

September 26, 2017 Marubeni Corporation

Memorandum of Understanding between EGAT and Marubeni for Power Digital Solution

On September 25, 2017, Marubeni Corporation ("Marubeni") executed a Memorandum of Understanding ("MOU") with Electricity Generating Authority of Thailand ("EGAT") for installation of a power digital solution at the existing Mae Moh Coal Fired Power Plant of EGAT. The objective of this MOU is to optimize operations and plant maintenance by utilizing Internet of Things ("IoT") technology.

EGAT is a state-owned enterprise responsible for generation and transmission of electricity, and is the largest electricity company in Thailand. EGAT has a generating capacity of approximately 16,000 MW and promotes the development of power plant which is environmentally-friendly. Mae Moh Coal Fired Power Plant, owned by EGAT, is the largest coal-fired power plant in Thailand, and has a generating capacity of approximately 2,400 MW. The power plant uses lignite coal from an adjacent lignite mine as a fuel source, and the fuel quality is low and varies in composition, resulting in an unstable heat rate. It is expected that the IoT solution will satisfy the need to optimize operation and fuel consumption.

Marubeni has been awarded a total of six large-scale thermal power plant construction projects from EGAT in the past 15 years and has contributed to development of electricity for both Thailand and EGAT. Based on the strong mutual relationship between the companies, Marubeni's capabilities in sales and marketing as well as organization and management of the project, together with its know-how of the power IoT business domain and the capability of the power digital solution as demonstrated in Marubeni's reference(s), were evaluated by EGAT and those factors led to the execution of the MOU.

Marubeni will develop this power digital solution for its own power assets as well as the power assets of other utilities, and provide the solution to these facilities to improve profitability and achieve full utilization of limited fossil fuels by reducing fuel consumption and improving the management index of the power plant.

Name :	Electricity Generating Authority of Thailand
Governor :	Mr. Kornrasit Pakchotanon
Installed Generating Capacity :	Approx. 16,000MW (approx. 39% of the generating capacity in Thailand)
Sales :	497 million Thai Baht (equivalent to 1,615 million Japanese Yen)
Core Business in Electricity Generation :	Electricity Generation, Electricity Purchase, Electricity, Transmission

<Overview of EGAT>







Mae Moh Coal Fired Power Plant