Project Name	Bangladesh Bhola IPP
Country	The People's Republic of Bangladesh
Sector	Energy / Power generation
Project Number	000057
Sponsor	Shapoorji Pallonji Infrastructure Capital Company Private Limited
Borrower	Nutan Bidyut (Bangladesh) Limited
Environmental and Social Category	В
Date of PSI Prepared or Updated	Jan. 11, 2018
Date of Concept Review Approval	Nov. 6, 2017
Date of Final Review Approval	Jan. 10, 2018
Projected Date of Board Consideration	Feb. 9, 2018

# **Project Summary Information**

## I. Introduction

For the past decade, the average annual gross domestic product growth rate of Bangladesh has been 6 percent. To continue this growth momentum, the country has to deal with infrastructure deficiencies, particularly power supply shortage. Only 76 percent of the population currently has access to electricity. The total installed generation capacity in Bangladesh is currently around 12,000 megawatts (MW). With increasing power demand, the capacity is projected to increase to 20,000 MW by 2021 and 33,000 MW by 2030, according to the Power System Master Plan of Bangladesh.

The Asian Infrastructure Investment Bank (AIIB) is considering up to USD60 million of debt financing for the construction of a greenfield 220 MW (net capacity) dual-fuel (gas and high-speed diesel) combined cycle power plant to be located in Bhola, an island in the Barisal district of Bangladesh. The proposed project will be implemented on a build-own-operate basis.

## II. Project objective and expected result

The objective of the project is to increase power generation capacity in Bangladesh and help the country meet its power demand as it faces acute power shortages. Upon completion, the project will increase power generation by around 1,300 gigawatt hours annually.

#### III. Project description

The project will be developed by Shapoorji Pallonji Infrastructure Capital Company Private Limited through Nutan Bidyut (Bangladesh) Limited (NBBL), a special purpose vehicle established in Bangladesh for the sole purpose of developing and operating the project.

The 220 MW power plant will include two gas turbine generators, two heat recovery steam generators and one steam turbine generator along with the balance of the plant, including facilities for fuel gas transportation, compression and conditioning system, high-speed diesel storage, cooling water system and water treatment facility. Power will be evacuated through the proposed gas insulated switchyard of the proposed plant to the existing 230 kV air insulated switchyard to Barisal substation through the existing 230 kV transmission line. A gas pipeline of around 5 kilometers from the Shahbazpur gas field to the project site alongside the existing pipeline will be constructed.

Preliminary construction work began in the fourth quarter of 2017 and will be completed in approximately 26 months, with combined cycle commercial operations targeted to commence by December 2019.

The project site is around 28 kilometers north of the Bhola district headquarters, around three kilometers from the nearest Borhanuddin town. It is situated on the right bank of Dehular Khal and is accessible via waterways and the Charfassion-Bhola highway road (R890). The project site is adjacent to an operating 225 MW plant of the Bangladesh Power Development Board (BPDB) which has been commissioned in 2015. The project will thus be the second power project to be located within the same Bhola site complex.

# IV. Environmental and social

The project has been prepared using AIIB's Environmental and Social Policy (ESP) and the legislation of Bangladesh. Environmental clearance for the project has been obtained from the Department of Environment, Government of the People of Bangladesh on Mar. 20, 2017. Under AIIB's ESP, and Environmental and Social Standard (ESS) 1: Environmental and Social Assessment and Management and ESS 2: Involuntary Resettlement are applicable to the project. The project has been classified as Category B since its impacts are similar to those induced by the existing adjacent BPDB power plant, limited in number and localized to the project area. The project's instruments comprise an Environmental and Social Impact Assessment (ESIA), an Environmental and Social Management Plan (ESMP), a Resettlement Planning Framework, a Gender Action Plan, a project-level Grievance Redressal Mechanism (GRM), a Stakeholder Engagement Plan, a Labor and Influx Management Plan (LIMP) and relevant Environmental, Health, Safety, Social (EHSS) procedures, also in line with the AIIB's ESP.

Environmental and social impacts of the project have been identified through AIIB's environmental and social due diligence which included a site visit. These have been ascertained to be manageable to acceptable levels through the implementation of the ESMP and other plans. The impacts encompass increased noise and vibration during the plant construction and operation, change in air quality due to construction dust and combustion emissions, affected aquatic ecology and surface water quality due to dredging and effluent discharge and land acquisition and associated development in the area. Cumulative impacts on physical, biological and socioeconomic conditions are anticipated due to the existing adjacent BPDB power plant and the proposed project. Principal risks associated with the project include transportation of natural gas through the pipeline, chlorine and potentially in the future, the transportation, handling (loading/unloading) and storage of high-speed diesel. Appropriate design features have been adopted while a high-level Emergency Response Plan, an Emergency Preparedness and Response Procedure and an onsite Spill Control and Management procedure are available.

The land requirement for the project is approximately 22.78 acres, half of which has been transferred to NBBL by BPDB on a long-term lease. NBBL has acquired a quarter of it on a willing buyer-willing seller basis, and the remaining land for the gas pipeline right-of-way will be acquired by the Sundarban Gas Company Limited for and under the supervision of NBBL. Land acquisition for the plant site and right-of-way will induce economical resettlement, while a minimal number of households may be physically displaced. The process of acquisition, including consultation during the planning and implementation phases, will consider avoidance and minimization of resettlement, and comply with the AIIB's ESS. The LIMP, Human Resources Management and Labor Management procedures prepared by NBBL address in-migration's impact on local communities, employment conditions and occupational health and safety measures in line with AIIB's requirements. During the ESIA process, project-affected communities have been consulted to identify concerns. The ESIA and other plans are disclosed on http://www.shapoorjipallonji.com/company/SPInfrastructure and a project-level GRM has been designed for redress of community grievances at field and corporate levels.

# V. Estimated project cost and financing source

The total project cost is estimated at approximately USD271.9 million. The proposed AIIB investment is a loan of up to USD60 million.

# For inquiries about the project, contact:

### Sponsor:

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## Borrower:

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### AIIB:

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#### Local access for project documentation:

The full text of the ESIA and the ESMP report is available in hard copy at the project company office located in Dhaka, Bangladesh as per the address indicated above.