Tangguh LNG Train 3 Financing Advances

Financing for Tangguh's third liquefaction train progressed in late January when sponsors, advised by Societe Generale, sent out an information memorandum to banks. Financing proposals are due March 31 and financial close is expected June 30, 2016. Sponsors are preparing the financing to lay the ground for train 3's final investment decision, expected late this year.

Tangguh is raising $5 billion of debt facilities, with an additional $7 billion from the equity partners. The commercial tranche is $3.25 billion, while the Japan Bank for International Cooperation (JBIC) is expected to provide $1.25 billion and the Asian Development Bank will lend $500 million. Costs are estimated at $8 billion to $12 billion. Commercial bids for construction are due in February, and costs are expected to fall with lower oil prices and fewer projects competing for engineering, construction and procurement services. The debt facility will fund the onshore LNG plant and its facilities and includes estimated financing costs of $460 million to $500 million, while offshore development is being funded by equity. The existing two trains have robust cash flows that will fund part of the capital expenditure for the third train.

Provisional allocation of corporate guarantees - $ million

Guarantors	$ million	Share
BP	1,358	42%
CNOOC Ltd	695	21%
Japan Oil Gas and Metals National Corp	252	8%
Mitsubishi Corporation	226	7%
Inpex	177	5%
JX Holdings	170	5%
Mitsui & Co	52	2%
LNG Japan	167	5%
Repsol	153	5%
Total for Commercial Lenders tranche	**3,250**	**100%**

Guarantors	$ million	Share
Japan Oil Gas and Metals National Corp	302	24%
Mitsubishi Corporation	270	22%
Inpex	212	17%
JX Holdings	203	16%
Mitsui & Co	62	5%
Sumitomo Corp	100	8%
Sojitz Corp	100	8%
Total for JBIC tranche	**1,250**	**100%**

Guarantors	$ million	Share
BP	500	100%
Total for ADB tranche	**500**	**100%**

The liquefaction financing will have irrevocable and unconditional corporate guarantees from the sponsors, according to the information memorandum (see table). The interest payment on the loan will be a deductible expense under the cost recovery clause of the production-sharing contract underpinning expansion of the liquefaction scheme, as approved earlier by Indonesian upstream oil and gas regulator SKK Migas.

Lenders would have the option to choose between tenors of 10 years and 13 years because some banks would not be able to lend beyond 10 years. The breakeven oil price for the 10-year tenor is estimated at $44 a barrel, while the 13-year tenor is said to be $30.50/bbl. Given the current cost of funding and risk profile of this guaranteed deal, bankers expect the loan to be priced around 175 basis points (bps) to 200 bps over the London interbank offered rate (Libor). The cleared price, which will reflect bank appetite for the deal, will only emerge once banks make their proposals on commitment amounts and margins. However, lender appetite for Tangguh could be strong given that banks have capital to commit and may be expecting fewer deals to hit the market because of low oil and gas prices. With Japanese project sponsors and offtake agreements, Japanese commercial banks could be the most aggressive and propose the lowest pricing, said banking sources.

The suggested margin of 175 to 200 bps would be significantly higher than pricing on the loans raised for the first two trains in 2006 and 2007. It could reflect the fact that the earlier deals were done during the boom years of bank

lending before the 2008-2009 global financial crisis. As such, attempts to refinance them in 2014 showed that pricing was higher.

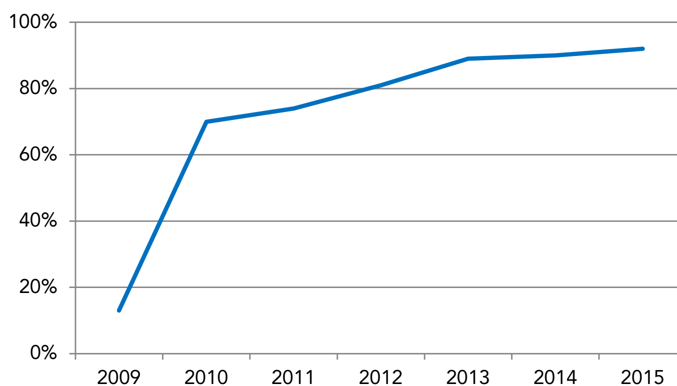
The new loan is expected to have a structure similar to the original Tangguh train 1 and 2 loans. The financing carries sponsor guarantees across the full loan repayment horizon in a trustee borrowing scheme (TBS) where an offshore trustee acts as the borrower and is paid by the offtaker, ensuring that debt repayment is prioritized over other expenses. HSBC is the trustee for Tangguh.

A $1.066-billion commercial bank loan for Tangguh was signed in 2006 with lenders including Bank of Tokyo Mitsubishi UFJ (BTMU), BNP Paribas, Fortis Bank, ING Bank, Mizuho, Sumitomo Mitsui Banking Corp. and Standard Chartered Bank. The structure for the 15-year loan included a TBS. The JBIC tranche was $1.2 billion while ADB's was $350 million. An $880-million club deal was also concluded in October 2007 for a tranche of debt with a maturity of 13.5 years, supporting Tangguh offtake going to China's Fujian import terminal. Lenders included Bank of China, BTMU, DNB, Intesa San Paulo, Mizuho and Royal Bank of Scotland.

The commercial and ADB tranches for the first two trains — part of a total $3.5-billion financing package — were repaid by the sponsors in January 2014. Lenders exercised the option to seek early repayment in 2014 because margins had trended higher and they believed they could book loans with higher pricing elsewhere. The commercial bank loans of $1 billion and $880 million were priced at around Libor plus 22 bps and 34 bps, respectively, and refinancing was offered around 90-100 bps higher. The sponsors were forced to repay the loans because the Indonesian government rejected the higher margins. To get approved by SKK Migas this time around, Tangguh partners will need to show that train 3 bank debt is the lowest-cost financing source.

Tangguh close to another 1-MMt/y deal

Tangguh is close to finalizing a 1-MMt/y long-term supply deal with a Chinese buyer, said to be a power utility, bringing it closer to making FID for train 3, according to industry sources. BP and partners delayed the FID from the second half of 2015 as they worked to reduce the cost of construction to compete globally in a well-supplied market, as well as selling down the volumes of train 3.



There are two existing supply contracts totaling 2.5 MMt/y — with Kansai Electric and state power company PT Perusahaan Listrik Negara (PLN) — to underpin train 3, but only half the volumes would be supplied by the expansion with the other half coming from the first two trains. Kansai Electric is the foundation buyer with 1 MMt/y under a 22-year deal with significant quantity flexibility of 12.5%. Kansai Electric is scheduled to take 0.25 MMt/y during 2014 to 2017, increasing to 0.5 MMt/y in 2018 to 2022 and 1MMt/y from 2023 to the end of the contract in 2035. PLN is taking the 40% of train 3 capacity allocated to the domestic market. In its 20-year contract, that would eventually increase to 1.5 MMt/y of train 3's 3.8-MMt/y output. Kansai's contract went into effect in 2014 while PLN's started in January 2015. Both are supplied by the existing two trains and will shift to the third train. Train 3 was originally scheduled to come on stream in 2019 but it is now expected in July 2020 after 48 months of construction to first LNG. Revenues from the expansion project's condensate production will not be part of debt servicing.

Tangguh volumes are being marketed at a slope above 13% linked to JCC for 10 years on an X-ship basis with a constant, making it difficult to compete with other supply projects in the current environment, since its lean volumes are in the same quality category as coal bed methane-to-LNG. Major buyers in Asia already have substantial CBM offtake and are less willing to buy additional lean volume. PLN was scheduled to take 0.5 MMt in 2015, rising to 0.75 MMt/y in 2016 to 2018 and 1.5 MMt/y from 2019 until the end of the contract. The electric utility is paying 13% of the realized export price for Indonesian crude oil plus $1/MMBtu. That would be the floor price for any supply agreements for Tangguh as it is politically difficult to sell below domestic prices. With a most-favored-nation clause, PLN's contract price would be adjusted accordingly whenever Tangguh gives another buyer more favorable pricing, if a new deal is longer than five years and larger than 0.5 MMt/y. As such, Tangguh needs future export buyers to match PLN's pricing.

Sempra Energy originally had a contract for 3.2 MMt/y from the first two trains for delivery to its Energia Costa Azul terminal on Mexico's Pacific Coast through 2015. But the US utility agreed to allow those volumes to be diverted to Asian customers willing to pay much higher prices. Sempra gets a portion of the profits from those higher-priced sales to Asia. Those short-term sales ramp down 2016 through 2018, however, and the 3.2 MMt/y is fully available beginning in 2019. Tangguh hasn't been allowed to place that volume in long-term export deals because the Indonesian government reneged on a high-level gas allocation agreement reached in 2012 with BP. It set the volume split between the domestic sector and the export market for both train 3 and the Sempra diversion quantities. In the case of train 3, 40% of the output was reserved for local use and 60% for export. But the Sempra volume was treated as a separate category, with about 25% of it allocated for domestic consumption and 75% for sale internationally.

Operator BP has a 37.16% share in Tangguh. Other partners are MI Berau BV (16.30%); CNOOC Muturi (13.90%), Nippon Oil Exploration (12.23%); KG Berau Petroleum (8.56%); KG Wiriagar Overseas (1.44%); Indonesia Natural Gas Resources Muturi (7.35%) and Talisman Wiriagar Overseas (3.06%).

Tangguh Sales and Purchase Agreements (MMt/y)

Import Country	Seller	Buyer	Terms	Start Year	End Year	Plateau Volume
South Korea	Tangguh	K-Power	Xship	2005	2025	0.6
South Korea	Tangguh	POSCO	Xship	2005	2025	0.55
China	Tangguh	CNOOC	FOB	2007	2032	2.6
Mexico	Tangguh	Sempra	Xship	2008	2028	3.7
Japan	Tangguh	Tohoku Electric	Xship	2010	2025	0.12
Japan	Tangguh	Chubu Electric	Xship	2013	2016	0.5
Indonesia	BP	PT PLN	Xship	2015	2033	1.5
Japan	BP	Kansai Electric	Xship	2013	2035	1

Source: Poten & Partners