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Mitsubishi Heavy Industries, Ltd.
Mitsubishi Electric Corporation

Next-Generation Gas Turbine Control System for Thermal Power Plants Completes Functional Testing

-- Jointly Developed by Mitsubishi Power and Mitsubishi Electric, Market Launch
Targeted for Fiscal Year 2026 --

- ◆ *Integration of Mitsubishi Power's control technology with Mitsubishi Electric's high-speed data processing technology*
- ◆ *Supports rapid load adjustments and diverse fuels including hydrogen*

Tokyo, December 24, 2025 – Mitsubishi Power, a power solutions brand of Mitsubishi Heavy Industries, Ltd. (MHI), and Mitsubishi Electric Corporation (Mitsubishi Electric) have completed functional testing of their jointly developed next-generation gas turbine control system for thermal power plants.

This control system integrates Mitsubishi Power's advanced control technology and Mitsubishi Electric's high-speed data processing technology to optimize the operation of large-scale gas turbines used for power generation, achieving stable and efficient power output. Additionally, it enables advanced control functions that support rapid load adjustments to complement fluctuations in renewable energy generation, as well as accommodate the diversified fuels such as natural gas and hydrogen.

The recent functional tests confirmed the system's capability to efficiently process the growing volume of operational data produced by larger and higher-performance gas turbines. Moving forward, the two companies will leverage their respective strengths to further advance joint development and verification efforts, including system validation tests simulating actual equipment, with the aim of launching the system to the market for new projects in fiscal year 2026.

The control system is an essential component supporting the high availability and safety of power plants, including gas turbine combined cycle (GTCC) facilities. Since the late 1980s, Mitsubishi Power has developed and supplied control systems that ensure high operational reliability and meet demanding maintenance support and safety requirements for both domestic and international power plants. Its proprietary "DIASYS" series is tailored to meet the diverse needs and regulatory standards of various countries, with over 3,000 units delivered to more than 60 countries worldwide for both overseas power plants and domestic industrial power generation facilities. Meanwhile, Mitsubishi Electric has supplied over 1,000 units of its instrumentation and control system, the "MELSEP" series, designed to meet domestic electric utility standards, to thermal and hydroelectric power plants since 1980, contributing to the stable supply of electricity in Japan.

As efforts toward decarbonization accelerate, there is growing demand for more flexible operation of thermal power plants that can quickly adjust load to complement the variable output of renewable energy sources and accommodate fuel diversification such as co-firing natural gas with hydrogen. To meet these needs and address the increasing size and enhanced performance of gas turbines, Mitsubishi Power and Mitsubishi Electric have been jointly developing a next-generation gas turbine control system that integrates Mitsubishi Power's expertise in optimal control with Mitsubishi Electric's hardware equipped with high-speed data processing technology capable of handling large volumes of data.

Through the development of this control system, Mitsubishi Power and Mitsubishi Electric will contribute to the stable supply of electricity essential for economic development worldwide, promote energy decarbonization, and support the preservation of the global environment.

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About Mitsubishi Heavy Industries Group

Mitsubishi Heavy Industries (MHI) Group is one of the world's leading industrial groups, spanning energy, smart infrastructure, industrial machinery, aerospace and defense.

MHI Group combines cutting-edge technology with deep experience to deliver innovative, integrated solutions that help to realize a carbon neutral world, improve the quality of life and ensure a safer world.

For more information, please visit www.mhi.com or follow our insights and stories on spectra.mhi.com.

About Mitsubishi Power

Mitsubishi Power is a power solutions brand of Mitsubishi Heavy Industries, Ltd. (MHI). Across more than 30 countries worldwide, Mitsubishi Power designs, manufactures and maintains equipment and systems that drive decarbonization and ensure delivery of reliable power around the world. Among its solutions are a wide range of gas turbines including hydrogen- and ammonia-fueled gas turbines. Committed to providing exemplary service and working with customers to imagine the future of energy, Mitsubishi Power is also spearheading the development of the digital power plant through its suite of AI-enabled TOMONI® solutions.

For more information, please visit <https://power.mhi.com>.

[Mitsubishi Power Logo (Business Brand Logo)]



About Mitsubishi Electric Corporation

With more than 100 years of experience in providing reliable, high-quality products, Mitsubishi Electric Corporation (TOKYO: 6503) is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, energy, transportation and building equipment. Mitsubishi Electric enriches society with technology in the spirit of its "Changes for the Better." The company recorded a revenue of 5,521.7 billion yen (U.S.\$ 36.8 billion*) in the fiscal year ended March 31, 2025. For more information, please visit www.MitsubishiElectric.com.

*U.S. dollar amounts are translated from yen at the rate of ¥150=U.S.\$1, the approximate rate on the Tokyo Foreign Exchange Market on March 31, 2025

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