

Uttar Pradesh Electricity Regulatory Commission

No. UPERC/Secy/Regulation/06- 1288

Dated: 23 March , 2006

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:

CHAPTER 1

PRELIMINARY

1 Short title and commencement

- (1) These regulations may be called the Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Supply of Power and Fixation of Tariff for sale of power from Captive Generating Plants, Co-generation, Renewable Sources of Energy and Other Non-Conventional Sources of Energy based Plants to a Distribution Licensee) Regulations, 2005.
- (2) These regulations shall come into force w.e.f. 28.7.2005 and, unless reviewed earlier or extended by the Commission, shall remain in force for a period of 5 years. The existing Practice Directions issued by the Commission on the captive power generation and renewable energy source based IPPs shall stand repealed from above date.
- (3) Words and expressions used in these regulations and not defined herein but defined in the Act shall have the meaning assigned to them under the Act.

2 Scope and extent of application

- (1) These regulations shall apply in cases of Captive Generating Plants, Bagasse/Biomass based Co-generation Plants, Renewable Sources of Energy and other Non-Conventional Sources of Energy based Generating Plants setup in the state of Uttar Pradesh.
- (2) The scheme of Availability Based Tariff implemented as per CERC Order dated 04.01.2000 shall be enforced in the State of Uttar Pradesh with effect from a date as may be notified by the Commission in that regard by an Order. The functions, duties and obligations specified for Generating Stations under the ABT Scheme shall be assumed by these generating stations unless provided otherwise.
- (3) The Commission shall encourage the generating companies to adopt Clean Development Mechanism and Carbon Trading and the generating companies shall be allowed to retain the benefit accrued to them as a consequence of the same. The transactional costs involved in such activities shall be a pass through in the tariff, in case no carbon credit is available in favour of that generating company subject to due diligence.
- (4) The generating stations covered under these regulations shall be deemed to be the generating station of a generating company and all functions, obligations & duties assigned to such generating stations under the Act shall apply to these power stations.

3. Tariff determination

The tariff in respect of a generating station under these regulations shall be applicable for the whole of the generating station.

4. Tariff for other Co-generation

For co-generation other than based on bagasse/bio-mass, the tariff shall be determined by the Commission on case to case basis on an application.

5 Approval of Power Purchase Agreement

The distribution licensee shall make an application for approval of power purchase agreement entered into with the generating station in such forms and such manner as prescribed in this Regulation and Uttar Pradesh Electricity Regulatory Commission (Conduct of Business) Regulations notified by the Commission from time to time.

6 Definitions

- i) "Act" means the Electricity Act 2003 (36 of 2003);
- ii) "Appropriate Commission" means the Central Regulatory Commission referred to in sub-section (1) of section 76 of the Act or the State Regulatory Commission referred to in section 82 of the Act or the Joint Commission referred to in section 83 of the Act, as the case may be;
- iii) "Authority" means the Central Electricity Authority referred to in sub- section (1) of section 70 of the Act;
- iv) 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 his eligibility to draw back this power from the grid.

- v) "Captive Generating Plant" means a power plant set up by any person to generate electricity primarily for his own use and includes a power plant set up by any cooperative society or association of persons for generating electricity primarily for use of members of such cooperative society or association;
- vi) "Co-generation" means a process which simultaneously produces two or more forms of useful energy (including electricity);
- vii) "Central Commission" means the Central Electricity Regulatory Commission referred to in sub-section (1) of Section 76 of the Act;
- viii) "Company" means a company formed and registered under the Companies Act, 1956 and includes any body corporate under a Central, State or Provincial Act;
- ix) "Central Transmission Utility" means any Government company which the Central Government may notify under sub-section (1) of section 38 of the Act;
- x) "Dedicated Transmission Lines" means any electric supply-line for point to point transmission which are required for the purpose of connecting electric lines or electric plants of a captive generating plant referred to in section 9 of the Act or generating station referred to in section 10 of the Act to any transmission lines or sub-stations or generating stations or the load centre, as the case may be;
- xi) "Distribution Licensee" means a Licensee authorized to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply;
- xii) "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 station, the date of commercial operation means the date of commercial operation of the last unit or

block of generating station and expression 'commissioning' shall be construed accordingly.

- xiii) "Generating company" means any company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person, which owns or operates or maintains a generating station;
- xiv) 'Generating Station' or 'Station' means any station for generating electricity, including any building and plant with step up transformer switchgear, switchyard cables or other appurtenant equipment, if any, used for that purpose and the site thereof; a site intended to be used for a generating station and any building used for housing the operating staff, of a generating station but does not in any case include any sub-station;
- xv) "Generate" means to produce electricity from a generating station for the purpose of giving supply to any premises or enabling a supply to be so given;
- xvi) "Grid Code" means the Grid Code specified by the U.P. Electricity Regulatory Commission under clause (h) of sub-section (1) of section 86 of the Act;
- xvii) 'Grid' means the high voltage backbone system of interconnected transmission lines, sub-stations and generating plants;
- xviii) "Sub station" means a station for transforming or converting electricity for the transmission or distribution thereof and includes transformers, converters, switchgears, capacitors, synchronous condensers, structures, cable and other appurtenant equipment and any buildings used for that purpose and the site thereof;

- xix) "National Electricity Plan" means the National Electricity Plan notified under sub-section (4) of section 3 of the Act;
- xx) "Open Access" means the non-discriminatory provision for the use of transmission lines or distribution system or associated facilities with such lines or system by any licensee or consumer or a person engaged in generation in accordance with the regulations specified by the Appropriate Commission;
- xxi) "Open Access Regulations" means the Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations, 2004 as amended from time to time;
- xxii) "Peak Hours/Off Peak Hours" means the hours declared as such by the State Load Dispatch Centre from time to time unless specified otherwise in this Regulations;
- xxiii) "Person" shall include any company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person;
- xxiv) Power Purchase Agreement 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;
- xxv) Reforms Act means the Uttar Pradesh Electricity Reforms Act, 1999;
- xxvi) "Regional Load Despatch Centre" means the Centre established under sub-section (1) of section 27 of the Act;
- xxvii) "Regulations" means regulations made under the Act;

- xxviii) "Renewable Energy Source" means sources of energy like, wind, solar, small hydro, biogas, biomass/bagasee, agro-based fuels or any other source as defined by the Ministry of Non-conventional Energy Sources (MNES) that can be used for power generation;
- xxix) "Rules" means rules made under the Act;
- xxx) "Specified" means specified by regulations made by the Appropriate Commission or the Authority, as the case may be, under the Act;
- xxxi) "State Grid Code" means the State Grid Code specified under clause (h) of sub-section (1) of section 86 of the Act by the UP Electricity Regulatory Commission;
- xxxii) "State Load Dispatch Centre" means the centre established in Uttar Pradesh under sub-section (1) of section 31 of the Act;
- xxxiii) "State Transmission Utility" means the Board or the Government Company specified as such by the State Government under sub-section (1) of section 39 of the Act;
- xxxiv) "The Commission" means the UP Electricity Regulatory Commission;
- xxxv) "Trading" means purchase of electricity for resale thereof and the expression "trade" shall be construed accordingly;
- xxxvi) "Wheeling" means the operation whereby the distribution system and associated facilities of a transmission licensee or distribution licensee, as the case may be, are used by another person for the conveyance of electricity on payment of charges to be determined by the Commission under section 62 of the Act.

7 Power to Remove Difficulties

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.

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, 2003, 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. Therefore, it shall be subject to day ahead despatch scheduling and unscheduled-interchange (UI) charges under Availability Based Tariff Scheme. A captive generating plant shall also comply with technical standards relating to safety and electricity supply, technical standards for construction for electrical plants and electric lines, safety requirements for construction, operation and maintenance of electrical plants & electric lines and conditions for installation of meters specified or to be specified by the Central Electricity Authority. These regulations seek to achieve efficient, safe, well-coordinated operation of the plant in the grid and exchange of information among the various interacting utilities in the State grid as well as with 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. Captive Power Plant

(1) A power plant shall qualify as a 'captive generating plant' under section 9 read with section 2(8) of the Act only when:

- a. In case of a power plant -
 - i) at least twenty six percent of the ownership is held by the captive user(s), and
 - ii) at least fifty one percent of the aggregate electricity generated in such plant, determined on an annual basis, is consumed for the captive use:

Provided that in case of power plant set up by registered cooperative society, the conditions mentioned under paragraphs at (i) and (ii) above shall be satisfied collectively by the members of the co-operative society:

Provided further that in case of association of persons, the captive user(s) shall hold not less than twenty six percent of the ownership of the plant in aggregate and such captive user(s) shall consume not less than fifty one percent of the electricity generated, determined on an annual basis, in proportion to their shares in ownership of the power plant within a variation not exceeding ten percent;

- b. In case of a generating station owned by a company formed as special purpose vehicle for such generating station, a unit or units of such generating station identified for captive use and not the entire generating station satisfy (s) the conditions contained in paragraphs (i) and (ii) of sub-clause (a) above:

Explanation :-

The electricity required to be consumed by captive users shall be determined with reference to such generating unit or units in aggregate identified for captive use and not with reference to generating station as a whole; and

The equity shares to be held by the captive user(s) in the generating station shall not be less than twenty six per cent of the proportionate of the equity of the company related to the generating unit or units identified as the captive generating plant.

- (2) It shall be the obligation of the captive users to ensure that the consumption by the Captive Users at the percentages mentioned in sub-clauses (a) and (b) of sub-rule (1) above is maintained and 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.

Explanation.-

For the purpose of this rule.-

"Annual Basis" shall be determined based on a financial year;

"Captive User" shall mean the end user of the electricity generated in a Captive Generating Plant and the term "Captive Use" shall be construed accordingly;

"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;

"Special Purpose Vehicle" shall mean a legal entity owning, operating and maintaining a generating station and with no other business or activity to be engaged in by the legal entity.

11 Captive Generating Plants covered under these regulations

- (1) These regulations shall apply to all existing Captive Generating Plant as well as proposed Captive Generating Plants having an installed capacity of 3 MW or above irrespective of their connectivity with the grid.
- (2) Any person intending to setup a captive generating plant shall submit the detailed project report, progress of construction and details regarding commissioning 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 to these regulations.
Provided that all existing captive generating plants shall furnish information in Annexure 1 and 3 to these regulations within 90 days from the date of notification of these regulations.
- (3) The captive 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.
- (4) In respect to plants generating electricity for their own use but having no connectivity with the grid, all provisions of these regulations shall apply except for those relating to provisions of regulation of supply in the grid.

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 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) Grid standards for operation and maintenance of transmission lines as specified by the Authority and/or the State Transmission Utility.
 - (d) The conditions for installation of meters for supply of electricity as specified by the Authority and/or the State Transmission Utility.
- (2) The Plant, in obligations under regulation 12(1) shall ensure economical use of resources, good performance and optimization of capital cost.
- (3) The plant shall endeavor to achieve the operational parameters, such as auxiliary consumption, heat rate, fuel consumption, capacity availability and plant load factor etc. as may be determined by the Commission from time to time for fixation of tariff.
- (4) In extraordinary circumstances, the State Government may direct the Captive generating plants to operate and maintain the plant in accordance with the directions to be issued by the State Government and the Commission may offset the consequential adverse financial impact of such direction, as it considers appropriate.

Explanation. - For the purposes of this section, the expression "extraordinary circumstances" means circumstances arising out of threat to security of the State, public order or a natural calamity or such other circumstances arising in the public interest.

13 Duties of the Captive Generating Plant

- (1) The Captive Generating Plant shall generate electricity primarily for his own use and shall:
 - (a) Submit the technical details concerning the generation and transmission as may be specified by the Authority for carrying out studies relating to cost and efficiency.
 - (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 1 & 3 of these regulations.
 - (c) Co-ordinate with State Load Dispatch Centre in respect to;

- i) Optimum scheduling and dispatch of electricity within the State or outside the state as per the scheme to be made by SLDC as per provisions of UPERC (Procedure, Terms and Conditions for Payment of Fee and Charges to State Load Dispatch Centre and other related provisions) Regulations, 2004 to be specified by the Commission and provisions of the Indian Electricity Grid Code and UP Electricity Grid Code.
 - ii) Exchange of data of quantity of electricity transmitted through the grid
 - iii) Real time grid operation and dispatch of electricity in accordance with U.P. Electricity Grid Code and Indian Electricity Grid Code.
 - iv) Establishing a communication and data transfer system with State Load Dispatch Centre.
- (2) The plant shall pay fee and charges payable to State Load Dispatch Centre as specified by the Commission from time to time by Regulation.
- (3) The plant shall be under obligation to comply with the directions issued to it by the State Load Dispatch Centre failing which the plant shall be liable to a penalty not exceeding Rs.5 lacs for each such instance.
- (4) In case of dispute with reference to quality of electricity or safe, secure and integrated operation of the grid or in relation to any direction issued by the State Load Dispatch Centre, the matter shall be referred to the Commission for adjudication.
- (5) The Captive Generating Plant shall ensure the compliance of U.P. Electricity Grid Code and the Indian Electricity Grid Code as amended from time to time.
- (6) The Captive Generating Plant shall not be required to obtain license under the Act for establishing, operating or maintaining a dedicated transmission line if such plant complies with the following:

- (a) Grid code and standards of grid connectivity;
 - (b) Technical standards for construction of electrical lines;
 - (c) System of operation of such a dedicated transmission line as per the norms of system operation of the concerned State Load Despatch Centre (SLDC) or Regional Load Despatch Centre (RLDC);
 - (d) Directions of concerned SLDC or RLDC regarding operation of the dedicated transmission line.
- (7) The Captive Generating Plant shall be deemed to be a transmission licensee for the purpose of establishment operation and maintenance of dedicated transmission line and connected sub station, and all duties and obligations, under the Act and Regulations made there under, as applicable to the transmission licensee shall apply accordingly.
- (8) The Captive Generating Plant shall ensure compliance of all general or specific direction, rules or regulations made by the Commission for the generating companies.
- (9) The Captive Generating Plant shall be subject to the provisions of Availability Based Tariff (ABT) as and when enforced in the State of Uttar Pradesh and all functions, obligations and duties assigned to a generating company in the ABT Order dated 4.1.2000 and amendments thereof, passed by Central Electricity Regulatory Commission, shall be assumed by the Captive Generating Plant.
- (10) The Captive Generating Plant shall coordinate with state transmission utility for the purpose of planning and coordination relating to intra-state transmission system as provided under the Act.
- (11) The Captive Generating Plant shall submit 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 his plant to the destination of his use by using transmission lines or distribution system or associated facilities with such lines or system and for that matter, rules or regulations notified by the Commission in that regard shall apply:

Provided that the plant shall ensure to dispatch electricity as per the schedule and unscheduled interchange, if any with the grid, shall not exceed 10 percent of the total dispatch in a day restricted to 5 percent during peak hours, beyond which a penalty may be imposed by the Commission, in addition to the Unscheduled Interchange Charges payable under the intra state ABT scheme, on the recommendation of the State Load Despatch Centre:

Provided also that the 'open access' shall be subject to the availability of transmission capacity as determined by State Transmission Utility or the Central Transmission Utility, as the case may be:

Provided further that in case of Inter state transmission the rules or regulations made by the Central Electricity Regulatory Commission shall apply:

Provided further that in case of Intra state transmission the rules or regulations made by the UP Electricity Regulatory Commission shall apply, and

Provided further that if any dispute arises regarding the availability of surplus transmission capacity, the matter shall be decided and adjudicated by the State or the Central Commission as the case may be.

- (2) The plant seeking 'open access' shall approach State Transmission Utility and/or Central Transmission Utility and/or intervening transmission licensee and/or

distribution licensee who shall determine and allow non discriminatory 'open access' subject to availability of transmission capacity.

15 Transmission Charges and Wheeling Charges:

The plant, seeking non-discriminatory 'open access' to the State and/or Inter state Transmission Systems and/or intervening transmission facility 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) under the Open Access Regulations.

16 Surcharge:

A Captive Power plant shall not be liable to pay surcharge in addition to the charges for transmission and wheeling for carrying the electricity to the destination of his own use or for the use of its member.

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, these Regulations and other 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 wheeling charges for such supply , as may be determined by the Commission by an order:

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 normative variable cost for a plant at any other location by a specific order on a petition filed by the generating plant.

Provided also that the escalating and non-escalating fixed costs for all plants covered in first proviso shall be as per the Schedule – I 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 capacities of the units commissioned in different years.*
- 2. The tariff for supply of electricity between the period of synchronization and the commissioning of the unit shall be equal to the variable cost.*

19 Purchase of Electricity

Any person, who establishes, maintains and operates a Captive Power Plant, may purchase electricity from a generating company or a distribution licensee in case his plant is not in a position to generate electricity to meet the requirement of his own use and consequently additional power is required:

Provided that such purchase of electricity, from a distribution licensee, shall be charged as per the tariff determined by the Commission under appropriate 'Rate Schedule of tariff under which the total load requirement of the plant shall belong to:

Provided also that in case of purchase of power through a trader or a generating company or a distribution licensee other than a distribution licensee of the area in which the plant is located, the rate shall be as mutually agreed however, surcharge and additional surcharge besides other charges shall be payable as determined by the Commission under open access regulations.

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) Subject to regulation 10 of these Regulations, 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 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 proof in this respect alongwith the project completion report to the Commission.

Chapter-3

GENERATION FROM CO-GENERATION, RENEWABLE ENERGY SOURCE OF ENERGY AND OTHER NON-CONVENTIONAL ENERGY SOURCES

22 Object

- (1) Electricity generation from biomass/ bagasse based cogeneration, renewable sources of energy viz. wind, hydro, solar and other non-conventional sources of energy like biogas, municipal waste & industrial wastes is gradually acquiring importance in augmenting the generation capacity. Apart from providing generation capacity in addition to the traditional sources of power, these sources are also environment friendly.
- (2) These regulations seek to achieve promotion of generation from these sources, facilitate connectivity of these generating plants with the grid and to ensure sale of electricity to any person and to specify a percentage of the total electricity generating capacity that shall be purchased by distribution licensee of the area in which the plant is located. Besides above, these regulations also seek to operate the plant in an efficient, safe and well-coordinated manner ensuring exchange of information among the various utilities interacting in the State grid as well as with the 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.
- (3) The National Electricity Policy of the Central Government in respect to promotion of non-conventional energy sources as envisaged in Para 5.2.20 is '*Feasible potential of non-conventional energy resources, mainly small hydro, wind and bio-mass would also need to be exploited fully to create additional power generation capacity. With a view to increase the overall share of non-conventional energy*

sources in the electricity mix, efforts will be made to encourage private sector participation through suitable promotional measures.'

- (4) On implementation of Availability Based Tariff in the State, 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 Co-Generation, Renewable Energy and Other Non-Conventional Sources of Energy

- (1) A person may construct, maintain or operate a generating station for generation of electricity from Co-generation or Renewable Sources of energy and other non-conventional sources of energy (hereinafter called 'the Plant') and a dedicated transmission line for carrying electricity from his plant to the point of connectivity with the grid or a sub-station of a distribution licensee.
- (2) The Plant shall be deemed to be a generating station of a generating company within the meaning of section 7 of the Act which shall establish, operate and maintain a generating station without obtaining a license under the Act if it complies with the standards specified by the authority under section 53 and section 73 of the Act. However, for hydroelectric generation, the provisions of section 8 of the electricity Act,2003 shall apply.
- (3) The Commission may direct the distribution licensee to purchase power from these sources through competitive bidding within suppliers offering energy from non-conventional sources including bagasse based cogeneration. In such case, these technologies would need to compete with other sources in terms of costs.

24 Generating Stations covered under Chapter 3

These Regulations shall apply to:

- (a) All the existing generating stations generating electricity from Co-Generation, Renewable Sources of energy and other non-conventional sources of energy in the state of Uttar Pradesh as on the date of notification of these regulations.
- (b) All generating stations generating electricity from Co-Generation, Renewable Sources of energy and other non-conventional sources of energy commissioned after the notification of these regulations.

25 Capacity

- (1) The capacity of Generating plant shall be determined 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 setup a generating plant shall submit the detailed project report, progress of construction and details regarding commissioning of the generating plant to the Commission for information and records. The necessary information to be accompanied with the detailed project report shall be as per Annexure-2 to these Regulations.

Provided that all existing generating plants shall furnish information in Annexure 2 to these regulations within 90 days from the date of notification 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-station and transmission line on account of any occurrence 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.
- (2) The generating plant shall obtain necessary clearances from Non-conventional Energy Development Agency, U.P.

27 Obligations of the Generating Plant

- (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) Grid standards for operation and maintenance of transmission lines as specified by Central Electricity Regulatory Commission / Central Electricity Authority or the State Transmission Utility.
 - (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 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 Regulation. 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 renewed to remove any inconsistencies with these regulations and such renewed PPAs shall be valid till 20 years from the year of commissioning of such plants.

- (3) The generating plant, in obligations under regulation 27(1) shall ensure economical use of resources, good performance and optimum investment.
- (4) The generating plant shall endeavor to achieve the operational parameters as applicable to a particular source of energy, such as auxiliary consumption, heat rate, fuel consumption, capacity availability and plant load factor etc. in case of a co-gen plant, as may be determined by the Commission from time to time for fixation of tariff for different non conventional and renewable source of energy.
- (5) In extraordinary circumstances, the State Government may direct the generating company to operate and maintain the generating plant in accordance with the directions to be 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.

Explanation. - For the purposes of this section, the expression "extraordinary circumstances" means circumstances arising out of threat to security of the State, public order or a natural calamity or such other circumstances arising in the public interest.

28 Duties of the Generating Plant

- (1) The generating plant shall:

- (a) Submit the technical details concerning the generation and transmission as may be specified by the Authority for carrying out studies relating to cost and efficiency.
 - (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 State Load Dispatch Centre in respect to;
 - i) Optimum scheduling and dispatch of electricity within the State or outside the state shall be as per the scheme to be made by SLDC as per provisions of UPERC (Procedure, Terms and Conditions for Payment of Fee and Charges to State Load Dispatch Centre and other related provisions) Regulation, 2004 to be specified by the Commission and provisions of the Indian Electricity Grid Code and UP Electricity Grid Code.
 - ii) Exchange of data of quantity of electricity transmitted through the grid
 - iii) Real time grid operation and dispatch of electricity in accordance with U.P. Electricity Grid Code and Indian Electricity Grid Code.
 - iv) Establish a communication and data transfer system with State Load Dispatch Centre.
- (2) The generating plant shall pay fee and charges payable to State Load Dispatch Centre as specified by the Commission from time to time by Regulation.

- (3) The generating plant shall be under obligation to comply with the directions issued to it by the State Load Dispatch Centre failing which the plant shall be liable to a penalty not exceeding Rs.5 lacs for each such instance.
- (4) In case of dispute with reference to quality of electricity or safe, secure and integrated operation of the grid or in relation to any direction issued by the State Load Dispatch Centre, the matter shall be referred to the Commission for adjudication.
- (5) In case of dispute with reference to quality of electricity or safe, secure and integrated operation of the grid or in relation to any direction issued by the Regional Load Dispatch Centre, the matter shall be referred to the Central Electricity Regulatory Commission for adjudication.
- (6) The generating plant shall ensure the compliance of U.P. Electricity Grid Code and the Indian Electricity Grid Code as amended from time to time.
- (7) The generating plant shall not be required to obtain license under the Act for establishing, operating or maintaining a dedicated transmission line if such plant complies with the following:
 - (a) Grid code and standards of grid connectivity;
 - (b) Technical standards for construction of electrical lines;
 - (c) System of operation of such a dedicated transmission line as per the norms of system operation of the concerned State Load Dispatch Centre (SLDC) or Regional Load Dispatch Centre (RLDC);
- (8) The generating plant shall be deemed as a transmission licensee for the purpose of establishment operation and maintenance of dedicated transmission line and connected sub station, and all duties and obligations, under the Act and

Regulations made there under, as applicable to the transmission licensee shall apply to the plant also.

- (9) The generating plant shall ensure to comply with any general or specific direction, rules or regulations made by the Commission for the generating companies.
- (10) The generating plant shall ensure compliance of Availability Based Tariff (ABT) guidelines as may be notified by the Commission and perform all function, obligations and duties assigned to a generating company in such guidelines.
- (11) The generating plant shall coordinate with state transmission utility for the purpose of planning and coordination relating to intra-state transmission system as provided under the Act.
- (12) The generating plant shall submit power purchase agreement to the Commission as mentioned in Regulation 27(2) of these Regulations for approval.

29 Sale of Power

- (1) All Co-Generation, Renewable Source of Energy and Other Non-Conventional Energy Sources based 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 shall be restricted to 7.5 percent of total power purchased by concerned distribution licensee in MUs. The distribution licensee on an offer made by the said plants for entering into a power purchase agreement, 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 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:

Note:- Other Non-conventional Sources of Energy shall include, inter alia, generation from wind, solar, municipal waste, industrial wastes including solid, semi solid, liquid and gaseous wastes and bio-gas.

- 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.

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 capacities of the units commissioned in different years.*
2. *The tariff for supply of electricity between the period of synchronization and the commissioning of the unit shall be equal to the variable cost for bagasse/biomass based co-generation.*

However, in case of hydel plants and other non-conventional and renewable sources of energy based plants, the tariff for supply of

electricity between the period of synchronization and the commissioning of the 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.*

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

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 person, who has constructed the Plant, shall have right to 'open access' for carrying electricity from his plant by using transmission lines or distribution system or associated facilities with such lines or system and for that matter, rules or regulations notified by the Commission in this regard shall apply on the plant:

Provided that the 'open access' shall be subject to the availability of transmission capacity as determined by State Transmission Utility and/or the Central Transmission Utility, as the case may be:

Provided also that in case of inter-state transmission, the rules or regulations made by the Central Electricity Regulatory Commission shall apply:

Provided further that if any question arises as to the availability of surplus transmission capacity, the matter shall be decided and adjudicated by the Appropriate Commission.

- (2) The plant seeking 'open access' shall approach the State Transmission Utility and/or Central Transmission Utility and/or intervening transmission licensee and/or distribution licensee who shall determine and allow non discriminatory 'open access' subject to availability of transmission/wheeling capacity and other operational constraints.

32 Transmission Charges and Wheeling Charges:

The plant seeking non-discriminatory 'open access' to the State and/or I-inter-state Transmission Systems and/or intervening transmission facility and/or distribution system for carrying the electricity generated by the plant to the destination of use, the transmission charges and wheeling charges, as determined by the Appropriate Commission, shall be paid by the licensee or consumer importing electricity for his use.

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 traded to a consumer then such consumer shall pay surcharge and the additional surcharge determined by the Commission under the open access regulations.

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 a distribution licensee in case his plant is not in a position to generate electricity to meet the requirement of his own use and consequently additional power is required.

Provided that such purchase of electricity, from a distribution licensee, shall be charged as per the tariff determined by the Commission under appropriate 'Rate Schedule of tariff' under which the total load requirement of the plant shall belong to.

Provided also that in case of purchase of power through a trader or a generating company, rate shall be as mutually agreed however, surcharge and additional surcharge besides other charges shall be payable as determined by the Commission under open access regulations.

Provided further that in case of purchase of electricity from a trader or a generating company or distribution licensee other than a distribution licensee of the area in which the plant is located, the plant shall be deemed as a consumer of such source of supply and the provisions of regulations concerning open access and electricity trading, as the case may be, shall apply.

CHAPTER 4

COMMON TERMS AND CONDITIONS APPLICABLE TO ALL PLANTS COVERED UNDER CHAPTER 2 AND CHAPTER 3

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) upto 10 MW on 33 KV,
 - ii) above 10 MW on 132 KV;

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 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 energy sources other than bagasse based cogeneration like wind, solar, hydro, municipal waste, industrial wastes (including solid, semi solid, liquid and gaseous wastes) and bio gas, the Commission may allow evacuation of power at 11 KV.

- (2) The cost of laying the transmission line to the sub-station, the required bay, terminal equipments and associated synchronization equipment, shall be borne by the generating plant and such work shall be undertaken under the supervision of the Licensee of the area in which the plant is located.

Provided also that the construction of the power evacuation system for transmission at 132 KV or higher voltage shall be carried out under the approval and supervision of the State Transmission Utility.

Provided further that the land for extending the bay shall be provided by the owner of the sub-station free of cost.

Provided further that if the total capital cost of the transmission line including bays etc. is likely to exceed 0.25 Cr./MW, a Co-generation plant generating electricity based on bagasse/biomass may approach the Commission for considering sharing of the incremental cost by the concerned distribution licensee or STU.

- (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 as the case may be.

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.

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 the point of injection and point of drawl for the purpose of recording and billing purposes shall be the substation of the licensee.

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

38 Energy Accounting and Billing

The State Load Dispatch 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 (Procedure, Terms & Conditions for Payment of Fee & Charges to State Load Dispatch Centre and Other Related Provisions) Regulations.

Provided that in case of sale to the distribution licensee of the area, the power purchase agreement 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) Co-generating plants, Renewable and Non-conventional Energy Sources Based 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 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. Upon introduction of intra-state ABT in the state of Uttar Pradesh, 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 50%, 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 Hrs. to 22 Hrs. The balanced 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) Upon introduction of intra state ABT in the state, the banking as well as withdrawal of power shall be subject to day ahead scheduling.
- (iv) The energy withdrawn by the plant, during 17:00Hr 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 2.5 (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

The Distribution Licensee shall make payment through a revolving self-replenishing Letter of Credit (LC) in favour of the plant. The value of LC shall be determined on the basis of average monthly energy scheduled for a particular calendar quarter under the power purchase agreement. The LC shall be updated by 5th working day of the quarter. The Licensee shall bear the charges for opening and maintenance of LC. Any shortfall in the amount of LC shall be payable within thirty days from the date of billing. In such case, a rebate of 1.25 percent shall be allowed and for default in payment beyond thirty days from the date of billing, a surcharge at the rate of 1.25 percent per month or part thereof shall be levied on the billed amount. If the payments is made by a mode other than through LC within a period of one month of presentation of bill by the generating company, a rebate of 1.0 percent shall be allowed, however a surcharge at the rate of 1.25 percent per month or part thereof shall be levied on the billed amount in case of default in payment beyond 30 days.

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

- (1) The Commission may in its discretion refer any technical matter relating to generation and transmission of electricity to Central Electricity Authority.
- (2) In case of any inconsistency in these regulations with the provisions of Electricity Act 2003, as amended from time to time, the provisions of the Act shall have the overriding effect.

By Order of the Commission

**(Sangeeta Verma)
Secretary**

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

(As per Commission’s Order dated 18th July 2005 on suo moto proceedings in the matter of Terms and Conditions of Supply and Tariff for Captive Generating Plants and Renewable and NCE source based plants read with Commission’s order dated 15th September 2005 on the Review Petitions)

(1) Coal Based Captive Generating Plants A one-part tariff would be applicable for sale of firm and infirm power by a Coal Based Captive Generating Plant at pithead location to the distribution licensee of its area. Such tariff would be determined separately for firm and infirm power.

(A) Firm Power

“Firm power” shall mean quantum of energy in million units supplied based on the capacity committed in mega-watt, to be sold monthly to the Distribution Licensee under the Power Purchase Agreement for a period of not less than five years provided that the actual supply shall be subject to scheduling and dispatch instructions of State Load Dispatch Centre under ABT.

The Tariff would comprise of Variable Cost and Fixed Cost as follows:

(1) Variable Cost

The Variable Cost per unit for a captive generating plant will be on the basis of its installed capacity and the same shall be subject to an yearly escalation @ 4 % per annum. The variable cost for 2005-06 and subsequent years for plants with different installed capacity will be as given in the following table :

Financial Year	Variable Cost (Paisa/Unit)		
	Below 200 MW	200/210/250 MW Sets	500 MW and above sets
2005-2006	86.95	75.00	72.74
2006-2007	90.43	78.00	75.65
2007-2008	94.05	81.12	78.68

2008-2009	97.81	84.36	81.83
2009-2010	101.72	87.74	85.10

(2) Fixed Cost

The Fixed cost will have two components i.e, Escalating Fixed Costs and Non-escalating Fixed Costs. These will be linked to the age of the generating station.

The Costs based on the age of the plant will be as follows:

(i) Escalating Fixed Cost

The escalating fixed cost for different capacity of plants for 2005-06 will be as given in the Tables given below and an escalation of 4% per annum shall be allowed for each subsequent year.

Escalating Fixed cost for Captive Generating Plants

Unit sizes below 200 MW

(Paise/unit)

Year of Commissioning	Tariff Year				
	2005- 06	2006- 07	2007- 08	2008- 09	2009- 10
2005- 06 or earlier year	13.87	14.43	15.01	15.61	16.23
2006- 07		14.29	14.86	15.46	16.07
2007- 08			14.71	15.29	15.91
2008- 09				15.12	15.73
2009- 10					15.54

200/210/ 250 MW Sets

(Paise/unit)

Year of Commissioning	2005- 06	2006- 07	2007- 08	2008- 09	2009- 10
2005-06 or earlier year	13.72	14.27	14.84	15.43	16.05
2006- 07		14.13	14.70	15.29	15.90
2007- 08			14.54	15.13	15.73
2008- 09				14.96	15.55
2009- 10					15.37

500 MW and above sets

(Paise/unit)

Year of Commissioning	2005- 06	2006- 07	2007- 08	2008- 09	2009- 10
2005-06 or earlier year	13.57	14.11	14.68	15.27	15.88
2006- 07		13.98	14.54	15.12	15.72
2007- 08			14.39	14.96	15.56
2008- 09				14.79	15.38
2009- 10					15.20

(ii) Non-escalating Fixed Cost

The non-escalating fixed cost will be based on the capacity and age of the plant and such cost for different category of plants shall be as follows:

Non-escalating Fixed Cost for Captive Generating Plants

Unit sizes below 200 MW

(Paise/unit)

	Year of Commissioning				
Year of Operation	2005- 06	2006- 07	2007- 08	2008- 09	2009- 10
1st	95.07	97.95	100.82	103.70	106.58
2nd	91.13	93.89	96.64	99.40	102.16
3rd	87.19	89.83	92.46	95.11	97.76
4th	83.15	85.78	88.29	90.82	93.35
5th	79.72	81.73	84.13	86.54	88.95
6th	75.39	77.68	79.96	82.26	84.55
7th	71.47	73.64	75.81	77.98	80.16
8th	67.54	69.60	71.65	73.71	75.78
9th	63.63	65.57	67.50	69.45	71.40
10th	59.72	61.54	63.36	65.19	67.02
11th and above	30.00	31.00	32.00	33.00	34.00

200/210/ 250 MW Sets

(Paise/unit)

	Year of Commissioning				
Year of Operation	2005- 06	2006- 07	2007- 08	2008- 09	2009- 10
1st	93.77	96.60	99.43	102.26	105.10
2nd	89.85	92.57	95.28	98.00	100.72
3rd	85.95	88.55	91.14	93.74	96.35
4th	82.04	84.53	87.00	89.49	91.98
5th	78.14	80.51	82.87	85.24	87.61
6th	74.24	76.50	78.74	80.99	83.25
7th	70.35	72.48	74.61	76.75	78.89
8th	66.46	68.48	70.49	72.51	74.54
9th	62.57	64.48	66.37	68.28	70.19
10th	58.69	60.48	62.26	64.05	65.85
11th and above	29.00	30.00	31.00	32.00	33.00

500 MW and above sets

(Paise/unit)

Year of Operation	Year of Commissioning				
	2005- 06	2006- 07	2007- 08	2008- 09	2009- 10
1st	92.71	95.52	98.31	101.12	103.92
2nd	88.86	91.53	94.21	96.90	99.59
3rd	85.01	87.55	90.11	92.69	95.26
4th	81.17	83.57	86.02	88.48	90.94
5th	77.33	79.60	81.93	84.27	86.62
6th	73.49	75.62	77.84	80.07	82.30
7th	69.66	71.66	73.76	75.87	77.99
8th	65.84	67.69	69.68	71.68	73.68
9th	62.02	63.73	65.61	67.49	69.38
10th	58.21	59.78	61.54	63.31	65.08
11th and above	29.00	30.00	31.00	32.00	33.00

For removal of doubts, it is clarified that the first year of operation shall be the year of commissioning of the plant.

Explanation:

The tariff for a 200 MW plant in the first year of its operation during 2005-06 would be Rs. 1.82 per unit i.e. sum of Non-escalating fixed cost (93.77 Paise), Escalating fixed cost (13.72 Paise) and Variable Cost (75 Paise) and for the same year the tariff for a plant in third year of its operation would be Rs. 1.75 per unit i.e. sum of Non-escalating fixed cost (85.95 Paise), Escalating fixed cost (13.72 Paise) and Variable Cost (75 Paise).

(B) Infirm Power

“Infirm power” shall mean quantum of energy supplied to the Distribution Licensee over and above the supply agreed in the PPA or otherwise, provided that the energy supplied beyond the capacity contracted in the PPA shall also be considered as infirm power.

The tariff for infirm power would be worked out as a sum of the following two components

1. Variable cost of Rs. 1.03 per unit for 2004-05 escalated @ 4 % for every subsequent year, and
2. Incentive @ 35 paisa per unit

The tariff for the year 2005-06 would be Rs. 1.42 per unit

(2) Diesel Based Captive Generating Plants

The tariff for Diesel Based Captive Generating Plants would be as applicable for sale of infirm power by a Coal Based Captive Generating Plant for the respective year under Para 1(B) above.

(3) Rounding off

The one part tariff shall be rounded off to the nearest paisa in both cases

SCHEDULE-II - TARIFF FOR GENERATION FROM CO-GENERATION, RENEWABLE ENERGY SOURCE OF ENERGY AND OTHER NON-CONVENTIONAL ENERGY SOURCES

(As per Commission's Order dated 18th July 2005 on suo moto proceedings in the matter of Terms and Conditions of Supply and Tariff for Captive Generating Plants, Renewable and NCE source based plants read with Commission's order dated 15th September 2005 on the Review Petitions)

(A) Tariff for Baggase/Bio-mass based co-generation

A one-part tariff would be applicable for sale of power by bagasse-based cogeneration plant to the distribution licensee of its area. Such tariff will comprise of Variable Cost and Fixed Cost as follows:

(a) Variable Cost

The Variable Cost for 2005-06 will be 128.21 Paise per unit and an escalation of 6% per annum shall be allowed for each subsequent year. The cost for subsequent years would be:

Financial Year	Variable Cost (Paise/ Unit)
2005-2006	128.21
2006-2007	135.90
2007-2008	144.06
2008-2009	152.70
2009-2010	161.86

(b) Fixed Cost

The Fixed cost will have two components i.e, Escalating Fixed Costs and Non-escalating Fixed Costs. These will be linked to the age of the generating station. The Costs based on the age of the plant will be as follows:

(i) Escalating Fixed Cost

The escalating fixed cost for the cogeneration plants shall be based on its year of commissioning. The plants commissioned prior to 2005-06 shall be entitled to the cost as is applicable for plants commissioned in 2005-06:

(in Paise per kWh)

Year of Commissioning	Tariff Year				
	2005- 06	2006- 07	2007- 08	2008- 09	2009- 10
2005-2006 or any earlier year	18.19	18.92	19.68	20.47	21.28
2006-2007		18.74	19.49	20.27	21.08
2007-2008			19.29	20.06	20.86
2008-2009				19.83	20.62
2009-2010					20.38

(ii) Non-escalating Fixed Cost

The non-escalating fixed cost for the cogeneration plants shall be based on its year of commissioning. The plants commissioned prior to 2005-06 shall be entitled to the cost as is applicable for plants commissioned in 2005-06:

(in Paise per kWh)

Year of Commissioning	Tariff Year				
	2005- 06	2006- 07	2007- 08	2008- 09	2009- 10
2005- 2006 or any earlier year	139.30	134.12	128.96	123.80	118.64
2006-2007		143.53	138.10	132.77	127.45
2007-2008			147.76	142.28	136.81
2008-2009				152.00	146.37
2009-2010					156.25

4. Effective Tariff

The effective tariff for the Cogeneration plant shall be the sum of the non-escalating fixed cost, escalating fixed cost and the variable cost and shall be rounded off to the nearest paise. The effective tariff is given in the following table:

(in Paise per kWh)

Year of Commissioning	Tariff Year				
	2005- 06	2006- 07	2007- 08	2008- 09	2009- 10

2005- 2006 Or any earlier year	286	289	293	297	302
2006-2007		298	302	306	310
2007-2008			311	315	320
2008-2009				325	329
2009-2010					338

4. Incentive

Incentive @ 3 paisa per unit shall be allowed for units supplied to the distribution licensee on fulfillment of following conditions:

- (a) The plant has achieved the target PLF of above 60 % for the respective financial year
- (b) Units supplied in excess of the target PLF of 60% during the off-season period shall only be eligible for the incentive.
- (c) The payment of incentive shall be made alongwith the settlement of the bill for the units supplied in the month of March.

(B) Tariff for Mini/Micro & Canal based Hydel Plants below 25 MW

The tariff for Mini/Micro hydel power plants will be based on its year of Commissioning and year of operation. The per unit tariff (in Rs/unit) based on the age of the plant will be as follows:

Year of operation	Year of Commissioning				
	2005- 06	2006- 07	2007- 08	2008- 09	2009- 10
1st	339.27	349.45	359.63	369.81	379.98
2nd	329.09	338.96	348.83	358.70	368.58
3rd	318.97	328.53	338.10	347.67	357.24
4th	308.91	318.18	327.45	336.72	345.98
5th	298.94	307.90	316.87	325.84	334.81
6th	289.03	297.70	306.37	315.04	323.72
7th	279.21	287.58	295.96	304.33	312.71
8th	269.46	277.55	285.63	293.71	301.80
9th	259.80	267.60	275.39	283.18	290.98
10th	250.23	257.74	265.24	272.75	280.26

11th	164.08	169.00	173.92	178.84	183.76
12th	166.54	171.54	176.53	181.53	186.53
13th	169.11	174.18	179.25	184.33	189.40
14th	171.77	176.93	182.08	187.23	192.39
15th	174.55	179.78	185.02	190.26	195.49
16th	177.43	182.76	188.08	193.40	198.73
17th	180.43	185.85	191.26	196.67	202.09
18th	183.55	189.06	194.57	200.07	205.58
19th	186.80	192.40	198.01	203.61	209.22
20th	190.17	195.88	201.59	207.29	213.00

The Tariff indicated above will be applicable for the Power Plants up to PLF of 35% and where PLF during a settlement period exceeds 35%, only an amount of 21.5 Paisa (in place of the tariff indicated above) shall be paid for every unit delivered in excess of 35% PLF at generator terminals i.e. including captive and auxiliary consumption.

(C) Tariff for all other Non-conventional and Renewable Sources of Energy based Plants (except Bagasse/Bio-mass based co-generation plants and Mini/Micro Hydel Plants)

The Tariff for all non-conventional and renewable source of energy based plants other than Bagasse/Bio-mass based co-generation plants and Mini/Micro Hydel Plants would be Rs. 2.50 per unit for 2005-06 with an escalation of 4% per annum for subsequent years without compounding.

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

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 dispatch 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.

Information to be submitted by an existing/proposed Cogeneration, Small Hydel, Non-conventional Source of Energy, Renewable Source Based Generating Plant alongwith the Detailed Project Report

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;
 - (d) First year
 - (e) Levelised
8. Feasibility Report
9. Details of communication and data transfer facility established
10. Details of person(s) responsible for scheduling and dispatch 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

Half-yearly return to be filed by Captive, & Other Renewable and NCE Plants

Part-A : Captive, Co-generation Generating Stations & Others

1.	Name of the Generating Company	:	
2.	Name of the Power Station	:	
3.	Details for the period ending	:	<input type="text" value="30<sup>th</sup> Sept....."/> <input type="text" value="31<sup>st</sup> Mar....."/>
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 Sept. /Mar of the year	:

Unit No.	1	2	3	4	5	6
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 Hydro generating Stations:

1.	Name of the Generating Company :
----	----------------------------------

2.	Name of the Power Station	:	
3.	Details for the period ending	:	30 th Sept..... 31 st Mar.....
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.	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 Sept. /Mar of the year	:	

23. Unit wise details as on 30th Sept. / 31st Mar. of the year: :

Unit No.	1	2	3	4	5	6
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 based generating Stations:

1.	Name of the Generating Company	:	
2.	Name of the Power Station	:	
3.	Half yearly return for the period ending	:	30 th Sept..... 31 st Mar.....
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 Sept. /Mar of the year	:	

21. Unit wise details as on 30th Sept. / 31st Mar. of the year: :

Unit No.	1	2	3	4	5	6
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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						

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 (Terms and Conditions for Supply of Power and Fixation of Tariff for Sale of Power to Distribution Licensee by Captive Generating Plants, Co-generation, Renewable Sources of Energy and Other Non-Conventional Sources of Energy based Plants) Regulations, 2005 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 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 'State Transmission Utility (STU)' means Uttar Pradesh Power Corporation Limited being the Government company specified so by the Government of Uttar Pradesh.
- 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 and associated facilities of a transmission licensee or distribution licensee, as the case may be, are 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 'CNCE Regulations' means the Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Supply of Power and Fixation of Tariff for sale of power from Captive Generating Plants, Co-generation, Renewable Sources of Energy and Other Non-Conventional Sources of Energy based Plants to a Distribution Licensee) Regulations, 2005 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 to ABCL/STU 's system from the Generating Plant's captive/bagasse based cogeneration/Mini/Micro Hydel

Plants/other NCE Plant (*delete whichever not applicable*) in accordance with the terms and conditions of this Agreement, at the rate specified for such plant in Schedule *I/II* (*delete whichever not applicable*) of Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Supply of Power and Fixation of Tariff for Sale of Power from Captive Generating Plants, Co-generation, Renewable Sources of Energy and Other Non-Conventional Sources of Energy based Plants to a Distribution Licensee) Regulations, 2005 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 Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Supply of Power and Fixation of Tariff for Sale of Power from Captive Generating Plants, Co-generation, Renewable Sources of Energy and Other Non-Conventional Sources of Energy based Plants to a Distribution Licensee) Regulations, 2005 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 Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Supply of Power and Fixation of Tariff for Sale of Power from Captive Generating Plants, Co-generation, Renewable Sources of Energy and Other Non-Conventional Sources of Energy based Plants to a Distribution Licensee) Regulations, 2005.

- 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 plant and ABCL shall comply with all the regulations issued by UPERC from time to time including but not limited to UP Electricity Grid Code, Open Access Regulations, SLDC Regulations to the extent they are applicable to them.

2.5 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.

2.6 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 month-wise Supply Schedule, schedule of banking and withdrawal of banked energy and other information, as required in the CNCE Regulation and UP Electricity Grid Code as amended from time to time or provisions of any other regulation 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.
- 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 one month 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 of part thereof shall be levied on the billed amount in case of default payment in within 30 days.
- 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-2000 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 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, 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 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.
- 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 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 (delete whichever not applicable)'s 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,2003.
- 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 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 dispatch 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: -

- a. 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
- b. 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
- c. Force Majeure Conditions as defined in para 26 below

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.

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-2000, or
- (e) Failure by the Generating Plant to pay ABCL any amount payable and due under this agreement within sixty (60) 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 sixty (60) 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 sixty (60) 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 sixty (60) 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:

FOR ABCL:

NAME:

NAME:

DESIGNATION:

DESIGNATION

ADDRESS:

ADDRESS

WITNESSED BY:

WITNESSED BY:

NAME:

NAME

DESIGNATION:

DESIGNATION:

ADDRESS:

ADDRESS:

THE GENERATING COMPANY'S GENERATION FACILITIES

1. THE GENERATING PLANT:

NAME:

LOCATION:

CHIEF EXECUTIVE:

CONTACT PERSON:

MAILING ADDRESS:

TELEPHONE NUMBER:

FAX NUMBER:

EMERGENCY TELEPHONE NUMBER:

2. GENERATING EQUIPMENT:

BOILERS:

TURBO-GENERATOR SETS:

GENERATION VOLTAGE:

SPEED:

TYPE OF GOVERNOR:

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**

1.0 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 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 wayof 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 dispatch and in accordance with provisions of the Supply Licence, CNCE Regulations & Directions of UPERC and other statutory authorities, and requirements of the state load dispatch centre. ***(Applicable to Captive Generating Plants Only)***

or

3. 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 dispatch 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)

SAMPLE MONTHLY BILL

INVOICE

For the Month of ,

Monthly Purchase Bill No.

Date

Name of Buyer: ABCL

Name of the Generating Plant:

Address:

Address:

Town: District:

Town: District:

PIN Code:

PIN Code:

Tel. No.: Fax:

Tel. No.: Fax:

<i>DESCRIPTION</i>	<i>QUANTITY</i>	<i>UNIT</i>	<i>PRICE</i>
<i>AMOUNT</i> <u>Energy</u>			
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 withdrawan during the month (3-4)

6. Energy banked at the end of the month (1+2-3)

OTHER CHARGES

Less/Add :.....

SUBTOTAL

TOTAL DUE

For Generating Plant Ltd.

Verified by

Authorised Signatory

Authorised Signatory, ABCL

INTERCONNECTION FACILITIES PROVIDED BY THE GENERATING PLANT

ITEMS PROVIDED

NOT PROVIDED

LINE BAY/S

STRUCTURES

BUS BARS, CLAMPS AND CONNECTORS

GROUNDING GRID

ISOLATORS

CURRENT TRANSFORMERS

CIRCUIT BREAKERS

CONTROL CUBICLES

CONTROL CABLING

AC / DC POWER SUPPLY

COMMUNICATION EQUIPMENT _____

SYNCHRONISATION & PROTECTION FACILITIES

AUTOMATIC VOLTAGE REGULATOR

AUTO SYNCHRONISATION UNIT

CHECK SYNCHRONISATION RELAY

PROTECTION FOR INTERNAL FAULTS:

DIFFERENTIAL GENERATOR

DIFFERENTIAL UNIT TRANSFORMER

RESTRICTED EARTH FAULT

STATOR EARTH FAULT

ROTOR EARTH FAULT

INTER-TURN FAULT

OVER VOLTAGE

LOSS OF EXCITATION

UNDER VOLTAGE

REVERSE POWER

LOW FORWARD POWER RELAY

PROTECTION AGAINST GRID FAULTS:

MINIMUM IMPEDANCE (DISTANCE PROTECTION RELAY)

UNBALANCE (NEGATIVE PHASE SEQUENCE)

O/C & E/F (UNIT TRANSFORMER)-LT & HT

ITEMS

PROVIDED

NOT PROVIDED

OVERLOAD ALARM

OVERFLUXING RELAY_

PROTECTION AGAINST GRID DISTURBANCES:

UNDER FREQUENCY

OVER FREQUENCY

POLE SLIP _____

ANNEXURE V

BILL METER READINGS OF GENERATING 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:

EXPORT METER READING

IMPORT METER READING

KWH

PREVIOUS READING

CURRENT READING

DIFFERENCE

DIFFERENCE X MULTIPLYING FACTOR

Authorised Signatory/

Authorised Signatory/

EXECUTIVE ENGINEER

EXECUTIVE ENGINEER

AUTH. REPRESENTATIVE.

TRANSMISSION

ABCL

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 Dispatcher.
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 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:

EXPORT METER READING

IMPORT METER READING

KWH

PREVIOUS READING

CURRENT READING

DIFFERENCE

DIFFERENCE X MULTIPLYING FACTOR

Authorised Signatory/

Authorised Signatory/

EXECUTIVE ENGINEER EXECUTIVE. ENGINEER AUTH. REPRESENTATIVE.

TRANSMISSION

ABCL

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 Dispatcher.
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.

DAILY GENERATION REPORT

Name and Address of Generating Plant:

Date:

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.
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Daily

0600 - 2200

2200 - 0600

Cumulative for Month

0600 - 2200

2200 - 0600

To: 1. Concerned SLDC, ABCL

2. Executive Engineer, Transmission, ABCL

Authorised Representative of the Generating

Plant

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ANNEXURE IX

PLANNED & FORCED OUTAGE

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

Progressive Days:

Time Lost:

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)

AUTHORISED REPRESENTATIVE OF THE GENERATING PLANT