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LNG-TO-POWER IN THE EMERGING MARKETS

IN RECENT YEARS, WE HAVE OBSERVED AN INCREASE IN THE NUMBER OF LNG-TO-POWER PROJECTS IN EMERGING MARKETS. BY **JULIA CZARNIAK**, PARTNER, ENERGY AND INFRASTRUCTURE PROJECTS AND BANKING, **TATIANA MONASTYRSKAYA**, PARTNER, ENERGY AND INFRASTRUCTURE PROJECTS, AND **ANGELA ROH**, ASSOCIATE, ENERGY AND INFRASTRUCTURE PROJECTS, AT **SKADDEN ARPS SLATE MEAGHER & FLOM**.

A number of countries have constructed a floating storage unit (FSU or FSRU) or built a regasification terminal. Twenty-six floating regasification terminals are now in operation and 16 are currently under construction or advanced planning.

A number of new countries, including Bangladesh and Egypt, have begun importing LNG (liquefied natural gas) in recent years. The concept of an LNG-to-power facility is that the same project imports LNG, regasifies it and uses the gas to generate power at a power plant constructed in conjunction with the regasification terminal.

Demand for LNG-to-power projects is driven by a number of macroeconomic and microeconomic factors: glut in the worldwide supply of LNG and the very competitive pricing that results; the relatively lower cost of LNG in comparison with domestic gas production in emerging markets; lack of local supply of pipeline gas; and governmental policies supporting cleaner energy, etc.

Of course, feasibility of any project depends on a variety of factors: stability of governmental policies and currency; presence of creditworthy offtakers; governmental support for offtaker obligations; sovereign debt rating; level of development of licensing and regulatory regimes; access to international financing; ability to attract favourable financing terms, etc.

Before deciding whether to invest in a project, each project finance lender considers a number of various risks and how they are mitigated, including construction risks, political risks, currency risks, and intercreditor risks, among others.

Below, we look at each structure that we have seen develop in the LNG-to-power space - an integrated structure, a tolling structure and a hybrid structure - from the standpoint of a project finance lender to determine additional financeability considerations and risks and how they are mitigated.

Integrated financing structure

In the integrated financing structure, the same project entity owns the regasification terminal,

the infrastructure connecting the regasification facility and the power plant, and the power plant itself. All elements are combined in one project: gas assets, marine facilities, pipelines and power transmission.

The project entity enters into an LNG sale and purchase agreement (SPA) with a third party. LNG is delivered to the regasification terminal and gas is used to generate electricity at the power plant owned by the same project entity. The project entity enters into a long-term power purchase contract with an offtaker. The same group of lenders finances the entire project.

There are a number of advantages to this model:

- 1 - No significant divergence of interest between equity holders with respect to regasification and power generation, as all the interests are combined in a single project entity.
- 2 - No additional intercreditor issues between two parts of the project, since the same group of lenders finances the entire project.
- 3 - A collateral package for the benefit of the single lender group includes all physical assets and all the project documents, including direct agreements with the LNG supplier for the LNG SPA and with the offtaker for the power purchase agreement (PPA). As such, upon an event of default, lenders may step into the borrower's shoes under all the key contracts and operate the project as a whole.
- 4 - It is easier to coordinate interface matters between completion of the power plant and completion of the regasification terminal because the same project entity is party to both construction contracts for the power plant and the regasification terminal.

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5 - It is easier to coordinate operation and maintenance of the regasification terminal with scheduled power plant maintenance, minimising delays or outages under the PPA.

However, such integrated structure may not be suitable in more developed markets with more than one user for the regasification terminal. It works better for smaller, simpler projects with only one terminal user.

Further, as a practical matter, this model does not work for sponsors that may not want to invest in both the regasification and power generation infrastructure for various reasons, including regulatory or tax constraints.

Furthermore, the model does not work where a regulatory regime prevents common ownership of both the regasification terminal and the power plant, or requires the regasification terminal to provide access rights to third parties – open access rules.

Non-integrated tolling structure

At the other end of the spectrum is the tolling financing structure. Under the tolling structure, a regasification terminal and a power plant are owned by different project entities and financed by separate groups of lenders.

LNG is purchased by an independent power company (IPPCo) from a third-party LNG supplier and stored and regasified by the owner of the regasification terminal (TerminalCo) under a tolling arrangement with IPPCo.

TerminalCo does not buy LNG, but instead provides regasification services (without taking title to LNG or natural gas) under a long-term tolling agreement with potentially a number of terminal users, including IPPCo.

IPPCo receives revenues under a power purchase agreement (PPA) with a third-party offtaker. TerminalCo receives revenues from tariff payments paid by terminal users, including IPPCo. TerminalCo lenders look to the credit of terminal users to determine financeability, while IPPCo lenders look to the credit of the power offtaker and the strength of the PPA.

The main advantage of the tolling structure is its flexibility: it allows TerminalCo to have more than one user, and thus a more diversified revenue stream. It may require less equity capital from any individual sponsor than a fully integrated structure, since TerminalCo can separate from IPPCo. However, a number of factors may complicate equity and debt financing of such a structure:

- *Project-on-project risk* -- Commercial operation dates (CODs) have to be achieved close to simultaneously for TerminalCo and IPPCo. A delay in construction of the regasification terminal will leave the power company unable to generate electricity. Similarly, if the power plant construction is delayed, the regasification terminal will stand idle. In addition, there are a number of legal risks caused by the project-on-project:

1 - Failure of TerminalCo to commission the regasification terminal by the required commercial start date is likely to expose IPPCo to significant take-or-pay liabilities under the LNG SPA for failure to start buying LNG on time.

2 - Failure of TerminalCo to commission the regasification terminal by the required commercial start date is likely to expose IPPCo to significant liquidated damages obligations under the PPA payable to the offtaker for failure to start delivering electricity on time.

3 - Given two different construction contracts for the regasification terminal and the power plant, remedies for failure to achieve the project schedule negotiated by one party (TerminalCo) may not be sufficient to fully compensate the other (IPPCo). Moreover, a contractor for TerminalCo likely will refuse to be liable for losses and consequential damages that arise from IPPCo contractor's failure to complete the power plant. TerminalCo's engineering, procurement and construction (EPC) contractor will try to limit its liability to the contract price of the EPC for TerminalCo, and its delay may cause more damages to IPPCo than TerminalCo can possibly recover from its contractor.

4 - Coordination of operations and maintenance between two independent projects is more difficult. TerminalCo may want to have downtime for the regasification terminal for maintenance during different times than maintenance of the power plant by IPPCo due to reasons outside of either project entity's control, and a consistent schedule, and corresponding debt reserves to cover such downtimes, may be hard to agree to.

5 - Allocation of contractual liabilities becomes harder: as alluded to above, parties are likely to have caps on liability that may be disproportionately small in comparison with damages of other parties under transaction documents.

- *Intercreditor issues* – IPPCo lenders will have a security interest in IPPCo assets. TerminalCo lenders will have a security interest in TerminalCo assets. IPPCo lenders are likely to require a direct agreement for the terminal use agreement (TUA) with TerminalCo, so that if IPPCo defaults, they can step in and still have a tolling contract with TerminalCo. IPPCo is also likely to require some sort of non-disturbance agreement with the lenders of TerminalCo – ie, if TerminalCo defaults, and TerminalCo lenders take over, TerminalCo lenders may only foreclose, subject to IPPCo's rights under the TUA. At the same time, TerminalCo lenders would want a non-disturbance agreement with IPPCo lenders, so that if IPPCo lenders foreclose on IPPCo assets, they would still perform its obligations under the TUA.

- *Direct agreement* – If there is one project entity, lenders enter into a direct agreement with each of the counterparties to the project (SPA, TUA,

PPA), obligating the counterparties to perform when lenders step into the shoes of the project entity – their borrower. But if there are two separate financings and two separate project entities and IPPCo defaults under the PPA, TerminalCo lenders have no rights. They don't have a direct agreement with the offtaker. They rely on IPPCo lenders to step in pursuant to their direct agreement and force the offtaker to continue to take – or pay for, if not taken - power.

- *Commingling/storage* – If there is more than one user of the regasification terminal, certain additional issues need to be grappled with, including: (a) how the capacity of the terminal is allocated between the customers (including IPPCo); (b) if LNG/gas is commingled, how issues of quality and contamination are tracked and balanced; and (c) if IPPCo project finance lenders have a security interest in LNG/gas, will they be open to that LNG/gas being commingled with the other users' gas.

Hybrid structure

The hybrid structure is a mix of the two structures above. It allows for two different special purpose entities to own the regasification facilities and the power plant, with both projects being financed jointly by the same group of lenders. From the lenders' perspective, it is an integrated LNG-to-power project.

TerminalCo and IPPCo enter into an arm's-length tolling agreement or gas sales agreement. The structure may involve both project entities being jointly and severally liable for loans, or may use a holding company as a borrower to on-lend to the two project entities. This structure is likely to be used where the regasification facility has capacity for more than one user.

No conflict of interest exists between TerminalCo and IPPCo since they are commonly owned by the same sponsor(s). No additional intercreditor issues are raised by the structure since the same collateral and remedies are shared by the same group of lenders – ie, assets of both project entities, including project contracts, collateralise the financing.

The structure allows the projects to be refinanced separately later – ie, for a regasification terminal and a power plant to seek separate refinancing after the construction is complete and most of the project-on-project risks are eliminated or mitigated.

Thus, in the future the structure allows for the terminal project to have more than one customer, although IPPCo may stay on as an anchor user.

This structure potentially has all the advantages of a fully integrated model and a flexibility of providing regasification services to more than one customer. Of course, the terminal use agreement would still need to address the issues of commingling, etc, that may arise in case of multiple users of the regasification terminal.

In conclusion, each of the three structures are financeable, but each project sponsor pursuing an LNG-to-power opportunity in emerging markets should analyse whether a particular structure is the right fit for the market and specific circumstances, applicable project agreements, applicable legal framework, sponsor(s) priorities, presence of creditworthy offtakers, demand for regas services from third parties, etc.

There is no one size fits all in this space, and a careful review of legal and commercial considerations should be undertaken to determine the most optimal financing structure. ■



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