SIEMENS

Press

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Siemens to upgrade steam power plant in Vietnam to combined cycle power plant

- Electrical capacity increased to approximately 1,200 megawatts
- Fired with regasified liquefied natural gas instead of oil
- Fifty percent lower CO₂ emissions per kilowatt hour produced

Siemens will provide the equipment to upgrade the Hiep Phuoc 1 steam power plant in Ho Chi Minh City, Vietnam, to a combined cycle power plant. This project will increase the plant's electrical capacity by roughly 780 megawatts (MW) to approximately 1,200 MW. The modernized plant will be fired with regasified liquefied natural gas (LNG) instead of the oil that has been used to date. By changing the fuel, deploying modern F-class gas turbines from Siemens, and using the waste heat from the gas turbines to produce electricity, the CO₂ emissions can be cut almost in half for each kilowatt hour produced on-site. With this project, the customer Hiep Phuoc Power Co. Ltd., will ensure a reliable, secure, and environmentally friendly power supply for Ho Chi Minh City and Vietnam.

The scope of supply from Siemens includes three SGT5-4000F gas turbines, three generators, three heat recovery steam generators, related electrical equipment and the SPPA-T3000 control system. Once the power plant has been upgraded, the waste heat from the gas turbines will be used to generate steam. The steam obtained will be used to drive the existing steam turbines and generators for electricity production. Recommissioning of the upgraded plant is scheduled for second half of 2022. To meet the current electricity demand in Vietnam, Hiep Phuoc Power Co. Ltd. will be able to provide around 520 MW to the grid by mid-2021 through open cycle operation.

Werner-von-Siemens-Straße 1 80333 Munich Germany "We are proud to support Hiep Phuoc Power Co. Ltd to improve the electricity supply situation with an environment friendly power plant solution," said Andreas Pistauer, head of the Asia/Pacific Region within Siemens Gas and Power. "At the same time, the extension to efficient combined cycle technology will diversify the plant's operational functionality and thus increase the customer's flexibility."

Siemens is a leading supplier of combined cycle power plants on Vietnam's market, with strong reference projects including the Phu My 2-1 and Phu My 3 extensions as well as orders for the Ca Mau 1&2 and Nhon Trach 2 power plants.

In September 2015, Siemens announced as the first industrial company globally its intention to cut the carbon footprint of its operative business in half by 2020 and to become climate neutral by 2030. To achieve this, Siemens is focusing on four levers: energy efficiency, decentralized energy systems, intelligent e-mobility solutions and the purchasing of clean electricity.



Three SGT5-4000F gas turbines, three generators, and three heat recovery steam generators from Siemens will be provided to upgrade the Hiep Phuoc 1 steam power plant in Ho Chi Minh City, Vietnam, to a combined cycle power plant.

This press release is available at <u>www.sie.ag/2qKYuss</u> For further information on Siemens Gas and Power, please see <u>www.siemens.com/energy</u> For further information on the SGT5-4000F gas turbine, please see <u>www.siemens.com/sgt5-4000f</u>

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Siemens Gas and Power (GP) is a global pacesetter in energy, helping customers to meet the evolving demands of today's industries and societies. GP comprises broad competencies across the entire energy value chain and offers a uniquely comprehensive portfolio for utilities, independent power producers, transmission system operators, the oil and gas industry and other energy intensive industries. Products, solutions, systems and services address the extraction, processing and the transport of oil and gas as well as power and heat generation in central and distributed thermal power plants, power transmission and grid stability, as well as energy transition technologies including storage. With global headquarters in Houston in the U.S. and around 63,000 employees in over 80 countries, Siemens Gas and Power has a presence across the globe and is a leading innovator for the energy systems of today and tomorrow, as it has been for more than 150 years.

Siemens AG (Berlin and Munich) is a global technology powerhouse that has stood for engineering excellence, innovation, quality, reliability and internationality for more than 170 years. The company is active around the globe, focusing on the areas of power generation and distribution, intelligent infrastructure for buildings and distributed energy systems, and automation and digitalization in the process and manufacturing industries. Through the separately managed company Siemens Mobility, a leading supplier of smart mobility solutions for rail and road transport, Siemens is shaping the world market for passenger and freight services. Due to its majority stakes in the publicly listed companies Siemens Healthineers AG and Siemens Gamesa Renewable Energy, Siemens is also a world-leading supplier of medical technology and digital healthcare services as well as environmentally friendly solutions for onshore and offshore wind power generation. In fiscal 2019, which ended on September 30, 2019, Siemens generated revenue of €86.8 billion and net income of €5.6 billion. At the end of September 2019, the company had around 385,000 employees worldwide. Further information is available on the Internet at www.siemens.com.