

**POLICY GUIDELINES
FOR POWER PURCHASE FROM
CAPTIVE POWER PLANT**



**POWER DIVISION
MINISTRY OF POWER, ENERGY AND MINERAL RESOURCES
PEOPLE'S REPUBLIC OF BANGLADESH.**

February-2007

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1. Objective

Adequate electricity supply plays a central role in development and realisation of the country's economic goals. Economic growth is being impeded both by poor electricity supply quality and by electricity supply interruptions, particularly in the peak period. To reduce the gap between supply and demand for electricity, and to make best use of energy resources, the Government of Bangladesh, pursuant to its powers under section 24(1) of BERC Act, and having consulted with the Commission pursuant to section 24(2) of BERC Act, hereby declares following Guidelines to (a) harness the surplus capacity of captive power plants, and (b) permit electric utilities to purchase electricity from captive power plants.

2. Definitions

- 2.1 *Bangladesh Energy Regulatory Commission (BERC)* is the commission established under Act 13 of 2003 titled BERC Act 2003. The terms *Commission, BERC* and *Bangladesh Energy Regulatory Commission* are synonymous.
- 2.2 *Captive Power Plant (CPP)* is a plant which produces electricity for its own use or for a group for their own use.
- 2.3 *Customer* means any person/entity who is supplied with electrical energy by any *Distribution Licensee*.
- 2.4 *Delivery Point* means the receiving end/point/terminal of power purchaser.
- 2.5 *Distribution Licensee* means an entity licensed to undertake distribution business under the BERC Act 2003.
- 2.6 *Export* means the gross quantum of electrical energy in KWh delivered from the Captive Power Plant at the *Delivery Point*.
- 2.7 *Host Distribution Licensee* of a CPP, or a prospective CPP, means the Distribution Licensee who owns the network to which the CPP is connected or to which the prospective CPP intends to connect.
- 2.8 *Network* means the electrical network of the Entities in 230KV/ 132KV/ 33 KV/ 11KV/ 0.4KV transmission or distribution line.
- 2.9 *Non-Utility Consumer* means a user of electricity receiving electrical energy from either a *Small Power Plant* or a *Captive Power Plant* but not a consumer of an electric utility.

- 2.10 *Off-peak Period* means all hours other than those in the Peak Period.
- 2.11 *Owner of Captive Power Plant* means a person or a group or an entity who establishes such generation for own use.
- 2.12 *Peak Period* means 17.00 to 23.00 hours of each day or such other hours as the Commission may notify.
- 2.13 *Small Power Plant* means power plant established under policy guidelines for Small Power Plant (SPP), 2000.
- 2.14 *Undertaking* means any entity relating to generation of electricity, transmission, transportation, storage, distribution or any installation for supply of commercial energy. The terms *Undertaking*, *Entity* and *Utility* are synonymous.

3. Opening of the Power Market to CPPs

- 3.1 Each CPP will be able to sell electricity at tariffs approved by the BERC:
 - (a) to its Host Distribution Licensee,
 - (b) to any other Distribution Licensee.

4. Approvals and License Requirement

- 4.1 For selling electricity, the Captive Power Plants shall have to obtain license from the Bangladesh Energy Regulatory Commission (BERC).
- 4.2 Any Captive Power Plant licensee may sell power to a Distribution Licensee at rates established by the BERC pursuant to tariff criteria outlined in the Policy Guidelines. Such sale of power to the utilities shall be by an Agreement approved by the BERC.
- 4.3 The Captive Power Plant will need to comply with all relevant laws of Bangladesh including Environmental Standards.
- 4.4 All statutory clearances for selling power by the Captive Power Plant have to be obtained by the owner of the Captive Power Plant on his own accord.
- 4.5 Permission from the concerned Entities will be required to synchronize and operate a Captive Power Plant with the network.

5. Tariff for Power Purchase from Captive Power Plant

- 5.1 The power purchase tariff shall have a structure that reflects the components of underlying costs to the extent reasonable, and can also vary by peak and off- peak period.

- 5.2 The power purchase tariff shall be expressed in Taka/kWh.
- 5.3 Notwithstanding the methodology described in 5.1 and 5.2 above, the tariff for purchasing power from a Captive Power Plant by the Utility shall not exceed the published tariff (effective from 1st March 2007) by which BPDB sells power at 132 KV (Category G1) excluding wheeling charges ; Provided that for increase of price of fuel, the fuel component of the tariff for purchase of power from the CPP may be adjusted.
- 5.4 The tariff proposal by the CPP shall contain break up of all components including fuel cost component. The Tariff shall be approved by the BERC.

6. Power Off-take

CPP will have to enter into an Agreement with the electric utility for the sale of electricity on terms mutually agreed upon and such Agreement shall be approved by the BERC. The electric Utility power purchaser shall have the option not to purchase electricity from CPP during off- peak hours.

The interconnection network required for the supply of electricity to the contracted electric utility shall be built by the Owner of Captive Power Plant. The cost of inter-connection with network including switchgear, metering, protection, etc. will be borne by the Owner of Captive Power Plant.

7. Transmission Charges

For selling electricity to any Distribution Licensee other than the Host Distribution Licensee, the CPP may transmit power through existing transmission and distribution network subject to availability of adequate network capacity. In that case the CPP will have to pay the wheeling charges, as fixed by the BERC, to the owner of the network.

8. Conditions of Supply

8.1 Voltage Level

The Voltage of supply during steady flow of power to the network of the Entities from Captive Power Plant shall be subject to approval by the Entities, but shall normally be as under:

<u>Plant Surplus Capacity</u>	<u>Voltage Level</u>
Less than 1 MW	0.4 kV/ 11 kV
Over 1 MW to 5MW	11 kV/ 33 kV
Over 5 MW to 10 MW	33 kV
More than 10 MW	33 kV or above

8.2 Frequency and Voltage fluctuations

Frequency for power supply will be 50 Hertz. Variation of frequency and voltage shall be in accordance with the Grid Code of Bangladesh. The Captive Power Plant must have arrangements for handling, absorbing and suppressing abnormal fluctuations in respect of voltage and frequency.

8.3 Power Factor

The Power Factor of power delivered by the power plant shall normally be 0.8 (Lagging).

8.4 Protection

Appropriate protections are to be installed by the CPP to protect its own plant as well as the Grid or other voltage level network depending on the Delivery Point and associated equipment of the Utility.

8.5 Synchronization

Proper synchronization shall be responsibility of owner of power plant and any damage to the property of the purchaser for improper handling by the CPP will be compensated as per decision of BERC.

8.6 Metering Arrangements

3(Three) element programmable Energy Meters having accuracy Class 0.2 and Time of Day (TOD) feature will be installed by the Owner of the Captive Power Plant at Delivery Point for measurement of energy. Such meter will be jointly

tested, calibrated and sealed by the Utility and the CPP. Separate metering shall be installed for Import and Export recording.

8.7 Control and Communication

Captive Power Plant having capacity exceeding the limit as set by the Government from time to time shall have communication with the Central Load Dispatch Centre (CLDC) and the CPP will follow instruction of the Dispatch Centre. The capacity limit will be set by GOB from time to time.

8.8 Inadvertent Flow of Energy to the Entities

The CPP will take appropriate measures to prevent inadvertent power flow. For any undue net flow of energy to the Utility, the Utility shall not pay for such power.

8.9 Banking of Energy

No banking of energy will be permitted during the period of electricity supply to the Utility by the CPP.

8.10 Billing Methods

Separate billing can be carried out for Export and Import of energy by the Captive Power Plants. Import of energy may be billed according to the tariff notifications issued by the BERC from time to time.

9. Period of Supply

9.1 The period of supply of power from the Captive Power Plants shall be mutually determined by the plant owner and the electric Utility.

9.2 The period of supply of Captive Power Plant to a utility shall normally be during the peak hour. However, power may be purchased during other period, provided a utility opt for the same.

9.3 Period of supply as mutually agreed upon shall be by an Agreement approved by the BERC.

10. Agreement

- 10.1 The utility will generally publish notifications expressing its intention to purchase power from the CPP and may enter into an Agreement observing the guidelines. However, if there is any precedence of such agreement the utility may use that benchmark for negotiation with any interested CPP.
- 10.2 Agreement will be executed between the Entities and owner of the Captive Power Plant for any sale of electricity by them.
- 10.3 Agreement for utilizing the network of the Utility will be executed among the owner of the Captive Power Plant and the concerned Utilities.

11. Custom Duty, Vat and Income Tax

Unless otherwise decided, the following provisions in respect of Custom Duties, VAT (Value Added Tax) and Income Tax shall be applicable:

- 11.1 The Imported project materials shall be subject to payment of Customs Duty and IDSC at clearance stage.
- 11.2 Machinery, tools and equipment imported for sales of electricity on re- exportable basis will be allowed temporary importation facilities under Sections 35 & 36 of the Customs Act. 1969 and rules framed thereunder.
- 11.3 The materials imported for this purpose shall be subject to payment of Value Added Tax (VAT) and Supplementary Duty (if any) at clearance stage as per provisions of the Value Added Tax Act, 1991 and the rules made thereunder.
- 11.4 Any goods supplied or services received or provided locally for this purpose will be subject to VAT and Supplementary Duty (if any) as per provisions of the VAT Act and the Rules.
- 11.5 For this purpose there will be no tax holiday or exemptions for the Captive Power Plant (CPP).

12. Miscellaneous

- 12.1 Any disputes or differences over the provisions of the Policy Guidelines shall be settled by mutual discussions or as per provisions of Bangladesh Energy Regulatory Commission (BERC).
- 12.2 Necessary advice and other assistance will be provided by the BERC to the Captive Power Plants.

12.3 Electric Utility will have no obligation to purchase power from the Captive Power Plants under the Policy Guidelines.

13. **Provisional Power Purchase Agreement**

An out line of Provisional Power Purchase Agreement is attached hereto at Annexure-1

PROVISIONAL POWER PURCHASE AGREEMENT

This POWER PURCHASE AGREEMENT (hereinafter referred to as "Agreement" or "PPA") is made and entered into effect as of ---- day -----, 200 at Dhaka between:

1. _____ with its registered office located at _____ (hereinafter referred to as "Captive Power Producer", which expression shall, unless repugnant to the context or meaning thereof, include its successors and assignees) as the Party of the First Part,

AND

2. _____ with its registered office at _____ hereinafter referred to as "Power Purchaser" (which expression shall, unless repugnant to the context or meaning thereof include their successor and assigns") as the Party of the Second Part,

WHEREAS the Captive Power Producer desires to sell electrical energy (minimum ____ MW but not exceeding ____ MW at any time) from its Captive Power Plant to the Purchaser, in accordance with the Policy Guidelines for Captive Power Purchase from Captive Power Plant.

AND, WHEREAS the Purchaser agrees to purchase such power.

NOW, THEREFORE, in consideration of the matters described above and the covenants in this Agreement, the Captive Power Producer and the Purchaser intending to be legally bound, agree as follows:

1. The Purchaser will permit the Captive Power Producer's Plant connect to and operate in synchronization with its network, provided that the interfacing system (including transformers, panels, kiosks, protection, main and back-up metering, service line) is provided and maintained by the Captive Power Producer. The Purchaser will undertake, at its cost, augmentation of its sub-station capacity and/or sub-transmission lines (except service line), if required, to receive the power generated by Captive Power Producer.
2. The Purchaser may direct the Captive Power Producer to temporarily curtail or stop its electricity delivery in emergency situations or when technically necessary for inspection, repair or maintenance of Purchaser's network.
3. The Captive Power Producer shall supply a minimum of ____ MW but not exceeding ____ MW. The Captive Power Producer shall schedule its generation from the power plant according to the requirement and direction of the Power Purchaser. The Power Purchaser shall have the option not to take any power during off-peak period.
4. The Purchaser and Captive Power Producer shall jointly read the meters at the delivery point on the first (1st) day of every month. In the event that the main metering system is not in service as a result of maintenance, repairs or testing, then the backup metering system shall be used. The representatives of each party will sign the meter reading taken jointly at the appointed date and time.
5. Billing will be on monthly basis in arrears and as per the power purchase price determined by Bangladesh Energy Regulatory Commission (BERC) for power purchase from CPPs, and as amended from time to time. The Purchaser will be billed by the Power Producer based on joint meter reading, promptly following the end of each month for the energy supplied, and billing will be due on the fifth working day following the joint meter reading.
6. The Purchaser shall make payment of the amounts due within a period of 15 days from the date of submission of the bill.

7. Disputed Payments: If any sum or part of sum shown on invoice rendered by Captive Power Producer is disputed in good faith by the Purchaser then the parties shall use their best efforts to resolve the dispute. The payment of undisputed sums or parts shall not be withheld on those grounds and shall be paid to the Captive Power Producer when due; and upon the resolution of dispute, Purchaser shall release to the Captive Power Producer the payments of the sums determined to be due to the Captive Power Producer. The Purchaser shall release to the Power Producer the payments determined to be due, together with the interest at the Bank Rate.
8. Each party will be responsible for compliance with the laws of Bangladesh. Each party will ensure compliance with Government of Bangladesh's "Policy Guidelines for Power Purchase from Captive Power Plants", all relevant regulations of BERC, and the Grid Code / Distribution Code, metering specifications, etc, as applicable.
9. The Party rendered unable to perform by reason of Force Majeure Event (A Force Majeure Event means any event(s) or combination of events or circumstances that is beyond the reasonable control of a Party) shall notify the other Party of such circumstance and shall exercise due diligence to end the inability as promptly as practicable. Non performance of any obligations during the period of Force Majeure shall not be considered a default under the Agreement. In case of sustained Force Majeure, the Agreement would be terminated. Neither Party shall be entitled for claiming compensation for damages or loss in the event of Force Majeure.
10. Settlement of disputes: Any matter of dispute between the Parties shall be resolved by mutual agreement or through some mechanism such as reference to an expert that may be mutually agreed upon in the future. If the matter is not resolved in 15 days or such extended period mutually agreed, it will be resolved by such person or persons as the BERC may nominate in that behalf on the application of either Party. The Courts in Bangladesh alone shall have jurisdiction.
11. Each Party shall keep complete and accurate records and all other data required by each of them for the purposes of proper administration of this Agreement.
12. Term of the Agreement: The term of the Agreement shall be six months from date of this agreement, unless terminated earlier by either party (by giving notice of 15 days) in case of sustained default by the other party. The term of the Agreement may be extended upon mutually agreed by the parties.
13. The expiry or termination of this Agreement shall not affect any right or obligation which may have accrued prior to such expiry or termination and shall not affect obligations of each of the Parties under this Agreement which are expressed to continue after such expiry or termination.

IN WITNESS WHEREOF, THE PARTIES HAVE ENTERED INTO AGREEMENT AS OF THE DAY AND YEAR FIRST WRITTEN ABOVE.

CAPTIVE POWER PRODUCER

POWER PURCHASER

By: _____

By: _____

Witness: _____

Witness: _____