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Press

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Siemens and ST Engineering secure major order for floating power plant in Dominican Republic

- Hybrid power plant solution with integrated battery energy storage
- Power supply with a capacity of 145 megawatts
- Scheduled to start operation in Santo Domingo in spring 2021

Siemens and the marine arm of ST Engineering in Singapore have jointly received an order for a SCC-800 2x1C SeaFloat barge-mounted power plant from Seaboard Corporation subsidiary Transcontinental Capital Corporation (Bermuda) Ltd., an Independent Power Producer (IPP) with operation in Dominican Republic. The project Estrella del Mar III in the Dominican Republic will provide the customer with a highly efficient power generation facility.

Under a turnkey plug and play concept, Siemens as team leader will provide a Siemens' combined cycle power plant with a capacity of 145 megawatts (MW). ST Engineering will be responsible for the engineering design, procurement and construction of the floating power barge, the balance of plant and the installation of the floating power plant. Siemens will also deliver its innovative hybrid SIESTART solution, combining a flexible (gas turbine) combined cycle power plant with a battery energy storage system. The SeaFloat concept completed in the shipyard will provide the customer with a quality proven power plant at a lower cost in comparison to a similar land-based power plant. Estrella del Mar III is scheduled to start operation in Santo Domingo in spring 2021.

"Our trendsetting SeaFloat technology combines state-of-the-art combined cycle power plant technology with the mobility and flexibility required by the current and future energy market," said Karim Amin, CEO Global Sales Siemens Power and

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Gas. "Our vision is a future with access to affordable but clean electricity and clean water for everyone. A tough challenge to achieve, but a necessity in light of climate change and the need to provide electrical energy for the world's growing population," Amin added.

"This collaboration between ST Engineering and Siemens leverages each other's strength and capabilities to design, build and deliver a technologically advanced floating power barge. We're excited that in the end, the SCC-800 2x1 floating power plant will bring clean and green electrical energy solution to benefit more people in the Dominican Republic," said Ng Sing Chan, President, Marine, ST Engineering.

Seaboard Estrella del Mar III will be installed at the customer's location in the country's capital city Santo Domingo. Due to site constraints with limited free land and their experience with previous power barges, the customer selected a SCC-800 2x1 SeaFloat concept with two Siemens SGT-800 gas turbines and one SST-600 steam turbine. This allows to increase the plant size in comparison to a land-based power plant. The gas and steam turbine generation sets are of single lift package design for floating applications utilizing integrated based frame design with three-point mount. For the SIESTART solution Fluence Energy, a company of Siemens and AES, is providing a 5MW/10 MWh battery energy storage system to be integrated as part of the power plant for frequency regulation control. This will allow the plant to operate at full capacity with highest fuel efficiency.

Variations of the SeaFloat power plants can be used as base load, or emergency backup for existing power plants during peak loads or outages and to provide a fast power supply in the event of a humanitarian disaster. SeaFloat power plants can even be supplemented with a desalination plant to provide clean potable water and help prevent diseases. A wide range of gas turbine frames and combined cycle configurations are available so that an appropriate solution that meets specific requirements can be developed together with customers.

The Siemens SeaFloat power plants use the company's proven and reliable equipment that has been adapted for application on floating devices. While the majority of the market requests are for the successful SGT-800 gas turbine, with to date more than 350 units sold and over 7 million operating hours, further solutions based on the SGT-A65 and SGT-8000H series have also been developed to address a variety of market needs. SeaFloat power plants can be moved to any site that is accessible by sea or major rivers and require almost no investment for land acquisition. SeaFloat has been designed to be as small as possible, and it has defined a new standard in power density. Because the plants' construction and a large portion of commissioning are performed using standardized equipment under strictly controlled conditions in the world's leading shipyards, a short lead time can be realized. Construction of the plant also does not interfere with any required onshore infrastructure like the installation of substation, transmission line, and access roads. This allows for a significant reduction in the total time required for these kinds of infrastructure projects.

Typical applications include the power supply for remote areas like islands, the development of industrial areas on shorelines or major rivers (for example, chemical and desalination plants) as well as brownfield applications.

This press release and a press picture / press pictures/ further material is available at www.siemens.com/press/PR2018120095PGEN

For further information on Division Power and Gas Division, please see www.siemens.com/power-gas

For further information on SeaFloat, please see <u>www.siemens.com/seafloat</u> For further information on SIESTART, please see <u>www.siemens.com/siestart</u>

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ST Engineering is a global technology, defence and engineering group specialising in the aerospace, electronics, land systems and marine sectors. The Group employs about 22,000 people across offices in Asia, the Americas, Europe and the Middle East, serving customers in the defence, government and commercial segments in more than 100 countries. With more than 500 smart city projects across 70 cities in its track record, the Group continues to help transform cities through its suite of Smart Mobility, Smart Security and Smart Environment solutions. Headquartered in Singapore, ST Engineering reported revenue of S\$6.62b in FY2017 and it ranks among the largest companies listed on the Singapore Exchange. It is a component stock of the FTSE Straits Times Index, MSCI Singapore, SGX ESG Transparency Index and SGX ESG Leaders Index. Visit <u>www.stengg.com</u>.