

## Floating LNG Moves Closer To Project Financing

There has been considerable speculation in the LNG industry over whether floating liquefaction facilities can be project financed by lenders in the same way as land-based operations. The possibility is growing as the number of proposed FLNG projects reaches a critical mass, with other developments also suggesting it is becoming more likely.

China's Export-Import Bank and the World Bank's International Finance Corp said that they were planning to provide funding to Caribbean LNG in Colombia. This would then allow sponsors to bring in commercial banks after the project is completed.

But a more classic project finance structure could be adopted by African-focused upstream oil and gas player Ophir Energy, which has chosen to monetize its Block R reserves in Equatorial Guinea via FLNG.

Ideally, commercial banks would like to see an FLNG operating track record before they consider providing funding via a project finance structure because they have little appetite for new technology risk. Even if they embraced it, banks would charge a hefty premium. But it is uncertain whether an FLNG project will be in operation, let alone be able to boast a good operating track record, when the Equatorial Guinea project and others are ready to seek financing.

Shell's 3.6 MMt/y Prelude floater, the world's first FLNG to reach a final investment decision, is under construction, but this \$12 billion project in the Browse basin off the Northwest coast of Australia is not expected to start up until 2016. It is also being balance sheet-financed by Shell. While many others are planned, the only other FLNG projects to achieve FID thus far are the aforementioned Caribbean LNG, sponsored by Exmar and Pacific Rubliales, planned for startup in second quarter 2015, and operations for Petronas targeting Malaysian offshore reserves. PFLNG-1 is due to begin operation in fourth quarter 2015 and PFLNG-2 in 2018.

Commercial banks are expected to join the Caribbean LNG financing at a later stage. **Initially, China's Exim and the IFC will provide funding.** China's participation came with the insistence of using a domestic yard. The two are providing financing with an unlevered project cost of about \$250 million based on a publicly disclosed cost of just under \$500 per ton of installed capacity (See LNGWM, Feb '14).

While most bankers believe that FLNG can secure commercial bank funding via project financing, even before FLNG has a proven track record, there are **obstacles to overcome.** **"Most definitely it can be project financed. But there are issues, there are a whole plethora of issues,"** comments one banker.

## Completion Support Vital

Foremost, given FLNG is new technology, project completion support and stringent completion testing before this support is released will be required by lenders at least for the first few projects. For the largest players, providing completion support would not pose a problem, but for smaller companies it can be a headache. There can be a big mismatch between the required FLNG capital expenditure, typically \$2 billion-plus, and the balance sheet of the project sponsor and/or the service company providing the FLNG vessel on a charter basis.

Securing a lump sum turnkey contract from contractors is tricky because the hull and topsides are coming from different providers. Some of the hull manufacturers, such as the large South Korean ship yards, would have the **means to provide completion support for construction, but these "wraps"** attract a pricing premium and could therefore bump up project costs.

Despite the problems the nascent FLNG sector will need to overcome for project financing, securing funds via this type of structure is nevertheless desirable because once completion support is released it is non-recourse to **the sponsors.** **It therefore protects a company's balance sheet** – worst case scenario they can walk away from a failing project – and it also provides a buffer against the contingent liabilities of partnerships.

## FPSO As A Template

Project finance is now routine in the floating production, storage and offloading (FPSO) sector and bankers say the covenants that have been developed over time probably provide a better template for FLNG project

finance than classic LNG project financings or financings for LNG vessels. FPSOs are project financed rather than asset-financed as would normally be typical with vessels, although some LNG ship financings carry project style covenants. **“For FPSOs right now it is bog standard to take ships and bang on the topsides but for the first one it was a very fraught process to get through the due diligence,”** recalls one financier.

The amount of financing a ship can secure is based on its value – lenders can seize it if the borrower defaults on the loan. In similar fashion, lenders can take mortgage over an FPSO and foreclose if the borrower defaults on its loan payments. But in practical terms this does not really work well for FPSOs, or for FLNG units. It would be difficult to carry out because once these units are deployed, unlike regular ships or classic LNG vessels, they would rarely, if ever, dock in port and may be located in the exclusive economic zone of countries where any attempts to seize them via the court system may prove complex, protracted and expensive. Once a floater is on site, it is unlikely to move – hence it is important that lenders are **comfortable with the project’s economics.**

**“Quiet Enjoyment”** or **step-in** clauses which state a charterer can use the asset without disturbance from other parties – the lender and vessel owner – will also limit asset seizure by lenders. Usually there is period upwards of 90 days that prevents the lenders seizing an FPSO. But the quiet enjoyment clause stipulates that lenders be notified if the charterer must terminate the contract. This gives lenders time to attempt to solve any problems in order to preserve the cash flow and thus debt servicing.

**Whether an FPSO is bankable is determined by the charterer’s credit standing, possibly supported by a bank guarantee or letter of credit where needed, and sponsor support such as completion support.** The FPSO may be deployed via a bareboat charter or time charter. There is daily payment for the FPSO’s availability and its operation funds debt repayment.

The availability of the asset is a key issue because marine conditions are such that 95%-plus utilization is difficult to guarantee, which will impact a **sponsor’s ability to raise debt for the project.** The **offtaker needs to be able to tolerate outages, and at the same time the project must still continue to service lenders.** As a result of expected outages the buyer may aim to secure lower prices.

Charterers have termination rights over the FPSO, but the termination payment must be at least the level of the outstanding debt and be able to

cover any other outstanding financing charges, such as swap contract termination. In the event of owner default, the charterer does not need to make payment to the owner.

## Force Majeure Clauses

For FPSOs, force majeure clauses are critical to bankability. A reduced daily rate is typically paid during such an event, and termination of the contract is permitted if force majeure continues beyond a specified period. But in the event of termination, banks would require a substantial termination payment by the charterer, especially if the force majeure clauses cover events triggered by host government action such as expropriation.

Securing insurance cover can also be problem for FSPOs and this will cause issues for FLNG vessels, which are expected to cost even more. Such large vessels will come up against limits very quickly in the traditional insurance market. This has meant that operations such as Shell's Prelude FLNG and some of the larger FPSO units are either self-insured or partially self-insured by the sponsor.

To overcome the FLNG financing problems, there may need to be higher equity contributions from all participants such as sponsors, service providers, offtakers, etc, than is typical for project finance. The usual gearing ratio for LNG projects tends to be 70:30 debt to equity, but this may be difficult to achieve in the first FLNG project financings. This is likely to encourage some sponsors to seek equity financing. Banks and export credit agencies (ECAs) have already supported the equity side of an FLNG project. In February 2013, Japan's Inpex secured a \$1 billion loan to pay for its 17.5% share in the Prelude and Concerto gas fields and fund its part of Shell's Prelude FLNG project. The Japan Bank for International Cooperation (JBIC), which is the country's ECA, provided \$600 million with the rest coming from a Japanese trio of Bank of Tokyo Mitsubishi UFJ, Mizuho and Sumitomo Mitsui Banking Corp.

While lessons learned from FPSO project finance can be applied to FLNG, it will still take time for FLNG project financings to evolve. Ultimately, financing for FLNG could be a hybrid of LNG-style project financing and asset-backed structuring. But it is encouraging for the FLNG sector that bank appetite remains strong for FPSOs, classic LNG projects and LNG vessel financing.

*This is an article taken from Poten's new LNG Finance in World Markets.  
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