



নর্থ-ওয়েস্ট পাওয়ার জেনারেশন কোম্পানী লিমিটেড
NORTH-WEST POWER GENERATION COMPANY LIMITED
(An Enterprise of Bangladesh Power Development Board)

বিদ্যুতের আলোক রেখা
দিন বদলের দীপশিখা

On the occasion of inauguration of Sirajganj 150 MW Power Plant by **Sheikh Hasina, Hon'ble Prime Minister** of the Government of People's Republic of Bangladesh

COMPANY PROFILE

Preamble :

A loan agreement between ADB and People's Republic of Bangladesh (Loan No. 2332-BAN) was signed on 28.06.07 for financing towards Sirajganj 150 MW and Khulna 150 MW Peaking Power Plant Projects. In order to make effective the ADB Loan, and with a view to mitigating the growing demand and low-voltage problem of electricity of the country, North-West Power Generation Company Limited (NWPGL) had been formed, incorporated and registered on 28 August 2007 under the framework of the Government Power Sector Reforms Policy as well as the provisions of the Companies Act 1994.

Present Activities :

The Company primarily started its functioning with Sirajganj 150 MW Peaking Power Plant Project and Khulna 150 MW Peaking Power Plant Project and thereafter Bheramara 360 MW Combined Cycle Power Plant Development Project. Its first power plant at Sirajganj having capacity of 150 MW resumes generation of electricity (on trial) from 03.11.2012. Construction of liquid fuel for the same plant will end in March/2013. It is expected that its second power plant in Khulna having same capacity (150 MW) will come in May/2013. It is also expected that the implementation work of Upgradation of Sirajganj 150 MW to 225 MW Combined Cycle Power Plant Project and that of Upgradation of Khulna 150 MW to 225 MW Combined Cycle Power Plant Project will be finished in December/2013 and December/2014 respectively. The Pre-qualification Document for selection of bidders for Bheramara 360 MW Combined Cycle Power Plant Development Project has been received. Bangladesh Government will ink for 33rd ODA Loan Package with JICA immediately for this purpose. It is expected that the simple cycle and the combined cycle of the plant will come in September/2015 and May/2016 respectively. At the Sirajganj Power Generation Hub under Public-Private Partnership (PPP), the Company and M/s LANCO are jointly implementing Sirajganj 300-450 MW Combined Cycle Power Plant Project (Dual-Fuel). Moreover, being satisfied at the performance of the Company, the Government has taken decision in principle to implement Barapukuria 250 MW Coal Fired Thermal Power Plant Project (3rd Unit) under the banner of North-West Power Generation Company Limited.

The Power Plant :

The Bangabandhu Bridge has been constructed over the Jamuna River which flows North-South over the mid-land of the country. Sirajganj 150 MW Power Plant is located near the West End of this Bangabandhu Bridge in the locality of Soydabad of Sirajganj Sadar Upazila under the district of Sirajganj. Electricity is the main driving force for socio-economic and industrial development. In this perspective, for playing a vital role in poverty alleviation as well as contributing towards overall socio-economic and industrial development of the country, especially in the North Bengal area, the Government of Bangladesh incepted the project financed by ADB & GOB. In this context, Sheikh Hasina, Hon'ble Prime Minister of the Government of People's Republic of Bangladesh, laid down the foundation stone of this project on 09 April, 2011 and instructed the Company Authority to implement the project within the stipulated time. Then, under the close monitoring of Power Division and sincere, spontaneous and lawful support and co-operation from Economic Relations Division, Finance Division, NBR, Ministry of Planning, Ministry of Commerce, ADB, BPDB, Petrobangla, Bangladesh Railway, PGCL, PGCB, M/s Minconsult (Foreign Consultant of the Project), M/s CMC (EPC Contractor of the Project) and other stakeholders to the Company, the project achieved a grand success. With a very limited manpower and scope of opportunities, the Company Authority and employees have rendered relentless efforts and activities for last 18 months which lead the plant for generation of electricity. Now, this project has become a reality. The plant resumes generation of electricity on trial basis from 03 November, 2012. The condition of power system of the locality will enhance by using the electricity generated from this plant. It will play a prolific role in socio-economic development and economic emancipation of the locality. Cottage industries, especially the poor women associated with the power-looms of this area, will be directly benefited by this plant.

The present democratic government has taken decision to upgrade this plant from 150 MW simple cycle peaking power plant to 225 MW combined cycle power plant. As a consequence, the nation will receive more 75 MW without any additional fuel since existing power plant exhaust flue gas will act as fuel.

Salient Features of the Power Plant

Name of the Power Plant	: Sirajganj 150 MW Power Plant
Location of the Plant	: Soydabad, Sirajganj
Executing Agency	: North - West Power Generation Co. Ltd. (An Enterprise of Bangladesh Power Development Board)
EPC Contractor	: M/s. China National Machinery Import & Export Corporation (CMC), China
Consultants	: i) Foreign M/S. MinConsult Sdn Bhd, Malaysia ii) Local M/S Modern Engineers Planners & Consultants Ltd., Dhaka
Financer	: GOB and ADB
Loan Agreement No.	: ADB's Loan No. 2332 -BAN
EPC Cost	: BDT 7992.90 Million
Total Project Cost	: BDT 9622.63 Million
Signing of the EPC Contract	: 12 October, 2010
Ground Breaking Ceremony	: 09 April, 2011
Plant Capacity	: 150 MW ±10 %
Fuel Type	: (i) Primary -Natural Gas, (ii) Alternative-HSD
Generation of Electricity (on trial)	: 03 November, 2012
Safety & Security Measures During	: (i) Casualty -None (ii) Injury -None

Future Development Plan :

The Company has already become competent and capable enough to incept cost-effective power generation projects of any capacity and any type of primary fuel. It intends to have a schematic plan for installing coal-fired power plants and renewable energy power plants. Construction of a power plant is a highly expensive and time-consuming issue. This is because outside the government funding, a planning has been adopted to construct some more power plants by using fund from other sources as a part of future development plan.

S/L	Name of the Project	Type of Fuel	Estimated Cost in US\$ (in million)
1	Barapukuria 250 MW Coal Fired Thermal Power Plant Project (3rd Unit)	Coal	280.00
2	Sirajganj 225 MW Combined Cycle Power Plant (2nd Unit)	(i) Primary-Natural Gas (ii) Alternative - HSD	187.48
3	Khulna 225 MW Combined Cycle Power Plant (2nd Unit)	(i) Primary -Natural Gas (ii) Alternative-HSD	187.48
4	Bheramara 360 MW Combined Cycle Power Plant (2 nd Unit)	(i) Primary-Natural Gas (ii) Alternative-HSD	335.00

It hopes to be the leading power generating utility and a branded icon in Power Sector in the country within a shortest possible period. In fine, if the Government takes decision and instructs the Company Authority to implement any sort of new power plant project, the Company is well prepared for this.

POWER SECTOR AT PRESENT

Power Sector at a Glance :

Installed Capacity	8525 MW (December 2012)
Present Demand	5700 MW
Present Generation Capacity	5000-5500 MW
Maximum Generation (4 th August, 2012)	6350 MW
Transmission Line (230KV & 132KV)	8949 km
Distribution Line (33KV and below)	281123 k
No. of Consumers	13.543 million
Access to Electricity	60%
Per Capita Power Generation (including captive)	292 kwh

Installation of New Power Plants: January, 2009 to December, 2012

- New 54 power plants have been commissioned
- Total generation capacity of these plants is 3845 MW
- Gas based generation 1873 MW and liquid fuel based generation 1972 MW
- 1662 MW in public sector and 2183 MW in private sector

Signing of New Power Plant Contracts : January, 2009 to December, 2012

- Out of 61 projects 59 contracts having capacity of 8288 MW have been signed
- In the mean time 34 power plants having capacity of 2851 MW have resumed generation of electricity
- Rest 27 power plant projects having capacity of 5437 MW are under construction

Projects under Tendering Process:

- 17 projects having capacity of 3396 MW are under tendering process
- Contract signing for these projects will be done in turn

Alternative Fuel:

- It is inevitable for using multi-type fuels for gas crisis
- In FY 2012 generation of electricity was as follows :

Gas based-80%
Liquid fuel based-15%
Coal based -3%
Hydro based-2%

- If power generation begins by using coal in 2016, the use of liquid fuel will reduce in generation of electricity

Financing in Power Generation Projects:

- It is necessary for investment of USD 18.00 billion for about 16000 MW for 2010 to 2017
- About USD 9.00 billion investment in public and private sectors have been assured

Generation Cost:

Cost of generation of electricity depends mainly on the cost of fuel.

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