

Toshiba Energy Systems & Solutions Corporation
October 15, 2019

**Toshiba Wins Contract to Supply “Geoportable™” for
Dieng Small Scale Geothermal Power Plant in Indonesia**

Kawasaki, Japan— Toshiba Energy Systems & Solutions Corporation (hereinafter “Toshiba ESS”) today announced that the company has won a contract with PT Inti Karya Persada Teknik (IKPT), a leading Engineering, Procurement and Construction (EPC) company in Indonesia, to supply a set of steam turbine and generator for Dieng Small Scale Geothermal Power Plant located in Central Java, Indonesia. The power plant is developed by PT Geo Dipa Energi (Persero), Indonesia’s state-owned geothermal energy company. Toshiba ESS commenced the design and engineering work for the scope of supply. The power plant is scheduled to start commercial operation in March 2021.

This 10 MW-class small scale geothermal power plant will be constructed in the Dieng plateau and located near the existing Dieng Geothermal Power Plant Unit 1, which has been operating since 2002. For this new power plant, Toshiba ESS will supply “Geoportable™”.

“Geoportable™” is a compact power generation system developed by Toshiba ESS for small scale geothermal power plants with outputs ranging from 1 MW to 20 MW. This system employs advanced technologies, for instance, leading-edge corrosive gas resistance materials, which are crucial for geothermal steam turbines, and a unique design for the steam path, which leads to high performance and reliability.

In addition, with its compact design, “Geoportable™” can be installed even in limited spaces where conventional geothermal power generation systems normally cannot fit. “Geoportable™” is primarily composed of standardized components and are pre-assembled on skid* in the factory, allowing a shorter manufacturing and installation period. These factors were considered and evaluated positively during the selection process.

Indonesia has an estimate of 29,500 MW of geothermal energy resources, which is second most among all countries. According to the “Electricity Supply Business Plan of PT PLN Year 2019 up to 2028”, geothermal power plants are planned to be newly developed to generate about 4,600 MW by year 2028. Moreover, a compact geothermal power generation system is highly anticipated to replace a diesel generator, which is commonly used in many islands in Indonesia.

Takao Konishi, Director and Senior Vice President of the Power Systems Div. at Toshiba ESS, commented, “We can offer a wide range of geothermal power generation systems from 1 MW to 200 MW. In Indonesia, Toshiba ESS has supplied large-scale geothermal power generation systems with an aggregate output of 239 MW for the Sarulla Geothermal Power Plant, the largest geothermal power plant in Indonesia, and the Patuha Geothermal Power Plant. With this new opportunity, we will promote “Geoportable™” in addition to the large-scale type, and continue to contribute to realizing a stable power supply in Indonesia by providing our cutting-edge power generation system that realizes customer needs.”

*Skid: A load platform used in a material handling and logistics application

Project Outline

Plant name: Dieng Small Scale Geothermal Power Plant

Location: Dieng Plateau Wonosobo, Central Java, Indonesia

Plant owner: PT Geo Dipa Energi (Persero)

EPC company: PT Inti Karya Persada Teknik (IKPT)

Scope of supply: 1 set of a 10 MW-class steam turbine and generator “Geoportable™”

Planned start date of commercial operation: March, 2021

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About Toshiba Energy Systems & Solutions Corporation

Toshiba Energy Systems & Solutions Corporation is a leading supplier of integrated energy solutions. With its long experience and expertise in wide range of power generating and transmitting systems and energy management technology, the company delivers innovative, reliable and efficient energy solutions across the globe. Split off from Toshiba Corporation (TOKYO: 6502) in October 2017. <https://www.toshiba-energy.com/en/index.htm>