



### **GE to Provide Static Frequency Converter to Pump-Storage Power Plant for Electricity Generating Authority of Thailand**

- *Seventeen Years after Providing the First Set of Static Frequency Converters (SFC) to Electricity Generating Authority of Thailand, GE Will Provide New Sets of SFCs to Its Expanded Pump-Storage Power Plant (PSPP)*
- *GE's 16.5-Megawatt (MW) Water-Cooled SFCs Help Ensure Higher Level of Grid Stability*
- *Newly Expanded Power Plant Will Increase Its Capacity to 520 MW in Total, Providing Clean Power to the Country*

LAM TA KHONG, THAILAND—September 1, 2016—The government of Thailand has outlined an energy plan in which the country anticipates achieving [more than 2 gigawatts \(GW\)](#) of newly added pump-storage hydropower capacity by 2036. GE's (NYSE: GE) recent deal to help the Electricity Generating Authority of Thailand (EGAT) upgrade and expand its hydro power plant shows the company's firm commitment to help the country achieve its goal.

According to the deal, GE's Power Conversion business was chosen by the engineering, procurement and construction company that was awarded this project by EGAT to provide two 16.5-MW, water-cooled static frequency converters (SFC) for EGAT's hydro power plant, located in Lam Ta Khong, Thailand. The SFCs for the two 260-MW turbine units, Lam Ta Khong Phase 1 and Phase 2, were originally provided by GE back in 1999, and GE has once again been chosen to provide the SFCs for two new 260-MW turbine units.

"Our partnership with GE goes back to 1999 when GE's SFC solution was first deployed in the PSPP. After 17 years of operation, we have witnessed that the technology provided by GE is proven, reliable and meets our requirement at all ends," said Mr. Pairoj, head, Division of Pumped Storage Investigation and Study project of EGAT. "We look forward to continue to work with GE and believe that it would help us bring cleaner power to meet the growing energy demands of Thailand."

Hydro power is the world's largest renewable energy source by far. Although hydro technology is mature compared to wind and solar, the industry continues to face challenges during project implementation and operation.

PSPPs are often required to quickly provide energy from hydro power when the energy demand is high or to store energy in the event of overproduction from wind and solar. It is important that the PSPP be agile and quick to react to demand to balance load fluctuations. Fast response to grid fluctuations requires reliable systems, such as SFCs, to smoothly and quickly start and shut down the operation in the time of need.

GE's SFCs start the turbine in pump mode and smoothly synchronize with the network frequency. It can help with a smooth startup. It also reduces mechanical stress, therefore extending equipment life of rotating parts and requiring lower maintenance cost. The compact design means low component count, making the converter highly reliable and easy to use, which brings the much needed operational flexibility.

“Every day, more than 25 GW of installed capacities in PSPPs are successfully started by GE’s SFCs around the world. The confidence from GE’s customers speaks volumes about the reliability and high quality of our technology,” said Peter Oram, renewables sales leader, GE’s Power Conversion business. “GE is recognized as one of the leaders in the world for this solution. We will continue to push limits to provide reliable technology that will help provide cleaner power and improve energy.”

## **About GE**

GE (NYSE: GE) is the world’s Digital Industrial Company, transforming industry with software-defined machines and solutions that are connected, responsive and predictive. GE is organized around a global exchange of knowledge, the “GE Store,” through which each business shares and accesses the same technology, markets, structure and intellect. Each invention further fuels innovation and application across our industrial sectors. With people, services, technology and scale, GE delivers better outcomes for customers by speaking the language of industry. To learn more, please visit [www.ge.com](http://www.ge.com)

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## **About GE Power Conversion**

GE’s Power Conversion business, a business unit of GE Energy Connections, applies the science and systems of power conversion to help drive the electrification of the world’s energy infrastructure by designing and delivering advanced motor, drive and control technologies that evolve today’s industrial processes for a cleaner, more productive future. Serving specialized sectors such as energy, marine, oil and gas, renewables and industry, through customized solutions and advanced technologies, GE Power Conversion partners with customers to maximize efficiency. For more information, please visit [www.gepowerconversion.com](http://www.gepowerconversion.com).

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