

Mitsubishi Heavy Industries America **Completes Construction of World's Largest** **Post-Combustion CO₂ Capture System for** **the Petra Nova Carbon Capture Project**

January 10, 2017 02:37 AM Eastern Standard Time

HOUSTON--([BUSINESS WIRE](#))--Mitsubishi Heavy Industries America, Inc. (MHIA), a wholly-owned subsidiary of Mitsubishi Heavy Industries, Ltd. of Japan (MHI) (TOKYO:7011), has successfully completed construction of the world's largest post-combustion CO₂ capture and compression system. Managed and executed in the U.S., the system is based on MHI's proprietary KM CDR Process® and high-performance KS-1™ amine solvent which was jointly developed by MHI and Kansai Electric Power Co. and is used for CO₂ absorption and desorption. The system captures CO₂ from a 240 MW equivalent coal exhaust slipstream from Unit 8 at NRG Energy Inc.'s (NRG's) W. A. Parish coal-fired generating station in Thompsons, Texas, and is rated at 4,776 metric tons per day of CO₂ captured.

MHIA, together with MHI, licensed and provided the KM CDR Process® and KS-1™ solvent and delivered overall system design services, engineering, procurement for major system equipment (from primarily U.S.-based vendors), operator training, and commissioning support. MHIA formed a consortium with TIC (The Industrial Company) for execution of a full turnkey contract of the CO₂ capture plant. The MHIA – TIC consortium was awarded in July 2014, began construction in September 2014 and completed the performance tests in December 2016.

The CO₂ capture and compression system at the W.A. Parish coal-fired generating station is part of the Petra Nova Carbon Capture Project which is jointly promoted by NRG and JX Nippon Oil & Gas Exploration Corporation (JX Nippon). Captured CO₂ will be transported through an 81-mile pipeline and used for enhanced oil recovery at the West Ranch Oilfield, located on the Gulf Coast of Texas.

MHI has, through successful deployment of the KM CDR Process® and KS-1 Solvent™, delivered 11 commercial plants for natural gas and oil combustion exhaust gases and holds an outstanding market share in the world in the field of post combustion CO₂ capture. CO₂ capture application to coal-fired power stations is a cutting-edge technology that requires highly sophisticated tools and know-how to treat various impurities contained in flue gases. MHI has taken several steps to commercialize the technology, including extensive R&D efforts. In 2006, MHI successfully conducted a demonstration test, at a scale of 10 metric tons per day, in cooperation with Electric Power Development Co., Ltd. (J-POWER). In 2011 MHI, together with Southern Company, successfully proved the reliability of the KM CDR Process® in a joint demo project at Alabama Power's Plant Barry coal-fired generating station, operating at a scale of 500 metric tons per day.

MHIA's involvement in the Petra Nova Carbon Capture Project is part of the company's ongoing efforts to contribute to the development of a sustainable society through innovative technological solutions.

More information on the Petra Nova Project is available at <http://www.nrg.com/generation/projects/petra-nova/>.

More information on the technology and experience is available at [http://www.mhi-global.com/products/category/co2_recovery_plants.html].

About Mitsubishi Heavy Industries Group

Mitsubishi Heavy Industries, Ltd. (MHI), headquartered in Tokyo, is one of the world's leading industrial firms with 80,000 group employees and annual consolidated revenues of around 38 billion U.S. dollars. For more than 130 years, the company has channeled big thinking into innovative and integrated solutions that move the world forward. MHI owns a unique business portfolio covering land, sea, sky and even space. MHI delivers innovative and integrated solutions across a wide range of industries from commercial aviation and transportation to power plants and gas turbines, and from machinery and infrastructure to integrated defense and space systems.

For more information, please visit MHI's website: www.mhi-global.com

For Technology, Trends and Tangents, visit MHI's new online media **SPECTRA**: spectra.mhi.com

About Mitsubishi Heavy Industries America

Mitsubishi Heavy Industries America, Inc. (MHIA) is a wholly-owned subsidiary of Mitsubishi Heavy Industries, Ltd. (MHI), one of the world's leading industrial firms. Headquartered in Houston, Texas, MHIA serves as the central oversight office of MHI operations throughout North America, providing corporate functions to local subsidiaries. MHIA oversees more than 100 bases across 30 states covering a wide range of businesses including chemical plants, transportation systems, corrugating machinery, machine tools, tire machinery and aircraft. MHIA covers operations in the United States, Canada and Mexico.

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