ABB to support India's push for solar power

Zurich, Switzerland, Sept. 15, 2015-\$18 million orders for power plant electrification, automation and substations to integrate 850 MW of solar energy

ABB, the leading power and automation technology group, has won orders worth around \$18 million to provide plant electrification, automation and substation solutions for solar power plants being built as part of India's strong push for solar energy and renewables. Spread across the southern Indian states of Karnataka, Tamil Nadu and Andhra Pradesh, these projects will connect more than 850 megawatts (MW) of solar energy to the grid and will be among the biggest solar projects worldwide.

The most significant of these projects, placed by the Adani Group, a diversified Indian multinational, is the 648 MW solar plant in Kamuthi, Tamil Nadu. ABB will provide a turnkey solution encompassing the design, supply, installation and commissioning of the power plant electrification and automation systems, the pooling stations and multiple substations. This includes two 230 kilovolt (kV) and three 110 kV substations to connect the electricity generated to the local grid.

ABB's Symphony Plus control technology will serve as the 'unified automation platform' for the plant including the electrical systems, the solar inverters and state-of-the art software for plant performance monitoring, maximizing operational efficiency and ensuring grid compliance. The IEC 61850 based automation system will facilitate local and remote monitoring and control of the plant and substation assets and is another example of ABB technologies enabling the Internet of Things, Services and People.

"ABB has supported India's power infrastructure development through the decades and we are pleased to facilitate the country's push for solar energy, where we have already made a significant contribution" said Claudio Facchin, president of ABB's Power Systems division. "This project exemplifies our power and automation system integration capabilities and reinforces our commitment to renewable energy, a key component ABB's Next Level strategy"

India is endowed with a vast solar energy potential and with approximately 300 clear, sunny days in a year, the theoretical solar power reception, on its land area alone, is about 5,000 trillion kilowatt-hours (kWh) per year. Even assuming a PV module efficiency of as low as 10 percent, this would still be a thousand times greater than the domestic electricity demand projected for 2015.

But with an installed grid connected solar power capacity of around 4.1 GW (almost all of which has been added in the last four years) solar power still constitutes only 1.45 percent of its total installed power generation capacity of around 276GW. India expects to install an additional 10GW by 2017 and earlier this year the government announced an ambitious goal to have 100 GW of solar power installed in the country by 2022, translating into an investment target of around US\$100 billion.

ABB has delivered several turnkey solar projects in India and earlier this year became the first company in the country to deliver solar inverters with a cumulative capacity of two gigawatts.

ABB has a range of solar offerings that includes inverters, low-voltage products, monitoring and control systems, grid connection, stabilization and integration technologies, as well as complete electrical balance of plant and automation solutions. ABB also offers a wide range of support and maintenance services, including remote operations and diagnostics, that help ensure solar installations deliver optimal performance.

ABB (www.abb.com) is a leader in power and automation technologies that enable utility, industry, and transport and infrastructure customers to improve their performance while lowering environmental impact. The ABB Group of companies operates in roughly 100 countries and employs about 140,000 people.

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For more information please contact:

Head of Communications ABB Power Products & Power Systems Harmeet Bawa Tel: +41 43 317 6480 harmeet.bawa@ch.abb.com ABB Ltd Affolternstrasse 44 8050 Zurich Switzerland

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