

July 3, 2018
The Kansai Electric Power Co., Inc.
Mitsubishi Hitachi Power Systems, Ltd.

**Kansai Electric and MHPS to Jointly Undertake
Preparatory Survey on Maintenance of Power Plants
in the Republic of the Union of Myanmar**

**-- Two Companies to Explore Feasibility Using State-of-the-Art
Technology such as IoT and AI --**

The Kansai Electric Power Co., Inc. (Kansai Electric) and Mitsubishi Hitachi Power Systems, Ltd. (MHPS) concluded an agreement for a preparatory survey on power plant maintenance using state-of-the-art technologies such as IoT and AI in the Republic of the Union of Myanmar today. The work was contracted to the two companies by the Japan International Cooperation Agency (JICA).

Increasing Myanmar's power supply capacity is an urgent issue today as this Southeast Asian nation's maximum power demand is currently projected to expand to 4,000 megawatts (MW) in 2020 and 14,000MW in 2030, in tandem with economic growth. Existing power plants that were impacted primarily by previous economic sanctions, suffer today from shortages of equipment and parts that are necessary for carrying out needed repairs, with the result that proper O&M has not been carried out. Development of human resources to take charge of such duties is also lagging. In light of this situation, the Japanese Government has drawn up plans to provide economic support to Myanmar and has declared intent to cooperate in the energy field.

Against this backdrop, JICA openly invited bids to undertake an investigation into the current status of O&M at Myanmar's existing power plants and to explore the feasibility of introducing IoT, AI and other state-of-the-art technologies held by small and medium sized enterprises in Japan. Kansai Electric and MHPS responded to this call as a team and were selected to carry out the cited work.

The investigation will be conducted over a period of approximately one year, starting this July and finishing in July 2019. Both companies will dispatch employees to the site, their objectives being to survey Myanmar's existing power plants and prepare technical proposals based on their O&M.

Kansai Electric presently offers an engineering service for thermal power plants known as "Kansai-Value Creation Service," or K-VaCS. This is a solution service for creating customer value throughout all aspects of projects to establish new thermal power plants, from basic planning to O&M after operation start-up. The company is now working closely with small and medium enterprises having outstanding

technologies, to jointly develop new products and services that will boost added value through integration of these currently disparate technologies.

MHPS possesses expertise and technological capabilities as a provider of engineering, manufacturing and servicing operations for power generation facilities. Its "MHPS-TOMONI®" is a digital solution service that supports optimization of the operation of thermal power plants.

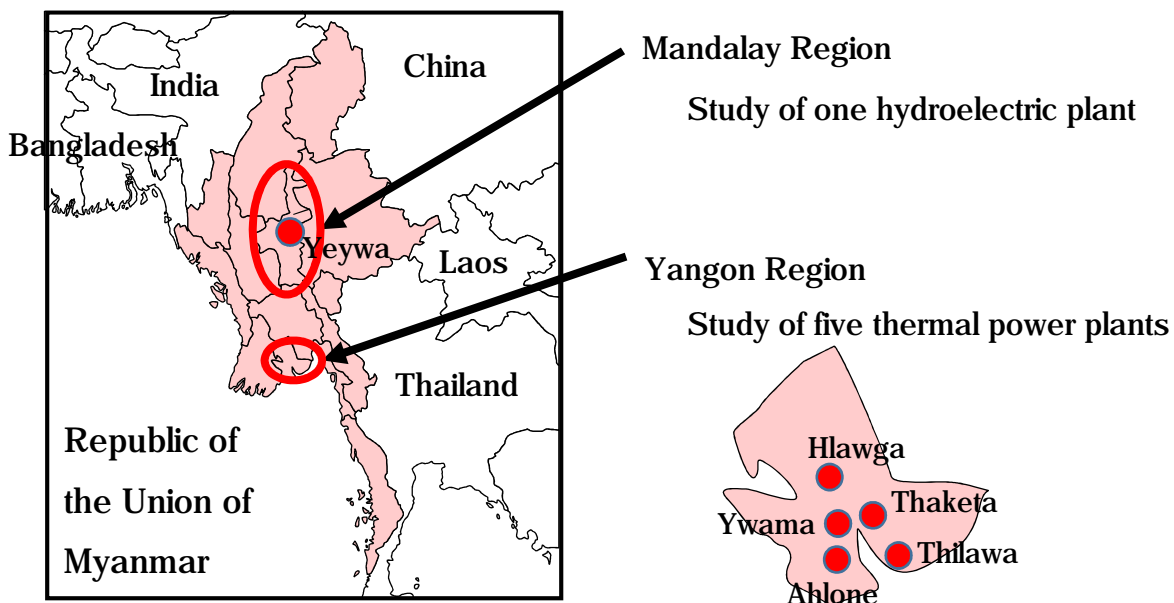
Both companies realize stable power supply in Myanmar using their knowledge and technology, and contribute to the development of the country.

Attachment: Overview of Preparatory Survey on Maintenance of Power Plants Using State-of-the-Art Technology such as IoT and AI in the Republic of the Union of Myanmar

Overview of Preparatory Survey on Maintenance of Power Plants Using State-of-the-Art Technology such as IoT and AI in the Republic of the Union of Myanmar

Work Summary:

- Project implementation: Joint implementation by Kansai Electric and MHPS
- Study target areas: 5 thermal power plants near Yangon and 1 hydroelectric plant in Mandalay Region, Myanmar
- Project duration: July 2018 to July 2019 (approx. 1 year)
- Project scope:
 - Survey of current status of O&M of thermal and hydroelectric power plants
 - Preparation of technical proposal relating to O&M applying IoT, AI, and Japanese technologies
 - Preparation of technical proposal relating to improving facility maintenance with regards to plant operation and organization structure
- Duty allocation:
 - Kansai Electric: Overall project oversight, preparation of investigative and technical proposals relating to power plant operation and power generation facilities (electricity, control)
 - MHPS: Preparation of investigative and technical proposals relating to power generation facilities (machinery) and remote monitoring by applying MHPS' digital solution service "MHPS-TOMONI®"
- Locations :



Profiles of Project Participants

The Kansai Electric Power Co., Inc.

President: Shigeki Iwane

Establishment: May 1951

Head Office: 3-6-16 Nakanoshima, Kita-ku, Osaka 530-8270

Business Scope: Electric power, heat supply, telecommunications, gas supply, etc.

Mitsubishi Hitachi Power Systems, Ltd.

President and CEO: Kenji Ando

Establishment: February 2014

Head Office: 3-1, Minatomirai 3-chome, Nishi-ku, Yokohama, Kanagawa 220-8401

Business Scope: Development, engineering, manufacture, sale, installation and maintenance of thermal power systems and auxiliary equipment