The Rampal Power Station is a proposed 1320 megawatt coal-fired power station at Rampal Upazila of Bagerhat District in Khulna, Bangladesh.The proposed project, on an area of over 1834 acres of land.

- **Sponsor:** Bangladesh-India Friendship Power Company Pvt Ltd. (BIFPCL)
- **Parent company:** Bangladesh Power Development Board (Government of Bangladesh) (50%) and National Thermal Power Corporation (Government of India) (50%)
- **Location:** Mongla upazila, Bagerhat district, Khulna division, Bangladesh
- **Coordinates:** 22.5924582, 89.556427 (exact)[3]
- **Status:** Phase I: Construction; Phase II: Cancelled

- **Gross Capacity:** Phase I: 1320 MW (2 x 660 MW); Phase II: 1320 MW (2 x 660 MW)
- **Type:** Supercritical
- **Projected in service:** 2022
- **Coal Type:**
- **Coal Source:** Imported (Indonesia, South Africa, and Australia)
- **Source of financing:** US$1.6 billion loan from Exim Bank India, US$400 million equity from BIFPCL

The Maitree super thermal power project is a 1,320MW coal-fired power station under construction in Rampal, Bangladesh.

The power plant is being developed by Bangladesh India Friendship Power Company (BIFPCL), a 50:50 joint venture between India's state-run National Thermal Power Corporation (NTPC) and Bangladesh Power Development Board (BPDB).

Construction on the Rampal power plant was started in 2017 with commissioning expected by 2022.

It will be one of the biggest coal-fired power plants in Bangladesh, along with the Payra Power Plant in Pataukhali that commenced test production in January 2020.

PROJECT GALLERY

Location and site details

The Maitree super thermal power project is located at Moithara, Rampal, in the Bagerhat district, approximately 23km south-east of the Khulna city, Bangladesh.

The coal-fired facility is being developed on a 1,834acre-site on the bank of Passur River in south-west Bangladesh.

The project site is located approximately 14km away from the Sundarbans, a UNESCO heritage site which is the home to one of the largest mangrove forests.

The Khulna Junction railway station is the nearest railhead which is located approximately 36km away from the project site.

Plant make-up

The Maitree power plant will consist of two ultra-supercritical coal-fired units of 660MW capacity each and a 275m-tall twin reinforced concrete chimney (RCC) with glass-reinforced plastic (GRP) liner.

Both the units will be equipped with flue gas desulfurization (FGD) and dry bottom ash- handling systems to control emissions.

Other ancillary facilities will include a mill reject system, coal de-blocking device, an auxiliary boiler, condensate polishing unit, as well as AC and ventilation systems.

The project also involves a 1.2km-long jetty to receive coal supply and a water intake system to draw process water from the Passur River.

Coal supply for the Rampal power plant

The Maitree super thermal power station is estimated to require 3.8 million tonnes per annum (Mtpa) of coal to operate at a plant load factor (PLF) of 80%.

The coal for the power plant will be imported from Australia, Indonesia, and South Africa at Akram Point which is located approximately 60km downstream from the Mongla Port in Bangladesh.

Coal from the Akram Point will be further transhipped in smaller ships through the Passur River to the power plant site.

Maitree power project finance

The Maitree super thermal power project is being financed through a £1.3bn ($1.6bn) loan from the Export-Import (EXIM) Bank of India. BIFPCL entered into a loan agreement with the EXIM Bank of India in March 2017.

Contractors involved

Bharat Heavy Electricals Limited (BHEL) was awarded an engineering, procurement, and construction (EPC) contract worth £1.15bn ($1.5bn) for the Maitree super thermal power plant in July 2016.

GE was awarded a subcontract worth £31m ($40m) by BHEL to supply components and services for the steam generator island package for the 1.3GW coal-fired power project in May 2017.

Power Mech Projects received a £56m ($70m) contract for civil and architectural works of all buildings, structures and associated works for the power plant in January 2020.

It was also contracted for the civil structural works for the coal handling plant (CHP), ash handling plant (AHP), induced draft cooling tower (IDCT), as well as for the erection, testing and commissioning of turbine generator auxiliaries including the fire protection system and LP piping for the power, under separate contracts awarded in 2018 and 2019.

BTL EPC, a subsidiary of India-based Shrachi Group, was awarded a £23m ($31m) contract to design, manufacture, supply, and commission the complete coal conveyor system for the plant in September 2018.

The contractors and suppliers involved with the construction of the coal jetty for the power plant include Afcons Infrastructure, a subsidiary of India's Shapoorji Pallonji Group, and the Dextra Group.

Economics Analysis:

According to a 2016 report by the Institute for Energy Economics and Financial Analysis, the Rampal power station will produce electricity that will cost 32% more than the average electricity costs in Bangladesh, despite multiple subsidies from Bangladesh and India. The financial think tank argues the project amounts to US$3 billion in public subsidies: "First, a below-market-rate loan by Indian EXIM Bank represents a US$988m subsidy effectively paid by Indian taxpayers to Bangladeshi consumers. Second, the Bangladesh government is proposing a 15-year income tax exemption for the plant, an exemption worth US$936m. Third, Bangladesh would be granting an effective

annual US$26m subsidy by conducting maintenance dredging to assure coal delivery to the plant.