Press Release

5 May 2015

Alstom to lead Smart Grid pilot in India

Alstom T&D India has been selected to lead the smart grid pilot project by Himachal Pradesh State Electricity Board Limited (HPSEBL). This pilot project will be located at the Kala Amb industrial area of Himachal Pradesh in Northern India and will serve over 1,500 consumers. This will be the second out of fourteen projects under the Indian Ministry of Power's flagship "Smart Grid Pilot" programme. The Kala Amb smart grid pilot project will act as a proof of concept to further strengthen the Information Technology system in place, to make the distribution grid cost-effective, responsive and better engineered for reliability and self-healing operations.

Alstom will design, develop and implement an integrated set of smart grid applications targeting power quality issues, managing peak demand, power outages and limiting violations at distribution network nodes. Alstom's solution will be based on its **e-terra** distribution 3.0 - a fully Integrated Distribution Management System (IDMS). The **e-terra** distribution 3.0 is the industry's first completely integrated and most advanced suite of <u>SCADA</u>, Distribution Management System (DMS), and Outage Management System (OMS) applications. Alstom will lead this project along with Genus Power Infrastructure Ltd and a few other OEM equipment suppliers.

Rathin Basu, Managing Director, Alstom T&D India said, "Alstom is pleased to be the recipient of the second smart grid pilot project in the country. Over the last 15 years, the company has been delivering large scale smart gird projects for India's national grid through Power Grid Corporation of India Ltd (Power Grid). In addition, the company has delivered several distribution projects for the State Distribution System Operators. Currently, Alstom is delivering NTAMC¹ and URTDSM² projects for Power Grid which will have advance smart technological solutions for the transmission grid. Alstom is constantly striving to make the power grid more efficient, smart and reliable by participating in such innovative projects."

The smart grid solution aims to enhance the monitoring and automation of two distribution substations feeding Kala Amb. It will collect data from a new installed smart metering infrastructure and grid sensors, including power transformer condition monitoring. The platform will seamlessly exchange the business analytics with the existing utility consumer portal and enable the state regulator to make suitable adjustments in tariff and other regulations. The project aims to save millions of dollars annually in reduced demand charges, defer new generation construction and reduce peak-priced energy purchases.

² Unified Real Time Dynamic State Measurement - the world's largest grid Wide Area Monitoring System which will enable PGCIL nation-wide monitoring of power flows across the grid, responding to fluctuations within a fraction of a second.



¹ National Transmission Asset Management Centre – The project will support PGCIL in the management and control of 192 substations from nine regional and one national asset management centre.

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About Alstom

Alstom is a global leader in the world of power generation, power transmission and rail infrastructure and sets the benchmark for innovative and environmentally friendly technologies. Alstom builds the fastest train and the highest capacity automated metro in the world, provides turnkey integrated power plant solutions and associated services for a wide variety of energy sources, including hydro, nuclear, gas, coal and wind, and it offers a wide range of solutions for power transmission, with a focus on smart grids. The Group employs 93,000 people in around 100 countries. It had sales of over ϵ 20 billion and booked ϵ 21.5 billion in orders in 2013/14.

Alstom Grid has one clear vision: to develop innovative solutions for a flexible, reliable, affordable and sustainable electrical grid, everywhere. We design, manufacture, install and service the power transmission and distribution products and systems that empower the planet's low carbon economy... for now and for the future.

Alstom Grid has over 130 years' experience and ranks among the top three in the electrical transmission sector with an annual sales turnover of €3.8 billion. Alstom Grid's 17,000 employees are spread across 87 manufacturing and engineering sites worldwide and have one common mission: be our customers' trusted partner, from the source to the city. We are energising a smarter world... with Alstom.

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