News Release

TOSHIBA

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Toshiba Energy Systems & Solutions Corporation

Toshiba to Supply Hydro Turbines

for Kerinci Merangin Hydro Electric Power Plant in Indonesia
-Providing Highly Reliable Equipment for High Head and High Rotating Speed-

KAWASAKI, JAPAN—Toshiba Energy Systems & Solutions Corporation (hereinafter "Toshiba ESS") announced today that Toshiba Hydro Power (Hangzhou) Co., Ltd. (THPC), a Chinese subsidiary of Toshiba ESS, and PT. Toshiba Asia Pacific Indonesia (TAPI), an Indonesian subsidiary of Toshiba ESS, have won a major order from a hydropower plant project company affiliated under Bukaka for conducting energy and infrastructure business in Indonesia to manufacture four 105 MW hydro turbines for the Kerinci Merangin Hydro Electric Power Plant (hereinafter "Kerinci Hydropower Plant"), which is located at the center of Sumatra Island, Indonesia. Delivery of the equipment will begin from September 2023.

Because the head at the Kerinci Hydropower Plant is higher than 400 meters, technologies to meet the high head and rotating speed are required for delivering hydro turbines. Toshiba ESS and THPC won the order because they were evaluated for their strong technical capabilities, the high reliability of their equipment, and their experience in delivering hydropower equipment to clients all over the world. Furthermore, TAPI also contributed to sales activities and has earned customer trust as a partner, even though opportunities for overseas business trips have been limited because of COVID-19.

Shinya Fujitsuka, Director and Senior Vice President of the Power Systems Division at Toshiba ESS, said, "I'm pleased that we received orders for hydro turbines and associated equipment for the Kerinci Hydropower Plant in Indonesia. Toshiba ESS will continue to contribute to supplying highly reliable equipment for hydropower plants all over the world in cooperation with local, reliable hubs in order to realize carbon-neutral electricity generation."

THPC has received orders for hydropower plant equipment from the Bukaka Group continuously since 2016 for Indonesia's four plants, including the Malea 1 Hydropower Plant, which started commercial operation in July 2021. Moreover, THPC received an order for hydropower generator units in March of last year, and as a result, the orders THPC received became an entire set of hydropower equipment for the Kerinci Hydropower Plant.

This time, THPC will work for the design and manufacturing of the hydro turbines at THPC's operations in China, and TAPI will handle the dispatch of instructors for installation work on site, and offer online technical guidance so that the project can be carried out as planned

without delay even to COVID-19.

The ratio of renewable energy for energy resources is expected to continue accelerating in Indonesia, up to 23% by 2025.* The planned hydropower generation capacity occupies the largest ratio among planned renewable energy equipment, which is expected to grow to around 40%. In addition, demand from the hydropower generation market is expected to grow particularly fast; thus, Toshiba ESS and THPC will aim to further contribute to the area.

Toshiba Group had delivered 60 kW hydro generators as the first domestic equipment for the Keage Power Plant, which was the first commercial Japanese hydropower plant when it started operation in 1894. Since then, the Group has a delivery record total of more than 2,700 hydro equipment, and an output total of more than 66 GW for over 40 countries, including Asia and other areas. As hydropower is the main resource of clean energy in Southeast Asia, Toshiba Group has delivered hydropower equipment for such countries as Thailand, Vietnam, Philippines, and Laos. Toshiba Group aims to achieve a carbon neutral society by continuing to bring high quality products to China, Southeast Asia, Africa, and other regions all over the world.

*Source: Indonesia Electricity Procurement Plan (RUPTL 2019)

Project Outline

Name of Power Plant: Kerinci Hydropower Plant

Plant Operator: PT. Kerinci Merangin Hidro (KMH)

Site location: Center of Sumatra Island, Indonesia

Scope of Supply: 4 x 105 MW Francis turbines and dispatch of instructors

Scheduled Installation: From September 2023 (planned)

Scheduled Operation: From June 2025 (planned for all four hydro turbines)

(Photo) Contract signing



(Left) Mr. Kaoru TAKAYANAGI

Toshiba Hydro Power (Hangzhou) Co., Ltd. Vice President/Executive Officer, Marketing

(Photo) Similar Francis turbine as for the Kerinci Hydropower Plant



About Toshiba Energy Systems & Solutions Corporation

Toshiba Energy Systems & Solutions Corporation is a leading supplier of integrated energy solutions. With our long experience and expertise in a wide range of power generating and transmitting systems and energy management technology, the company delivers innovative, reliable, and efficient energy solutions across the globe. Expanded from Toshiba Corporation (TOKYO: 6502) in October 2017.

https://www.toshiba-energy.com/en/index.htm