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## LNG in World Markets - Mid Month

## **Taipower Seeks Terminal Capacity**

Taiwan Power Co., or Taipower, is facing challenges in importing LNG. Intense environmental activism, increased politicking and tight global markets have slowed plans for the development and deployment of two planned floating storage and regasification units (FSRUs).

The lack of regasification capacity could hinder Taipower's ability to start its respective sale and purchase agreements (SPAs) with Shell and TotalEnergies between early 2024 and early 2025. Both SPAs were signed in mid-2019 at attractive prices compared with current levels. Taipower must turn to state-run energy firm CPC for terminal capacity access – and is hoping to finish such negotiations by 1Q 2024.

## **Taipower's FSRU Projects**

Taipower's two proposed FSRUs will supply three LNG-fired power projects. The Hsieh-ho project is targeting the installation of two combined-cycle gas turbine (CCGT) plants – each with 1.3 GW capacity – by 2025 to replace oil-fired power generation.

An interim FSRU is to supply the plants at Keelung city in northern Taiwan for around five years, until an onshore terminal is operational. The Taichung project will also have two CCGT units, each with 1.3 GW of capacity, to offset some coal-fired generation at the adjacent 5.5-GW Taichung coal power station. The units are to be installed progressively from mid-2024.

The 2.7-GW, Tung-hsiao gas-fired project in northeastern Taiwan's Miaoli County, meanwhile, involved the building of three, 900-MW CCGT plants to replace oil-fired power generation. The units were completed and commenced operations between 2018 and 2020. Taipower has been supplying Tung-hsiao with purchased regasified LNG from CPC's Taichung terminal. A proposed FSRU, however, will supply both the Taichung and Tung-hsiao projects when operational.

Taipower is keen to buy LNG on its own. It currently buys LNG from CPC at the latter's published import price, which has been increasing, especially in the past year. Importing LNG independently allows Taipower the ability to manage and optimize costs against CPC prices. Taipower accounts for 60%-70% of CPC's LNG sales, sources said.

Taipower is facing difficulties in advancing both FSRU projects in Hsieh-ho and Taichung, and there are expectations that the terminals would not be able to start up in the next few years. The Hsieh-ho project requires an interim FSRU because land reclamation is required to accommodate an onshore facility. The work, however, has been delayed by challenges in obtaining environmental approval. The LNG terminal developments – from FSRU deployment to land reclamation – will harm the region's marine wildlife, which includes rare white dolphins, activists said.

The Taichung FSRU faces a similar problem. The power plant and liquefaction facilities have secured preliminary environmental approval for development, but not the jetty and breakwater facilities due to their potential impact on marine wildlife, sources said.

## **TUAs with CPC required**

With FSRU plans delayed, Taipower must secure terminal use agreements (TUAs) with CPC if it wants to commence SPAs with Shell and TotalEnergies as scheduled. CPC is currently the island's only LNG terminal capacity operator.

Taipower has a 15-year deal with Shell for 900,000 t/y of LNG and a 10-year deal with TotalEnergies for some 1.5 MMt/y. Both deals were signed in 2019 and are to commence in January 2024 and January 2025, respectively. They are priced off a Japan Crude Cocktail-Henry Hub hybrid structure, with the oil slope at slightly above mid 11%. Shell's volumes are bound for Taichung, while those from TotalEnergies will be headed to Hsieh-ho.

There are hurdles to securing the TUAs. CPC terminals are already overutilized, so spare slots will be hard to find. Shell and TotalEnergies are also likely to raise prices to account for risks related to using third-party regasification slots, sources said. Moreover, the SPAs are condition precedent on Taipower having import terminal capacity.

The Hsieh-ho gas-to-power project, however, is not connected to existing regasification facilities, and therefore cannot be supplied via a TUA with CPC. This means Taipower must develop regasification capacity or connectivity to prevent

Hsieh-ho from turning into a stranded asset.

Taiwan Proposed LNG Import Terminals

CHINA

Hsleh-ho LNG (Taipower)

Taoyuan LNG (CPC)

Taoyuan City

Taichung LNG (Taipower)

Taichung City

Note: Hsieh-ho wiil use an interim FSRU for the first five years, before transitioning to being land-based.

Another potential option is for Taipower to novate the contracts to CPC. This, however, is unlikely. Shell and TotalEnergies are likely to renegotiate prices to match current levels. Novating the deals to CPC also goes against Taipower's objective to import LNG independently.

In any case, domestic politics should be watched for any potential impact on Taiwanese LNG demand. General elections are due in January 2024, with the main opposition party KMT inclined towards the use of nuclear energy as a clean option to meet Taiwan's energy demand. If elected, the party could delay or scrap a planned nuclear energy phase-out, which should reduce fuel switching and LNG requirements.