



First Introduction of “Neo-White (Clathrate Hydrate Slurry) Thermal Energy Storage Air-Conditioning Systems” in Thailand

– Opening Ceremony Held at Electricity Generating Authority of Thailand (EGAT) –

JFE Engineering Corporation (President: Sumiyuki Kishimoto; Head Office: Chiyoda-ku, Tokyo) announced the completion of a clathrate hydrate slurry (CHS) thermal energy storage air-conditioning system for the Electricity Generating Authority of Thailand (EGAT), which was commissioned as a demonstration project by Japan’s New Energy and Industrial Technology Development Organization (NEDO). The Opening Ceremony was held in Thailand on January 17, 2013.

The Opening Ceremony was an impressive event with numerous dignitaries in attendance, headed by Police Lieutenant General Dr. Wichianchot Sukchotrat, Vice Minister of Energy of the Kingdom of Thailand, Mr. Amnuay Thongsathitya, Director-General of the Department of Alternative Energy Development and Efficiency, and Mr. Sutat Patmasiriwat, Governor of EGAT, and Mr. Fumio Ueda, Executive Director of NEDO, from Japan.

In Thailand, air-conditioners must be operated year-round, and as a result, building air-conditioning consumes an enormous amount of energy. Thus, reduction of greenhouse gas (GHG) emissions by introduction of highly-efficient air-conditioning systems has been expected.

The demonstration systems delivered by JFE Engineering in this project is a “Neo-White (CHS) Thermal Energy Storage Air-Conditioning System,” which was installed in EGAT’s Head Office Building. These systems achieve high efficiency by charging cool heat using electric power at night, when the outside air temperature decreases, and discharging the charged cool heat during daytime. Use of these systems are expected to reduce GHG emissions by 728 tons/year.

JFE Engineering Corporation has a wide lineup of highly-efficient air-conditioning products and technologies, such as the “Neo-White Thermal Energy Storage Air-Conditioning Systems” and “Geothermal HVAC Systems,” among others. In the future, the Company will continue to develop total solutions for high efficiency of energy in buildings by applying the optimum combination of these technologies.

*1 Neo-White:

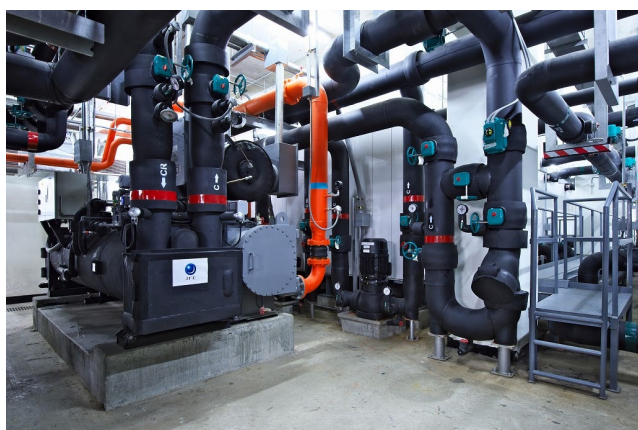
Clathrate Hydrate Slurry Thermal Energy Storage Air conditioning Systems were developed jointly by NEDO and JFE Engineering Corporation during 2001-2003. Neo-White (CHS) is a new latent heat storage medium that uses tetrabutylammonium bromide (TBAB), which has a high cool heat storage capacity. It is a revolutionary cool heat storage medium with a higher melting point (approx. 7°C, or 44°F) than ice and a cool heat storage capacity which is twice that of sensible cool heat of chilled water at the same temperature.

■ Outline of Project

1. Project name: Project on Measures for Rationalization of International Energy Use
International Energy Consumption Efficiency Model Project
“Model Project for a Hydrate Slurry Thermal Storage Air-Conditioning System for Commercial Use (Thailand)”
2. Location delivered: Electricity Generating Authority of Thailand (EGAT), Head Office Building
3. Equipment delivered: Neo-White Thermal Energy Storage Air-Conditioning Systems (1 set)
4. Total floor space: 28,800m²
5. Thermal storage capacity: 1,000RTh (3,510kWh)



■ Electricity Generating Authority of Thailand (EGAT) Head Office Building



■ Completed Neo-White Thermal Energy Storage Air-conditioning Systems



■ Dignitaries attending the Opening Ceremony held on January 17; from the left, Mr. Sutat Patmasiriwat, Governor of EGAT, Police Lieutenant General Dr. Wichianchot Sukchotrat, Vice Minister of Energy of the Kingdom of Thailand, Mr. Iwao Hanzawa, Senior Managing Director of JFE Engineering Corporation, and Mr. Fumio Ueda, Executive Director of NEDO.

For inquiries regarding this item, please contact JFE Engineering Corporation at the following: +
JFE Engineering Corporation, Energy Conservation Solution Dept,