SIEMENS

Press

Erlangen, July 12, 2018

Siemens supplies equipment for Vietnam's largest solar farm

Siemens has won the contract to supply systems to its customer Trung Nam Group in Vietnam and put the country's largest solar farm into operation. The farm is the first solar project for Siemens in South-East Asia, and has a module capacity of 258 megawatts peak (MWp). The deliverables include inverters, power- and distribution transformers, gas-insulated medium-voltage switchgear, circuit-breakers, and a monitoring and control system. All transformers are to be delivered as Sensformer with digital interface. The overall project constitutes an "Electrical Balance of Plant" (eBoP) solution, and involves a number of Siemens units, headed by Medium Voltage and Systems. The solution includes all the electrical engineering components needed to equip a photovoltaic plant. "The customer received our competent support in the bidding phase and will get a very competitive solution," says Stephan May, CEO of the Medium Voltage and Systems Business Unit. "We are proud to be able to offer the best solution that will play a vital role in supporting the energy transformation in Vietnam."

The project, in the southern province of Ninh Tuan, will take shape by mid-2019. Solar panels will generate a combined DC voltage of 1,500 Volts (V). Inverters will convert the DC to 660 V AC, and transformers will first step this up to 33 Kilovolts (kV) and finally to 220 kV. This will then be fed into the high-voltage grid and the power distributed around the country. The components needed up to the 33 kV level are designed as a "plug-and-play MV station", and can therefore be installed as a standalone unit without major construction cost. The project will deliver up to 425 Gigawatt hours (GWh) per year. This is enough to supply approximately 200,000 households with electricity and saves around 250,000 tons of CO₂.

Siemens AG Communications Head: Clarissa Haller Werner-von-Siemens-Straße 1 80333 Munich Germany Siemens AG Press Release

Trung Nam Group is an investment company for the energy, infrastructure and real estate sectors. "Vietnam's need for energy is rapidly growing. To cover this demand, we must increase the share of renewables, among other things. The government is aiming at developing 18 gigawatts of generating capacity by 2030. Siemens is supporting us with our solar project so we can reach the government targets for developing renewable energy in Vietnam", says Nguyen Tam Tien, General Director at Trung Nam Group.

The four power transformers used in the Trung Nam project are to be delivered as Sensformers. As transformers are placed at critical nodes of the power grid, they are perfect sensors for grid conditions containing full information on energy flow. This new transformer class merges physics and information and equips transformers with a digital interface. This allows the operator to view its data in real-time – turning transformers into information hubs.

This press release and a press picture is available at

www.siemens.com/press/PR2018070256EMEN

For further information on Division Energy Management, please see

www.siemens.com/energy-management

For further information on eBoP Solutions, please see

https://sie.ag/2pWcZna

For further information on Sensformer, please see

https://sie.ag/2L3JBKm

Contact for journalists

Felix Michelfeit

Phone: +49 9131 7 335 59; E-mail: felix.michelfeit.ext@siemens.com

Follow us on Twitter at: www.twitter.com/siemens press

Siemens AG (Berlin and Munich) is a global technology powerhouse that has stood for engineering excellence, innovation, quality, reliability and internationality for 170 years. The company is active around the globe, focusing on the areas of electrification, automation and digitalization. One of the world's largest producers of energy-efficient, resource-saving technologies, Siemens is a leading supplier of efficient power generation and power transmission solutions and a pioneer in infrastructure solutions as well as automation, drive and software solutions for industry.

Siemens AG Press Release

With its publicly listed subsidiary Siemens Healthineers AG, the company is also a leading provider of medical imaging equipment – such as computed tomography and magnetic resonance imaging systems – and a leader in laboratory diagnostics as well as clinical IT. In fiscal 2017, which ended on September 30, 2017, Siemens generated revenue of €83.0 billion and net income of €6.2 billion. At the end of September 2017, the company had around 377,000 employees worldwide. Further information is available on the Internet at www.siemens.com.