

Uttar Pradesh Electricity Regulatory Commission

Notification no. UPERC / Secy / CNCE Regulation, 2009/ 696

Dated: 22.3.2010

In exercise of powers conferred under section 181 read with section 9, 61, 86 (1) (a), 86 (1) (b) and 86 (1) (e) of the Electricity Act, 2003, and all other powers enabling in this behalf, the Uttar Pradesh Electricity Regulatory Commission hereby makes the following Regulations, namely:

UPERC (Captive and Non-Conventional Energy Generating Plants) Regulations, 2009

(CNCE Regulations, 2009)

CHAPTER - 1

PRELIMINARY

1 Short title and commencement

- (1) These Regulations shall be called the UPERC (Captive and Non-Conventional Energy Generating Plants) Regulations, 2009 (hereinafter referred to as CNCE Regulations, 2009).
- (2) These Regulations shall be reckoned to have come into force from 1st October, 2009 and shall remain in force up to 31.3.2014, unless reviewed earlier or extended by the Commission.
- (3) Words and expressions used in these Regulations and not defined herein but defined in the Electricity Act, 2003 (hereinafter referred to as 'the Act'), as amended from time to time, shall have the meaning as assigned to them under the Act.

2 Scope and extent of application

- (1) These Regulations shall apply to Captive and Non-Conventional Energy Generating Plants setup in the State of Uttar Pradesh.
- (2) The provisions of Availability Based Tariff (herein after referred to as 'ABT') in respect to functions, duties and obligations, as provided, for Generating Plants under ABT shall apply to these Generating Plants also, unless provided otherwise.
- (3) For Generating Plants commissioned on or after 1.4.09, where the Generating Plant / Company has adopted Clean Development Mechanism (CDM), the proceeds of carbon credit from approved CDM project shall be shared in the following manner, namely:

- (a) 100% of the gross proceeds on account of CDM shall be retained by the project developer during the first year of commercial operation of the Generating Plants;
- (b) During the second year of commercial operation, the share of the beneficiaries shall be 10% which shall progressively increase by 10% every year till it reaches 50%, whereafter the proceeds shall be shared in equal proportion, by the Generating Company and the beneficiaries.
- (4) Annual Energy Audit of each Generating Plant shall be compulsory under relevant provisions of Energy Conservation Act, 2001.
- (5) The Generating Plant / Company shall abide by obligations cast on it by orders of the Central / State Commission issued from time to time in respect to promotion of Non-Conventional Energy Sources.
- (6) The Generating Plant / Company shall abide by the provisions of the Act, Rules, Codes, Regulations, Orders and Directions of the appropriate Authority / Commission issued from time to time regarding generation and evacuation of electricity.
- (7) If any difficulty arises in giving effect to these Regulations, the Commission may, on its own motion or otherwise, by an order and after giving a reasonable opportunity to those likely to be affected by such order, make such provisions, as may appear to be necessary for removing the difficulty.

3. Tariff determination

The tariff in respect of a Generating Plant under these Regulations shall be applicable to the capacities or the units in respect to which an agreement has been reached between the parties for supply of electricity:

Provided also that any commercial arrangement, other than tariff, made or agreed between the parties in a Power Purchase Agreement for supply of electricity, prior to UPERC CNCE Regulations, 2005, may be continued with the approval of the Commission for such time as considered appropriate by the Commission. However the tariff under such agreement shall be determined as per provisions of these Regulations.

4. Tariff for Non-Conventional Energy Generating Plants other than covered under these Regulations

For Non-Conventional Energy Generating Plants, other than covered under these Regulations, the tariff shall be determined by the Commission on case to case basis on receipt of an application for this purpose.

5 Approval of Power Purchase Agreement

The Distribution Licensee shall make an application for approval of Power Purchase Agreement entered into with the Generating Plant in such forms and such manner as prescribed in these Regulations and UPERC (Conduct of Business) Regulations notified by the Commission from time to time.

6 Definitions

- i. "Banking of power" is the process under which a Generating Plant supplies power to the grid not with the intention of selling it to either a third party or to a Licensee, but with the intention of exercising its eligibility to draw back this power from the grid;
- ii. "CNCE Regulations,09" means UPERC (Captive and Non-Conventional Energy Generating Plants) Regulations, 2009 as amended from time to time;
- iii. "Commission" means the Uttar Pradesh Electricity Regulatory Commission;
- iv. "Contracted Capacity" means the capacity in MW as agreed to be supplied by the Generating company to a Distribution Licensee under the Power Purchase Agreement;
- v. "Date of commercial operation or COD"- in relation to a unit means the date declared by the generator on achieving maximum continuous rating through a successful trial run and in relation to the Generating Plant, the date of commercial operation means the date of commercial operation of the last unit or block of Generating Plant and the expression 'commissioning' shall be construed accordingly;
- vi. "IEGC" means the Grid Code specified by the Central Regulatory Commission under clause (h) of sub-section (1) of section 79 of the Act;
- vii. "Ownership" in relation to a Generating Station or power plant set up by a company or any other body corporate shall mean the equity share capital with voting rights. In other cases ownership shall mean proprietary interest and control over the Generating Station or power plant;
- viii. "Peak Hours / Off Peak Hours" means the hours declared as such by the State Load Despatch Centre from time to time unless specified otherwise in this Regulations or by order of the Commission;
- ix. "Power Purchase Agreement" or 'PPA' means an agreement between a Generating Company and a Distribution Licensee for supply of power on the terms and conditions specified therein and with the provisions that the tariff for sale of power shall be as determined by the Commission from time to time;

- x. "Reforms Act" means the Uttar Pradesh Electricity Reforms Act, 1999;
- xi. "RLDC" means the Regional Load Despatch Centre established under sub-section (1) of section 27 of the Act;
- xii. "SLDC" means State Load Despatch Centre established in Uttar Pradesh under sub-section (1) of section 31 of the Act;
- xiii. "UPEGC" means the State Grid Code specified under clause (h) of sub-section (1) of section 86 of the Act by the Commission;
- xiv. "UPERC Open Access Regulations" means the Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations, 2004 as amended from time to time;

7 General Power to Amend

The Commission may, at any time and on such terms as to costs or otherwise, as it may think fit, amend any defect or error in any Proceeding before it, and all necessary amendments shall be made for the purpose of determining the real question or issue arising in the Proceedings.

8 Power to Relax

The Commission, for reasons to be recorded in writing, may vary any of the provisions of these Regulations on its own motion or on an application made before it by any interested party.

CHAPTER - 2

CAPTIVE POWER GENERATION

9. Object:

As per the provisions of the Act, supply of electricity from a Captive Generating Plant through the grid shall be regulated in the same manner as the Generating Station of a Generating Company. These Regulations seek to achieve efficient, safe, well-coordinated operation of the plant, connectivity with the grid and exchange of information among the various utilities in the State grid, Central Utilities and Northern Regional Grid, as the case may be. Non-compliance of these Regulations shall be liable for action under the appropriate provision of the Act.

10. Generation from Captive Power Plants

- (1) A power plant shall qualify as a 'Captive Generating Plant', under section 9 read with section 2(8) of the Act and Rule 3 of The Electricity Rules, 2005.
- (2) It shall be the obligation of the Captive Users to ensure the captive consumption at the percentages mentioned in The Electricity Rules, 2005. In case the minimum percentage of captive use is not complied with in any year, the entire electricity generated shall be treated as if it is a supply of electricity by a Generating Company.

11 General conditions for Captive Generating Plants

- (1) These Regulations shall apply to all existing Captive Generating Plants as well as proposed **Captive Generating Plants having an installed capacity of 1 MW or above irrespective of their connectivity with the grid.**
- (2) Any person intending to set-up a Captive Generating Plant shall submit the detailed project report, scheduled date of commercial operation and half yearly progress report of construction of the plant to the Commission for information and record. The necessary information to be accompanied with the detailed project report shall be as per Annexure-1 of these Regulations:
Provided that all existing Captive Generating Plants (whether connected with the grid or not shall furnish the desired information in Annexure 1 and 3 of these Regulations within 90 days from the date of notification of these Regulations. Non-compliance shall be liable for action under the appropriate provisions of the Act.
- (3) The Captive Generating Plant shall abide by the grid discipline and shall not be entitled to any compensation in the event of grid failure or any interruptions or damage to the plant or its associated sub-stations or transmission line on account of any happening in the grid.
- (4) All provisions of these Regulations except for those relating to supply in the grid and tariff shall also apply to the captive plants having no connectivity with the grid,.
- (5) The Commission may in its discretion refer any technical matter relating to Generation and Transmission to Central Electricity Authority for examination.

12 Obligations of the Captive Generating Plant

- (1) The Captive Generating Plant shall establish, operate and maintain Generating Station, sub-station, tie lines and dedicated transmission lines connected thereto in accordance with:
 - (a) The technical standards for construction of electrical plants, electric lines and connectivity with the grid as specified by the Authority;
 - (b) Safety requirements for construction, operation and maintenance of electrical plants and electric lines as specified by the Authority;
 - (c) UPEGC or Indian Electricity Grid Code (IEGC);
 - (d) The conditions for installation of meters for supply of electricity as specified by the Authority and / or the State Transmission Utility (STU).
- (2) In extraordinary circumstances, the Captive Generating Plants shall operate and maintain the plant in accordance with the directions issued by the State Government and the Commission may offset the consequential adverse financial impact of such direction, as it considers appropriate.

13 Duties of the Captive Generating Plant

- (1) The Captive Generating Plant shall generate electricity primarily for its own use and shall:
 - (a) Submit the technical details regarding its Generating Stations to the Appropriate Commission and the Authority;
 - (b) Submit information to the Commission in respect to availability, generation achieved, demand met, plant load factor, auxiliary consumption, specific heat rate, specific oil consumption and other information as specified under Annexure 1 & 3 of these Regulations;
 - (c) Co-ordinate with SLDC and / or STU for scheduling and dispatch of electricity.
- (2) The plant shall be under obligation to comply with the directions issued to it by SLDC and shall pay fee and charges payable to SLDC as specified by the Commission from time to time.
- (3) The Captive Generating Plant shall not be required to obtain license under the Act for establishing, operating or maintaining a dedicated transmission line.
- (4) The Captive Generating Plant shall ensure compliance of all general or specific direction, Rules or Regulations made by the Commission for the generating companies.
- (5) The Captive Generating Plant shall ensure that the Distribution Licensee has submitted Power Purchase Agreement to the Commission as mentioned in Regulation 17(1) of these Regulations for approval.

14 Open Access

- (1) A Captive Generating Plant shall have right to 'open access' for carrying electricity from its plant to the destination of its use by using transmission and / or distribution system or associated facilities with such lines or system and

for that purpose, Rules, Regulations and Orders passed by the Appropriate Commission shall apply.

- (2) The plant seeking 'Open Access' within or outside the State through the grid shall be regulated under Regulations specified by the Appropriate Commissions.

15 Transmission Charges and Wheeling Charges:

The Plant or the Consumer, seeking 'Open Access' to the State and / or Inter State Transmission Systems and / or distribution system for carrying the electricity to the destination of use, shall pay the transmission charges, wheeling charges and such other charges for use of such facilities as determined by the Appropriate Commission (s).

16 Surcharge and Additional Surcharge:

1. A Captive Power plant shall not be liable to pay surcharge over and above transmission and / or wheeling charges for carrying the generated electricity from its plant to the destination of its own use or for the use of its members, as prescribed under the Act:
 Provided that in case of supply of power to a consumer or to a person other than its members, such consumer or person shall pay surcharge over and above transmission and wheeling charges as determined by the Commission.
2. Open Access Consumer receiving supply of electricity from a person other than the Distribution Licensee of his area of supply, shall pay an additional surcharge, over and above transmission and / or wheeling charges and surcharge, as determined by the Commission.

17 Sale of Power

- (1) A Captive Generating Plant may enter into an agreement with the Distribution Licensee for sale of its surplus capacity based on Model PPA available at Annexure – 4 to these Regulations. The parties to the agreement may make plant / site specific changes in the Model PPA not inconsistent with the Act and relevant Regulations. Such changes shall however be subject to approval of the Commission:
 Provided that the plant may also supply electricity to a consumer who is permitted open access as per provisions of Open Access Regulations.
- (2) The Distribution Licensee shall pay the transmission charges and / or wheeling charges for such supply, as may be determined by the Commission:
 Provided further that Distribution Licensee may require emergency assistance following an extensive failure in the system. Subject to technical feasibility, the Captive Generating Plant may, if requested by the Licensee, extend power supply from its Generating Station to the Licensee's system. In such circumstances, the tariff for such supply shall be mutually agreed.

18 Tariff

The tariff for supply of electricity by a plant at pithead location to a Distribution Licensee shall be as per Schedule – I of these Regulations:

Provided that the Commission shall approve the transportation cost of fuel for non pithead locations on case to case basis on a petition filed by the Generating Plant.

Note:

- (1) The tariff for supply of electricity from the plant, having more than one unit commissioned in different years, shall be based on weighted average of the contracted capacities of the units commissioned in different years.
- (2) The tariff for supply of electricity during the period of synchronization and commissioning of the unit shall be equal to the variable cost.

19 Purchase of Electricity

Any person, who establishes, maintains and operates a Generating Plant, may purchase electricity from a Generating Company or Distribution Licensee in case his plant is not in a position to generate electricity to meet the requirement in the event of emergency or shut down or maintenance of the plant including supply to township housing the operating staff:

Provided that such purchase of electricity, from a Distribution Licensee of the area in which the plant is located, shall be charged under appropriate category of the rate schedule of tariff. This shall apply only to those generators who have entered into PPA with the Distribution Licensee:

Provided also that in case of purchase of power for purposes other than mentioned above, the generator may purchase electricity through a trader or a Generating Company or a Distribution Licensee other than Distribution Licensee of the area in which the plant is located at the rate as mutually agreed however, surcharge and additional surcharge besides other charges shall be payable as determined by the Commission:

Provided further that the tariff payable by a captive plant to a Distribution Licensee, in case of banking of energy, shall be as per Regulation 39(B) if that plant has an arrangement of banking of energy with such Distribution Licensee.

20 Capacity of the Plant and Location

- (1) The capacity of the plant shall be based on the need of a person intending to establish a Captive Generating Plant. The location, fuel linkage and other required resources may be in conformity with the National Electricity Policy and National Electricity Plan.
- (2) Captive Generating Plant owner shall clearly mention the fuel linkages in the project report and ensure that Government of India/State Government guidelines regarding use of fuel are complied with.

21 Environmental Clearance

The Captive Generating Plant owner shall abide by the emission standards set by the Union/State Government. The Captive Generating Plant shall obtain all the required environmental and pollution clearances from the Central / State pollution control authorities and submit copies of Clearance Certificates to the Commission.

CHAPTER - 3

NON-CONVENTIONAL ENERGY (NCE) SOURCE BASED GENERATION AND CO-GENERATION

22 Object

- (1) These Regulations seek to achieve promotion of generation of electricity from NCE source based Generation and Co-generation, facilitate connectivity of Generating Plants with the grid, ensure sale of electricity to any person and specify a percentage of the total generated electricity from Non-conventional sources that shall be purchased by Distribution Licensee of the area in which the plant is located. These Regulations also seek to operate the plant in an efficient, safe and well-coordinated manner ensuring exchange of information among the various utilities in the State grid, Central Utilities and Northern Regional Grid, as the case may be. Non-compliance of these Regulations shall be liable for action under the appropriate provision of the Act.
- (2) The provisions of Availability Based Tariff shall be implemented and the Generating Plants shall be subject to day ahead scheduling with the exception that on operation, actual generation shall be deemed as the actual schedule.

23 Generation from Non-Conventional Energy Sources

- (1) A person may construct, maintain and operate a Generating Plant and a dedicated transmission line for generation and evacuation of electricity from NCE source based Generation and Co-generation.
- (2) The Plant shall deem to be a Generating Company within the meaning of section 7 of the Act. However, for generation from small hydro, the provisions of section 8 of the Act shall apply.
- (3) The Commission may direct the Distribution Licensee to purchase power from these sources through competitive bidding when generation from non-conventional sources would compete with conventional sources in terms of cost of electricity.

24 General conditions for NCE source based Generation

These Regulations shall apply to:

- (a) All the existing Generating Stations generating electricity from NCE source based Generation and Co-generation in the State of Uttar Pradesh as on the date of notification of these Regulations irrespective of their connectivity with the grid or distribution system.
- (b) All Generating Stations generating electricity from Non-Conventional Energy Sources commissioned after the notification of these Regulations irrespective of their connectivity with the grid or distribution system.
- (c) All provisions of these Regulations except for those relating to supply in the grid and tariff shall also apply to plants having no connectivity with the grid.

25 Capacity of NCE Generating Plants

- (1) The optimum capacity of Generating Plant shall be assessed by the Generating Company in the detailed project report in view of potential of electricity generation available with such source.
- (2) Any person intending to set-up a NCE source based Generating Plant shall submit the detailed project report, scheduled date of commercial operation and half yearly progress report of construction of the plant to the Commission for information and record. The necessary information to be accompanied with the detailed project report shall be as per Annexure - 2 of these Regulations:
- (3) The Commission may in its discretion refer any technical matter relating to Generation and Transmission to Central Electricity Authority for examination.
- (4) The Generating Plant shall abide by the grid discipline and shall not be entitled for any compensation in the event of grid failure or any interruptions or damage to the plant or its associated sub-stations or transmission line on account of any happening in the grid.

26 Environmental and other Clearances

- (1) The Generating Plant shall abide by the emission standards, as the case may be, set by the Union/State Government and for that purpose it shall obtain all the required environmental and pollution clearances from the Central / State pollution control authorities and submit copies of Clearance Certificates to the Commission.
- (2) The Generating Plant shall obtain necessary clearances from Non-conventional Energy Development Agency, U.P.

27 Obligations of NCE Generating Plants

- (1) The Generating Plant shall establish, operate and maintain Generating Station, sub-station and dedicated transmission lines connected therewith in accordance with:
 - (a) The technical standards for construction of electrical plants, electric lines and connectivity with the grid as specified by the Authority.
 - (b) Safety requirements for construction, operation and maintenance of electrical plants and electric lines as specified by the Authority.
 - (c) UPEGC or or Indian Electricity Grid Code (IEGC).
 - (d) The conditions for installation of meters for supply of electricity as specified by the Authority or the State Transmission Utility.
- (2) The Generating Plant shall enter into a Power Purchase Agreement with the Distribution Licensee of the area in which the plant is located for a period of 20 years from the date of its commissioning, in line with the Model Power Purchase Agreement (herein after called Model PPA) available at Annexure - 4 to these Regulations. The parties to the agreement may make plant / site specific changes in the Model PPA not inconsistent with the Act, these Regulations and other relevant Regulations. Such changes shall however be subject to approval of the Commission:

Provided that all Power Purchase Agreements signed by the plants existing on the date of notification of these Regulations shall be modified by means of a supplementary agreement to remove any inconsistencies with these Regulations, if any.

- (3) In extraordinary circumstances, the Generating Company shall operate and maintain the Generating Plant in accordance with the directions issued by the State Government and the Commission may offset the consequential adverse financial impact of such direction on the Generating Company, as it considers appropriate.

28 Duties of NCE source based Generating Plants

- (1) The Generating Plant shall:
 - (a) Submit the technical details regarding its Generating Stations to the Appropriate Commission and the Authority;
 - (b) Submit the information to the Commission in respect to generation, demand met, capacity availability, plant load factor, auxiliary consumption, specific heat rate and specific oil consumption and other information as specified under Annexure 2 and 3 of these Regulations;
 - (c) Co-ordinate with SLDC and / or State Transmission Utility for scheduling and despatch of electricity.
- (2) The Plant shall be under obligation to comply with the directions issued to it by SLDC and shall pay fee and charges payable to SLDC as specified by the Commission from time to time by order.
- (3) The Generating Plant shall not be required to obtain license under the Act for establishing, operating or maintaining a dedicated transmission line.
- (4) The Generating Plant shall ensure compliance of all general or specific direction, Rules or Regulations made by the Commission for the generating companies.
- (5) The Generating Plant shall ensure that the Distribution Licensee has submitted Power Purchase Agreement to the Commission as mentioned in Regulation 27(2) of these Regulations for approval.

29 Sale of Power

- (1) All NCE source based Generation and Co-generation plants shall be allowed to sell power, over and above the capacity required for their own use, to the Distribution Licensee in whose area the plant is located at the rate specified in Schedule II:

Provided that purchases under these Regulations, may be referred to as Renewable Purchase Obligation 'RPO', shall be restricted to 8.0% of total power in MUs purchased by concerned Distribution Licensee. The Solar and Wind power (if found in the State) shall be purchased by the Distribution Licensee over and above 8%.

The Distribution Licensee on an offer made by the said plants for entering into a PPA, the same shall be signed by such Licensee within two months failing which the Generating Company may approach the commission for suitable remedy. The Distribution Licensee shall purchase such capacity

through competitive bidding process as and when notified by the Commission:

Provided further that the plant shall be allowed to sell the power available after sale to the concerned Distribution Licensee to any other Licensee or a consumer at mutually agreed rate:

Provided further that supply to any Distribution Licensee other than the Distribution Licensee of the area in which the plant is located or to any consumer shall be subject to provisions of Open Access Regulations.

- (2) Notwithstanding any other provisions of these Regulations, a Distribution Licensee may require emergency assistance following an extensive failure in the system. Subject to technical feasibility, the Generating Plant may, on a request from the Licensee, extend power supply from its Generating Station to the Licensee's system. Under such circumstances, the tariff for supply shall be mutually agreed.

30 Tariff

The tariff for supply of electricity by the plant to a Distribution Licensee shall be as per Schedule – II of these Regulations.

Note:

- (1) The tariff for supply of electricity from the plant, having more than one unit commissioned in different years, shall be based on weighted average of the contracted capacities of the units commissioned in different years.
- (2) The tariff for supply of electricity during the period of synchronization and the commissioning of the unit shall be equal to the variable cost.

However, in case of small hydro plants and other non-conventional and renewable sources of energy based plants, the tariff for supply of electricity during the period of synchronization and the commissioning of unit shall be equal to the 50 percent of the tariff.

- (3) "Plant Load Factor" shall mean the total sent out energy corresponding to generation during the period expressed as a percentage of sent out energy corresponding to contracted capacity in that period.

$$PLF = \frac{ES \times 10000000}{CC \times (100 - AUX) \times 8760} \%$$

Where,

ES - Energy sold in MU during the year,

CC - Contracted capacity in MW,

AUX - Normative Auxiliary Consumption (i.e. 8.5% for Cogeneration).

31 Open Access:

- (1) A Generating Plant shall have right to 'open access' for carrying electricity from its plant to the destination of its use by using transmission and / or distribution system or associated facilities with such lines or system and for

that purpose, Rules, Regulations and Orders passed by the Appropriate Commission shall apply.

- (2) The plant seeking 'Open Access' within or outside the State through the grid shall be regulated under Regulations specified by the Appropriate Commissions.

32 Transmission Charges and Wheeling Charges:

The plant or the consumer, seeking 'open access' to the State and / or Inter State Transmission Systems and / or distribution system for carrying the electricity generated by it to the destination of use, shall pay the transmission charges, wheeling charges and such other charges for use of such facilities as determined by the Appropriate Commission (s).

33 Surcharge and Additional Surcharge:

A person, having established a Generating Plant shall be liable to pay surcharge and additional surcharge if it seeks open access for the transmission/wheeling of electricity from his Plant to a destination for consumption of power for his own use. In case, the power is supplied to a consumer then such consumer shall pay surcharge and the additional surcharge determined by the Commission. Surcharge and Additional Surcharge shall be over and above transmission and / or wheeling charges.

34 Purchase of Electricity by the Plant:

Any person, who establishes, maintains and operates a Generating Plant, may purchase electricity from a Generating Company or Distribution Licensee in case his plant is not in a position to generate electricity to meet the requirement in the event of emergency or shut down or maintenance of the plant including supply to township housing the operating staff:

Provided that such purchase of electricity, from a Distribution Licensee of the area in which the plant is located, shall be charged under appropriate category of the rate schedule of tariff. **No minimum consumption guarantee or other charges shall be levied on such declared load.** Excess load over and above the declared load shall be billed according to the provision of the relevant Schedule of Tariff specified by the Commission. This shall apply only to those generators who have entered into PPA with the Distribution Licensee:

Provided also that in case of purchase of power for purposes other than mentioned above, the generator may purchase electricity through a trader or a Generating Company or a Distribution Licensee other than Distribution Licensee of the area in which the plant is located at the rate as mutually agreed however, surcharge and additional surcharge besides other charges shall be payable as determined by the Commission:

CHAPTER - 4

COMMON TERMS AND CONDITIONS

35. Evacuation of Power

- (1) The Generating Plant shall supply power to the Distribution Licensee of its area through a 33 KV or higher voltage line terminating at the nearest 132 KV Sub-station as per the voltage and capacity as given below:

- i) installed capacity upto 10 MW on 33 KV;
- ii) installed capacity above 10 MW on 132 KV;

The Distribution Licensee or State Transmission Utility shall ensure that the plant is allowed to be connected to the nearest substation in order to control length of line subject to technical feasibility:

Provided that in case of existing plants, the connectivity shall be the same as existing on the date of these Regulations coming into effect:

Provided also that in case of plants where the scheme for connectivity has already been approved by the Commission in PPA and the same are commissioned after the date of these Regulations coming into effect, the connectivity as per that approved scheme shall be allowed:

Provided further that in case of generation from Non-Conventional sources other than bagasse/biomass based generation, like wind, solar, hydro, municipal waste, industrial wastes (including solid, semi solid, liquid and gaseous wastes) and biogas, the Commission may allow evacuation of power at 11KV.

- (2) The plant shall be responsible for construction of the evacuation system for connecting its plant with the substation of the Distribution Licensee or STU / any Transmission Licensee, as per the scheme approved by the Commission in PPA, of its own or through any other agency engaged for that purpose. The cost of laying the dedicated transmission line to the sub-station, the required bays, associated terminal equipments and synchronization equipments shall be borne by the Generating Plant and such works shall be undertaken under approval and supervision of the Licensee / STU or any Transmission Licensee of the area in which the plant is located:

Provided that above construction of evacuation system at 132 KV or higher voltage shall be carried out under the approval and supervision of the STU or any Transmission Licensee:

Provided further that the land for extending the bay (s) shall be provided by the owner (the Distribution Licensee or STU / any Transmission Licensee) of the sub-station free of cost:

Provided further that in case of evacuation through temporary arrangements, approved by the Commission on a petition filed by the Generating Company, the applicable fixed cost in the tariff shall be reduced by the proportion of the approved normative capital cost of transmission system. For this purpose normative capital cost of transmission system shall be considered Rs. 0.25 Cr./MW. The applicable tariff in such cases shall be decided on case to case basis by the Commission.

- (3) In case the Generating Company elects to get the dedicated transmission line constructed by other than STU / Distribution Licensee, the supervision charges shall be payable to Distribution Licensee or STU or any Transmission Licensee as the case may be.

However, in case of Solar and Wind energy plants, as a promotional measure, the grid connectivity at approved voltage shall be provided by the Distribution Licensee and the total cost on construction of sub-station and transmission line including bay etc. shall be borne by Distribution Licensee of the area. In case, the sub-station / transmission line comes under STU / any other Transmission Licensee, the same shall be borne by STU / any other Transmission Licensee. The cost incurred thereof shall be allowed in tariff of the Distribution Licensee or STU / any other Transmission Licensee.

36 Maintenance of Transmission lines and Equipment

- (1) The Generating Plant shall be responsible for the maintenance of terminal equipment at the generating end and the dedicated transmission lines. However, Distribution Licensees or STU, as the case may be, shall carry maintenance of the dedicated transmission line if so desired by the Generating Company on mutually agreed charges.
- (2) The Distribution Licensee or the Transmission Licensee or the State Transmission Utility, as the case may be, shall be responsible for maintenance of the terminal equipment(s) at the sub-station of the concerned Licensee. The operation and maintenance cost shall be considered as pass through by the Commission while determining the wheeling and transmission charges of the concerned Licensee or State Transmission Utility, as the case may be.
- (3) In case of Solar and Wind energy plants, total cost on maintenance of sub-station and transmission line including bay etc. shall be borne by Distribution Licensee or STU / any other Transmission Licensee, as the case may be, and the cost incurred shall be allowed in tariff of the STU / any other Transmission Licensee.

37 Metering Arrangement

The Generating Plant shall provide ABT compatible Special Energy Meters at the point of injection and point of drawl and shall comply with all metering requirements as notified by the State Transmission Utility:

Provided that in case of Solar and Wind energy Generating Plants the entire cost on metering shall be borne by the Licensee:

Provided that the point of injection and point of drawl for the purpose of recording and billing purposes shall be the substation of the Licensee / STU:

Provided also that metering at generator terminal shall be as per the guidelines issued by the Authority:

Provided further that while calculating the energy billed, the meter reading in MWH taken at substation shall be multiplied by a factor as follows

to compensate the transmission losses (the line losses to be taken as percentage per km/MW).

Multiplying Factor = $100 / (100 - 0.001 \times L \times C.C.)$

L = Length of line in km

C.C. = Contracted Capacity in MW

Loss factor = 0.001/km/MW

38 Energy Accounting and Billing

The State Load Despatch Centre shall do energy accounting and billing and the same shall be communicated to the utilities interacting with the grid as per the scheme framed by SLDC in pursuance of the provisions of UPERC Regulations:

Provided that in case of sale to the Distribution Licensee of the area, the PPA may provide for joint metering and in such cases, energy accounting and billing shall be done by the Generating Plant in association with the concerned Distribution Licensee.

39 Banking of Power

(A) Non-Conventional Energy Source based Generation and Co-generation Plants:

The Generating Plants shall be allowed to bank power, for the purpose of withdrawal of the banked power in the event of emergency or shut down or maintenance of the plant, subject to following conditions:

- a. Banking of energy upto 100%, as agreed between the plant and the Distribution Licensee, shall be allowed during the period 17:00 hrs. to 22:00 Hrs. (specified as peak hours for this purpose).
- b. Withdrawal of power shall be allowed only during the period other than 17:00 hrs. to 22:00 Hrs.
- c. The plants shall provide ABT compliant Special Energy Meters and the monthly settlement of energy sales shall be done based on:
 - i. Power supplied during the peak hours as per SEM meter readings
 - ii. Power banked as per daily schedules given for banking of power during the month.

The lower of the two shall be considered as banked power and monthly settlement shall be done for the balance energy supplied by the plant at the rate specified for supply of electricity to Distribution Licensee:

Provided that till implementation of intra-State ABT in the State of Uttar Pradesh, lower of the Power supplied during the peak hours as per SEM meter readings and the power banked as per the declaration given by the Generating Plant shall be considered as banked power.

- d. The banking as well as withdrawal of banked energy shall be subject to day ahead scheduling.
- e. The power withdrawn by the plant as ascertained by SEM readings, which could not be considered as withdrawal from banked power, shall be considered as power purchased by the plant.
- f. The purchase of power by these plants under clause (e) or otherwise shall be charged for the maximum-recorded demand and the energy at rate specified in the Schedule of retail Tariff corresponding to the declared load by the generator. No minimum consumption guarantee or other charges shall be levied on such generators. Excess load over and above the declared load shall be billed according to the provision of the relevant Schedule of Tariff specified by the Commission. This shall apply only to those generators who have commissioned the supply of power under the PPA with the Licensee.
- g. A Generating Plant shall be allowed to withdraw power that was banked during a particular financial year in the same year or during the following financial year.
- h. The banked power remaining unutilized on the expiry of the following financial year would be treated as sale and the financial settlement shall be made at the scheduled tariff for the year during which the power was banked. No banking charges shall be deducted from such unutilized banked energy.
- i. Banking charges shall be 12.5% of the energy banked

(B) Captive Generating Plants:

Captive Generating Plants shall be allowed banking subject to following conditions:

- (i) The withdrawal of banked energy, subject to deduction of banking charges of 12.5%, shall be allowed during the period other than 17:00 Hrs. to 22:00 Hrs., specified as peak hours.
- (ii) The plant shall provide ABT compliant special energy meters and the monthly settlement of energy shall be in the following manner;
 - (a) A maximum of 75%, as agreed between such plants and the Distribution Licensee, of the energy supplied to the Licensee during the day shall be considered as banked energy and the remaining as energy sold to the Licensee,
 - (b) Withdrawal of banked energy shall be subject to deduction of 12.5% of the banked energy as banking charges payable to the Licensee,
 - (c) The demand posed by the plant in KVA while purchasing power from Distribution Licensee combined with demand due to withdrawal of banked energy by the captive plant shall be considered as the total demand (maximum demand) posed by the captive plant and the same shall not exceed the contracted demand which the plant has agreed to purchase from the Distribution Licensee:

Provided that the demand charges payable by the captive plant to the Distribution Licensee shall be as

determined by the Commission, from time to time, in appropriate rate schedule of retail tariff:

Provided also that if the maximum demand exceeds the contracted demand, such excess demand shall be paid at additional rate as specified by the Commission, from time to time, in the appropriate rate schedule of retail tariff.

- (d) The withdrawal of banked energy shall be adjusted against the energy purchased from the Distribution Licensee during period other than 17:00 Hrs. to 22:00 Hrs. The balance energy supplied by the Distribution Licensee shall be billed at rate of energy charges specified by the Commission, from time to time, in appropriate rate schedule of retail tariff.
- (iii) The banking as well as withdrawal of power shall be subject to day ahead scheduling.
- (iv) The energy withdrawn by the plant, during 17:00 Hr to 22:00 Hr, as ascertained by energy meter readings, shall be considered as power purchased by the plant from the Licensee.
- (v) No minimum charge shall be levied on such plants in computing bill based on 39 (B) (ii) (c), (d) and (iv).
- (vi) The captive plant shall be allowed to withdraw power that was banked during a particular financial year either in the same year or during the following financial year.
- (vii) The banked energy remaining unutilized on the expiry of the following financial year would be treated as sale to the Distribution Licensee and the financial settlement shall be made at the rate specified by the Commission for the year during which the power was banked. No banking charges shall be deducted from such unutilized banked energy.

40. Payment Mechanism

For payment of bills made through a letter of credit within a period of one month of presentation of bill for supplied power, a rebate of 2% shall be allowed. If the payments are made by a mode other than through a letter of credit but within a period of one month of presentation of bill, a rebate of 1% shall be allowed. In case the payment of bills for supplied power by the beneficiary (ies) is delayed beyond a period of 2 months from the date of billing, a late payment surcharge at the rate of 1.25% per month shall be levied by the Generating Company:

Provided further that the rate and payment terms approved by UPERC from time to time for the respective consumer category under 'Rate Schedule for Tariff' shall apply for purchase of electricity by the plant:

Provided further that in respect of, transmission charges, wheeling charges, surcharge and additional surcharge, as the case may be, payable by the Plant for purchase of electricity under these Regulations, the payment mechanism provided under the relevant Regulations shall apply.

41 Miscellaneous Provisions

In case of any inconsistency in these Regulations with the provisions of the Act, as amended from time to time, the provisions of the Act shall have the overriding effect.

42 Repeal

UPERC CNCE Regulations, 05 shall stand repealed with effective date of these Regulations.

By Order of the Commission

**(A.K.Srivastava)
Secretary**

SCHEDULE - I

Tariff for Sale of Power by A Captive Generating Plant

Schedule-I – Tariff for sale of Power by a Captive Generating Plant

As per Commission's Order dated 09-09-2009 on Draft "Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions of supply of power from Captive and Non-conventional Energy Generating Plants) Regulations, 09" (CNCE Regulations, 09).

1. Tariff for Coal Based Captive Generating Plants

Tariff structure comprising of fixed and variable costs would be applicable for sale of power by pit-head located Coal Based Captive Generating Plant to the Distribution Licensee of its area. For non-pit head plants, the transportation cost of fuel shall be separately determined on case to case basis.

Under CNCE Regulations, 2005 the tariff was determined considering the following three categories:

1. Unit size below 200 MW
2. Unit size 200/210/250 MW
3. Unit size above 500 MW

However based on information available with Commission, no PPA has been signed for above unit sizes by any Distribution Licensee or any Captive Capacity comprising of the said unit sizes established by any Generating Company under CNCE Regulations, 2005. Also, no new capacity addition comprising of any of the above mentioned unit sizes seem to be in the offing. Therefore, under these Regulations, the tariff has been determined in the following three categories in respect to Captive Generating Plants:

1. Unit sizes upto 100 MW.
2. Unit sizes above 100 MW but upto 300 MW.
3. Unit sizes above 300MW.

Further, the tariff for above categories of plant has been dealt with the time of commissioning.

The RoE for all the Captive Generating Plants has been considered as 15.5% (pre tax) whereas Rate of Interest for existing plants has been considered as 10.25% and for new plants (units commissioned on or after 1.04.09) as 12.8%. The variable cost shall be escalated @ 6 % per annum for subsequent years and O&M expenditure shall be escalated @ 5.72%.

i. Existing Captive units commissioned prior to FY 2005-06

For Captive units Commissioned prior to FY 2005-06, the Commission has considered the same normative parameters as applicable for new plants except for Station Heat Rate (SHR) which is considered as 2900 kcal/kWh instead of 2800 kcal/kWh. Tariff for such units shall be as given in Table-1 below:

Table 1: Tariff for Existing Captive units commissioned prior to FY 2005-06

Captive - Existing Projects (Prior to FY 2005-06)			
Financial Year	Fixed Cost (Rs/kWh)	Variable Cost (Rs/kWh)	Total Cost (Rs/kWh)
FY 2009-10	0.62	1.31	1.92
FY 2010-11	0.63	1.39	2.02
FY 2011-12	0.64	1.47	2.11
FY 2012-13	0.66	1.56	2.22
FY 2013-14	0.68	1.65	2.33

ii. Existing Captive units commissioned during FY 2005-06 to FY 2008-09

The fixed & variable costs for the existing plants of unit size upto 100 MW commissioned during FY 2005-06 to FY 2008-09 has been determined based on revised norms and is given in Table-2 and Table-3 respectively. Total tariff for such plants shall be as given in Table-4 below.

Table 2: Fixed Cost for Existing Captive units commissioned during FY 2005-06 to FY 2008-09

Captive - Existing Projects (Fixed Cost: Rs /Kwh)					
Year of Commissioning	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
FY 2005-06	1.08	1.06	1.03	1.00	0.97
FY 2006-07	1.16	1.13	1.10	1.07	1.04
FY 2007-08	1.23	1.20	1.17	1.14	1.11
FY 2008-09	1.31	1.28	1.25	1.22	1.19

Table 3: Variable Cost for Existing Captive units commissioned during FY 2005-06 to FY 2008-09

Captive-Existing Projects	
Financial Year	Variable Cost (Rs/Kwh)
FY 2009-10	1.26
FY 2010-11	1.34
FY 2011-12	1.42
FY 2012-13	1.50
FY 2013-14	1.60

Table 4: Tariff for Existing Captive units commissioned during FY 2005-06 to FY 2008-09

Captive - Existing Projects (Total Cost: Rs/Kwh)					
Year of Commissioning	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
FY 2005-06	2.35	2.39	2.45	2.50	2.57
FY 2006-07	2.42	2.47	2.52	2.57	2.64
FY 2007-08	2.50	2.54	2.59	2.65	2.71
FY 2008-09	2.57	2.62	2.67	2.72	2.78

iii. Captive units commissioned on or after 1st April 2009

The fixed and variable costs and total tariff for the new plants commissioned on or after 1st April 2009 shall be as given in Table - 5, 6 and 7 respectively.

Table 5: Fixed Cost for New Captive units commissioned on or after 1st April 2009

Captive - New Projects (Fixed Cost : Rs/ Kwh)					
Year of Commissioning	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
Unit Size (0-100 MW)					
FY 2009-10	1.71	1.66	1.61	1.56	1.51
FY 2010-11		1.76	1.71	1.66	1.61
FY 2011-12			1.81	1.76	1.71
FY 2012-13				1.86	1.81
FY 2013-14					1.91

Captive - New Projects (Fixed Cost : Rs/ Kwh)					
Year of Commissioning	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
Unit Size (100-300 MW)					
FY 2009-10	1.51	1.46	1.42	1.37	1.33
FY 2010-11		1.55	1.50	1.46	1.41
FY 2011-12			1.60	1.55	1.50
FY 2012-13				1.64	1.59
FY 2013-14					1.68
Unit Size (Above 300 MW)					
FY 2009-10	1.31	1.27	1.23	1.20	1.16
FY 2010-11		1.35	1.31	1.27	1.23
FY 2011-12			1.39	1.34	1.30
FY 2012-13				1.42	1.38
FY 2013-14					1.46

**Table 6: Variable Cost for New Captive units commissioned on or after
1st April 2009**

Variable Cost			
Financial Year	Rs/Kwh	Rs/Kwh	Rs/Kwh
	0-100 MW	101-300 MW	Above 300 MW
FY 2009-10	1.25	1.11	1.09
FY 2010-11	1.33	1.17	1.16
FY 2011-12	1.40	1.24	1.23
FY 2012-13	1.49	1.32	1.30
FY 2013-14	1.58	1.40	1.38

Table 7: Effective Tariff for New Captive units commissioned on or after 1st April 2009

Captive - New Projects (Total Cost: Rs/ Kwh)					
Year of Commissioning	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
Unit Size (0-100 MW)					
FY 2009-10	2.96	2.99	3.02	3.05	3.09
FY 2010-11		3.09	3.12	3.15	3.19
FY 2011-12			3.22	3.25	3.28
FY 2012-13				3.35	3.39
FY 2013-14					3.49

Captive - New Projects (Total Cost: Rs/ Kwh)					
Year of Commissioning	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
Unit Size (100-300 MW)					
FY 2009-10	2.61	2.63	2.66	2.69	2.73
FY 2010-11		2.72	2.75	2.78	2.81
FY 2011-12			2.84	2.86	2.90
FY 2012-13				2.96	2.99
FY 2013-14					3.08
Unit Size (Above 300 MW)					
FY 2009-10	2.40	2.43	2.46	2.50	2.54
FY 2010-11		2.51	2.54	2.57	2.61
FY 2011-12			2.61	2.65	2.68
FY 2012-13				2.73	2.76
FY 2013-14					2.84

iv. Electricity (MW/MU) supplied over and above 80% PLF

The tariff of the captive generating plants has been determined at 80% PLF. It might be willing to supply at PLF above 80%. For such supply, only variable cost and incentive shall be paid as follows:

1. Variable cost applicable for new plants or existing plants, as the case may be.
2. Incentive @ 35 paisa per unit

SCHEDULE – II

Tariff for Non-Conventional Energy Generating Plants

- A) Bagasse based Cogeneration Plants**
- B) Biomass based Generation Plants**
- C) Small Hydro Generation Plants**
- D) Solar Power Generation Plants**
- E) Other NCE Generation Plants**

Schedule-II – Tariff for sale of Power by a Non-Conventional Energy Generating Plant

As per Commission's Order dated 09-09-2009 on Draft "Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions of supply of power from Captive and Non-conventional Energy Generating Plants) Regulations, 09" (CNCE Regulations, 09).

A) Bagasse Based Co-Generation Plants

The Tariff structure for Bagasse based co-generation plants has been provided for existing plants (Commissioned prior to FY 2005-06 and during FY 2005-06 to FY 2008-09) as well as for new projects commissioned on or after 1st April 2009.

The RoE for all the bagasse based Co-Generation Plants has been considered as 16.0% (pre tax) whereas Rate of Interest for existing plants has been considered as 10.25% and for new plants (units commissioned on or after 1.04.09) as 12.8%. The variable cost shall be escalated @ 6 % per annum for subsequent years and O&M expenditure shall be escalated @ 5.72%.

i. Tariff for Existing Bagasse projects Commissioned prior to FY 2005-06 and during FY 2005-06 to FY 2008-09

The fixed & variable costs and total tariff for the existing plants for control period of these regulations shall be as given in Table 8, 9 and 10 respectively.

Table 8: Fixed Cost of Existing Bagasse Plants

Bagasse - Existing Projects (Fixed Cost: Rs/Kwh)					
Year of Commissioning	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
FY 2005-06 or earlier	1.75	1.70	1.66	1.62	1.58
FY 2006-07	1.86	1.81	1.77	1.72	1.68
FY 2007-08	1.97	1.92	1.87	1.83	1.78
FY 2008-09	2.09	2.04	1.99	1.94	1.89

Table 9: Variable Cost of Existing Bagasse Plants

Bagasse - Existing Projects	
Financial Year	Variable Cost (Rs/kWh)
FY 2009-10	2.07
FY 2010-11	2.19
FY 2011-12	2.32
FY 2012-13	2.46
FY 2013-14	2.61

Table 10: Effective Tariff of Existing Bagasse Plants

Bagasse - Existing Projects (Total Cost: Rs/Kwh)					
Year of Commissioning	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
FY 2005-06 or earlier	3.81	3.89	3.98	4.08	4.19
FY 2006-07	3.92	4.00	4.09	4.18	4.29
FY 2007-08	4.04	4.11	4.20	4.29	4.39
FY 2008-09	4.15	4.23	4.31	4.40	4.50

ii. Tariff for New Bagasse projects commissioned on or after 1st April 2009

The fixed & variable costs and total tariff for the new plants for control period of these regulations shall be as given in Table 11, 12 and 13 respectively.

Table 11: Fixed Cost of New Bagasse Plants

Bagasse - New Projects (Fixed Cost : Rs /Kwh)					
Year of Commissioning	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
FY 2009-10	2.46	2.39	2.32	2.25	2.18
FY 2010-11		2.53	2.46	2.38	2.31
FY 2011-12			2.60	2.52	2.45
FY 2012-13				2.67	2.59
FY 2013-14					2.74

Table 12: Variable Cost of Existing Bagasse Plants

Bagasse - New Projects	
Financial Year	Variable Cost (Rs/kWh)
FY 2009-10	1.75
FY 2010-11	1.86
FY 2011-12	1.97
FY 2012-13	2.09
FY 2013-14	2.21

Table 13: Effective Tariff of New Bagasse Plants

Bagasse - New Projects (Total Cost: Rs/Kwh)					
Year of Commissioning	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
FY 2009-10	4.21	4.24	4.29	4.34	4.40
FY 2010-11		4.39	4.43	4.47	4.53
FY 2011-12			4.57	4.61	4.67
FY 2012-13				4.76	4.81
FY 2013-14					4.96

iii. Incentive

The bagasse based generating plants, to generate more power beyond 50% PLF alongwith the variable cost, as applicable, shall be paid incentive as below:

Table 14: Incentive Structure for New Bagasse Plants

Plant Load Factor	Incentive
More than 50%	25 Paise per Kwh

B) Biomass based Generation Plants

In CNCE Regulations 2005, the tariff for existing plants was determined same as of bagasse based co-generation plants. As there has been only one biomass based generating power plant in FY 2008-09, based on prudence check of relevant information on performance parameters from all sources, the Commission has decided to determine tariff for existing as well as new projects (commissioned on or after 1st April 2009) separate from bagasse. To encourage capacity addition from biomass, the Commission has also decided that the parameters for fixation of tariff for existing biomass based generating plants shall be the same as decided for the new plants.

The RoE for all the biomass based generation plants has been considered as 16.0% (pre tax) whereas Rate of Interest for existing plants has been considered as 10.25% and for new plants (units commissioned on or after 1.04.09) as 12.8%. The variable cost shall be escalated @ 6 % per annum for subsequent years and O&M expenditure shall be escalated @ 5.72%.

The detailed tariff structure for biomass based plants has been discussed in the order.

i. Tariff for Biomass Projects

a) Fixed Cost

The fixed costs based on the parameters discussed in the order shall be as given in Table-15.

Table 15: Fixed Cost of Biomass Plants

Biomass based generating plants (Fixed Cost: Rs/Kwh)					
Year of Commissioning	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
FY 2008-09	1.68	1.65	1.61	1.58	1.55
FY 2009-10	1.77	1.73	1.69	1.66	1.62
FY 2010-11		1.82	1.78	1.74	1.70
FY 2011-12			1.87	1.83	1.79
FY 2012-13				1.91	1.87
FY 2013-14					1.96

b) Variable cost

The Variable Costs shall be as given in Table-16.

Table 16: Variable Cost of Biomass Plants

Biomass based generating plants	
Financial Year	Variable Cost (Rs/kWh)
FY 2009-10	2.61
FY 2010-11	2.77
FY 2011-12	2.93
FY 2012-13	3.11
FY 2013-14	3.29

c) Effective Tariff

The total tariff for a biomass plant shall be as given in Table-17.

Table 17: Effective Tariff of Biomass Plants

Biomass - New Projects (Total Cost: Rs/Kwh)					
Year of Commissioning	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
FY 2008-09	4.29	4.41	4.55	4.69	4.84
FY 2009-10	4.38	4.50	4.63	4.77	4.92
FY 2010-11		4.58	4.71	4.85	5.00
FY 2011-12			4.80	4.93	5.08
FY 2012-13				5.02	5.17
FY 2013-14					5.26

ii. Incentive for Existing & New Plants

To provide suitable incentive to biomass based generating plants to generate more power i.e. above 80%, the generator shall be paid as below:

- (a) Variable cost as applicable; plus
- (b) Incentive as below

Table 18: Incentive Structure of Biomass Plants

Plant Load Factor	Incentive
More than 80% -85%	15 Paise per kWh
More than 85%	25 Paise per kWh

C. Small Hydro Power Plant

The tariff for Small Hydro plants as discussed in the order has been provided for old projects commissioned from FY 2005-06 to FY 2008-09; although, as per the available information with the Commission, no plant was commissioned during period of CNCE Regulations, 2005. The tariff for Small Hydro plants (new projects), to be commissioned on or after 1st April 2009, based on approved capital cost and PLF, has been taken separately.

The RoE for all the small hydro generating plants has been considered as 16.0% (pre tax) whereas Rate of Interest for existing plants has been considered as 10.25% and for new plants (units commissioned on or after 1.04.09) as 12.8%. The O&M expenditure shall be escalated @ 5.72%.

i. Tariff for Old Small Hydro Power Plants

Effective Tariff

The effective tariff for the Old Small Hydro Power Plants shall be as given in Table-19.

Table 19: Effective Tariff of Small Hydro Plants – Old Projects (Rs/Kwh)

Year of Commissioning	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
FY 2005-06	2.89	2.81	2.73	2.65	2.57
FY 2006-07	3.06	2.97	2.89	2.81	2.73
FY 2007-08	3.24	3.15	3.06	2.97	2.89
FY 2008-09	3.42	3.33	3.24	3.15	3.06

ii. Tariff for New Small Hydro Power Plants

Effective Tariff

The effective tariff for New Small Hydro Power Plants, based on its approved capital cost in Rs Cr/MW and Plant load factor (PLF), is as follows:

Table 20: Effective Tariff of Small Hydro Plants

PLF (35% to 40%), Capital Cost (Rs 5.3 Cr /MW)					
Year of Operation	FY 10	FY 11	FY 12	FY 13	FY 14
FY 10	3.83	3.71	3.58	3.46	3.34
FY 11		3.94	3.82	3.69	3.56
FY 12			4.06	3.93	3.80
FY 13				4.17	4.04
FY 14					4.29

PLF (More than 40% to 45%), Capital Cost (Rs 5.75 Cr /MW)					
Year of Operation	FY 10	FY 11	FY 12	FY 13	FY 14
FY 10	3.67	3.55	3.43	3.31	3.20
FY 11		3.78	3.65	3.53	3.41
FY 12			3.89	3.76	3.63
FY 13				4.00	3.87
FY 14					4.11

PLF (More than 45% to 50%), Capital Cost (Rs 6.2 Cr /MW)					
Year of Operation	FY 10	FY 11	FY 12	FY 13	FY 14
FY 10	3.54	3.42	3.31	3.20	3.08
FY 11		3.64	3.52	3.41	3.29
FY 12			3.75	3.63	3.51
FY 13				3.86	3.73
FY 14					3.96

PLF (More than 50% to 55%), Capital Cost (Rs 6.65 Cr /MW)					
Year of Operation	FY 10	FY 11	FY 12	FY 13	FY 14
FY 10	3.43	3.32	3.21	3.10	2.99
FY 11		3.54	3.42	3.31	3.19
FY 12			3.64	3.52	3.40
FY 13				3.74	3.62
FY 14					3.84

PLF (More than 55% to 60%), Capital Cost (Rs 7.1 Cr /MW)					
Year of Operation	FY 10	FY 11	FY 12	FY 13	FY 14
FY 10	3.35	3.24	3.13	3.02	2.92
FY 11		3.45	3.33	3.22	3.11
FY 12			3.55	3.43	3.32
FY 13				3.65	3.53
FY 14					3.75

PLF (More than 60% to 65%), Capital Cost (Rs 7.55 Cr /MW)					
Year of Operation	FY 10	FY 11	FY 12	FY 13	FY 14
FY 10	3.27	3.17	3.06	2.96	2.85
FY 11		3.37	3.26	3.15	3.05
FY 12			3.47	3.36	3.25
FY 13				3.57	3.45
FY 14					3.67

PLF (More than 65% to 70%), Capital Cost (Rs 8.0 Cr /MW)					
Year of Operation	FY 10	FY 11	FY 12	FY 13	FY 14
FY 10	3.21	3.11	3.00	2.90	2.80
FY 11		3.31	3.20	3.09	2.99
FY 12			3.40	3.29	3.18
FY 13				3.50	3.39
FY 14					3.60

a) Incentive

The Tariff indicated above shall be applicable for the small hydro power plants for the different range of PLF. If PLF of a plant during a year exceeds the range; it shall be eligible for an incentive of 35 Paise for every additional unit delivered at generator terminal.

For e.g. A Plant having PLF of 43% shall fall in the range of 40%-45%; then any production beyond 45 % PLF shall be eligible for incentive of 35 Paise per unit.

Similarly, A Plant having PLF of 59% shall fall in the range of 55%-60%; then any production beyond 60 % PLF shall be eligible for Incentive of 35 Paise per unit.

D. Solar Power Plant

With newer technologies, the costs of solar plants are changing drastically. GOI is in the process of evolving detailed policy and tariff for solar power. As such in future the tariff for solar power shall be determined and notified by a separate order by the Commission. Till such time, the tariff orders on Solar Power Plants determined by the Commission shall be applicable for both the cases/ schemes as mentioned below:

i. Not Covered under MNRE scheme

The tariff for Solar Power Plants not covered under GOI Incentive scheme, commissioned upto 31-12-2011, shall be as given below:

Table 21: Tariff for Solar Plants

Types of Solar Power Plants	Rate of Electricity for 20 Years
Solar Photovoltaic	Rs.15.00/kWh
Solar Thermal	Rs.13.00/kWh

ii. Covered under MNRE scheme

For Solar Power Plants covered under MNRE scheme the orders of the Commission shall be applicable.

E. Other NCE Projects (Except Bagasse/Biomass/SHP/Solar)

For this category, there was no representation from other NCE based generators, therefore the Commission approves minimum of the tariff from existing and new generating plants based on non-conventional resources. As soon as the projects come in the state, the Commission may review the tariff even on case to case basis.

i. Tariff for other NCE sources-Existing Plants

The tariff for other existing NCE plants shall be @ Rs.2.89/kWh with an escalation of 5.72% p.a.

ii. Tariff for other NCE sources- New Plants

The tariff for other NCE projects shall be @ Rs.3.21/Kwh with an escalation of 5.72% p.a.

Annexure -1

Information to be submitted by an existing / proposed Captive Generating Plant alongwith the Detailed Project Report (DPR)

1. Whether the Captive Generating Plant is a company or body corporate or association or body of individuals, incorporated or not.
2. State the destination for his own use or for use of its members.
3. Site-map indicating location
4. Technical details of Generating Set (s)
5. Single line diagram (details of interconnection at both ends, protection, interlocks etc.)
6. Single line diagram of power evacuation system for sale of power to Licensee
7. Whether complies with the standards specified by the authority.
8. Letter of Consent for Establishment issued by Uttar Pradesh Pollution Control Board
9. Statement of Interruption details.
10. Copy of existing wheeling, banking, sale of surplus power arrangement
11. Copy of agreement of supply/purchase.
12. Details of calculation of cost of generation;
 - (a) First year
 - (b) Levelised
13. Any other details considered necessary.
14. Feasibility Report.
15. Details of communication and data transfer facility established
16. Details of person(s) responsible for scheduling and despatch activities and coordination with SLDC
17. Existing / Proposed connectivity conditions
18. Operation and maintenance of dedicated transmission line (State whether the line was constructed at the expense of the plant or by a Licensee).
19. Details of metering State whether ABT compatible meter is installed or not.

Note:

- (a) A half yearly progress report shall be submitted in respect of the proposed Captive Generating Plant in the month of April and October every year till its commissioning.
- (b) A Completion report shall be filed by with the Commission within 60 days of commissioning of the plant.

Annexure –2

Information to be submitted by an existing / proposed Non-Conventional Energy source based Co-generation and Generation Plant alongwith the Detailed Project Report (DPR)

1. Site-map indicating location
2. Technical details of Generating Set(s)
3. Single line diagram (details of interconnection at both ends, protection, interlocks etc.)
4. Single line diagram of power evacuation system for sale of power to Licensee
5. Letter of Consent for Establishment issued by Uttar Pradesh Pollution Control Board
6. Copy of agreement of supply and purchase of electricity with any Licensee or Generating Company.
7. Details of calculation of cost of generation;
 - (a) First year
 - (b) Levelised
8. Feasibility Report
9. Details of communication and data transfer facility established
10. Details of person(s) responsible for scheduling and despatch activities and coordination with/SLDC and RLDC.
11. Existing / Proposed connectivity conditions
12. Operation and maintenance of dedicated transmission line (State whether the line was constructed at the expense of the plant or by a Licensee).
13. Details of metering State whether ABT compatible meter is installed or not.
14. Any other details considered necessary.

Note:

- (a) A half yearly progress report shall be submitted in respect of the proposed Captive Generating Plant in the month of April and October every year till its commissioning.
- (b) A Completion report shall be filed by with the Commission within 60 days of commissioning of the plant.

Annexure – 3**Yearly report to be filed by Captive and NCE Generating Plants****Part-A: Captive and Co-generation (biomass / bagasse)**

1	Name of the Generating Company	
2	Name of the Power Station	
3	Details for the period ending	31 st March.....
4	Capital cost (Rs.Cr.)	
5	Equity (Rs.Cr.)	
6	Outstanding Loan (Rs.Cr.)	
7	Depreciated cost (Rs.Cr.)	
8	Depreciation (%)	
9	O&M (Actual) (Rs.Cr.)	
10	Actual Availability (%)	
11	Plant Load Factor (%)	
12	Gross Energy Generated (MU)	
13	Auxiliary Consumption (%)	
14	Specific heat rate (Kcal/Kwh.)	
15	Specific oil consumption (ml / Kwh.)	
16	Consumption of coal (MT)	
17	Purchase of coal (MT)	
18	Consumption of oil (KL)	
19	Purchase of oil (KL)	
20	Average Stock of coal maintained/ month(MT)	
21	Average Stock of oil maintained/ month (KL)	
22	Average Receivables (in months) (Rs.Cr.)	
23	Requirement of spares (% of capital cost)	
24	GCV of coal (Kcal/Kg.)	
25	GCV of oil (Kcal/Lt.)	
26	Average price of coal (per MT)	
27	Transportation cost (Rs. per MT) for Coal	
28	Average price of oil (per KL)	
29	Interest on Loans	
30	Interest on Working Capital	

31. Unit wise details as on 31st Mar. of the year:

Unit No.	
Rated capacity (MW)	
De-rated capacity (MW)	
Date of synchronization	
Date of commercial operations	
Date of stabilization	

Type of cooling system	
Type of fuel	
Annual Maintenance (Days)	
Forced outage (days)	
Partial outage (days)	
Target Availability	
Actual Availability	
Generation	
Coal consumption per Kwh	
Oil consumption per Kwh	
Cost of R&M (Rs.Cr.)	

Part-B Small Hydro Generating Stations:

1	Name of the Generating Company	
2	Name of the Power Station	
3	Details for the period ending	31 st March.....
4	Capital cost (Rs. Cr.)	
5	Equity (Rs. Cr.)	
6	Loan (Rs. Cr.)	
7	Depreciated cost (Rs. Cr.)	
8	Depreciation (%)	
9	O&M (Actual) (Rs. Cr.)	
10	Actual Availability (%)	
11	Availability Achieved (%)	
12	Designed energy (MU)	
13	Primary Energy (MU)	
14	Energy generated (MU)	
15	Secondary Energy generated (MU)	
16	Auxiliary Consumption (%)	
17	Transformation Losses (%)	
18	Average Receivables (in months)	
19	Requirement of spares (% of capital cost)	
20	Interest on Loans	
21	Interest on Working Capital	

22. Unit wise details as on 31st Mar. of the year:

Unit No.	
Rated capacity (MW)	
De-rated capacity (MW)	
Date of synchronization	
Date of commercial operation	
Annual Maintenance (Days)	
Forced outage (days)	
Partial outage (days)	
Target Availability	
Actual Availability	
Generation	
Type of station (surface/underground)	
Type of excitation	
Cost of R&M(Rs. Cr.)	

Part-C Solar, Wind, Municipal/Industrial Waste and other NCE Generating Stations:

1	Name of the Generating Company	
2	Name of the Power Station	
3	Details for the period ending	31 st March.....
4	Capital cost (Rs.Cr.)	
5	Equity (Rs.Cr.)	
6	Loan (Rs.Cr.)	
7	Depreciated cost (Rs.Cr.)	
8	Depreciation (%)	
9	O&M (Actual) (Rs.Cr.)	
10	Target Availability (%)	
11	Availability Achieved (%)	
12	Energy generated (MU)	
13	Auxiliary Consumption (%)	
14	Transformation Losses (%)	
15	Average Receivables (in months)	
16	Requirement of spares (% of capital cost)	
17	Transportation cost involved in fuel procurement	
18	Interest on Loans	
19	Interest on Working Capital	

20. Unit wise details as on 31st Mar. of the year:

Unit No.	
Rated capacity (MW)	
De-rated capacity (MW)	
Date of synchronization	
Date of commercial operation	
Annual Maintenance (Days)	
Forced outage (days)	
Partial outage (days)	
Target Availability	
Actual Availability	
Generation	
Cost of R&M (Rs. Cr.) if any	

Annexure-4

MODEL POWER PURCHASE AGREEMENT

BETWEEN

(Name of the Generating Plant)

AND

(Name of the DISCOM, say M/s. ABC Limited)

THIS AGREEMENT is made this _____ day of _____, (hereinafter called the Effective Date), by and between (..Name of the Generating Company) registered under the (....Provisions of the Act....) and having its registered office at (.....Regd. Office address, hereinafter called the "Generating Company ", which expression shall, unless repugnant to the context or meaning thereof, include its successors and assignees as party of the first part and (.....Name of the DISCOM, say M/s. ABC Limited.....), a Company registered under (.....the Company's Act, 1956.....), having its Registered Office at (...enter Regd. Office Address...), hereinafter called "ABCL", which expression shall, unless repugnant to the context or meaning thereof, include its successors and assignees as party of the second part

WHEREAS, the Generating Company is engaged in the business of and other incidental businesses situated at..... in the State of Uttar Pradesh, more particularly described in Annexure I attached hereto and made a part hereof and,

AND WHEREAS, ABCL is a distribution licensee operating in the State of Uttar Pradesh, and has license to supply power in.....part of the State.

AND WHEREAS, the Generating Company intends to own, maintain and operate a power plant situated at(hereinafter referred to as the Plant) having a generating capacity of....MW and generate electricity primarily for his own consumption to the extent of...MW and is desirous to supplyMW/MU to ABCL from such plant, and **(Applicable to Captive Plant)**

or

AND WHEREAS, the Generating Plant owns, maintains and operates a power plant situated at(hereinafter referred to as the Plant) having a generating capacity of....MW and generates electricity primarily for his own consumption to the extent of...MW and is desirous to supplyMW/MU from such plant to ABCL, and **(Applicable to Captive Plant)**

or

WHEREAS, the Generating Company owns and operates / intends to own and operate a (*Bagasse based Co-generation Plant/Other cogeneration Plant/Biomass based plant/Solar plant/ Micro /Mini/ Canal based hydel power plant /Municipal waste/Industrial Waste/ Biogas based plant*) plant situated at(hereinafter referred to as the Plant) having a generating capacity of....MW and generate

electricity for his own consumption to the extent of....MW and/MW for supplying electricity so generated by the Generating Plant's facility to ABCL, and

or

WHEREAS the Generating Company has undertaken to implement the power project by installing Plant and Equipment having installed capacity of MW situated at(hereinafter referred to as the Plant) its production facility and complete erection, installation and commissioning of the said capacity and make it operational by (.....CoD.....), and (Applicable for new plants only)

WHEREAS, the Generating Company desires to sell **surplus** (after its own use) / entire (...Insert capacity in MW...) power generated in the Generating Plant's facility ... MW, and ABCL agrees to purchase electricity generated from such capacity by the Generating Plant for sale, under the terms and conditions set forth herein, and

WHEREAS the Generating Company agrees to purchaseMW power for it's such plant from ABCL and ABCL agrees to supplyMW power to such plant at retail tariff as per Regulations specified by the Commission, and

WHEREAS the parties to this Agreement agree for prior consultation with the State Transmission Utility for the purpose of implementation of this agreement and seek its approval for permitting, inter alia, interconnection to the generating plant with the (*write name*) grid substation owned by STU or other transmission licensee(*delete whichever not applicable*), and

WHEREAS the parties to the agreement bind themselves for compliance of all relevant provisions specified by the Commission in different regulations regulating the functioning of State Transmission Utility, other Transmission Licensee and State Load Despatch Centre.

Now, therefore, in consideration of premises and mutual agreements, covenants and conditions set forth herein, it is hereby agreed by and between the parties as follows:

1. **DEFINITIONS**

Other than those defined below, the words/expressions used in this agreement, unless repugnant to the context, shall have the meaning assigned to them in the Electricity Act, 2003, UP Electricity Reforms Act, 1999 and U.P. Electricity Grid Code as amended from time to time, "UPERC (Captive and Non-Conventional Energy Generating Plants) Regulations, 2009" shall mean in short "CNCE Regulations, 09"; as amended from time to time, and the rules framed there under. The words/expressions listed below shall have the meanings respectively assigned hereunder.

- 1.1 'Bill Meter' means ABT compatible Import and Export Meter on the basis of which energy bills shall be raised by the Generating Plant/ABCL.
- 1.2 'Check Meter' means ABT compatible Import and Export Meter for performing a check on the accuracy of the Bill Meter.

- 1.3 'Date of Commissioning' means the date on which supply of Energy is commercially commenced by the Generating Plant to ABCL and includes COD.
- 1.4 'Export Meter' means Bill Meter installed at the grid substation (*write name*) of ABCL/STU for measurement of Active Energy, Maximum demand and Power factor for Energy exported to the Generating Plant from ABCL/STU 's Grid Sub-Station (*write name*).
- 1.5 'Energy Account Month' means period from date of meter reading in previous month to date of meter reading in following month and such period should not exceed 35 days.
- 1.6 'Sub Station' means sub-station (*write name*) of 33 KV or higher voltage owned, maintained and operated by ABCL or UP Power Transmission Corporation Limited or other transmission licensee (*delete whichever not applicable*).
- 1.7 'Import Meter' means Bill Meter installed at the grid substation of ABCL/STU (*delete whichever not applicable*) for Measurement of Active Energy, Maximum demand and Power factor of Energy Imported to ABCL from the Generating Plant.
- 1.8 'L.C.' means "revolving and self - replenishing Letter of Credit".
- 1.9 'Bill' means a bill raised, that includes all charges to be paid by ABCL with respect to sale of Power by the Generating Plant to ABCL.
- 1.10 'STU' means State Transmission Utility.
- 1.11 'TOD' means "Time of day", for the purpose of Metering.
- 1.12 'UPERC' means the U.P. Electricity Regulatory Commission.
- 1.13 'Wheeling' means the operation whereby the distribution system of a distribution licensee is used by another person for the conveyance of electricity on payment of charges to be determined under section 62 of the Electricity Act 2003.
- 1.14 "UPERC (Captive and Non-Conventional Energy Generating Plants) Regulations, 2009" shall mean in short "CNCE Regulations, 09"; as amended from time to time.

2. POWER PURCHASE, SALE AND BANKING

- 2.1 ABCL shall accept and purchaseMUs/ MW (*delete whichever not applicable*) of power made available by the Generating Plant's captive / bagasse based cogeneration / biomass / Mini / Micro Hydel Plants / other NCE Plants (*delete whichever not applicable*) in accordance with the terms and conditions of this Agreement, at the rate specified for such plant in Schedule ***III*** (*delete whichever not applicable*) of "CNCE Regulations, 09"; as amended from time to time. Except for Income Tax, all other taxes, duties and other levies imposed by the Central and/or State Government or other local authorities directly relating to generation shall be payable by ABCL on production of necessary supporting documents by the Generating Plant, while those relating to sale of electricity, shall be borne and payable by ABCL.

(Explanation: The price as per Schedule II of the "CNCE Regulations,09"; shall apply only in the event of generation of power by using non conventional or renewable fuel for generating power. In case conventional fuel is used, the

tariff shall be as per Schedule I of the “CNCE Regulations, 09”).

- 2.2 The rate applicable for supply of electricity by ABCL to the Generating Plant shall be as per the tariff determined by the Commission under appropriate ‘Rate Schedule of Tariff’ for the consumer category determined on the basis of the total load requirement of the plant and billing done in the manner as specified by the Commission in the Regulations.
- 2.3 The provisions set out in Annexure-II shall govern the Sale and accounting for power purchased by ABCL.
- 2.4 The Generating Company shall abide by the provisions of the Act, Rules, Codes, Regulations, Orders and Directions of the appropriate Authority / Commission issued from time to time regarding generation and evacuation of electricity.
- 12.2 The generating company agrees to bank energy to the extent of% of the energy supplied to ABCL from the plant during the periodand ABCL agrees to allow withdrawal of the banked energy during the time specified by the Commission.
- 12.3 The provisions of Banking and wheeling of electricity shall be as per the CNCE Regulations.

3 MAINTENANCE REQUIREMENT OF THE GENERATING PLANT

- 3.1 The Generating Plant's annual maintenance schedule shall normally be from to The Generating Plant shall inform ABCL and the STU regarding the Maintenance schedule in accordance with provisions of the UP Electricity Grid Code as revised by the Commission from time to time.
- 3.2 Environmental Clearance and compliance of environmental standards shall be the sole responsibility of the generating plant.

4. SUPPLY SCHEDULE

The Generating Plant shall furnish to ABCL and the State Transmission Utility (STU) or State Load Despatch Centre (SLDC), as the case may be, a day ahead Supply Schedule, schedule of banking and withdrawal of banked energy and other information, as required in the CNCE Regulations and UP Electricity Grid Code as amended from time to time or provisions of any other regulation, code, order or direction in that regard or as desired otherwise.

5. BILLING PROCEDURE AND PAYMENTS

- 5.1 ABCL shall raise monthly bill for electricity purchased by the Generating Plant as per its normal billing cycle after taking into account energy withdrawn from the banked energy and maximum recorded demand in the manner as specified by the Commission in the CNCE Regulations and such bill shall be payable within the time period stipulated in the General Conditions of Tariff.

- 5.2 The Generating Plant shall raise monthly bill based on the monthly joint meter reading in the Bill Meter at the grid substation (*write name*) after deduction of bankable energy as certified by ABCL and in such cases, energy accounting and billing shall be done by the Generating Plant in association with the concerned Distribution Licensee.

The State Load Despatch Centre shall do energy accounting and billing and the same shall be communicated to the utilities interacting with the grid as per the scheme framed by SLDC in pursuance of the provisions of UPERC Regulations.

- 5.3 The Monthly Bill raised by the Generating Plant shall be delivered to ABCL at its designated office (*write name*) on or before the fifth (5th) working day of the following month hereinafter called the Monthly Bill date.
- 5.4 ABCL shall make full payment against such Monthly Bills to the Generating Plant within thirty (30) working days of the receipt of the Monthly Bill through irrevocable revolving & self-replenishing letter of credit of a value equal to the billable amount opened with a public sector bank in favour of the Generating Plant or through any other mode. The L.C. opening and maintenance charges shall be borne by the Distribution Licensee. The L.C. shall cover the average monthly billing for units indicated in the supply schedule furnished under para 4 above for the particular calendar quarter. The LC shall be updated by 5th working day of the calendar quarter.
- 5.5 A rebate of percent on the billed amount shall be allowed for payment made through LC within one month of the date of billing and for default in payment beyond two months from the date of billing, a surcharge at the rate of percent per month or part thereof shall be levied on the billed amount. Format of the Monthly Bill to be raised by the Generating Plant is given in Annexure III attached hereto and made a part of this agreement.
- If the payment is made by a mode other than through LC but within a period of one month of presentation of bill by the generating company, a rebate of percent shall be allowed. However, a surcharge at the rate of percent per month or part thereof shall be levied on the billed amount in case of default in payment beyond two months from the date of billing.
- 5.6 The bills raised by the Generating Plant shall be paid in full subject to the conditions that:-
- (i) There is no apparent arithmetical error in the bill(s).
 - (ii) The bill(s) is/are claimed as per tariff referred to in Para 2 of this agreement.
 - (iii) They are in accordance with the energy account referred to in Para 14 of this agreement.
- 5.7 In case of any dispute regarding the bill raised by the Generating Plant, ABCL shall file a written objection with the Generating Plant within fifteen days of

receipt of the bill giving full particulars of the disputed item(s), with full details/data and reasons of dispute and amount disputed against each item. The Generating Plant shall resolve the above dispute(s) with ABCL within 30 days.

- 5.8 In case, the dispute is not resolved within 30 days as provided in para 5.7 above, and in the event it is decided to proceed with the Arbitration as provided in para 23 of this agreement, then ABCL shall pay 100% of the disputed amount forthwith and refer the dispute for arbitration as provided in this agreement. The amount of excess / shortfall with respect to the said disputed amount on final award of arbitration shall be paid / adjusted; but in case of excess, the adjustment shall be made with interest at rate 1.25% per month from the date on which the amount in dispute was refundable by the generating company to ABCL.

6. PARALLEL OPERATIONS

Grid substation (*write name*) owned by ABCL/STU/other transmission licensee (*delete whichever not applicable*) shall allow the Generating Plant to interconnect its facility and operate in parallel with ABCL/STU/other transmission licensee's (*delete whichever not applicable*) system, subject to the provisions of this Agreement, Electricity Act, 2003 and the UP Electricity Grid Code as amended from time to time.

7. GENERATION FACILITIES OWNED AND OPERATED BY THE GENERATING PLANT

- 7.1 The Generating Company shall own, install, operate, and maintain the generating plant equipments and associated dedicated transmission line described in Annexure I. The Generating Plant shall follow such operating procedures on its side of the electric interconnection with ABCL/STUs (*delete whichever not applicable*) system, as are consistent with applicable laws, rules and regulations, the terms and conditions of this Agreement, provisions of the UP Electricity Grid Code, and other related guidelines, if any, issued by UPERC, SLDC, ABCL, STU and any other concerned Transmission licensee.
- 7.2 In the event, any other non-conventional / renewable fuel or fuels are used by the Generating Plant to supplement bagasse / biomass the fuel linkage shall be the responsibility of the Generating Plant. No pass through of cost on account of this shall be permitted. **(Applicable only to Cogeneration Plants).**

Or

- 7.2 ***This point is intentionally left blank for inclusion of sight specific changes.***

- 7.3 All electrical equipments shall be installed in compliance with the requirements of the Director of Electrical Safety, Government of Uttar Pradesh and safety specifications of the Central Electricity Authority (CEA)

under section 53 of the Electricity Act, 2003.

- 7.4 The Generating Plant further agrees to make no material changes or additions to its facility, which may have an adverse effect on ABCL/STU/other transmission licensee (*delete whichever not applicable*) system, or amend the single-line diagram, relay list and/or trip scheme given in Annexure I, without ABCL's prior written consent. ABCL agrees that such consent shall not be unreasonably withheld or given without the prior permission of STU.
- 7.5 Without prejudice to the foregoing, the Generating Plant shall install, operate, and maintain its facility in accordance with accepted prudent utility practices in the electricity industry. The Generating Plant's operation and Maintenance schedules and staffing shall be adequate to meet such standards at all times.
- 7.6 ABCL/STU/other transmission licensee (*delete whichever not applicable*) shall follow such operating procedures on its side of the electric interconnection point with the Generating Plant, as required to receive Power from the Generating Plant's facility, without avoidable interruptions or adverse consequences on the Generating Plant, and consistent with applicable laws, rules and regulations, and the terms and conditions of this Agreement.

8. INTERCONNECTION FACILITIES

- 8.1 Power from the Generating Plant shall be transmitted at voltage through a.....KV line from the Generating plant located at The power so transmitted shall be interfaced with ABCL's 33 KV/132KV or higher grid sub-station located at..... (*write name of the sub-station*) owned by /STU/other transmission licensee (*delete whichever not applicable*).
- 8.2 The cost of the dedicated transmission line from the Generating Plant to the designated grid sub-station (*write name*) of ABCL/ /STU/other transmission licensee (*delete whichever not applicable*) and the cost of interfacing at both ends (the Generating Plant and grid substation) including work at the ABCL/STU/other transmission licensee (*delete whichever not applicable*) Sub-Station, cost of bay, tie- line, terminal equipments and associated synchronizing equipments, shall be borne by the Generating Plant. (***Not applicable in case of solar and wind power generating plants.***)
- 8.3 ***Left blank for parties to enter the provision of construction of the transmission line in accordance with the provisions of CNCE Regulations and orders of the Commission as mutually agreed.***

(Explanation: The technical and other specifications of the work shall be finalized with ABCL's/STU's approval and be in accordance with standards and specifications laid by ABCL, construction of 132 KV or higher voltage line shall be done under the supervision of STU/other transmission licensee (delete whichever not applicable). The lines constructed for the evacuation of power from the Generating Plant, shall not be used for transmitting/supplying power for any other purpose, without a mutual agreement between the

Generating Plant and ABCL /STU/other transmission licensee (delete whichever not applicable) , and without prior approval of UPERC. Existing transmission/distribution lines of ABCL/ STU (as the case may be) may be utilized for evacuation of power from the Generating Plant to the Grid sub-station, on the basis of a mutual agreement between the Generating Plant and ABCL and/or STU (as the case may be), with the approval of UPERC. Notwithstanding the above, the work of interfacing at ABCL/STU/other transmission licensee's (delete whichever not applicable) Sub-Station will be done by ABCL/STU/other transmission licensee (delete whichever not applicable) only.)

- 8.4 The Generating Plant shall be responsible for the Maintenance of equipment at the generating end.
- 8.5 ***Left blank for parties to enter the provision of maintenance of the transmission line in accordance with the provisions of CNCE Regulations as mutually agreed.***
- 8.6 Any work to be done by the Generating Plant shall be taken up only with a specific approval and on the basis of approved drawings and specifications from ABCL and in compliance with the safety requirements as per the UP Electricity Grid Code. On the completion of work, final approval shall be obtained from ABCL/ STU (as the case may be) before charging the line. The Generating Plant would obtain all statutory clearances/approvals required for this purpose.
- 8.7 The Generating Plant shall consult ABCL/STU/other transmission licensee (delete whichever not applicable) on the scheme of protection of the interconnecting line/s and the facilities at both ends, and accordingly provide the equipment at both ends. The protection system, installed by the Generating Plant, shall be checked by ABCL/STU/other transmission licensee (delete whichever not applicable).
- 8.8 Without limiting the foregoing, the Generating Plant and ABCL/STU/other transmission licensee (delete whichever not applicable) shall, operate and maintain the interconnection and parallel operation facility in accordance with accepted good engineering practices in the electricity industry and the UP Electricity Grid Code as amended from time to time and directions of Director Electrical Safety (GOUP) and safety requirements as specified by the Authority under section 53 of the Act.
- 8.9 The interconnection facilities, to be provided by the Generating Plant are set forth in Annexure IV attached hereto and made a part hereof.

9. PROTECTIVE EQUIPMENT & INTERLOCKING

- 9.1 The interconnection facilities shall include necessary protective equipment and interlocking devices, which shall be so coordinated that any malfunctioning or abnormality in the generators or in the bus of the

Generating Plant shall not adversely reflect on or affect ABCL/STU/other transmission licensee (*delete whichever not applicable*)'s grid system. In event of any malfunctioning or abnormality, the system shall be designed to ensure that the Generating Plant's breaker trips first to protect the equipment. Prior to adopting it the Generating Plant shall obtain approval of ABCL/STU/other transmission licensee (*delete whichever not applicable*) for the protection logic of the generator system and the synchronisation scheme.

- 9.2 The Generating Plant shall install necessary equipment to eliminate feeding of reverse power from the Grid to the Generating Plant's system in absence of any agreement for purchase of power with ABCL.

10. TECHNICAL ASSISTANCE BY ABCL & GENERATING PLANTS RESPONSIBILITY

- 10.1 On request, ABCL, in consultation with STU, shall provide reasonable technical assistance to the Generating Plant in preparing the design and specifications of the required facilities and for laying down the standard operating and maintenance procedures. The Generating Plant, however, shall be responsible for procurement, installation, testing, maintenance and operation of the electrical system installed in the Generating Plant's premises.
- 10.2 Notwithstanding the above, ABCL shall not be responsible for any damage caused to the electrical system/generating set of the Generating Plant, on account of errors or defects in the design, procurement, installation, testing, maintenance and operation of the system.

11. ARRANGEMENTS AT THE POINT OF SUPPLY

The Generating Plant shall make all arrangements for paralleling the set/s with ABCL/STU/other transmission licensee (*delete whichever not applicable*)'s grid in consultation with and to the satisfaction of ABCL and/or STU, subject to the approval of the Director of Electrical Safety, Government of Uttar Pradesh and safety specifications of the Central Electricity Authority (CEA) under Section 53 of the Electricity Act, 2003.

12. SYNCHRONISATION

- 12.1 The Generating Plant shall synchronise its power generating set in consultation with the(Designated Authority), in-charge of the sub-station of ABCL/STU/other transmission licensee (*delete whichever not applicable*) and as per provisions of the UP Electricity Grid Code as amended from time to time. The Generating Plant shall give seven (7) days prior intimation of the synchronisation programme to the Nodal Officer:

- i) when commissioning the plant for the first-time,
- ii) when commissioning after completion of the annual Maintenance programme.

- 12.2 ABCL/STU/other transmission licensee (*delete whichever not applicable*)

shall not be responsible for the damage, if any, caused to the plant and equipment of the Generating Plant due to failure of the synchronising or the protective system provided by the Generating Plant.

13. LIASON WITH & ASSISTANCE FROM ABCL

The Generating Plant shall closely liaise with the Nodal Officer of ABCL and the STU and shall inform the date of commencement of delivery of power to the designated officials of ABCL and STU one month in advance and also arrange for testing and commissioning of the protection system at least 15 days in advance. If requested by the Generating Plant, ABCL, in consultation with STU as the case may be, shall extend assistance for testing, subject to the condition that the Generating Plant shall pay the charges for such assistance to ABCL, if so indicated by the concerned Testing Division of ABCL. This charge shall be reasonable and be based on the man-hours devoted by ABCL staff and their usual levels of remuneration, and ABCL equipment used. ***(Applicable to Cogen & other NCE Plants Only)***
Or

13. This point is intentionally left blank for inclusion of site specific provisions.

14. METERING

- 14.1 The Generating Plant shall supply two identical sets of ABT compliant meters, with the facility for downloading data to measure the quantity and time details of the Power exported from and imported by the Generating Plant, conforming to the specifications approved by ABCL/STU, along with all necessary associated equipments. These meters shall be installed and maintained by ABCL/STU/other transmission licensee *(delete whichever not applicable)*. These meters shall be installed at the grid substation of ABCL/ STU/other transmission licensee *(as the case may be)* at the interconnection point. One set of export/import meters shall be termed as Bill Meter and other set will serve as the Check Meter. The complete metering system consisting of meters, Current Transformers & Potential Transformers shall conform to the 0.2 accuracy class, individually and collectively, and shall comply with the technical standards, accuracy and calibration requirements of the Indian Electricity Rules and the specifications of the Bureau of Indian Standard and the guidelines of CEA for installation of meters.
- 14.2 The joint meter readings shall be recorded in the format given in Annexure V & VI.
- 14.3 The Meter/Metering system shall be properly sealed and made pilfer proof, to the satisfaction of both parties.
- 14.4 ABCL *(in consultation with STU if the generating plant is connected to the sub-station of STU/other transmission licensee)* shall, test all the metering equipment for accuracy, in the presence of a representative of the Generating Plant, if the Generating Plant so elects, at least once every year while the agreement is in force. Either party may, however, elect to get the meters tested at any time they so desire, at their own cost, in the presence of the

- other party.
- 14.5 ABCL/STU's designated representative and the representative of the Generating Plant shall jointly certify the meter test results. After every testing all metering equipment and the Metering system shall be securely sealed jointly by the representatives of ABCL and the Generating Plant.
- 14.6 The reading and testing of meters and associated equipment shall be in accordance with accepted good engineering practices in the electricity industry.
- 14.7 Calibration, inspection and testing of meters and the associated equipment shall be the responsibility of ABCL, who shall bear the related costs.
- 14.8 Meter readings shall be taken jointly by parties as indicated below:-
- (i) ABCL side -..... (Designation of Authorised Official)
 - (ii) Generating Plant side - Authorised representative of the Generating Plant.
- 14.9 The reading of the Bill Meter shall form the basis for the energy account, provided that the magnitude (i.e. absolute value) of the difference between the Check and Bill Meter reading is within one percent of the Bill Meter reading.
- 14.10 If in any month the readings of the Bill Meter and Check Meter are found to be doubtful or beyond the permissible 1% deviation indicated above, both sets of meters shall be checked and calibrated in the presence of authorised representatives of both the parties. Corrections shall be made, if required, on the basis of the error detected during this process, in the Monthly Bill for the period between the previous meter readings and the date and time from which accurate readings become available through replacement or re-calibration. These corrections shall be full and final for the Bill of that month.
- 14.11 During the period of checking and calibration of both meters simultaneously another export and import meter duly calibrated would be installed by ABCL(*in consultation with STU if the plant is connected to the s/s of STU/other transmission licensee*). For this purpose, one spare set of meters would be required to be available with the generating plant at all times.
- 14.12 If the Bill Meter is found to be defective, and the Check meter is found to be accurate then the reading from the latter shall be used for billing purpose and the Bill meters would be re-calibrated and re-installed or replaced by duly tested and calibrated meters, as necessary. Where error in the Check Meter is indicated beyond permissible limit but there is no error in the Bill Meter, monthly energy account would be prepared on the basis of the Bill Meter reading and the Check Meter shall be immediately re-calibrated and re-installed or replaced as necessary. If both meters are found to be defective, then the Bill will be revised on the basis of the in-accuracy discovered in the testing. The M.R.I. output from the meters shall be considered an authentic document for verification.
- 14.13 Metering at generating terminal of each unit of the generating plant shall be ensured as per the guidelines of the Central Electricity Authority.

15. ACCEPTANCE AND APPROVAL OF ABCL

ABCL's acceptance or approval for equipment, additions or changes to equipment, and their operational setting etc., would be required. Such acceptance/approval shall not be unreasonably withheld and shall be based on ABCL's existing policies and practices after the clearance of STU (*only in case the generating plant is connected to the s/s of STU/other transmission licensee*) is obtained.

16. COMMISSIONING OF GENERATION FACILITIES

The Generating Plant shall commission the generation facility and synchronise it with ABCL's / STU system (*as the case may be*) grid by

In case, the plant is commissioned beyond the said dates of commissioning, the tariff applicable for sale of electricity from the plant to ABCL shall be the rate corresponding to the year in which the Commissioning of the plant was agreed to as above in case of delay. However, in the case of delay in Commissioning of the plant for reasons beyond the reasonable control of the generating company, the provisions of para 26 of the Agreement shall apply.

17. CONTINUITY OF SERVICE

17.1 The supply of electricity by the Generating Plant shall be governed by instructions from the state load despatch centre, as per the provisions of the UP Electricity Grid Code as amended from time to time. However, ABCL/ STU/other transmission licensee (*as the case may be*) may require the Generating Plant to temporarily curtail or interrupt deliveries of power only when necessary in the following circumstances: -

7.1 Repair and/or Replacement and/or Removal of ABCL's/ STU/other transmission licensee (*as the case may be*) equipment or any part of its system that is associated with the Generating Plant's facility; and/or

7.2 Endangerment of Safety: If ABCL/ STU /other transmission licensee (*as the case may be*) determines that the continued operation of the facility may endanger the safety of ABCL's/ STU/other transmission licensee (*as the case may be*) personnel or integrity of ABCL's/ STU/other transmission licensee (*as the case may be*) electric system, or have an adverse effect on the provision of electricity to ABCL/ STU/other transmission licensee (*as the case may be*) 's other consumers/customers; and/or

7.3 Force Majeure Conditions as defined in para 26.

Note: Any necessary inspection, investigation or maintenance of ABCL/ STU/other transmission licensee (*as the case may be*) 's equipment or any part of its system that is associated with the Generating Plant's facility shall be planned by ABCL/ STU/other transmission licensee (*as the case may be*) to coincide with the scheduled outage of the Generating Plant's generation

system;

- 17.2 Before disconnecting the Generating Plant from ABCL /STU/other transmission licensee (*delete whichever not applicable*)'s system, ABCL shall, except in the case of an emergent situation, give advance intimation to the Generating Plant through telephone/wireless or through other means of communication along with reasons for disconnection, and the likely period of the disconnection. However, subsequent to disconnection, ABCL/STU/other transmission licensee (*delete whichever not applicable*) shall immediately notify the Generating Plant by telephone and confirm in writing the reasons for, and the likely period of, disconnection. During the period so notified ABCL shall not be obligated to accept or pay for any power from the Generating Plant.
- 17.3 In any such event as described above, ABCL/STU/other transmission licensee (*delete whichever not applicable*) shall take all reasonable steps to minimise the frequency and duration of such interruptions, curtailments, or reductions.
- 17.4 ABCL/STU/other transmission licensee (*delete whichever not applicable*) shall avoid scheduling any event described in 17.1 above, to the extent reasonably practical, during the Generating Plant's operations. Where the scheduling of such an event during the Generating Plant's operations cannot be avoided, ABCL /STU/other transmission licensee (*delete whichever not applicable*) shall provide the Generating Plant with fifteen days advance notice in writing to enable the Generating Plant to cease delivery of Power to ABCL at the scheduled time.
- 17.5 In order to allow the Generating Plant's facility to remain on-line and to minimise interruptions to Generating Plant operations, the Generating Plant may provide automatic equipment that will isolate the Generating Plant's facility from ABCL/ STU's (*as the case may be*) system during major system disturbances.

18. DAILY/MONTHLY/ANNUAL REPORT

The Generating Plant shall submit daily/monthly/annual and other reports on the format, and as per the procedure, specified in the UP Electricity Grid Code as amended from time to time and under the CNCE Regulations or as desired by the STU other transmission licensee (*delete whichever not applicable*) and ABCL.

The Generating Plant shall submit six monthly progress report during the construction of the plant to the distribution licensee. A Completion report shall be filed by with the Commission within 60 days of commissioning of the plant.

19. CLEARANCES, PERMITS AND LICENSES

The Generating Plant shall obtain, at its own expense, all authorisations, permits, and licences required for the construction, installation and operation of the Generating Plant's facilities and any interconnection facilities, including but not limited to, rights-of-way or easements. ABCL shall provide

reasonable assistance, including permissions, approvals and clearances from STU, to the Generating Plant if so requested by the Generating Plant.

20. DURATION

- 20.1 Unless terminated by default, this agreement shall be valid till the expiry of 20 years from the date of commissioning of the plant.
- 20.2 The agreement may be renewed or extended for such period as may be mutually agreed between the Generating Company and ABCL on expiry of initial term of 20 years.

21. EVENTS OF DEFAULT AND TERMINATION

- 21.1 The occurrence of any of the following events at any time during the term of this agreement shall constitute a default by the Generating Plant:
- (a) Failure on the part of the Generating Plant to use reasonable diligence in operating, maintaining, or repairing the Generating Plant's facility, such that the safety of persons and property, ABCL's equipment, or ABCL's service to others is adversely affected; or
 - (b) Failure or refusal by the Generating Plant to perform its material obligations under this agreement; or
 - (c) Abandonment of its interconnection facilities by the Generating Plant or the discontinuance by the Generating Plant of services covered under this agreement, unless such discontinuance is caused by force majeure, or an event of default by ABCL, or
 - (d) Failure by the Generating Plant to abide by all statutory provisions, rules, regulations, directions and conditions for installation, operation, and supply of power and maintenance of co-generation units etc., enforced from time to time by the Union/State Government, UPERC or other empowered authorities, including compliance with the UP Electricity Grid Code or as amended from time to time, or
 - (e) Failure by the Generating Plant to pay ABCL any amount payable and due under this agreement within ninety (90) working days of the demand being raised.
- 21.2 The occurrence of any of the following at any time during the term of this agreement shall constitute a default by ABCL: -
- (a) Failure to pay to the Generating Plant any amount payable and due under this agreement within ninety (90) working days of the receipt of the bill/monthly purchase bill; or
 - (b) Failure to use reasonable diligence in operating, maintaining, or repairing ABCL's interconnecting facilities, such that the safety of persons or property in general, or the Generating Plants equipment or personnel are adversely affected; or
 - (c) Failure or refusal by ABCL to perform its material obligations under this agreement; or

- (d) Abandonment of its interconnection facilities by ABCL or the discontinuance by ABCL of services covered under this agreement, unless such discontinuance is caused by force majeure or an event of default by the Generating Plant.
- (e) Except for failure to make any payment due, within ninety (90) working days of receipt of the monthly purchase bill, if an event of default by including non-payment of bills either party extends beyond a period of ninety (90) working days after receipt of written notice of such event of default from the non-defaulting party, then the non-defaulting party may, at its option, terminate this agreement by delivering written notice of such termination to the party in default.
- (f) Failure by either ABCL or the Generating Plant to exercise any of its rights under this agreement shall not constitute a waiver of such rights. Neither party shall be deemed to have waived the performance of any obligation by the other party under this agreement, unless such a waiver has specifically been made in writing and approved by the UPERC.

21.3 ABCL reserves the right to terminate this agreement upon one months notice to the Generating Plant, if the Generating Plant's facility fails to commence production of electric power within three months from the planned commercial operation date shown in Annexure 1.

22. COMMUNICATION

In order to have effective co-ordination between ABCL and the Generating Plant, a designated official shall be kept on duty round the clock by the Generating Plant and ABCL in their respective premises, with information to each other about the name, location, telephone number etc., of the official. Without prejudice to discharge of their rightful duties by others, this duty official shall take necessary action on receiving information about developments from the other party. The Generating Plant shall provide reliable and effective communication through wireless/hotline etc., between the Generating Plant & the interconnecting sub-station of ABCL/STU/other transmission licensee (*delete whichever not applicable*) and between the Generating Plant and the SLDC. The Generating Plant shall make provision for an RTU for remote monitoring of voltage, current and other related electrical parameters, as may be required by the STU.

23. DISPUTES AND ARBITRATION

In the event of any dispute or difference between the parties concerning performance of this agreement and/or the rights and liabilities of the parties in respect of which a procedure for the resolution is not otherwise provided for in this agreement the following provisions shall apply:

- a)(Designation of Authorised Official) on behalf of ABCL, and the authorised representative of the Generating Plant would be empowered to indicate explicitly the nature and material particulars of the dispute/dissatisfaction and the relief sought,

and serve notice thereof on the other, with copy to the ABCL's(Designation of Senior Official of ABCL) of the Circle under whose jurisdiction the Generating Plants plant is located.

- b) On receiving such information, the(Designation of Senior Official of ABCL) of the Circle of ABCL in which the Generating Plant is located, shall be required to personally meet the authorised representative of the Generating Plant and the(Designation of ABCL's Official) Executive Engineer of the concerned Division, at his own office, separately and/or together, within 15 (Fifteen) days of the date of receipt of such notice, and attempt in good faith to resolve the dispute to the mutual satisfaction of the two parties, within the stipulations dictated by the letter and spirit of the agreement.
- c) If the dispute is not resolved by way of a settlement being arrived at and duly signed by each of the above officers within (30) thirty days of the date of receipt of the notice described in clause (a) above, the matter may be referred by either or both the above designated officers of the two parties to the ABCL's(Designation of Senior Official of ABCL) , who has direct supervisory jurisdiction over the(Designation of Senior Official of ABCL) referred to above, with information to the Chief Executive of the Generating Plant. Within 15 days of receipt of such notice, the(Designation of Senior Official of ABCL) and the Chief Executive of the Generating Plant would be required to meet at the formers office and endeavour to settle the dispute within a further period of (30) thirty days. i.e. within a total period of 45 (forty Five) days from the initial date of receipt of the notice by the(Designation of Senior Official of ABCL).
- d) If the said dispute / dissatisfaction remains unresolved, either party can file a petition before UPERC, whose decision will be final and binding on both the parties. UPERC shall be empowered to determine the exact nature and modalities of the procedure to be adopted in resolving the matter.

24. INDEMNIFICATION

- 24.1 The Generating Plant shall indemnify, defend, and render harm free, ABCL, its members, directors, officers, employees and agents, and their respective heirs, successors, legal representatives and assignees, from and against any and all liabilities, damages, costs, expenses (including attorneys fees), losses, claims, demands, action, causes of action, suits, and proceedings of every kind, including those for damage to property of any person or entity (including the Generating Plant) and/or for injury to or death of any person

(including the Generating Plant's employees and agents), which directly or indirectly result from or arise out of or in connection with negligence or wilful misconduct of the Generating Plant.

- 24.2 ABCL shall indemnify and render the Generating Plant, its directors, officers, employees and agents, and their respective heirs, successors, legal representatives and assignees harmless from and against any and all liabilities, damages, costs, expenses (including outside attorneys fees), losses, claims, demands, actions, causes of action, suits and proceedings of every kind, including those for damage to the property of any person or entity (including ABCL) and/or injury to or death of any person (including ABCL's employees and agents), which directly or indirectly result from or arise out of or in connection with negligence or wilful misconduct by ABCL.

25 ASSIGNMENT

This Agreement may not be assigned by either ABCL or the Generating Plant without the consent in writing of the other party, except that either party may assign its rights under this Agreement, or transfer such rights by operation of law, to any corporation with which or into which such party shall merge or consolidate or to which such party shall transfer all or substantially all of its assets; provided that such assignee or transferee shall expressly assume, in writing, delivered to the other party to this Agreement, all the obligations of the assigning or transferring party under this Agreement.

26. FORCE MAJEURE

- 26.1 If any party hereto is wholly or partially prevented from performing any of its obligations under this agreement by reason of or due to lightning, earthquake, riots, fire, floods, invasion, insurrection, rebellion, mutiny, tidal wave, civil unrest, epidemics, explosion, the order of any court, judge or civil authority, change in State or National law, war, any act of God or a public enemy, or any other similar or dissimilar cause reasonably beyond its exclusive control and not attributable to its neglect, then in any such event, such party shall be excused from whatever performance is prevented by such event, to the extent so prevented, and such party shall not be liable for any damage, sanction or loss for not performing such obligations.
- 26.2 The party invoking this clause shall satisfy the other party of the occurrence of such an event and give written notice explaining the circumstances, within seven days to the other party and take all possible steps to revert to normal conditions at the earliest.
- 26.3 Any payments that become/have become due under this agreement shall not be withheld, on grounds of force majeure conditions developing.

27. AUTHORITY TO EXECUTE

Each respective party represents and warrants as follows: -

- (a) Each party has all necessary rights, powers and authority to execute, deliver and perform this agreement.
- (b) The execution, delivery and performance of this agreement by each respective party shall not result in a violation of any law or result in a breach of any government authority, or conflict with, or result in a breach of, or cause a default under, any agreement or instrument to which either respective party is a party or by which it is bound.
- (c) No consent of any person or entity not a party to this agreement, including any governmental authority, is required for such execution, delivery and performance by each respective party. All necessary consents have been either obtained or shall be obtained in the future as and when they become due.

28. LIABILITY AND DEDICATION

- 28.1 Nothing in this agreement shall create any duty, standard of care, or liability to be discharged by any person not a party to it.
- 28.2 No undertaking by one party to the other under any provision of this Agreement shall constitute the dedication of that party's system or any portion thereof to the other party or to the public; or affect the status of ABCL as a public utility or constitute the Generating Plant or the Generating Plant's facility as a public utility.

29. NODAL AGENCY OF ABCL

The(Designation of Senior Official of ABCL) shall act as a nodal agency for implementing this Agreement.

30. AMENDMENTS

Any waiver, alteration, amendment or modification of this Agreement or any part hereof shall not be valid unless it is in writing, signed by both the parties and approved by UPERC.

31. BINDING EFFECT

This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors, legal representatives, and permitted assignees.

32. NOTICES

Any written notice provided hereunder shall be delivered personally or sent by registered post, acknowledgement due, or by courier for delivery on written receipt, with pre-paid postage or courier charges, to the other party, at the following address:

THE, (Designation of Senior Official of ABCL) ABCL:

GENERATING PLANT:

Notice delivered personally shall be deemed to have been given when it is delivered at the office of the Generating Plants or to the office of the(Designation of Senior Official of ABCL) of ABCL, as the case may be, at address set forth above and actually delivered to such person or left with and received by a responsible person in that office. Notice sent by post or courier shall be deemed to have been given on the date of actual delivery as evidenced by the date appearing on the acknowledgement of delivery.

Any party to this agreement may change its address for serving a written notice, by giving written notice of such change to the other party.

33. EFFECT OF SECTION AND ANNEXURE HEADINGS

The headings or titles of the various sections and annexures hereof are for convenient reference and shall not affect the construction or interpretation of any provision of this Agreement.

34. NON-WAIVER

No delay or forbearance by either party in the exercise of any remedy or right will constitute a waiver thereof, and the exercise or partial exercise of a remedy or right shall not preclude further exercise of the same or any other remedy or rights.

35. RELATIONSHIP OF THE PARTIES

Nothing in this Agreement shall be deemed to constitute either party hereto as partner, agent or representative of the other party or create any fiduciary relationship between the parties.

36. ENTIRE AGREEMENT

This agreement constitutes the entire understanding and agreement between the parties.

37. GOVERNING LAW

This agreement shall be governed by and construed in accordance with the

laws applicable in the State of Uttar Pradesh

38. NO PARTY DEEMED DRAFTER

The parties agree that no party shall be deemed to be the drafter of this Agreement and that in the event this Agreement is ever construed by arbitrators, or by a court of law, no inference shall be drawn against either party on account of this Agreement or any provision hereof being drafted by them. ABCL and the Generating Plant acknowledge that both parties have contributed substantially and materially to the preparation of this Agreement.

39. APPROVALS

Wherever approvals from either ABCL or the Generating Plant are required in this Agreement, it is understood that such approvals shall not be unreasonably withheld.

40. ANNEXURES

ANNEXURES I to IX WOULD FORM PART OF THIS AGREEMENT.

41. STANDARD FOR DECISION MAKING

- 41.1 All operational decisions or approvals that are to be made at the discretion of either ABCL or the Generating Plant, pursuant to the terms of this agreement, including specifications and design criteria etc., shall be made or performed according to good engineering practices prevailing in the electricity industry.
- 41.2 Professional decisions or activities undertaken by either party for the purpose of constructing, installing, removing, maintaining or operating any facility, which may affect the operations of the other party's facility or facilities, shall be made or performed according to good engineering practices prevailing in the electricity industry.

IN WITNESS:

WHEREOF, ABCL and the Generating Plant have executed this agreement as of the..... Day of in the year.....

FOR THE GENERATING PLANT:
NAME:
DESIGNATION:
ADDRESS:

FOR ABCL:
NAME:
DESIGNATION:
ADDRESS:

WITNESSED BY:
NAME:
DESIGNATION:
ADDRESS:

WITNESSED BY:
NAME:
DESIGNATION:
ADDRESS:

ANNEXURE I**THE GENERATING COMPANY'S GENERATION FACILITIES****1. THE GENERATING PLANT:**

a. NAME:	
b. LOCATION:	
c. CHIEF EXECUTIVE:	
d. CONTACT PERSON:	
e. MAILING ADDRESS:	
f. TELEPHONE NUMBER:	
g. FAX NUMBER:	
h. EMERGENCY TELEPHONE NUMBER:	

2. GENERATING EQUIPMENT:

a. BOILERS:	
b. TURBO-GENERATOR SETS:	
c. GENERATION VOLTAGE:	
d. SPEED:	
e. TYPE OF GOVERNOR:	
f. TRANSFORMER:	

FIRST SYNCHRONISATION WITH ____KV LINE (INITIAL OPERATION DATE):

Transmission Line:.....KV line connecting withKV Sub-station of ABCL//STU/other transmission licensee (*delete whichever not applicable*) .

COMMERCIAL OPERATION DATE:

3. Stipulations relating to the facilities:

- 3.1 For the purpose of this agreement the Generating Plant's facility includes all real estate, fixtures, and property owned, controlled, operated or managed by the Generating Plant in connection with or to facilitate generation, transmission, delivery, or furnishing of electricity or required to interconnect and deliver the electricity to ABCL's system.

(Explanation: A single-line diagram relay list and trip scheme of the

Generating Plant's facility, reviewed and accepted by ABCL at the time the Agreement is signed, shall be attached to this agreement and made part hereof. The single-line diagram, relay list, and trip scheme shall expressly identify the point of electrical interconnection of the Generating Plant's facility to ABCL/STU/other transmission licensee (*delete whichever not applicable*)'s system. Material changes or additions to the Generating Plant's generating and interconnection facilities reflected in the single-line diagram, relay list, and trip scheme shall be approved by ABCL.)

- 3.2 The Generating Plant shall furnish, install, operate and maintain facilities such as breakers, relays, switches, synchronising equipment, monitoring equipment, and control and protective devices as suitable for parallel operation with ABCL/STU/other transmission licensee (*delete whichever not applicable*)'s system and acceptable to ABCL. Such facilities shall be accessible to authorised ABCL personnel for inspection, with prior intimation to the Generating Plant
- 3.3 The Generating Plant shall furnish, in accordance with ABCL/STU/other transmission licensee (*delete whichever not applicable*)'s requirements, all conductors, service switches, fuses, meter sockets, meter and instrument transformer housings and mountings, switches, meter buses, meter panels, and similar devices required for the service connection and meter installation at ABCL/STU/other transmission licensee (*delete whichever not applicable*)'s premises. This equipment shall be installed and Commissioned by ABCL/STU/other transmission licensee (*delete whichever not applicable*)
- 3.4 ABCL shall review and approve the design drawings and Bill of Material for the Generating Plant's electrical equipment, required to interconnect with ABCL/STU/other transmission licensee (*delete whichever not applicable*)'s system. The type of electrical equipment, the type of protective relaying equipment and the settings affecting the reliability and safety of operation of ABCL/STU/other transmission licensee (*delete whichever not applicable*)'s and the Generating Plant's interconnected system shall be approved by ABCL. ABCL, at its option, may request witnessing operation of the control, synchronising, and protection schemes.
- 3.5 The Generating Plant shall provide a manual isolating device, which provides a visible break to separate the Generating Plant's facilities from ABCL/STU/other transmission licensee (*delete whichever not applicable*)'s system. Such a disconnecting device shall be lockable in the OPEN position and be readily accessible to ABCL/STU/other transmission licensee (*delete whichever not applicable*) personnel at all times.

4. Operating Procedures:

- 4.1 The Generating Plant shall operate its plant when interconnected with the grid as per the procedure given in the UP Electricity Grid Code as amended from time to time. The overall responsibility of operation and implementation of the UP Electricity Grid Code rests with the State Load Despatch Centre and the

State Transmission Utility under the provisions of the Act, 2003.

- 4.2 The Generating Plant's normal annual Maintenance shall be carried out fromto
- 4.3 The Generating Plant shall notify ABCL/STU/other transmission licensee (*delete whichever not applicable*)'s interconnecting sub station and SLDC prior to synchronising a generator on to or taking a generator off of the system. Such notification should be as far in advance as reasonably possible under the circumstances causing the action.

5. **Single Line Diagram**

(To Be Inserted Here)

Annexure II

Sale and Accounting for Power

1. In case the Generating Plant is not a consumer of ABCL, protective gear at ABCL/ STU (*as the case may be*)'s Substation would be designed to ensure that reverse flow of power from ABCL's system to the Generating Plant is totally blocked out and the circuit breaker at the Substation gets opened automatically when required. However, notwithstanding this provision, if any export to the Generating Plant takes place, it would be paid for by the Generating Plant in accordance with the terms of this agreement.
2. On the first day of the Energy Account Month, the Generating Plant shall provide information in writing or Generation Schedule to SLDC and M/s ABCL , when ABT is implemented in the state about the quantity of Power to be wheeled by way of purchase or sale or banking, as the case may be, during the month.
3. ABCL will purchase Electricity based on the principle of merit order despatch and in accordance with provisions of the Supply Licence, CNCE Regulations & Directions of UPERC and other statutory authorities, and requirements of the State Load Despatch Centre. ***(Applicable to Captive Generating Plants Only)***

or

The purchase of electricity by ABCL shall be subject to the provisions of the Distribution Licence, CNCE Regulations & Directions of UPERC and other statutory authorities, and requirements of the State Load Despatch Centre. ***(Applicable to Cogeneration & NCE Plants)***

4. Power accounting and Billing would be done on the basis of the section titled "Metering" in the main agreement (Clause No. 14.0)

ANNEXURE III**SAMPLE MONTHLY BILL**
INVOICE

Date :	
For the Month of:	
Monthly Purchase Bill No.	
Name of Buyer: ABCL	Name of the Generating Plant:
Address:	Address:
Town:	Town:
District:	District:
PIN Code:	PIN Code:
Tel. No.:	Tel. No.:
Fax:	Fax:

DESCRIPTION	QUANTITY	UNIT PRICE	AMOUNT
1. ENERGY SUPPLIED (KWh)			
2. ENERGY FOR WHEELING (KWh)			
3. ENERGY FOR PAYMENT (KWh) (1-2)			

Banked Energy

1. Energy banked during the month	
2. Energy balance as on preceding month	
3. Energy scheduled for withdrawal during the month	
4. Banking charges	
5. Energy withdrawn during the month (3-4)	
6. Energy banked at the end of the month (1+2-3)	

OTHER CHARGES

Less/Add:	
SUBTOTAL:	
TOTAL DUE :	

Verified by:**For Generating Plant Ltd.
Authorised Signatory****For ABCL
Authorised Signatory**

ANNEXURE IV**INTERCONNECTION FACILITIES PROVIDED BY THE GENERATING PLANT**

	ITEMS PROVIDED	NOT PROVIDED
<u>LINE BAY/S</u>		
a) STRUCTURES		
b) BUS BARS, CLAMPS AND CONNECTORS		
c) GROUNDING GRID		
d) ISOLATORS		
e) CURRENT TRANSFORMERS		
f) CIRCUIT BREAKERS		
g) CONTROL CUBICLES		
h) CONTROL CABLING		
i) AC / DC POWER SUPPLY		
j) COMMUNICATION EQUIPMENT		
k) SYNCHRONISATION & PROTECTION FACILITIES		
l) AUTOMATIC VOLTAGE REGULATOR		
m) AUTO SYNCHRONISATION UNIT		
n) CHECK SYNCHRONISATION RELAY		
<u>PROTECTION FOR INTERNAL FAULTS:</u>		
a) DIFFERENTIAL GENERATOR		
b) DIFFERENTIAL UNIT TRANSFORMER		
c) RESTRICTED EARTH FAULT		
d) STATOR EARTH FAULT		
e) ROTOR EARTH FAULT		
f) INTER-TURN FAULT		
g) OVER VOLTAGE		
h) LOSS OF EXCITATION		
i) UNDER VOLTAGE		
j) REVERSE POWER		
k) LOW FORWARD POWER RELAY		

<u>PROTECTION AGAINST GRID FAULTS:</u>		
a) MINIMUM IMPEDANCE (DISTANCE PROTECTION RELAY)		
b) UNBALANCE (NEGATIVE PHASE SEQUENCE)		
c) O/C & E/F (UNIT TRANSFORMER)-LT & HT		
<u>ITEMS</u>	ITEMS PROVIDED	NOT PROVIDED
a) OVERLOAD ALARM		
b) OVERFLUXING RELAY		
<u>PROTECTION AGAINST GRID DISTURBANCES:</u>		
a) UNDER FREQUENCY		
b) OVER FREQUENCY		
c) POLE SLIP		

ANNEXURE V**BILL METER READINGS OF GENERATING PLANT**

READING SHOULD BE TAKEN ON 1ST WORKING DAY OF EVERY MONTH, AT 12.00 NOON.

NAME OF THE GENERATING PLANT:	
PLACE:	
TALUKA:	
DISTRICT:	
STATE:	
C.T. RATIO AVAILABLE/CONNECTED:	
P.T. RATIO AVAILABLE/CONNECTED:	
SCALE FACTOR (IF ANY):	
MULTIPLYING FACTOR (MF):	
BILLING METER MAKE / NUMBER:	

METER READINGS:

<u>KWH</u>	EXPORT METER READING	IMPORT METER READING
PREVIOUS READING		
CURRENT READING		
DIFFERENCE		
DIFFERENCE X MULTIPLYING FACTOR		

Authorised Signatory

Authorised

Signatory

Authorised

Signatory

EXECUTIVE ENGINEER
TRANSMISSIONEXECUTIVE ENGINEER
ABCLAUTH.
REPRESENTATIVE
GENERATING PLANT

DATE:

NOTES:

1. ABCL / STU/ other transmission licensee (*delete whichever not applicable*) shall maintain a daily logbook to record hourly readings of the Bill Meter/ HT Meter.
2. The Generating Plant shall maintain a daily log to record the hourly generation and supply in KWh, along with the schedule given by ABCL's Despatcher.
3. If the meter is changed, the reason/s, date, time of meter change and new meter make and number must be recorded by both parties.

ANNEXURE VI**CHECK METER READINGS OF GENERATING PLANT**

READING SHOULD BE TAKEN ON 1ST WORKING DAY OF EVERY MONTH, AT 12.00 NOON.

NAME OF THE GENERATING PLANT:	
PLACE:	
TALUKA:	
DISTRICT:	
STATE:	
C.T. RATIO AVAILABLE/CONNECTED:	
P.T. RATIO AVAILABLE/CONNECTED:	
SCALE FACTOR (IF ANY):	
MULTIPLYING FACTOR (MF):	
CHECK METER MAKE / NUMBER:	

METER READINGS:

<u>KWH</u>	EXPORT METER READING	IMPORT METER READING
PREVIOUS READING		
CURRENT READING		
DIFFERENCE		
DIFFERENCE X MULTIPLYING FACTOR		

Authorised Signatory

Authorised

Signatory

Authorised

Signatory

EXECUTIVE ENGINEER
TRANSMISSION

EXECUTIVE ENGINEER
ABCL

AUTH.
REPRESENTATIVE
GENERATING PLANT

DATE:

NOTES:

1. ABCL /STU/other transmission licensee (*delete whichever not applicable*) shall maintain a daily logbook to record hourly readings of the Check Meter/ HT Meter.
2. The Generating Plant shall maintain a daily log to record the hourly generation and supply in KWh, along with the schedule given by ABCL's Despatcher.
3. If the meter is changed, the reason/s, date, time of meter change and new meter make and number must be recorded by both parties.

ANNEXURE VII**DAILY GENERATION REPORT**

Date:	
NAME OF THE GENERATING PLANT:	
Installed generation Capacity (MW):	

Active Power (KWh)

Time	Scheduled	Meter Reading	Difference x M.F.
00			
01			
02			
03			
04			
05			
06			
07			
08			
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
	Total (for each column)		

Summary of Active Power, KWh

Time	Scheduled	Meter Reading	Difference x M.F.
Daily			
0600 – 2200			
2200 - 0600			
Cumulative for Month			
0600 – 2200			
2200 - 0600			

To:

1. Concerned SLDC, ABCL
2. Executive Engineer, Transmission, ABCL
3. Authorised Representative of the Generating Plant

Annexure VIII**MONTHLY TRIPPING REPORT**

Name and Address of the Generating Plant:	
Installed generation Capacity (MW):	
Date of First Commissioning (Synchronising):	
Date of Commercial Operation:	
Date of Synchronising:	
Progressive Days (generation): In Days	

TRIPPING ON FAULT:

TRIPPING ON PAGE 1													
	Tripping			REASON FOR TRIPPING				SYNCHRONISATION			TOTAL TIME LOST		REMARKS
S.N	Date	Time		Relay operated	Mech.	Electrical	Other	Date	Time		Hr	Min	
		Hr	Min						Hr	Min			

To:

1. Concerned SLDC, ABCL
2. Authorised Person/ Executive Engineer, STU /other Transmission Licensee/ABCL (as the case may be)
3. Authorized Representative of the Generating Plant

ANNEXURE IX**PLANNED & FORCED OUTAGE**

REASON FOR OUTAGE													
	OUTAGE			REASON FOR OUTAGE				SYNCHRONISATION			TOTAL TIME LOST		REMARKS
S.N	Date	Time		No Fuel	Mech.	Electrical	Other	Date	Time		Hr	Min	
		Hr	Min						Hr	Min			

Progressive Days:

Time Lost (In Hours):

- During Month& Year
- Since First Commissioning

To:

1. Concerned SLDC, ABCL
2. Authorised Person/ Executive Engineer, STU /other Transmission Licensee/ABCL (as the case may be)
3. Authorized Representative of the Generating Plant