

IPP STANDARD FOR MYANMAR

MYANMAR HAS EMERGED AS ONE OF THE MORE PROMISING OPPORTUNITIES IN SOUTH-EAST ASIA FOR THE DEVELOPMENT AND FINANCING OF POWER PROJECTS, AND THE MYINGYAN POWER PROJECT IS CURRENTLY THE MOST SIGNIFICANT PROJECT IN THE MARKET. BY **BENJAMIN THOMPSON**, PARTNER, **MAYER BROWN JSM**; **DENNIS FOO**, VICE-PRESIDENT, **SEMBCORP**; **MARAT ZAPPAROV**, SENIOR DIRECTOR AND **TED LOW**, ASSOCIATE DIRECTOR, **CLIFFORD CAPITAL**.

In the last four years Myanmar has emerged as one of the more promising opportunities in the region for the development and financing of major infrastructure projects, particularly in the power sector. Very little else can move forward in the broader economy without a reliable source of base-load electricity and Myanmar's significant and urgent need for power cannot be overstated.

The Myingyan power project, which Singapore-based power developer Sembcorp Utilities Pte Ltd (Sembcorp) is developing, and which recently achieved financial close after an extensive effort by all parties, is currently the most significant project in the market in this respect and a test-case that has been closely monitored by the broader investment community as an indication of how the Myanmar power market may develop going forward.

The project is a strong credential for Singapore Inc – backed by a Singapore-based sponsor, undertaken by a consortium of Singaporean construction contractors, financed in significant part by Singapore-based commercial lenders and supported by a number of key Singapore-based advisers.

Sembcorp identified the project at the very early stage of the initial RFP issued by the Ministry of Electric Power (MOEP) of Myanmar, now the Ministry of Electricity and Energy (MOEE) in November 2013. Clifford Capital engaged with the company from those early stages in late 2013, providing input on financing terms and early versions of the project documentation.

Following the release of the Supplemental RFP in May 2014, Clifford Capital, DBS Bank, OCBC Bank and DZ Bank, as the initial mandated lead arrangers, supported Sembcorp through the bid submission process, the post-bid finalisation of the structure and to financial close.

In this article we discuss the background to the project, some of the key risks that were required to be addressed in reaching financial close, and the aspects that are likely to make the Myingyan power project a landmark in the Myanmar power sector for years to come.

Urgent need for power

After several decades of under-investment, the development of Myanmar's energy sector lags significantly behind other Asian countries, despite abundant energy resources, including hydropower

and natural gas. In June 2017, Myanmar had approximately 5,380MW of installed generation capacity¹. However, the proportion of that installed capacity that is readily available is only about 50% as certain gas and coal power plants require significant maintenance, while hydropower has insufficient water during the dry season.

To put this into a global context, annual per capita electricity consumption in Myanmar in 2013 was 165kWh, as against a world average consumption of 3,000kWh/capita. Perhaps even more telling, the average for the least-developed countries is 174kWh/capita.

The inadequate and unreliable supply of electricity, combined with the high cost of back-up generators, are major obstacles to the development of industry in Myanmar and economic and social growth. A low electrification rate negatively impacts social progress and other essential services such as health and education.

Welcome reform

Since 2011, however, the Myanmar government has introduced important economic and political reforms, and significantly improved the regulatory framework for foreign direct investment. In particular, it has pursued a policy of liberalising the energy sector and opening it up to foreign investment.

Key positive developments have included (i) the passing of several significant pieces of sector-friendly legislation, including the Electricity Law in 2014, the Arbitration Act in 2016, and most recently the updated Investment Law; (ii) signing of the relevant enabling documentation with providers of political risk insurance to allow such products to be offered to the market; (iii) a general strengthening of the country's environmental and social regulatory regime; and (iv) the award of banking licences to several international banks.

Myingyan IPP

Perhaps the most significant development of all, however, has been the successful tendering of the Myingyan IPP, a combined-cycle, gas-fired power generation plant with a net capacity of 225MW, which was awarded to Sembcorp in 2015 following a competitive bid process initiated in late 2013.

Structured as a build-operate-transfer (BOT) transaction, the project is located in Myingyan, approximately 500km north of Yangon and 90km west of Mandalay. In addition to the power plant itself, associated facilities constructed by the project company include a 3km transmission line to connect the power plant to the nearby Myingyan 230 kV substation, which dispatches power to the grid, and a 14km water supply line from the river intake to the power plant.

- *An international standard tender* – In 2014, the PPP transaction advisory services unit of the International Finance Corporation was appointed as transaction adviser to MOEP to assist in preparing and managing the bidding process for the project, which included developing and issuing to shortlisted bidders a full suite of tender and pre-bid documentation on which bidders were provided the opportunity to comment.

During the pre-bid period, the set of project documents and risk allocation benefited from a thorough bankability and due diligence review by Sembcorp and the initial mandated lead arrangers, with this work coordinated by Sembcorp and Clifford Capital and with legal advice from Mayer Brown as international counsel to the lenders and DFDL Myanmar as lenders' local counsel.

Final versions of the bid documentation were issued in September 2014, against which final bids were submitted (five in total) in October 2014. Sembcorp was awarded the project in April 2015 and entered into a memorandum of agreement in December 2015.

- *Reputable sponsor and financiers* – The project company is a newly created, special-purpose company incorporated in Myanmar, majority owned by Sembcorp, a leading developer, owner, and operator of energy and water assets globally. Sembcorp's experience includes a successful track record of developing and operating independent power producers in Singapore, China, Vietnam, India, Oman, the UK and the UAE.

The project is being financed by a combination of development and commercial lenders, namely the Asian Development Bank (ADB), the International Finance Corporation (IFC), the Asian Infrastructure Investment Bank (AIIB), Clifford Capital, documentation bank, DBS Bank, PRG coordinating bank, DZ Bank, technical bank and social and environmental bank, and OCBC Bank, insurance and financial modelling bank.

Political risk guarantees are to be provided by the ADB and the Multilateral Investment Guarantee Agency (MIGA), with DBS Bank coordinating the negotiation of this document on behalf of the commercial lenders.

During the period prior to bid submission, the initial mandated lead arrangers worked closely with Sembcorp in developing the financing term sheet, coordinated by Clifford Capital, that formed the basis of a highly competitive and winning financing package. Post-tender, the wider lending group then worked on the finalisation of the eventual set of project documents and the development of the full package of financing documentation.

As a demonstration not only of the bankability of the project structure and documents, but the significant appetite in the lending community for a role in Myanmar's nascent power market, the financing was substantially oversubscribed, even during the pre-bid phase.

Bankable project structure

Formulating a package of documents with a risk allocation acceptable to the international lending community was the major challenge in a country as early in its development as Myanmar. It is testament to the efforts of all involved, from the bidding stage through to signing, that the project company successfully concluded a power purchase agreement (PPA) in March 2016 with the Myanmar Electric Power Enterprise (MEPE) (now the Electric Power Generation Enterprise (EPGE),



The plant under construction

and a BOT agreement (BOTA) with the MOEE in January 2017. The project achieved financial close in May 2017.

- *PPA* – Prior to the tender, the ADB provided MOEP with a draft framework power purchase agreement through its technical assistance programme, based substantially on the form of power purchase agreement currently in use for domestic IPPs in a more developed IPP market in ASEAN.

MOEP's transaction advisers (IFC and Allen & Overy) then tailored the template PPA to the Myingyan transaction. As such, the PPA is well-drafted and detailed, with a risk allocation broadly in line with regional norms, amended to be suitable for a frontier market such as Myanmar.

The PPA is for a term of 22 years following the Phase 1 commercial operations date and is availability-based. It has a US dollar-denominated tariff and is structured as an energy conversion arrangement, pursuant to which EPGE essentially takes fuel supply risk.

- *BOTA* – The BOTA, entered into by MOEE on behalf of the Government of Myanmar, is the concession document pursuant to which the project company is granted rights to develop and operate the project for the term of the BOTA.

EPGE is highly dependent on a government subsidy as its payments for power generation are greater than its selling price for that power to its end-consumers. While a subsidised power utility is not unusual in the Asian region, EPGE's lack of a payment track-record (unlike, for example, EGAT in Thailand) means that projects will need to be structured to provide comfort to lenders on EPGE credit risk, and this is provided for on Myingyan through the BOTA.

Government backing through the BOTA is also crucial to enable the commercial lenders to procure political risk guarantees from the ADB and MIGA, given their requirement for a clear line of recourse to the government in the event of a political risk (including breach of contract) leading to a pay-out under such political risk guarantees.

Key risks

While many of the risks requiring to be addressed on the Myingyan project were the same as a gas-fired power project in any other market, some of them were given increased focus as a result of the circumstances of the Myanmar power market:

- *Offtake and tariff risks* – The international bidding process resulted in a competitive tariff, locked-in for the term of the PPA. While MEPE/EPGE's track record as an offtaker is limited, its contractual obligations under the PPA are backstopped by the BOTA with MOEE. Through cabinet approval of the project agreements, including the PPA and BOTA, the Myanmar government will ensure that MOEE can use state budget funds to satisfy its payment obligations.

A legal opinion from the Union Attorney-General's Office, being the first of its kind in Myanmar and setting an important precedent, is also provided for in order to confirm, among

other things, that MOEE's obligations under the BOTA constitute the direct obligations of the Myanmar government. This will further mitigate the offtake credit risk.

- *Fuel supply risk* – Gas-fired power plants require a secure and reliable source of natural gas for the life of the project with limited pricing risk. However, the majority of Myanmar's available gas is already allocated under long-term contracts with Thailand and China.

Given the resultant gas supply risk, it was agreed that EPGE would be better positioned to take the fuel supply risk under the PPA, with EPGE entering into a corresponding long-term gas supply agreement with the Myanmar Oil & Gas Enterprise (MOGE) to supply natural gas (originating from the Shwe offshore gas field) for use at the Myingyan power plant, with EPGE paying MOGE directly for the value of the gas delivered to the project. This also provides flexibility to EPGE in the future to manage the sourcing of gas on a portfolio basis for its projects

- *Completion risk* – The borrower has entered into a fixed-price, date-certain turnkey engineering, procurement, and construction arrangement to be undertaken by a consortium of Singapore contractors. The arrangement is based on internationally accepted principles, including liquidated damages for completion delay and performance guarantees and warranties. Since construction commenced, the borrower has achieved 6.8m man hours without any lost time injury (LTI). Further, a member of the consortium of Singapore contractors was awarded the Royal Society for the Prevention of Accidents (RoSPA) Gold Award in UK for health and safety performance for the year 2016.

- *Operation and maintenance risks* – The viability of the project will be dependent on the plant being reliably operated at the budgeted costs and satisfactorily maintained to achieve sufficient availability. Operation and maintenance works will be carried out under support agreements with Sembcorp and General Electric, given their proven track record of operating and maintaining power plants worldwide. The project's use of commercially proven and market-tested technology also helps to mitigate operation risk.

- *Interconnection risk* – While it is not uncommon in the region for responsibility for construction of transmission and fuel supply facilities to be retained by the host government, on Myingyan it is the project company that has constructed the transmission facilities connecting the power plant to the nearby Myingyan 230 kV substation, consisting mainly of a 3km transmission line. As such, the risk of any delay in interconnection is mitigated since the project does not rely on any third party for construction and completion of the transmission facilities. The facilities have since been transferred to EPGE upon completion, with a facility charge payable under the PPA to compensate the project company accordingly.

- *Legal and regulatory risks* – As outlined above, the Myanmar government has taken significant steps

to promote economic deregulation and market liberalisation, and is providing strong support for power projects, in particular the Myingyan project. However, with such progress also comes a legislative environment that remains in a degree of flux, and therefore change in law risk is passed to the government under the project documents.

Although substantial progress has been achieved, the current regulatory regime also remains untested. As such, while the support provided to the government on the Myingyan project has been crucial, continued support and assistance from multilaterals to government institutions, including EPGE and MOEE, will be an important factor in building capacity and ensuring the sustainability of projects in the longer term.

- **Land risk** – Securing the necessary land rights is often the single most important aspect in developing a power project in South-East Asia. Land issues in Myanmar can be complex and time-consuming, and ascertaining title is not straightforward. As such, on Myingyan it was agreed that it would be more appropriate for EPGE to secure the project site and enter into a land lease agreement with the project company.
- **Political risks** – Given the early stage in Myanmar's development, protection against political risks is likely to be required by any commercial banks for the foreseeable future. On Myingyan, the ADB and MIGA will provide “four-point cover” or “extended political risk guarantee” against (1) war/civil unrest (2) currency availability, convertibility and transferability and (3) expropriation/nationalisation, as well as (4) breach of contract by MOEE.

New standards

Projects that are the first of their kind shoulder the burden of setting the standards for those that follow. There are a number of aspects in which Myingyan should prove “fit for purpose” in this regard.

- The project represents the first internationally competitively tendered power project in Myanmar. The bid documentation issued by the government represents the first, and successful, attempt by the government to formulate international standard project documentation for use on power projects in the country. Having been banked, these documents are likely to form the basis for the tendering of projects going forward, increasing the likelihood of bankable projects coming to market.
- The transparent bidding process resulted in a competitive and sustainable tariff for the government. By all accounts the project is viewed internally within the government as a success, which should lead to further support for Myingyan-based tender processes. Future successful tenders and completion of more independent power producer projects should, in turn, help strengthen the regulatory and legal framework in the sector, signal growing stability to the market, and lead to a pipeline of power deals.
- The project provides a model for private sector

financing of power on the basis of a PPP structure in Myanmar. The ADB B loan structure and political risk guarantees provided by ADB and MIGA have facilitated long-term financing from international commercial banks for the project, which will set an important market-based benchmark for future financings in Myanmar.

- The tender attracted a diverse international field of prospective developers from Australia, South Korea, India, Malaysia, Singapore and Thailand, demonstrating both the high level of interest in the market as well as providing a significant level of visibility to the international investment community on the potential contractual terms they may expect to be presented with on future power project opportunities.
- The environmental and social safeguards of the project are subjected to international best practice standards. Consultations with identified affected people were conducted in accordance with ADB, IFC and AIIB requirements, and the environmental standards are consistent with the World Bank guidelines and Equator Principles. During construction, the civil work contractors also provide work opportunities for the local community.
- The new gas-fired plant will ensure system stability and reliability, and help to avoid future shortages in power generation capacity. The plant, along with its location closer to Myanmar's main load centre than hydroelectric power plants, existing and prospective, will provide stable power unaffected by seasonal weather patterns and much-needed additional capacity from a modern, efficient gas-fired technology with limited emission compared with coal fired plants.
- The project is testament to the continuing rise of regional sponsors and their financiers, including Singapore-based banks and specialist financing institutions, global and regional multilateral development banks, and their ability to mobilise the full strength and suite of the regional infrastructure financing ecosystem, and its supporting advisers, for the benefit of the region's development needs.

The road ahead

While the agreement of a bankable project structure against which international lenders are willing to commit funds and make their first forays into this new market is a significant achievement, there is clearly still a long road ahead for both the Myingyan project itself and the Myanmar power market more generally.

Much larger, and significantly more complex power projects await in the wings, particularly in the hydropower sector, and steering these through to successful completion will remain extremely challenging. Nevertheless, perhaps more than anything else, the success of such future projects will depend on building them on a secure and bankable contractual foundation, and it is in that respect that Myingyan represents a genuine landmark project in Myanmar. ■

Footnote

1 – Myanmar Investment Forum 20