

EMD Gas Hydrates Committee Report

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Vice-Chairs:

TBA, (Vice-Chair: Industry)

TBA, (Vice-Chair: Government)

United States Gas Hydrate Program

A joint-federal-agency 15-day research expedition was conducted between April 19 and May 3, 2013 in the northern Gulf of Mexico and yielded innovative high-resolution seismic data and imagery that will help refine characterizations of large methane hydrate resources in the U.S. Outer Continental Shelf. The agencies involved are the U.S. Geological Survey (USGS), the U.S. Department of Energy (DOE) and the Bureau of Ocean Energy Management (BOEM).

The data was acquired in the vicinity of the 2009 sites that were logged with LWD tools as part of the Joint Industry Program (JIP) led by Chevron. Those sites were discovered to have sand units with hydrate saturations of 50-90% of the pore space. According to the U.S. Department of Energy's (DOE) Office of Fossil Energy (FE), the information provided insight into the source of gas, migration pathways for the gas, the distribution of hydrate-bearing sediments, and the traps that hold the hydrate and free gas in place. This high-resolution data will be used by BOEM to assist efforts to assess the resource potential of gas hydrates on the U.S. Outer Continental Shelf. In particular, the data will be used to help assess how useful specialized seismic data may be to estimating hydrate saturations in deepwater sediments.

This expedition, jointly planned by USGS, DOE, and Bureau of Ocean Energy Management (BOEM) provided insight into the source of gas, migration pathways for the gas, the distribution of hydrate-bearing sediments, and the traps that hold the hydrate and free gas in place. This high-resolution data help to inform the BOEM effort to assess the resource potential of gas hydrates on the U.S. Outer Continental Shelf. The new data provide information about how much gas hydrate exists in a much broader area than can be determined from standard industry seismic data, which is typically designed to image much deeper geologic units.

Japanese Gas Hydrate Production Test

Since the March 12 report by the Japanese Ministry of Economy, Trade and Industry (METI) on the Nankai test, little information has been made public as the MH21 researchers evaluate the extensive volume of data recovered. It is thus unclear whether there will be another production test prior to a decision being made on commercial development.

Gas Hydrate in India

Site selection for an LWD drilling program for offshore India in 2014 was finalized in April, 2013. This program is targeting hydrate-bearing sands with a focus on reservoir delineation and resource assessment. Two legs are planned, with the first dedicated to LWD logging.

Gas Hydrate in China

China commenced exploratory gas hydrate drilling and coring in Spring, 2013. Results and other details of the program have not yet been released.

Gas Hydrate in South Korea

After two successful drilling programs (2006 and 2010), South Korea is planning a gas hydrate production test for 2014.

Meetings

The 2013 URTeC meeting in August included three gas hydrate presentations as part of the Theme 6 “Other Unconventional Reservoirs”.