# INTERVIEW

## Project Financing an LNG Liquefaction Project in the U.S.

Contributing to the Stable Supply of Energy Resources and the Diversification of LNG Sources for Japan

Interview with Director Noriyasu Matsuda and Deputy Director Hiroyuki Suzuki, Division 1, Oil and Gas Finance Department, Energy and Natural Resources Finance Group

Director Matsuda



Deputy Director Suzuki

### Freeport LNG Project in U.S.

JBIC signed a USD2.6 billion project financing loan agreement with FLNG Liquefaction, LLC (FLIO) in October 2014. Osaka Gas Co., Inc. (OG), Chubu Electric Power Co., Inc. (CE), and Freeport LNG Expansion, L.P. (Freeport) have invested in FLIQ.

JBIC's debt financing was cofinanced by private financial institutions including the following five Japanese private financial institutions: The Bank of Tokvo-Mitsubishi UFJ, Ltd., Sumitomo Mitsui Banking Corporation, Mizuho Bank, Ltd., Sumitomo Mitsui Trust Bank, Limited and Mitsubishi UFJ Trust and Banking Corporation, as well as the Tokyo Branch of ING Bank N.V., with the overall cofinancing amount reaching approximately USD3.8 billion. Nippon Export and Investment Insurance (NEXI) provided insurance for the cofinanced portion.

In this project FLIQ will construct new natural gas production facilities near Freeport in Texas and plans to produce 4.4 million tons of LNG per year made from shale gas and conventional gas produced in the U.S. OG and CE will offtake all of the LNG produced by the liquefaction plant as LNG tollers.

#### In light of the Shale Gas Revolution

After the Great East Japan Earthquake in March 2011, the environment surrounding Japan's energy supply is becoming increasingly challenging. As LNG currently contributes to over 40% of Japan's power energy mix, one of Japan's priorities is to secure the stable supply of LNG in a cost effective manner. To that end, the "Strategic Energy Plan" approved by the Cabinet in April 2014 promotes the diversification of LNG procurement sources and pricing structures for the long term supply of LNG to Japan.

"Freeport, by the Gulf of Mexico, was already equipped with wharfs, LNG storage tanks, regasification facilities and pipelines, comprising an LNG import terminal, prior to the implementation of the Project. However, the significant increase in domestic natural gas production as a result of the "Shale Gas Revolution" in the U.S. led to the almost complete suspension of the operation of the LNG import terminal. The Project consists of effectively utilizing those non-operating existing facilities, adding the First Train and expanding the shipping wharfs to develop an export terminal. The Project was established to liquefy natural gas procured in the U.S. and export all resultant LNG to OG and CE. In a liquefaction business in which Japanese electric and gas companies hold equity interest, this is the first project that will export LNG from the U.S. to Japan under long-term supply contracts at a price benchmarked against the U.S. natural gas market (Henry Hub).", says Noriyasu Matsuda.

"I was based in JBIC's Representative Office in New York from 2010 to 2013 and closely followed President Obama's policies on natural resources and the "Shale Gas Revolution." More than half of LNG that Japan imports is linked to the price of crude oil, so the natural desire for Japan was to secure long term supply of LNG at the more competitive Henry Hub index. While the crude oil price is currently in flux, it is still considered important to secure long-term stable supply of LNG from the U.S. and diversify LNG procurement sources and prices. Notably, OG and CE will also benefit from the full value chain from fuel production, processing to transportation in this Project.", says Hiroyuki Suzuki.

#### Structuring an LNG Liquefaction Facility **Project Financing without Completion** Guarantees

JBIC was first requested to consider this project financing in October 2012. "In this Project, the sponsors requested to structure the financing without the sponsors' completion guarantees. The "construction risk" (risk of FLIQ not being able to complete the construction of the First Train and its operation as scheduled) was therefore an important consideration, as sponsor guarantees available to other projects in this sector were not available in this Project. One advantage of this Project was that it was a "Brown Field Project", involving the renovation of existing facilities and requiring less investment for new facilities than a "Green Field Project". Bearing this in mind, we took on the challenge to structure, for JBIC, the first LNG liquefaction from the sponsors.", says Matsuda.

JBIC signed a USD2.6 billion project financing loan agreement with FLNG Liquefaction, LLC (FLIQ) in October 2014. JBIC's financing is cofinanced by six private financial institutions of which five are Japanese, making the aggregate committed debt financing to FLIQ amount to approximately USD3.8 billion.

Osaka Gas Co., Inc. (OG), Chubu Electric Power Co., Inc. (CE), and Freeport LNG Expansion, L.P. (Freeport) have invested equity in FLIQ. The debt financing provided by JBIC and other lenders will finance the construction of a natural gas liquefaction plant (the First Train) near Freeport in Texas which will produce LNG from natural gas produced in the U.S. (the Project). OG and CE will use the First Train as LNG tollers and as offtakers of the total amount of LNG produced from the First Train, with the estimated annual production of 4.4 million tons. The Project was awarded The Americas Deal of the Year PFI Award 2014 by Thomson Reuters.



During the course of the deal structuring, Matsuda and Suzuki visited the Project and engaged in fact finding missions, including with respect to FLIQ's management team's strategy for the Project. The construction contractor was financially robust and put forward a team with strong credentials on large-scale LNG projects. FLIQ also put forward a project management team with experts boasting LNG credentials from all over the world.

"Houston has become the city of oil and gas technology, home to many companies that have implemented oil and gas projects in various parts of the world. We diligenced the experience of key members of the construction and operation teams of FLIQ and the construction contractor. We sensed from the local experts involved in the Project their strong desire to use their know-how to implement the Project. We had discussions for days and nights on technical matters, including with technical advisors. Furthermore, we consulted our colleagues who are familiar with financing power generation projects without completion guarantees, and how they addressed construction risk in such projects.", says Suzuki.

"We were able to structure an LNG project financing without completion guarantees by securing a robust risk allocation package and conducting a thorough due diligence on the Project from various perspectives. Notably, the participation of Chiyoda Corporation was also one of major factors in addressing the construction risk.", says Matsuda.

#### **Contributing to the Diversification of LNG** Sources, through Importing US Share Gas

Freeport obtained a permit from the Federal Energy Regulatory Commission for the construction and operation of the Project and a permit from the U.S. Department of Energy for the export of LNG to non FTA countries. FLIQ then successfully reached agreement with the lenders on the debt financing in October 2014.

JBIC's support for the Project will contribute to the stable supply of Japan's energy resources and the execution of Japan's energy policy. Following the successful closing of this financing, together with the closing of JBIC's project financing for the Cameron LNG project in Louisiana, these two projects are seen as the new models for projects implementing the procurement of LNG from North America to Japan. These natural gas liquefaction facilities are scheduled to complete, start operation and commence export of LNG to Japan, in each case in 2018.

"Both Freeport and Cameron projects financed by JBIC were established to renovate existing facilities in the Gulf of Mexico, but new LNG export projects are also planned in the west coast of the U.S. and Canada, which would allow the LNG transportation periods to Japan to be shorter. We would like to further support such LNG projects and continue working on project finance structuring of LNG projects, in order to further contribute to the facility project financing without the completion guarantees diversification of LNG supply sources and prices and the stable supply of energy resources to Japan.", says Matsuda.



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