



Patuakhali, Bangladesh



Key facts about the plant

- 2x660MW ultra-supercritical coal-fired power plant
- Owner: RPCL - Norinco, Bangladesh
- Contractor: TEPC, China



Key facts about the chimney

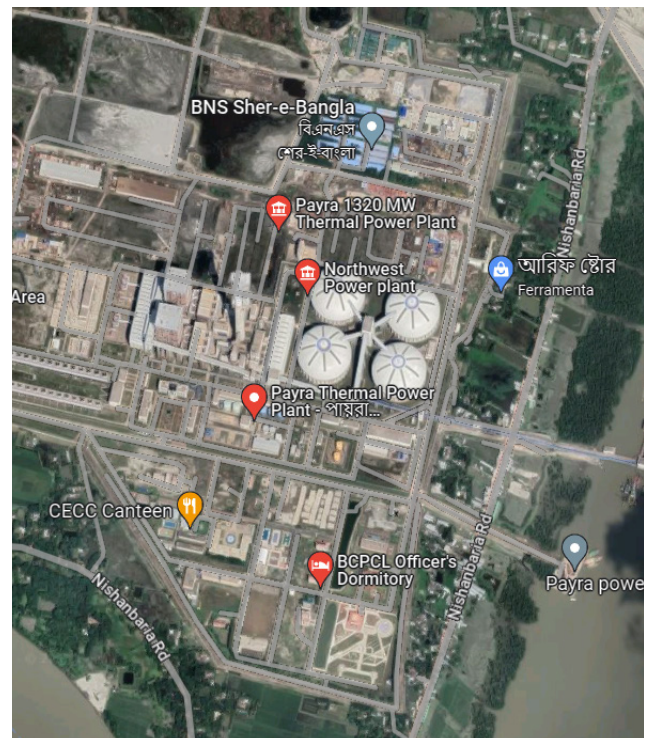
- Ongoing
- Concrete chimney
- Bottom conical to top cylindrical shape
- H 220m
- Outer $\varnothing = 24\text{m}$ (bottom), 18.3m (top)
- 2 carbon steel liners, $\varnothing = 6,500\text{mm}$ each with borosilicate protection

The Patuakhali power plant is constructed in the Patuakhali district of Bangladesh. It is built on 500 acres of land in Kalapara, in the Patuakhali district of the Barisal administrative division of Bangladesh. The power plant is developed by RPCL-Norinco Intl Power (RNPL), a joint venture between Bangladesh's state-owned Rural Power Company (RPCL) and Chinese state-owned Norinco International (Norinco).

Tianjin Electric Power Construction (TEPC), which is a wholly-owned subsidiary of Chinese state-owned China Energy Engineering Group is in charge of the main construction, equipment procurement and installation, plant commissioning, trial operation and performance testing. FERBECK INTERNATIONAL SA has been awarded an EPC contract for one 220 meters-height concrete chimney by TEPC, China.

The scope of work includes:

- foundation
- concrete shell
- outer shell coat
- steel platforms and walkways
- borosilicate as internal protection
- all other steel elements (doors, windows...)
- access lift and ladders
- electric system (lighting, inner power supply, aircraft signalization lamps...)
- lightning protection system





Foundation

The foundation is made of 4,490m³ of concrete with the following size:

- 22.9m diameter
- h 4.1m at EL.-4.1m



Concrete shell

The outer concrete shell is made of 6,188m³ of concrete with the following size:

- 24m (bottom), 18.3m (top) of external diameter
- h 220m

The casting is performed with a slipform operating 24/7.





Platforms

7 platforms are installed inside the structure:

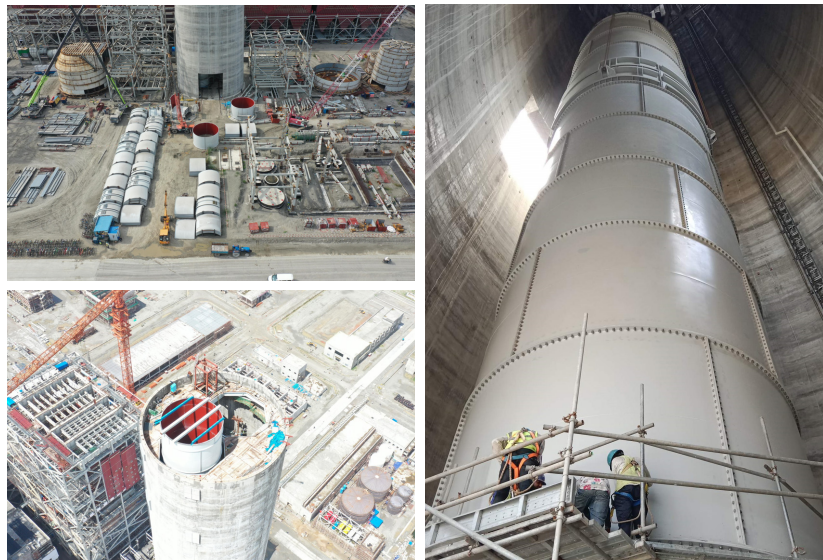
- roof platform at EL.+215m
- support platform at EL.205m
- service platform at EL.+180m
- circular platform at EL.+144m
- service platform at EL.+108m
- guide platform (CEMS) at EL.+72m
- inspection platform at EL.+40m

The structure of support platform is made of a huge steel profile for bearing the load of the suspended inner liner.



Liners

The chimney has 2 carbon steel liners, $\varnothing = 6,500\text{mm}$ each with borosilicate protection.





| Overview of the plant

The Patuakhali power plant is a 1.32GW coal-fired power plant.

