

# LEADING SINGAPORE INC INTO BANGLADESH

THE SIRAJGANJ-4 POWER PLANT IS A SIGNIFICANT MILESTONE IN THE DEVELOPMENT OF THE ENERGY SECTOR IN BANGLADESH. BY **NOMI AHMAD, NG SONG MENG AND RUCHIKA SALUJA** OF **SEMBCORP UTILITIES PTE LTD**, AND **AUDRA LOW, MARAT ZAPPAROV AND TED LOW** OF **CLIFFORD CAPITAL PTE LTD**.

On August 16 2017, financial close was achieved on the US\$310m project financing raised by Sembcorp North-West Power Company Ltd (the Project Company) for the development of the Sirajganj Unit 4 power plant, a dual-fuel gas and high speed diesel electricity generation facility with 414MW (net) power capacity, located in the Sirajganj district of Bangladesh (the project). The project is a joint-venture between Sembcorp Utilities Pte Ltd (Sembcorp), a leading Singapore-headquartered developer, owner and operator of energy and water assets globally, and North-West Power Generation Company Ltd (NWPGL), a leading state-owned power generating utility in Bangladesh.

Designed as one of the most efficient combined-cycle gas turbine (CCGT) generation facilities in the country, the plant will allow Bangladesh to efficiently utilise its domestic gas resources and potentially imported LNG to underpin the country's rapid industrial and economic development.

The project represents the largest foreign direct investment by a Singaporean company into the energy sector in the country. It is the first project with an international investor under the auspices of the Bangladesh Public Private Partnership (PPP) model.

In addition, the project is notable for its pathfinder financing structure and the lender mix, as Sembcorp successfully accessed long-term project financing from lenders other than development financing institutions (DFIs) for an IPP in Bangladesh for the first time.

The involvement of Clifford Capital as one of the mandated lead arrangers and the only commercial lender in this transaction will help open up the sector to greater participation from more commercial banks and other non-bank financial institutions similar to Clifford Capital in the future. JICA has also selected this project as its first co-financing with the IFC for private sector projects in developing countries.

In this article, Sembcorp and Clifford Capital aim to share the key features of the project, the main challenges faced by the project teams and outline the salient features of the financing structure that enabled the project to proceed and, once operational, to deliver cost-effective and reliable electricity supply to the country's grid.

## The sponsors

Sembcorp is a developer, owner and operator of energy and water assets globally with its headquarters in Singapore and a strong presence in growth markets. Since its inception, Sembcorp has developed 11,000MW of power projects across gas, coal and renewable technologies in diverse geographies including Asia, the Middle East and the UK. The group takes utilities projects from start to finish, from the identification of business opportunities and the commercial and financial structuring of projects, to project execution and asset management.

Sembcorp has long-term plans to develop further power projects in the country and has established a significant presence in Bangladesh through the hiring of experienced local staff with expertise in the power sector.

NWPGL was formed under the framework of the Government Power Sector Reforms Policy and is 100% owned by the Government of Bangladesh. The company is responsible for developing and operating power generation projects in the north-west region of Bangladesh and intends to be the leading power generating utility in the country in the long run.

As of December 2016, NWPGL has total operating capacity of 444MW with another 2,596MW under development. NWPGL played a key role in achieving prompt financial close of the Project through assisting Sembcorp in discussions with the key government stakeholders.

## The project

With an electrification ratio of 76%<sup>1</sup> as at 2016 and a 10-year average increase in electricity demand of circa 9.3%<sup>1</sup> driven by industrial activity and population growth, the Government of Bangladesh (GOB) has committed to providing access to electricity to all citizens by 2021. The Sirajganj-4 independent power producer is a key component of this commitment and will contribute to the alleviation of power generation capacity shortages in the country. The plant, fuelled primarily by natural gas with the ability to operate on high-speed diesel as a back-up fuel, will provide clean and reliable power supply to the grid.

Sembcorp was awarded the project by the GOB in September 2015 following a detailed proposal submission. Clifford Capital and the International Finance Corporation (IFC) expressed early interest

in supporting Sembcorp with long-term financing and were actively engaged with Sembcorp during the initial phase of the financing, setting benchmark terms and steering the financing structure to ensure bankability of the project.

The key project documents – implementation agreement, power purchase agreement, gas/fuel supply agreements and land lease agreement – follow established international principles of bankability, providing for a fair and equitable risk allocation between the government counterparties, the Project Company and the lenders.

Key risks such as electricity demand, currency fluctuations, change in law, force majeure and gas supply are borne by the GOB and the performance and payment obligations of the government counterparties, including termination payments under the power purchase agreement, are guaranteed by the GOB. The balanced risk allocation embodied in the well-drafted project documents was a key contributor to the strong confidence of lenders in the IPP sector in Bangladesh and translated into the Project Company being able to obtain competitive financing terms, including obtaining the longest tenor commercial debt financing to-date for an IPP in the country.

Expected to be completed in 2018, the plant will supply power capacity and electrical energy to the grid under a 22.5-year power purchase agreement (PPA) with the Bangladesh Power Development Board (BPDB), the state-owned utility. Gas will be supplied by Pashchimanchal Gas Company Ltd (PGCL), while high-speed diesel will be provided by Bangladesh Petroleum Corporation (BPC) under long-term supply agreements that are coterminous with the PPA. Both PGCL and BPC are state-owned companies responsible for gas and petroleum products respectively.

Construction of the project will be undertaken by a consortium consisting of Sembcorp Project Engineering Company Pte Ltd (SEMBPEC), Sembcorp Design & Construction Pte Ltd (SDC) – Sembcorp, SEMBPEC and SDC are wholly owned, direct/indirect

subsidiaries of Sembcorp Industries – and SEPCO III Electric Power Construction Corporation under a fixed price, turnkey date-certain EPC contract.

The project will utilise gas turbines manufactured by Mitsubishi Hitachi Power Systems (MHPS). L&T Sargent & Lundy, the lenders’ technical adviser, undertook a detailed review of the construction arrangements and the turbine technology to ensure that it was fit-for-purpose.

The Project Company will be responsible for operations and maintenance of the plant. There will be dedicated staff (consisting of specialists and key technical personnel) hired by Sembcorp and placed at the Project Company. In addition, a long-term services agreement has been executed between the Project Company and MHPS for the maintenance of the turbines.

**The financing**

The sponsors structured a competitive financing package comprising fixed and floating-rate US dollar-denominated senior secured term long-term loan facilities provided by Clifford Capital, the International Finance Corporation (IFC), CDC Group Plc (CDC) and Japan International Cooperation Agency (JICA). The Clifford Capital tranche is an innovative combination of fixed and floating-rate loans benefiting from the IFC’s B-Loan structure and a partial risk guarantee from the Multilateral Investment Guarantee Agency (MIGA).

The participation of the IFC, CDC, JICA and MIGA was integral to the financing of this project as it provided the halo effect of DFI participation. Such financing structures where commercial lenders lend alongside multilateral institutions with a portion of their loan covered by political risk insurance providers such as MIGA, are likely to be key to unlocking further participation from international commercial banks in the IPP sector in Bangladesh.

The project marks the IFC’s first investment with Sembcorp and is IFC-MIGA’s first joint engagement in Bangladesh. This transaction is also JICA’s first co-financing project with IFC.

**FIGURE 1 - CONTRACT STRUCTURE**

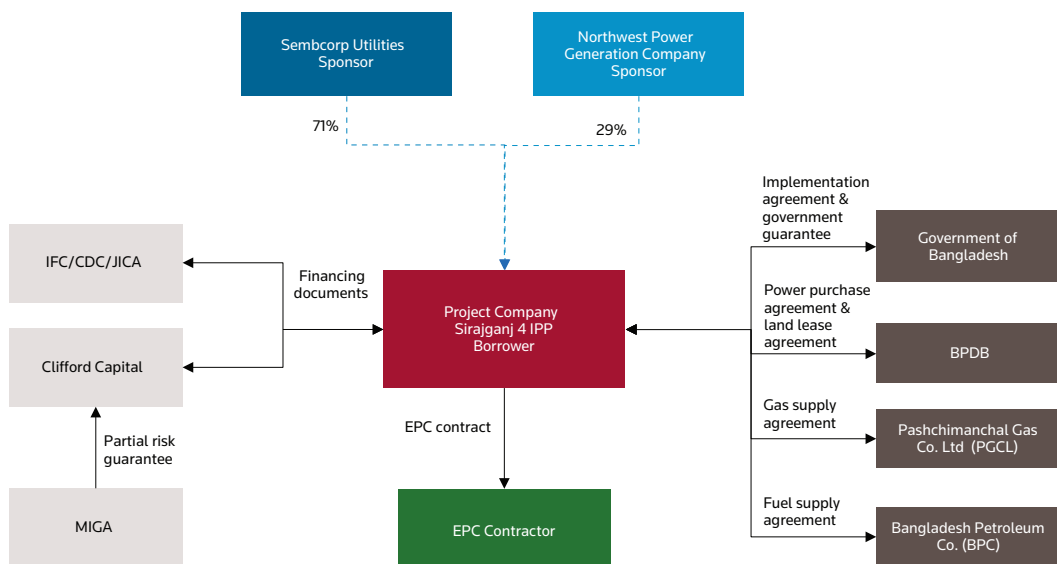


TABLE 1 - PROJECT ROLES

| Role  | Parties involved   |
|---|--|
| Initial mandated lead arrangers                       | CDC  |
|   | Clifford Capital (Modelling bank)  |
|   | IFC (Technical and Insurance bank)   |
|   | JICA   |
| Political Risk Guarantee provider                     | MIGA   |
| Account bank, inter-creditor agent and security agent | Standard Chartered Bank  |
| Lenders' advisers                                     | Shearman & Sterling and Ahmed & Farooq (International and local legal counsel) |
|   | L&T Sargent & Lundy (Technical adviser)  |
|   | INDECS (Insurance adviser)   |
|   | IHS (Gas and power market adviser)   |
|   | KPMG (Model auditor and Tax/Accounting adviser)                                |
|   | ERM (Environmental adviser)  |

### Financing considerations

• *Project structure and technology choices* – The constraints on the availability of domestic gas supply in Bangladesh are well publicised. The increase in demand for gas in the power and fertiliser sector over time together with depleting domestic reserves have resulted in elevated gas supply risks for new projects in the country. The lenders spent a considerable amount of time on diligence around the gas supply risks and the mitigating factors. These issues were addressed as follows:

i) Robust contractual protections. Gas supply risk mitigation through the project documents. All payment obligations of government counterparties are guaranteed by the GOB;

ii) State-of-the-art technology choices. Power plants are expected to be dispatched according to an “economic merit order”, a principle that favours the most efficient plants with the lowest fuel and operating costs. The sponsors thus deliberately selected the most efficient and state-of-the-art combined-cycle gas turbine power generation technology;

iii) Availability of back-up fuel. The plant has the flexibility to run on high-speed diesel as a back-up fuel in situations of interruptions to gas supply;

iv) Sensitivity analysis. Extensive financial analysis was carried out by the lenders led by Clifford Capital as modelling bank to quantify the financial impact of gas supply interruptions and operations under high-speed diesel. Ultimately, the structure was shown to have the ability to withstand severe downside scenarios that envisaged prolonged gas supply disruptions;

v) Alternative fuel sources. To alleviate the gas supply constraints in the country, the GOB, like many other emerging market governments, has started to look at importing LNG regasification via FSRUs, which can help bring new gas into the country on a more timely basis.

• *Partial risk guarantee* – The Multilateral Investment Guarantee Agency (MIGA) provided a political risk guarantee to cover Sembcorp’s equity investment, as well as a portion of Clifford Capital’s debt investment into the project. This transaction marks MIGA’s first engagement with Sembcorp in Bangladesh and the first joint transaction between Clifford Capital and MIGA. MIGA’s involvement not only provides contractual protections against specific political risk events,

but a strong “halo effect” from MIGA’s direct access to government and ability to mediate disputes with host governments.

• *Collaboration amongst the lender group* – the IFC and Clifford Capital have been working on the project since December 2014 and CDC was brought into the project in November 2015 as the financing structure evolved. CDC was able to work fast and quickly got up to speed with key issues of the deal – testament to the professionalism of the CDC team and their strong familiarity with Bangladesh through involvement in precedent transactions.

CDC was thus able to expeditiously obtain credit approvals with strong support from Sembcorp and its two co-lenders – the IFC and Clifford Capital. The IFC as technical and insurance bank helped to address credit-related queries relating to the technical aspect of the project while Clifford Capital as modelling bank provided critical support on the financial analysis underpinning the credit story of the project.

JICA provided project financing through JICA’s private sector investment finance programme, leveraging on the IFC’s early involvement in the transaction. JICA will continue providing assistance to the Bangladesh energy sector and intends to proactively promote partnerships with the IFC and other international financing institutions for economic development in developing countries.

Throughout the financing process, the lender group worked together in a collaborative and supportive manner with the common goal of achieving financial close as soon as possible. This strong alignment between the various parties ensured that execution of the financing documents and completion occurred in a timely manner.

### Conclusion

The project marks a significant milestone in the development of the energy sector in the People’s Republic of Bangladesh and is testament to the continuously improving climate for foreign investment in the country. The innovative financing structure, involving a mix of DFI’s and a non-bank financing institution with a commercial mandate, paves the way for a more diverse funding mix. ■

### Footnote

1 – Source: Bangladesh Power Development Board Annual Report 2015-2016