors that could cause actual results to differ materially, including risks associated with the company's business involving the company's products, their development and distribution, economic and competitive factors and the company's key strategic relationships and other risks detailed in the company's filings with the Securities and Exchange Commission. First Solar assumes no obligation to update any forward-looking information contained in this press release or with respect to the announcements described herein.

Photos/Multimedia Gallery Available: http://www.businesswire.com/cgi-bin/mmg.cgi?eid=50445749&lang=en

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