

Uttar Pradesh Electricity Regulatory Commission
Notification No.: UPERC/Secretary/CRE Regulations/ 2019/

Dated: 25/07/2019

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

**UPERC (Captive and Renewable Energy Generating Plants)
Regulations, 2019**

(CRE Regulations, 2019)

CHAPTER - 1

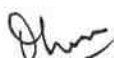
PRELIMINARY

1. Short Title and commencement

- i. These Regulations shall be called the UPERC (Captive and Renewable Energy Generating Plants) Regulations, 2019 (hereinafter referred to as CRE Regulations, 2019).
- ii. These Regulations shall be reckoned to have come into force from 1 April, 2019 and shall remain in force up to 31 March, 2024 unless reviewed earlier or extended by the Commission.
- iii. Words and expressions used in these Regulations and not defined herein but defined in the Electricity Act, 2003 (hereinafter referred to as 'the Act'), as amended from time to time, shall have the meaning as assigned to them under the Act.

2. Scope and extent of application

- i. These Regulations shall apply to:
 - a) All the Generating Stations based on Captive generation, renewable sources of generation and co-generation, existing prior to 01.04.2019 in the State of Uttar Pradesh as on the date of notification of these Regulations.
 - b) All new projects commissioned after 01.04.2019 within Uttar Pradesh for







generation based on Captive generation, renewable sources of generation and co-generation, captive consumption and sale of electricity from such captive plants or plants based on RE sources, to all distribution licensees within Uttar Pradesh or through Open access to a third party.

Provided that in case of Wind, Mini/ Micro hydro projects, Small Hydro projects, Biomass power, Non-fossil fuel based generation and Cogeneration projects, Solar PV projects and Wind based power plants these Regulations shall apply subject to the fulfillment of eligibility criteria specified in these Regulations.

- ii. The provisions of Availability Based Tariff (hereinafter referred to as 'ABT') in respect to functions, duties and obligations, as applicable to conventional generation plants shall apply to these Generating Plants also, unless provided otherwise in some other Regulations.
- iii. For Generating Plants commissioned on or after 1.04.2009, where the Generating Plant/Company has adopted Clean Development Mechanism (CDM), the proceeds of carbon credit from approved CDM project shall be shared in the following manner, namely:
 - a. 100% of gross proceeds on account of CDM shall be retained by the project developer during the first year of commercial operation of the Generating plants.
 - b. During the second year of commercial operation, the share of the procurer shall be 10% which shall progressively increase by 10% every year till it reaches 50%, where-after the proceeds shall be shared in equal proportion, by the Generating Company and the procurer.
- iv. Annual Energy Audit of each Generating Plant shall be compulsory under relevant provisions of Energy Conservation Act, 2001, as amended from time to time.



- v. The Generating Plant / Company shall abide by obligations cast on it by orders of the State Commission issued from time to time in respect of promotion of Renewable Energy Sources.
- vi. The Generating Plant/ Company shall abide by the provisions of the Act, Rules, Codes, Regulations, Orders and Directions of the appropriate Authority / Commission issued from time to time regarding generation and evacuation of electricity.

Provided the Commission may appoint a separate independent auditor who, under the supervision of the Commission, would undertake technical and financial audit of the generating station at any time.

- vii. The Commission may in its discretion refer any technical matter relating to Generation and Transmission to Central Electricity Authority for examination.
- viii. 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 removal of difficulty so arisen.

3. Tariff Determination for Captive Generating Plants (Non- RE)

The tariff in respect of a Captive Generating Plant (Non- RE) under these Regulations shall be applicable to the capacities or the units in respect of which an agreement has been reached between the generating company and the procurer for supply of electricity, as per the provisions of these Regulations.

4. Tariff Determination for Renewable Energy based Power Plants

A generic tariff for renewable energy based generating plants viz. Bagasse Based Generation, Biomass (Rice Husk Based) Generation Plants, Municipal Solid Waste Based Generation Plants, Biogas Based Generation Plants, Biomass Gasifier Based Generation Plants, Small Hydro Generation Plants,



Solar Power Generation Plants and Wind Power Generation Plants is given in Schedule II of these Regulations.

Provided that for any renewable energy technology approved by MNRE other than those covered under these Regulations, the tariff may be determined by the Commission on case to case basis on receipt of an application for this purpose.

5. Approval of Power Purchase Agreement

The Distribution Licensee shall make an application for approval of Power Purchase Agreement (PPA) entered into with the Generating Plant in such form and in such manner as prescribed in these Regulations, Orders of the Commission and UPERC (Conduct of Business) Regulations, 2004, notified by the Commission and as amended from time to time.

Provided that the Distribution Licensee shall make the application to the Commission within three (3) months of signing the PPA with the Generating Plant.

6. Definitions

- i. In these Regulations, unless the context otherwise requires:
 - a. **“Act”** means the Electricity Act, 2003 (36 of 2003), including amendments thereto;
 - b. **“Auxiliary Energy Consumption”** means the quantum of energy consumed by auxiliary equipment of the generating station and transformer losses within the generating station, and shall be expressed as a percentage of the sum of gross energy generated at the generator terminals of all the units of the generating station;
 - c. **“Banking of power”** is the process under which a Generating Plant supplies power to the grid with the intent of exercising its eligibility to draw back this power from the grid for its own use as per the conditions



provided in these Regulations;

- d. **“COD” or “Date of Commercial Operation”** shall mean the date on which the generating plant is synchronized with the grid system and has demonstrated the generation capacity as per the terms of the PPA.
- e. **“CERC”** means the Central Electricity Regulatory Commission;
- f. **“Commission”** means the Uttar Pradesh Electricity Regulatory Commission;
- g. **“Contracted Capacity”** means the capacity in MW as agreed to be supplied by the Generating company to a Distribution Licensee under the Power Purchase Agreement;
- h. **“Control Period”** means a period during which the principles and norms for determination of tariff specified in these Regulations shall remain valid;
- i. **“Existing Generating Station”** means a generating station, which has achieved COD prior to the coming into effect of these Regulations;
- j. **“Financial Year”** means a period commencing on 1st April of a calendar year and ending on 31st March of the subsequent calendar year;
- k. **“Gross Calorific Value” or “GCV”** in relation to a fuel used in a generating station means the heat produced in kcal by complete combustion of one kilogram of solid fuel or one litre of liquid fuel or one standard cubic meter of gaseous fuel, as the case may be;
- l. **“Gross Station Heat Rate” or “SHR”** means the heat energy input in kcal required to generate one kWh of electrical energy at generator terminals of a thermal generating station;
- m. **“IEGC”** means the Grid Code specified by the Central Regulatory Commission under clause (h) of sub-section (1) of section 79 of the Act;



- n. **“Installed Capacity” or “IC”** means the summation of the name plate capacities of all the Units of the generating station or the capacity of the generating station (reckoned at the generator terminals), approved by the Commission from time to time;
- o. **“Inter-connection Point”** means a point at EHV substation of transmission licensee or HV/LV sub-station of distribution licensee, as the case may be, where the electricity produced from the generating station is injected into the Uttar Pradesh Grid;
- p. **“Large scale stand-alone Solar projects”** means Solar projects with installed capacity of 5 MW and above.
- q. **“MNRE”** means the Ministry of New and Renewable Energy of the Government of India;
- r. **“New Generating Station”** means a generating station which achieves COD after coming into effect of these Regulations;
- s. **“Non fossil fuel based co-generation”** means the process in which more than one form of energy (such as steam and electricity) are produced in a sequential manner by use of biomass provided the project may qualify as a co-generation project if it fulfils the eligibility criteria as specified in CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2017 and subsequent amendments thereof.
- t. **“Operation and Maintenance expenses” or “O&M expenses”** means the expenditure incurred on operation and maintenance of the project, and includes the expenditure on manpower, repairs, spares, consumables, insurance and other overheads of revenue nature;
- u. **“Ownership”** in relation to a Generating Station or power plant setup 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;

- v. **“Peak Hours / Off Peak Hours”** means the hours declared as such by the State Load Despatch Centre from time to time unless specified by an Order of the Commission;
- w. **“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 with Distribution Licensee in that period.

$$PLF = \frac{ES \times 1000}{CC \times (100 - AUX) \times 8760}$$

Where,

ES: Energy sold in MU during the year,

CC: Contracted capacity in MW,

AUX: Normative Auxiliary Consumption

- x. **“Power Purchase Agreement” or “PPA”** means an agreement between a Generating Company and a Distribution Licensee for supply of power on the terms and conditions specified therein and with the provisions that the tariff for sale of power shall be as determined by the Commission from time to time;
- y. **“Project”** means a generating station and the evacuation system upto inter-connection point and in case of a small hydro generating station includes all components of generating facility such as dam, intake water conductor system, power generating station and generating units of the scheme, as apportioned to power generation;
- z. **“Renewable Energy”** means the grid quality electricity generated from Renewable Energy sources;
- aa. **“Renewable Energy Power Plants”** means the power plants other than the conventional power plants generating grid quality electricity



from Renewable Energy sources;

- bb. **“Renewable Energy Sources”** (hereinafter called ‘RE sources’) means renewable energy sources such as small hydro, wind, solar, biomass, bio fuel co-generation (including Bagasse based co-generation), urban or municipal solid waste and such other sources as recognized or approved by the MNRE or State Government;
 - cc. **“RLDC”** means the Regional Load Despatch Centre established under sub-section (1) of section 27 of the Act;
 - dd. **“SLDC”** means State Load Despatch Centre established in Uttar Pradesh under sub-section (1) of section 31 of the Act;
 - ee. **“UPEGC”** means the State Grid Code specified under clause (h) of subsection (1) of section 86 of the Act by the Commission;
 - ff. **“UPERC Open Access Regulations”** means the Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations, 2009 as amended from time to time;
 - gg. **“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 the Act;
 - hh. **“Year”** means a financial year.
- ii. The Words or expressions occurring in these Regulations and not defined herein, but defined in the Act or any other Regulations of the Commission, shall bear the same meaning as in the Electricity Act, 2003 or any other Regulations of the Commission, as amended from time to time. Expressions used herein but not specifically defined in these Regulations or in the Electricity Act, 2003 but defined under any law passed by a competent legislature and applicable to the electricity industry in the state shall have the meaning assigned to them in such



law. Expressions used herein but not specifically defined in these Regulations or in the Acts or any law passed by a competent legislature shall have the meaning as is generally assigned in the electricity industry

7. Power to Relax

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

8. Interpretation

In case of any conflict in the interpretation of this Regulation, the english version of the Regulation shall prevail over the hindi version of the Regulation.



CHAPTER - 2

CAPTIVE GENERATING PLANT (NON- RENEWABLE ENERGY)

9. Object

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

10. Generation from Captive Power Plants

- i. A power plant shall qualify as a 'Captive Generating Plant', under Section 9 read with Section 2(8) of the Act and Rule 3 of The Electricity Rules, 2005, as amended from time to time.
- ii. It shall be the obligation of the Captive Users to ensure the captive consumption at the percentages mentioned in the Electricity Rules, 2005 and subsequent amendments thereto. In case the minimum percentage of captive generation is not used for captive purposes in any year, the generating plant shall not be eligible for the benefits of a captive generating plant in that financial year and shall not be governed by the Tariff determined under these Regulations. The Tariff for generation from such plants will have to be separately approved by the Commission on an application filed by the generator.

11. General conditions for Captive Generating Plants

- i. These Regulations shall apply to all existing Captive Generating Plants as well as proposed Captive Generating Plants having an installed capacity of 1 MW or above.



- ii. Any person intending to set-up a Captive Generating Plant shall submit the detailed project report, scheduled date of commercial operation and half yearly progress report of construction of the plant to the Commission for information and record. The necessary information to be accompanied with the detailed project report shall be as per *Annexure 1* of these Regulations:

Provided that all existing Captive Generating Plants (whether connected with the grid or not) shall furnish the desired information in *Annexure 1 and Annexure 3* of these Regulations within 90 days from the date of notification of these Regulations. Non-compliance shall be liable for action under the appropriate provisions of the Act or Regulations.

- iii. The provisions of ABT in respect to functions, duties and obligations, as provided for conventional Generating Plants under ABT regime, shall apply to Captive Generating Plants.
- iv. The Captive Generating Plant shall abide by the grid discipline and shall not be entitled to any compensation in the event of grid failure or any interruptions or damage to the plant or its associated sub-stations or transmission line on account of any happening in the grid.
- v. Relevant provisions of these Regulations shall also apply to the captive plants having no connectivity with the grid.

12. Obligations of the Captive Generating Plant

- i. The Captive Generating Plant shall establish, operate and maintain Generating Station, Sub- Station, tie lines and dedicated transmission lines connected thereto in accordance with the following:
 - 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. Uttar Pradesh Electricity Grid Code (UPEGC);
- d. The conditions for installation of meters for supply of electricity as specified by the Authority and / or the State Transmission Utility (STU).
- e. Submit information to the Commission in respect to availability, generation achieved, demand met, plant load factor, auxiliary consumption, specific heat rate, specific oil consumption and other information as specified under *Annexure 1 & Annexure 3* of these Regulations;
- f. Co-ordinate with SLDC and / or STU for scheduling and despatch of electricity.
- g. The plant shall be under obligation to comply with the directions issued to it by SLDC and shall pay fee and charges payable to SLDC as specified by the Commission from time to time.
- h. The Captive Generating Plant shall ensure compliance of all general or specific direction, Rules or Regulations made by the Commission for the generating companies.
- i. The Captive Generating Plant shall ensure that the Distribution Licensee has submitted Power Purchase Agreement to the Commission for approval, if the captive power plant intends to sale surplus power to the distribution licensee.

13. Capacity of the Plant & Location

Captive Generating Plant owner shall clearly mention the capacity of the Plant, Location and fuel linkages in the project report and ensure that Government of India/State Government guidelines regarding use of fuel are complied with.

14. Environmental Clearance

The Captive Generating Plant owner shall abide by the emission standards set



by the Union/State Government. The Captive Generating Plant shall obtain all the required environmental and pollution clearances from the Central / State pollution control authorities and submit copies of Clearance Certificates to the Commission as early as possible.

15. Sale of Power

- i. A Captive Generating Plant may enter into an agreement with the Distribution Licensee/procurer for sale of its surplus capacity based on Model PPA available at *Annexure 4* to these Regulations. The parties to the agreement may make plant / site specific changes in the Model PPA not inconsistent with the Act and relevant Regulations. Such changes shall however be subject to approval of the Commission:

Provided that the plant may also supply electricity to a consumer or Licensee, not being the host Licensee and who is permitted open access as per provisions of UPERC Open Access Regulations.

- ii. In case of Open Access, the Distribution Licensee/procurer shall pay the Open Access charges as specified by the UPERC Open Access Regulations:

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.

16. Tariff

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

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



Plant.

Note:

- a. 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 tariff of contracted capacities of the units commissioned in different years.
- b. The tariff for supply of electricity during the period of synchronization and commissioning of the unit shall be equal to the variable cost.

17. Purchase of Electricity

Any person, who establishes, maintains and operates a Generating Plant, may also purchase electricity through Open Access or from Distribution Licensee of his area, to meet the requirement.

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

Provided also that in case of purchase of power through Open Access, charges shall be payable as determined under UPERC Open Access Regulations:



CHAPTER - 3

RENEWABLE ENERGY BASED GENERATING PLANT (INCLUDING RE CO-GENERATION AND CAPTIVE RE)

18. Object

- i. These Regulations seek to achieve promotion of generation of electricity from RE sources based generation, facilitate connectivity of RE sources based power plants with the grid, ensure sale of electricity to any person. These Regulations also seek to operate the plant in an efficient, safe and well-coordinated manner ensuring exchange of information among the various utilities in the State grid, Central Utilities and Northern Regional Grid, as the case may be. Non-compliance of these Regulations shall be liable for action under the appropriate provision of the Act.
- ii. The Plant shall be deemed to be a Generating Company within the meaning of Section 7 of the Act. However, for generation from small hydro, the provisions of Section 8 of the Act shall apply.
- iii. A person shall construct, maintain and operate a Generating Plant and a dedicated transmission line for generation and evacuation of electricity from RE source based Generation, unless otherwise provided in these Regulations or in any other Regulation.
- iv. The Distribution Licensee shall purchase power from all RE sources only through competitive bidding (except Municipal Solid Waste and rooftop solar covered under RSPV Regulations). The tariff for projects discovered by competitive bidding shall be as per their PPA.
- v. However, for projects whose tariff was governed by earlier Regulations, shall be as provided under these Regulations as per *Schedule II*.
- vi. The provisions of Deviation settlement mechanism (DSM) shall be implemented for all Renewable Energy based Power Plants, except for



Small hydro projects (SHP) and Municipal solid waste (MSW) plants, and the Generating Plants shall be subject to day ahead scheduling:

Provided that for SHP and MSW plants actual energy shall be considered as scheduled energy.

Provided that DSM for Solar and Wind based plants shall be as per UPERC (Forecasting, Scheduling, Deviation Settlement and related matters of Solar and Wind generation sources) Regulations, 2018.

Provided that Deviation Settlement for Biomass & Bagasse based plants shall be accounted for and settled in accordance with the provisions of the CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2014 as amended from time to time.

Provided that the DSM charges as defined by CERC shall apply mutatis mutandis on Biomass & Bagasse based plants irrespective of the installed capacity of these plants. The accounting for this purpose shall be done by the SLDC.

- vii. For recovery of full capacity charges for Biomass & Bagasse based plants, the PLF shall be 50%. Annual Fixed charges (AFC) for Bagasse and Biomass based plants, are provided in *Schedule II- A and B* respectively, of these Regulations. Recovery of capacity (fixed) charges below the level of targeted PLF shall be on *pro rata* basis. At zero PLF, no capacity charges shall be payable. The PLF of Biomass & Bagasse based plants shall be computed on the energy sold to the Distribution Licensee or energy scheduled by SLDC, whichever is lower.

Provided the payment of capacity charges shall be on monthly basis in proportion to the contracted capacity.

19. Eligibility of Renewable Energy based Power Plants

- i. Small hydro project: Small hydro project(s) located at the sites approved by State Nodal Agency/State Government using new plant and

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machinery, and with installed power plant capacity lower than or equal to 25 MW at single location.

- ii. Biomass power project: Biomass power project(s) using plant and machinery based on Rankine cycle technology and using biomass fuel sources.
- iii. Bagasse based generation and co-generation projects shall qualify if these are using plant and machinery in accordance with the definition and also meets the qualifying requirement as defined by CERC.
- iv. Biogas projects: as approved by MNRE from time to time
- v. Biomass Gasifier: as approved by MNRE from time to time
- vi. Solar PV and other small Solar power projects based on Technologies approved by MNRE from time to time.
- vii. Wind Energy based power plants based on technologies as approved by MNRE from time to time.
- viii. MSW based power plants based on Technologies approved by MNRE from time to time;

Provided that mixing of other wastes to renewable nature, including rice husk, bagasse, sewage, cow-dung, other biomass and industrial effluents (excluding distillery effluents) will be permissible up to the extent as prescribed by MNRE from time to time.

20. Capacity of Renewable Energy based Power Plants

- a. The optimum capacity of Generating Plant shall be assessed by the Generating Company in the detailed project report in view of potential of electricity generation available with such source.
- b. Any person intending to set-up a RE source based Generating Plant shall submit the detailed project report, scheduled date of commercial



operation and half yearly progress report of construction of the plant to the Commission for information and record. The necessary information to be accompanied with the detailed project report shall be as per Annexure 2 of these Regulations:

- c. The Generating Plant shall abide by the grid discipline and shall not be entitled for any compensation in the event of grid failure or any interruptions or damage to the plant or its associated sub-stations or transmission line on account of any happening in the grid.

21. Environmental and other Clearances

The Generating Plant shall abide by the emission standards, as the case may be, set by the Union/State Government and for that purpose it shall obtain all the required environmental and pollution clearances from the Central / State pollution control authorities and submit copies of Clearance Certificates to the Commission.

22. Duties and obligations of Renewable Energy based Power Plants

- a) The Generating Plant shall establish, operate and maintain Generating Station, sub-station and dedicated transmission lines connected therewith in accordance with:
 - i. The technical standards for construction of electrical plants, electric lines and connectivity with the grid as specified by the Authority.
 - ii. Safety requirements for construction, operation and maintenance of electrical plants and electric lines as specified by the Authority.
 - iii. UPEGC.
 - iv. The conditions for installation of meters for supply of electricity as specified by the Authority or the State Transmission Utility.

- b) The Generating Plant shall also:



- i. Submit the technical details regarding its Generating Stations to the Appropriate Commission and the Authority;
- ii. Co-ordinate with SLDC and / or State Transmission Utility for scheduling and of electricity.
- iii. Be under obligation to comply with the directions issued to it by SLDC and shall pay fee and charges payable to SLDC as specified by the Commission from time to time by order.
- iv. Be required to obtain license under the Act for establishing, operating and maintaining a dedicated transmission line.
- v. Ensure compliance of all general or specific direction, Rules or Regulations made by the Commission for the Renewable Energy based Power Plants.

23. Sale of Power

- a. All existing Renewable Energy based Power Plant having PPA approved by the Commission shall be allowed to sell power, to the Distribution Licensee in whose area the plant is located at the rate specified in *Schedule II*, whereas, for sale of power from new Renewable Energy Power Plant (except MSW) to be tied under PPA with Discom shall be at tariff as approved by the Commission through its Orders and under these Regulations:

Provided that purchases under these Regulations, shall qualify for meeting the RPO of the Distribution Licensee under terms and conditions of the UPERC (Promotion of Green Energy through Renewable Purchase Obligation) Regulations, 2010 as amended from time to time;

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 UPERC Open Access Regulations.

- b. 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 on mutually agreed tariff.

24. Tariff

The tariff for supply of electricity by the Renewable Energy based Power Plant RE source based generating plant to a Distribution Licensee shall be as per Schedule II of these Regulations.

Note:

- I. The tariff for supply of electricity from the plant, having more than one unit commissioned in different years, shall be based on weighted average tariff of the contracted capacities of the units commissioned in different years.
- II. For Bagasse and Biomass based power plants, the tariff for supply of electricity during the period of synchronization and the commissioning of the unit shall be equal to the variable cost.
- III. In case of other renewable energy based plants, the tariff for supply of electricity during the period of synchronization and the commissioning of unit shall be equal to the 50 percent of the tariff.
- IV. In the earlier control period, if any discount in the tariff has been agreed to between the procurer and the supplier, the same shall not be binding on the supplier during the term of these Regulations.

25. Purchase of Electricity by the RE based Generating Plant:

Any person, who establishes, maintains and operates a Generating Plant, may purchase electricity from Distribution Licensee or through Open Access, in case his plant is not in a position to generate electricity to meet the requirement:

Provided that in case of Renewable Energy based Generating Power Plant RE source based generating stations such purchase of electricity as agreed and



declared in PPA, from a Distribution Licensee of the area in which the plant is located, shall be charged only on actual demand and energy purchased under appropriate category of the rate schedule of tariff. This shall apply only to those generators who have entered into PPA with the Distribution Licensee:

Provided that demand charges for such supply shall be charged for 15 days if the supply is taken for up to 15 days and shall be charged for the month if the supply is taken for more than 15 days.

Provided also that in case of purchase of power through Open Access by the generator, open access charges shall be payable as determined by the Commission under UPERC Open Access Regulations.

Provided further that the tariff payable by a Renewable Energy based Generating Power Plant to a Distribution Licensee, in case of banking of energy, shall be as per these Regulations only if the plant has an arrangement of banking of energy with such Distribution Licensee.



CHAPTER - 4

COMMON TERMS AND CONDITIONS

26. Open Access

a) Captive Plants (Non RE)

- i. A Captive Generating Plant shall have right to 'Open Access' for carrying electricity from its plant to the destination of its use by using transmission and/or distribution system or associated facilities with such lines or system and for this purpose, Rules, Regulations and Orders passed by the appropriate Commission shall apply.
- ii. The Captive Plants seeking 'Open Access' within or outside the State through the grid shall be regulated under Regulations specified by the Appropriate Commission.
- iii. The Captive Plant or the Consumer, seeking 'Open Access' to the State and / or Inter State Transmission Systems and / or distribution system for carrying the electricity to the destination of use, shall pay the transmission charges, wheeling charges and such other charges for use of such facilities as determined by the Appropriate Commission(s).
- iv. A Captive Plant shall not be liable to pay cross subsidy surcharge but shall be liable to pay the transmission and / or wheeling charges as the case may be and losses for carrying the generated electricity from its plant to the destination for its own use or for the use of its user as defined by the Act or the rules made thereunder:

Provided that in case of supply of power to a consumer or to a person other than its users, such consumer or person shall pay cross subsidy surcharge and other charge over and above transmission and wheeling charges as determined by the Commission.

No cross subsidy surcharge shall be payable, if the energy is supplied to a



distribution licensee.

b) Renewable Energy based Generating Power Plant

- i. A Renewable Energy based Generating Power Plant shall have right to 'open access' for carrying electricity from its plant to the destination of its use by using transmission and / or distribution system or associated facilities with such lines or system and for that purpose, Rules, Regulations and Orders passed by the Appropriate Commission shall apply.
- ii. The plant seeking 'Open Access' within or outside the State through the grid shall be regulated under Regulations specified by the Appropriate Commission.
- iii. The plant or the consumer, seeking 'Open Access' to the State and / or Inter State Transmission Systems and / or distribution system for carrying the electricity generated by it to the destination of use, shall pay the transmission charges, wheeling charges and such other charges for use of such facilities as determined by the Appropriate Commission(s).

Provided for large scale stand-alone solar projects set up for sale of power to Electricity distribution Company or Third party or Captive use, there shall be exemption of 50% on Wheeling charges/ Transmission charges on Intrastate Sale of Power and 100% exemption on Intrastate Transmission system on Interstate sale of solar power. This exemption is as per the provisions provided in UP Solar Energy Policy, 2017.

- iv. In case, the power generated from RE source based generating plant is supplied to a consumer, then such consumer shall pay charges as per the provisions of UPERC Open Access Regulations.

Provided for large scale stand-alone solar projects set up for sale of power to Electricity distribution Company or Third party or Captive use, there shall be 100 % exemption from State cross subsidy surcharge for Interstate sale of solar power. This exemption is as per the provisions provided in UP Solar Energy Policy, 2017.



27. Evacuation of Power

- I. The Captive Plants and Renewable Energy based Generating Power Plants shall supply power to the Distribution Licensee of its area through a 33 KV or higher voltage line terminating at the nearest 33 kV (upto 3 MW)/ 132 KV Sub-station as per the voltage and capacity as given below:
 - i. Contracted capacity up to 3 MW on 11 KV.
 - ii. Contracted capacity above 3 MW and up to 20 MW on 33 KV;
 - iii. Contracted capacity above 20 MW on 132 KV;

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

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

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

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

Provided further that in case of evacuation through temporary arrangements



or in case of additional capacity commissioned under supplementary PPA using existing transmission infrastructure the applicable tariff given in *Schedule I and II* of these Regulations shall be reduced by 20 Paise/ kWh.

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

28. Maintenance of Transmission lines and Equipment

- a) The Captive Plants and Renewable Energy Generating Power Plants (except for MSW 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 out maintenance of the dedicated transmission line, if so desired by the Captive Plants (Non RE) and Renewable Energy Generating Power Plants (except for MSW plant) on mutually agreed charges.
- b) 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.
- c) In case of MSW Plants, total cost on maintenance of substation and transmission line including bay etc. shall be borne by Distribution Licensee or STU / any other Transmission Licensee, as the case may be, and the cost incurred shall be allowed in tariff of the STU or any Transmission Licensee or Distribution Licensee as the case may be.

29. Metering Arrangement

The Captive Plants and Renewable Energy Generating Power Plants (except for SHP and MSW plant) shall provide ABT compatible Special Energy Meters



(SEM) 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 / STU:

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

Provided further that while calculating the energy billed, the meter reading in MWH taken at substation shall be multiplied by a factor as follows to compensate the transmission losses (the line losses to be taken as percentage per km/MW):

$$\text{Multiplying Factor} = 100 / (100 - 0.001 \times L \times CC)$$

L = Length of line in km

CC = Contracted Capacity in MW

Loss factor = 0.001/km/MW

30. Energy Accounting and Billing

SLDC shall do energy accounting and billing and the same shall be communicated to the utilities interacting with the grid as per the scheme framed by SLDC in pursuance of the provisions of UPERC Regulations,

Provided that in case of sale to the Distribution Licensee not involving the transmission network of the area, joint metering shall be done in such cases. The energy accounting and billing shall be done by the Captive Plants and Renewable Energy based Generating Power Plants in association with the concerned Distribution Licensee.

31. Banking of Power

- a) Renewable Energy source based Generation and Co-Generation Plants/ Captive RE:



The Renewable Energy Generating Power Plants may be allowed to bank power subject to the following conditions:

- i. All Renewable Energy Generating Power Plants (except for SHP and MSW plants) shall be under ABT mechanism and procedure as mentioned in these Regulations, shall apply to them. The Renewable Energy Generating Power Plants (except for SHP and MSW plants) shall provide ABT compliant SEMs, capable of energy accounting for each block of 15 minutes, or as amended from time.
- ii. Banking of energy up to 100%, as agreed between the Renewable Energy Generating Power Plants (except for SHP and MSW plants) and the Distribution Licensee, shall be allowed subject to technical feasibility regarding evacuation.
- iii. Withdrawal of banked power shall be allowed only as per TOD system i.e. withdrawal of power in the peak/off-peak hours shall not be more than the power banked in that respective TOD slot.
- iv. The Banking as well as withdrawal of banked energy shall be subject to day ahead scheduling. The power withdrawn by Renewable Energy Generating Power Plants (except for SHP and MSW plants), as ascertained by SEMs readings, which is not against the banked power, shall be considered as power purchased by the plant.

In that case the balance energy withdrawn by the RE banking Plant from the Distribution Licensee shall be billed at tariff specified by the Commission, from time to time, in appropriate rate schedule of retail tariff.

- v. Renewable Energy Generating Power Plant (except for SHP and MSW plants) shall be allowed to withdraw power that was banked during a particular quarter within two subsequent quarters i.e. power banked in Qth quarter shall be allowed to withdraw within (Q+2)th quarter. The banked power remaining unutilized on the expiry of the period defined herein would be treated as sale and the financial settlement shall be made at Rs. 2 per



unit or the rate approved in the PPA entered with the Distribution Licensee, whichever is less. However, banking charges shall be deducted from such unutilized banked energy.

- vi. Banking charges shall be 12% of the energy banked except for Solar and Wind Power for which it shall be 6% of the energy banked and should be adjusted against the banked energy before withdrawal.

b) Captive Plants (Non- RE):

Captive Plants (Non- RE) may be allowed banking subject to following conditions:

- i. The withdrawal of banked energy will be subject to deduction of banking charges @12% of the banked energy. Withdrawal of banked energy shall be allowed only as per TOD system i.e. withdrawal of power in the peak/off-peak hours shall not be more than the power banked in that respective TOD slot.
- ii. Banking of energy up to 100%, shall be allowed, subject to technical feasibility regarding evacuation.
- iii. The banking as well as withdrawal of power shall be subject to day ahead scheduling. The power withdrawn by Captive Power Plant as ascertained by SEMs readings which is not against the banked power shall be considered as power purchased by the plant.

In that case the balance energy withdrawn by the Captive banking Plant from the Distribution Licensee shall be billed at tariff specified by the Commission, from time to time, in appropriate rate schedule of retail tariff.

- iv. The plant shall provide ABT compliant special energy meters capable of energy accounting for each block of 15 minutes.
- v. The demand posed by the Captive Plants (Non- RE) in KVA while purchasing power from Distribution Licensee combined with demand due



to withdrawal of banked energy by the Captive Plants (Non- RE) shall be considered as the total demand (maximum demand) posed by the Captive Plants (Non- RE) and the same shall not exceed the contracted demand which the Captive Plants (Non- RE) has agreed to purchase from the Distribution Licensee;

Provided that the demand charges payable by the Captive Plants (Non- RE) 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 equal to 150% of the rate applicable for the particular class of consumer, as specified by the Commission, from time to time, in the appropriate rate schedule of retail tariff.~~

- vi. The banked energy in a particular Financial Year (FY) could be utilized in the same FY or the balance can be carried forward to the end of next financial year. The banked energy remaining unutilized on the expiry of such period would be treated as sale to the Distribution Licensee and the financial settlement shall be made at the rate approved for sale of power by the Captive Plant (Non- RE). However, banking charges shall be deducted from such unutilized banked energy;

Provided that the licensee may, subject to the availability of power and taking into account technical and commercial feasibility, enter into an emergency energy supply arrangement with a Captive Plant (Non- RE) subject to the provisions above and other relevant Regulations of the Commission

32. Other Provisions

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



33. Repeal

UPERC CRE Regulations, 2014 shall stand repealed with effective date of these Regulations.

By Order of the Commission

(_____)

Secretary



SCHEDULE – I

Tariff for Sale of Power by A Pit- head Captive Generating Plant (Non- RE)

01

2

**i. Existing Captive Plants (Non RE) commissioned prior to FY 2005-06**

The fixed & variable costs for the existing plants commissioned prior to FY 2005-06 and have completed their useful life, has been determined as shown below:

Table 1: Total Tariff- Captive plants (Non RE) commissioned prior to FY 2005-06 (Rs/kWh)

Financial Year	Fixed cost	Variable cost	Total cost
FY 2019-20	0.60	2.10	2.70
FY 2020-21	0.62	2.20	2.82
FY 2021-22	0.64	2.32	2.95
FY 2022-23	0.66	2.43	3.09
FY 2023-24	0.68	2.55	3.23

ii. Existing Captive Plants (Non-RE) commissioned during FY 2005-06 to FY 2008-09

The fixed & variable costs for the existing plants of unit size upto 100 MW commissioned during FY 2005-06 to FY 2008-09 has been determined as shown below:

Table 2: Fixed Cost - Existing Captive plants (Non RE) commissioned during FY 2005-06 to FY 2008-09 (Rs/kWh)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2005-06	0.64	0.65	0.67	0.68	0.70
FY 2006-07	0.65	0.67	0.68	0.70	0.72
FY 2007-08	0.67	0.69	0.70	0.72	0.74
FY 2008-09	0.69	0.70	0.72	0.74	0.76

Table 3: Variable Cost - Existing Captive plants (Non RE) commissioned during FY 2005-06 to FY 2008-09

Financial Year	Variable Cost (Rs/kWh)
FY 2019-20	2.10



Financial Year	Variable Cost (Rs/kWh)
FY 2020-21	2.20
FY 2021-22	2.32
FY 2022-23	2.43
FY 2023-24	2.55

Table 4: Total Tariff - Existing Captive plants (Non RE) commissioned during FY 2005-06 to FY 2008-09 (Rs/kWh)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2005-06	2.74	2.86	2.98	3.11	3.25
FY 2006-07	2.75	2.87	3.00	3.13	3.27
FY 2007-08	2.77	2.89	3.02	3.15	3.29
FY 2008-09	2.79	2.91	3.04	3.17	3.31

iii. Existing Captive plants (Non RE) commissioned during FY 2009-10 to FY 2013-14

The fixed & variable costs for the existing plants of unit size upto 100 MW commissioned during FY 2009-10 to FY 2013-14 has been determined as shown below:

Table 5: Fixed Cost - Existing captive plants (Non RE) commissioned during FY 2009-10 to FY 2013-14 (Rs/kWh)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2009-10	0.77	0.79	0.81	0.82	0.84
FY 2010-11	1.20	0.79	0.81	0.83	0.85
FY 2011-12	1.22	1.20	0.79	0.81	0.83
FY 2012-13	1.26	1.22	1.20	0.79	0.81
FY 2013-14	1.30	1.26	1.22	1.20	0.79

Table 6: Variable Cost - Existing captive plants (Non RE) commissioned during

**FY 2009-10 to FY 2013-14**

Financial Year	Variable Cost (Rs/kWh)
FY 2019-20	2.10
FY 2020-21	2.20
FY 2021-22	2.32
FY 2022-23	2.43
FY 2023-24	2.55

Table 7: Total Tariff - Existing Captive plants (Non RE) commissioned during FY 2009-10 to FY 2013-14 (Rs/kWh)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2009-10	2.87	3.00	3.12	3.26	3.39
FY 2010-11	3.30	3.00	3.13	3.26	3.40
FY 2011-12	3.32	3.41	3.11	3.24	3.38
FY 2012-13	3.36	3.42	3.52	3.22	3.36
FY 2013-14	3.40	3.46	3.53	3.63	3.34

iv. Existing Captive plants (Non RE) commissioned during FY 2014-15 to FY 2018-19

The fixed & variable costs and the total tariff for the existing plant of unit size upto 100 MW commissioned on or after 1st April 2014 and up to 31st March 2019 shall be as shown below:

Table 8: Fixed Cost - Existing Captive plants (Non RE) commissioned during FY 2014-15 to FY 2018-19 (Rs/kWh)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2014-15	1.40	1.36	1.31	1.26	1.22
FY 2015-16	1.49	1.44	1.39	1.35	1.30
FY 2016-17	1.58	1.53	1.48	1.43	1.38



Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2017-18	1.68	1.62	1.57	1.52	1.47
FY 2018-19	1.78	1.72	1.67	1.61	1.56

Table 9: Variable Cost - Existing Captive Plants (Non RE) commissioned during FY 2014-15 to FY 2018-19

Financial Year	Variable Cost (Rs/kWh)
FY 2019-20	2.10
FY 2020-21	2.20
FY 2021-22	2.32
FY 2022-23	2.43
FY 2023-24	2.55

Table 10: Total Tariff - Existing Captive Plants (Non RE) commissioned during FY 2014-15 to FY 2018-19 (Rs/kWh)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2014-15	3.50	3.56	3.63	3.70	3.77
FY 2015-16	3.59	3.65	3.71	3.78	3.85
FY 2016-17	3.68	3.74	3.80	3.86	3.93
FY 2017-18	3.78	3.83	3.89	3.95	4.02
FY 2018-19	3.88	3.93	3.98	4.04	4.11

v. Captive plants (Non RE) commissioned on or after 1st April 2019

The fixed and variable costs and total tariff for the new plants commissioned on or after 1st April 2019 shall be as shown below:

Table 11: Fixed Cost – New Captive Plants (Non RE) commissioned during FY 2019-20 to FY 2023-24 (Rs/kWh)



Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2019-20	1.92	1.87	1.83	1.79	1.75
FY 2020-21	-	1.94	1.89	1.85	1.81
FY 2021-22	-	-	1.96	1.92	1.88
FY 2022-23	-	-	-	1.98	1.94
FY 2023-24	-	-	-	-	2.00

Table 12: Variable Cost – New Captive Plants commissioned during FY 2019-20 to FY 2023-24

Financial Year	Variable Cost (Rs/kWh)
FY 2019-20	2.10
FY 2020-21	2.20
FY 2021-22	2.32
FY 2022-23	2.43
FY 2023-24	2.55

Table 12A: Total Tariff – New Captive Plants commissioned during FY 2019-20 to FY 2023-24 (Rs/kWh)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2019-20	4.02	4.08	4.15	4.22	4.30
FY 2020-21	-	4.14	4.21	4.29	4.37
FY 2021-22	-	-	4.27	4.35	4.43
FY 2022-23	-	-	-	4.41	4.49
FY 2023-24	-	-	-	-	4.55

vi. Electricity (MW/MU) supplied over and above 85% PLF

The tariff of the captive generating plants has been determined at 85% PLF. For supply at PLF above 85%, incentive @ 50 paise per unit shall be paid.



SCHEDULE – II

Tariff for Sale of Power by Renewable Energy Power Plants

- A. Bagasse Based Generation & Cogeneration Plants and Biogas based power plants**
- B. Biomass (Rice Husk Based) Generation Plants and Biomass gasifier based power plants**
- C. Municipal Solid Waste Based Generation Plants**
- D. Small Hydro Generation Plants**
- E. Solar Power Generation Plants**
- F. Wind Based Generation Plants**

**A. Bagasse based Generation & Cogeneration Plants****i. Tariff for Existing Bagasse based projects Commissioned during FY 2005-06 to FY 2008-09**

The fixed & variable costs and total tariff for the existing plants commissioned during FY 2005-06 to FY 2008-09 shall be as shown below:

Table 13: Fixed Cost –Bagasse based Existing Projects commissioned during FY 2005-06 to FY 2008-09 (Rs/kWh)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2005-06	1.15	1.18	1.21	1.24	1.27
FY 2006-07	1.17	1.20	1.23	1.26	1.29
FY 2007-08	1.19	1.21	1.24	1.28	1.31
FY 2008-09	1.20	1.23	1.26	1.29	1.33

Table 14: Variable Cost –Bagasse based Existing Projects commissioned during FY 2005-06 to FY 2008-09

Financial Year	Variable Cost (Rs/kWh)
FY 2019-20	1.77
FY 2020-21	1.85
FY 2021-22	1.95
FY 2022-23	2.04
FY 2023-24	2.15

Table 15: Total Tariff –Bagasse based Existing Projects commissioned during FY 2005-06 to FY 2008-09 (Rs/kWh)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2005-06	2.92	3.03	3.16	3.29	3.42
FY 2006-07	2.94	3.05	3.18	3.30	3.44
FY 2007-08	2.95	3.07	3.19	3.32	3.46



Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2008-09	2.97	3.09	3.21	3.34	3.47

Annual Fixed cost for existing plants commissioned during FY 2005-06 to FY 2008-09 for control period of these Regulations shall be as shown in Table below:

Table 16: Annual Fixed cost of Bagasse based Existing Projects commissioned during FY 2005-06 to FY 2008-09 (Rs lakhs per MW)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2005-06	46.14	47.28	48.49	49.75	51.08
FY 2006-07	46.87	48.01	49.22	50.48	51.81
FY 2007-08	47.53	48.68	49.88	51.14	52.47
FY 2008-09	48.26	49.40	50.61	51.87	53.20

ii. Tariff for Bagasse based projects commissioned during FY 2009-10 to FY 2013-14

The fixed & variable cost and total tariff for the existing plants (commissioned during FY 2009-10 to FY 2013-14) for control period of these Regulations shall be as shown below:

Table 17: Fixed Cost –Bagasse based Existing Projects commissioned during FY 2009-10 to FY 2013-14 (Rs/kWh)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2009-10	1.30	1.33	1.36	1.39	1.42
FY 2010-11	1.87	1.34	1.36	1.39	1.42
FY 2011-12	1.98	1.92	1.37	1.39	1.42
FY 2012-13	2.09	2.03	1.97	1.40	1.43
FY 2013-14	2.20	2.14	2.08	2.02	1.43

Table 18: Variable Cost –Bagasse based Existing Projects commissioned during FY 2009-10 to FY 2013-14 (Rs/kWh)



Financial Year	Variable Cost
FY 2019-20	1.67
FY 2020-21	1.75
FY 2021-22	1.84
FY 2022-23	1.93
FY 2023-24	2.03

Table 19: Total Tariff –Bagasse based Existing Projects commissioned during FY 2009-10 to FY 2013-14 (Rs/kWh)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2009-10	2.97	3.08	3.20	3.32	3.44
FY 2010-11	3.54	3.09	3.20	3.32	3.45
FY 2011-12	3.65	3.67	3.21	3.33	3.45
FY 2012-13	3.76	3.78	3.81	3.33	3.45
FY 2013-14	3.87	3.89	3.92	3.95	3.46

Annual Fixed cost for existing plants (commissioned during FY 2009-10 to FY 2013-14) for control period of these Regulations shall be as shown in Table below:

Table 20: Annual Fixed cost of Bagasse based Existing Projects commissioned during FY 2009-10 to FY 2013-14 (Rs lakhs per MW)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2009-10	52.22	53.29	54.40	55.56	56.77
FY 2010-11	75.10	53.51	54.60	55.73	56.92
FY 2011-12	79.33	77.02	54.79	55.90	57.06
FY 2012-13	83.74	81.32	78.94	56.07	57.20
FY 2013-14	88.35	85.81	83.31	80.85	57.34



iii. **Tariff for Bagasse based projects commissioned during FY 2014-15 to FY 2018-19**

The fixed & variable costs and total tariff for the existing plants (commissioned during FY 2014-15 to FY 2018-19) for control period of these Regulations shall be as shown below:

Table 21: Fixed Cost –Bagasse based Existing Projects commissioned during FY 2014-15 to FY 2018-19 (Rs/kWh)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2014-15	2.27	2.22	2.17	2.12	2.08
FY 2015-16	2.39	2.34	2.28	2.23	2.18
FY 2016-17	2.51	2.46	2.40	2.35	2.29
FY 2017-18	2.63	2.58	2.52	2.46	2.40
FY 2018-19	2.77	2.70	2.64	2.58	2.52

Table 22: Variable Cost –Bagasse based Existing Projects commissioned during FY 2014-15 to FY 2018-19 (Rs/kWh)

Financial Year	Variable Cost
FY 2019-20	1.67
FY 2020-21	1.75
FY 2021-22	1.84
FY 2022-23	1.93
FY 2023-24	2.03

Table 23: Total Tariff –Bagasse based Existing Projects commissioned during FY 2014-15 to FY 2018-19 (Rs/kWh)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2014-15	3.94	3.97	4.01	4.05	4.10
FY 2015-16	4.06	4.09	4.12	4.16	4.21



FY 2016-17	4.18	4.21	4.24	4.28	4.32
FY 2017-18	4.30	4.33	4.36	4.39	4.43
FY 2018-19	4.43	4.45	4.48	4.51	4.55

Annual Fixed cost for existing plants (commissioned during FY 2014-15 to FY 2018-19) for control period of these Regulations shall be as shown in Table below:

Table 24: Annual Fixed cost of Bagasse based Existing Projects commissioned during FY 2014-15 to FY 2018-19 (Rs lakhs per MW)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2014-15	91.15	89.09	87.07	85.10	83.16
FY 2015-16	95.86	93.69	91.55	89.46	87.42
FY 2016-17	100.74	98.46	96.22	94.01	91.85
FY 2017-18	105.60	103.22	100.87	98.56	96.29
FY 2018-19	110.85	108.35	105.89	103.46	101.08

iv. Tariff for Bagasse based projects commissioned on or after 1st April 2019

The Commission directs the licensee to procure power from Bagasse based generation and co-generation plants commissioned on or after 1st April 2019, through a process of competitive bidding under Section 63 of the Act.

Provided that the above tariff shall also be applicable to Biogas based plants on technologies approved by the MNRE which do not avail any subsidy. In case of any difficulty the aggrieved parties may approach the Commission for specific relief. The Commission may at its discretion, upon prudence check of the project parameters, may provide a project specific tariff for biogas producers.

v. Electricity (MW/MU) supplied over and above 50% PLF

The Bagasse based generating plants, to generate more power beyond 50% PLF shall be paid incentive @ 50 paise per kWh, along with the variable cost, as applicable.

B. Biomass (rice husk based) Generation Plants

i. Tariff for Biomass (rice husk based) projects commissioned during FY 2008-09 to FY 2013-14

The fixed & variable costs and total tariff for the existing plants (commissioned during FY 2008-09 to FY 2013-14) for control period of these Regulations shall be as shown below:

Table 25: Fixed Cost –Biomass Existing (rice husk based) Projects commissioned during FY 2008-09 to FY 2013-14 (Rs/kWh)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2008-09	1.49	1.55	1.60	1.66	1.72
FY 2009-10	1.50	1.54	1.59	1.64	1.69
FY 2010-11	1.89	1.56	1.60	1.65	1.70
FY 2011-12	1.97	1.96	1.62	1.67	1.72
FY 2012-13	2.06	2.05	2.04	1.68	1.73
FY 2013-14	2.15	2.13	2.12	2.11	1.75

Table 26: Variable Cost –Biomass Existing (rice husk based) Projects commissioned during FY 2008-09 to FY 2013-14

Financial Year	Variable Cost (Rs/kWh)
FY 2019-20	4.81
FY 2020-21	5.05
FY 2021-22	5.30
FY 2022-23	5.57
FY 2023-24	5.85

Table 27: Total Tariff –Biomass Existing (rice husk based) Projects commissioned during FY 2008-09 to FY 2013-14 (Rs/kWh)



Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2008-09	6.30	6.60	6.91	7.23	7.57
FY 2009-10	6.31	6.60	6.89	7.21	7.54
FY 2010-11	6.70	6.61	6.91	7.22	7.55
FY 2011-12	6.79	7.01	6.92	7.24	7.57
FY 2012-13	6.87	7.10	7.34	7.25	7.58
FY 2013-14	6.96	7.19	7.43	7.68	7.59

Annual Fixed cost for existing plants (commissioned during FY 2008-09 to FY 2013-14) for control period of these Regulations shall be as shown in Table below:

Table 28: Annual Fixed cost of Biomass Existing (rice husk based) Projects commissioned during FY 2008-09 to FY 2013-14 (Rs lakhs per MW)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2008-09	94.13	97.47	100.97	104.65	108.51
FY 2009-10	94.49	97.33	100.29	103.38	106.60
FY 2010-11	119.41	98.17	101.13	104.22	107.44
FY 2011-12	124.50	123.79	101.98	105.07	108.29
FY 2012-13	129.89	129.08	128.39	105.96	109.18
FY 2013-14	135.56	134.64	133.84	133.17	110.11

ii. Tariff for Biomass (rice husk based) projects commissioned during FY 2014-15 to FY 2018-19

The fixed & variable costs and total tariff for the existing plants (commissioned during FY 2014-15 to FY 2018-19) for control period of these Regulations shall be as shown below:

Table 29: Fixed Cost –Biomass Existing (rice husk based) Projects commissioned during FY 2014-15 to FY 2018-19 (Rs/kWh) at 50% PLF



Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2014-15	2.33	2.32	2.31	2.30	2.29
FY 2015-16	2.42	2.41	2.40	2.39	2.38
FY 2016-17	2.52	2.51	2.50	2.48	2.48
FY 2017-18	2.64	2.64	2.64	2.64	2.65
FY 2018-19	2.73	2.71	2.70	2.68	2.67

Table 30: Variable Cost –Biomass Existing (rice husk based) Projects commissioned during 2014-15 to FY 2018-19

Financial Year	Variable Cost (Rs/kWh)
FY 2019-20	4.81
FY 2020-21	5.05
FY 2021-22	5.30
FY 2022-23	5.57
FY 2023-24	5.85

Table 31: Total Tariff –Biomass Existing (rice husk based) Projects commissioned during FY 2014-15 to FY 2018-19 (Rs/kWh)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2014-15	7.14	7.37	7.61	7.87	8.14
FY 2015-16	7.23	7.46	7.70	7.96	8.23
FY 2016-17	7.33	7.56	7.80	8.05	8.32
FY 2017-18	7.45	7.69	7.94	8.21	8.49
FY 2018-19	7.54	7.77	8.00	8.25	8.52

Annual Fixed cost for existing plants (commissioned during FY 2014-15 to FY 2018-19) for control period of these Regulations shall be as shown in Table below:

Table 32: Annual Fixed cost of Biomass Existing (rice husk based) Projects

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commissioned during FY 2014-15 to FY 2018-19 (Rs lakhs per MW)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2014-15	146.77	146.05	145.44	144.97	144.63
FY 2015-16	152.88	152.05	151.34	150.76	150.31
FY 2016-17	159.14	158.20	157.39	156.70	156.14
FY 2017-18	166.44	166.26	166.29	166.53	167.00
FY 2018-19	172.39	171.23	170.20	169.30	168.53

iii. Tariff for Biomass (rice husk based) projects commissioned on or after 1st April 2019

The Commission directs the licensee to procure power from rice husk based Biomass based projects commissioned on or after 1st April 2019, through a process of competitive bidding under Section 63 of the Act.

The developers may approach the Commission on a case to case basis for use of any other Biomass based projects;

Provided that the above tariff shall also be applicable to biomass gasifier based plants on technologies approved by the MNRE which do not avail any subsidy. In case of any difficulty the aggrieved parties may approach the Commission for specific relief. The Commission may at its discretion upon prudence check of the project parameters may provide a project specific tariff.

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

To provide suitable incentive to biomass (rice husk based) based generating plants to generate more power i.e. above 80%, the generator shall be paid an incentive:

- Variable cost as applicable; plus
- Incentive @ Rs 50 paise/ kWh

C. Municipal Solid Waste based Generation Plants

i. **Tariff for Municipal Solid Waste projects commissioned during FY 2014-15 to FY 2018-19**

The effective tariff for the Municipal Solid Waste Based Generating Plants commissioned during FY 2014-15 to FY 2018-19 shall be as given below:

Table 33: Total Tariff –Municipal Solid Waste Projects commissioned during FY 2014-15 to FY 2018-19 (Rs/kWh)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2014-15	6.69	6.83	6.97	7.13	7.29
FY 2015-16	6.85	6.98	7.12	7.27	7.44
FY 2016-17	7.01	7.14	7.28	7.43	7.59
FY 2017-18	7.18	7.31	7.44	7.59	7.75
FY 2018-19	7.36	7.48	7.61	7.76	7.91

ii. **Tariff for New Municipal Solid Waste projects commissioned during FY 2019-20 to FY 2023-24**

The effective tariff for the Municipal Solid Waste Based Generating Plants commissioned during FY 2019-20 to FY 2023-24 shall be as given below:

Table 34: Total Tariff –Municipal Solid Waste New Projects commissioned during FY 2019-20 to FY 2023-24 (Rs/kWh)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2019-20	8.32	7.08	6.95	6.83	6.71
FY 2020-21	-	8.57	7.29	7.16	7.04
FY 2021-22		-	8.82	7.51	7.38
FY 2022-23			-	9.09	7.74
FY 2023-24				-	9.36

Provided that in case of any difficulty the developers may approach the Commission for a specific relief. The Commission may at its discretion upon prudence check of the project parameters may provide a project specific tariff.

iii. **Electricity (MW/MU) supplied over and above 75% PLF**

To provide suitable incentive to Municipal Solid Waste based generating plants to generate more power i.e. above 75%, the generator shall be paid as below:

- Total tariff as applicable; plus
- Incentive @ 50 paise per kWh

**D. Small Hydro based Generation Plants****i. Tariff for Old Small Hydro projects commissioned**

The effective tariff for the old Small Hydro Power Plants shall be as given below:

Table 35: Total Tariff –Old Small Hydro Plants (Rs/kWh)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2005-06	1.48	1.51	1.54	1.58	1.62
FY 2006-07	1.52	1.56	1.59	1.63	1.67
FY 2007-08	1.56	1.60	1.64	1.68	1.72
FY 2008-09	1.61	1.65	1.68	1.73	1.77

ii. Tariff for Small Hydro projects commissioned on or after 1st April, 2014

The effective tariff for the New Small Hydro Power Plants shall be as given in Tables below:

Table 36: Total Tariff –Small Hydro Projects upto 5 MW commissioned during FY 2014-15 to FY 2018-19 (Rs/kWh)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2014-15	4.75	4.64	4.53	4.42	4.32
FY 2015-16	5.02	4.91	4.79	4.68	4.57
FY 2016-17	5.27	5.12	4.98	4.84	4.70
FY 2017-18	5.61	5.48	5.35	5.23	5.11
FY 2018-19	5.92	5.78	5.65	5.53	5.40

Table 37: Total Tariff –Small Hydro Projects greater than 5 MW and upto 25 MW commissioned during FY 2014-15 to FY 2018-19 (Rs/kWh)

Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2014-15	4.11	3.99	3.88	3.77	3.66



Year of Commissioning	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
FY 2015-16	4.35	4.24	4.12	4.01	3.89
FY 2016-17	4.61	4.49	4.37	4.25	4.14
FY 2017-18	4.89	4.76	4.64	4.51	4.39
FY 2018-19	5.17	5.04	4.91	4.78	4.66

iii. Electricity (MW/MU) supplied over and above normative PLF

To provide suitable incentive to small hydro based generating plants to generate more power i.e. above normative PLF, the generator shall be paid as below:

Table 38: Incentive to small hydro based generating plants

Capacity	Plant Load Factor	Incentive
For Old Projects		
Any Capacity	PLF above 35%	50 paise/kWh
For Projects commissioned on or after 1st April 2014		
Upto 5 MW	PLF above 30%	50 paise/kWh
5 MW to 25 MW	PLF above 30%	50 paise/kWh

Tariff for projects commissioned after FY 2018-19

The Commission shall determine project specific tariff for projects commissioned on or after 1st April 2019.



E. Solar based Generation Plants

i. Tariff for projects commissioned before FY 2018-19

The levelized tariff for projects commissioned in FY 2014-15 shall be Rs 7.06/ kWh for 25 years, as provided in UPERC CRE Regulations, 2014.

The Commission vide Order dated 23.08.2017 in the matter for Solar Tariff for FY 2015-16 to FY 2017-18 opined that the tariff for Solar Grid Connected PV Plants from FY 2015-16 onwards shall be project specific.

The tariff for the projects discovered through a process of competitive bidding under Section 63 of the Act, shall be as approved by the Commission.

ii. Tariff for projects commissioned after FY 2018-19

The tariff for the projects above 5 MW shall be as discovered through competitive bidding under Section 63 of the Act.

The tariff for the projects equal to or less than 5 MW shall be the weighted average tariff of Solar projects above 5 MW discovered through Competitive Bidding in last Financial Year and adopted by the Commission or rate agreed between the parties in the PPA, whichever is lower.

F. Wind energy based Generation Plants

Tariff for projects commissioned after FY 2018-19

The tariff for the projects above 25 MW shall be as discovered through competitive bidding under Section 63 of the Act.

The tariff for the projects equal to or less than 25 MW shall be the weighted average tariff of Wind projects above 25 MW discovered through Competitive Bidding in last Financial Year and adopted by the Commission or rate agreed between the parties in the PPA, whichever is lower.

Annexure -1

**Information to be submitted by an existing / proposed Captive (Non- RE)
Generating Plant along with the Detailed Project Report (DPR)**

1. Whether the Captive Generating Plant is a company or body corporate or association or body of individuals, incorporated or not.
2. State the destination for 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 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.

- a) A Completion report shall be filed by with the Commission within 60 days of commissioning of the plant.





Annexure –2

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

1. Site-map indicating location
2. Technical details of Generating Set(s)
3. Single line diagram (details of interconnection at both ends, protection, interlocks etc.)
4. Single line diagram of power evacuation system for sale of power to Licensee
5. Letter of Consent for Establishment issued by Uttar Pradesh Pollution Control Board
6. Copy of agreement of supply and purchase of electricity with any Licensee or Generating Company.
7. Details of calculation of cost of generation;
 - a. First year
 - b. Levelised
8. Feasibility Report
9. Details of communication and data transfer facility established
10. Details of person(s) responsible for scheduling and 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 Non-Conventional Energy source based Co-generation and Generation Plant 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.

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Yearly report to be filed by Captive (Non- RE) and RE / Generating Plants**Part-A: Captive and Co-generation (Biomass / Bagasse)**

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

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29	Interest on Loans	
30	Interest on Working Capital	

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

Unit No.	
Rated capacity (MW)	
De-rated capacity (MW)	
Date of synchronization	
Date of commercial operations	
Date of stabilization	
Type of cooling system	
Type of fuel	
Annual Maintenance (Days)	
Forced outage (days)	
Partial outage (days)	
Target Availability	
Actual Availability	
Generation	
Coal consumption per Kwh	
Oil consumption per Kwh	
Cost of R&M (Rs.Cr.)	

Part-B Small Hydro Generating Stations:

1	Name of the Generating Company	
2	Name of the Power Station	
3	Details for the period ending	31st March
4	Capital cost (Rs. Cr.)	
5	Equity (Rs. Cr.)	
6	Loan (Rs. Cr.)	
7	Depreciated cost (Rs. Cr.)	
8	Depreciation (%)	
9	O&M (Actual) (Rs. Cr.)	
10	Actual Availability (%)	

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CRE Regulations 2019

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	

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

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

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

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

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

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

Annexure 4

MODEL POWER PURCHASE AGREEMENT

BETWEEN
(Name of the Generating Plant)
AND
(Name of the DISCOM)

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 business 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 supply MW/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 supply MW/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 (Name of the Applicable Technology as defined by MNRE) 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

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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 purchase MW power for its such plant from ABCL and ABCL agrees to supply MW 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 Dispatch 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 and amendments thereto, UP Electricity Reforms Act, 1999 and U.P. Electricity Grid Code as amended from time to time, "UPERC (Captive and Renewable Energy Generating Plants) Regulations, 2019" shall mean in short "CRE Regulations, 2019"; 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).

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- 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 11 KV or higher voltage owned, maintained and operated by ABCL or UP Power Transmission Corporation Limited or other transmission licensee (delete whichever not applicable).
- 1.7. 'Import Meter' means Bill Meter installed at the grid substation of ABCL/STU (delete whichever not applicable) for Measurement of Active Energy, Maximum demand and Power factor of Energy Imported to ABCL from the Generating Plant.
- 1.8. 'L.C.' means "revolving and self - replenishing Letter of Credit".
- 1.9. 'Bill' means a bill raised, that includes all charges to be paid by ABCL with respect to sale of Power by the Generating Plant to ABCL.
- 1.10. 'STU' means State Transmission Utility.
- 1.11. 'TOD' means "Time of day", for the purpose of Metering.
- 1.12. 'UPERC' means the U.P. Electricity Regulatory Commission.
- 1.13. 'Wheeling' means the operation whereby the distribution system 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 Act

2. POWER PURCHASE, SALE AND BANKING

- 2.1. ABCL shall accept and purchase MUs/ MW (delete whichever not applicable) of power made available by the Generating Plant's (*applicable technology*) 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 "CRE Regulations, 2019"; 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 "CRE Regulations, 2019"; shall apply only in the event of generation of power by using

renewable fuel for generating power. In case conventional fuel is used, the tariff shall be as per Schedule I of the "CRE Regulations, 2019".)

- 2.2. The rate applicable for supply of electricity by ABCL to the Generating Plant shall be as per the tariff determined by the Commission under appropriate 'Rate Schedule of Tariff' for the consumer category determined on the basis of the total load requirement of the plant and billing done in the manner as specified by the Commission in the Regulations.
- 2.3. The provisions set out in Annexure-II shall govern the Sale and accounting for power purchased by ABCL.
- 2.4. The Generating Company shall abide by the provisions of the Act, Rules, Codes, Regulations, Orders and Directions of the appropriate Authority / Commission issued from time to time regarding generation and evacuation of electricity.
- 2.5. The generating company agrees to bank energy to the extent of % of the energy supplied to ABCL from the plant during the period and ABCL agrees to allow withdrawal of the banked energy during the time specified under these Regulations.
- 2.6. The provisions of Banking and wheeling of electricity shall be as per the CRE Regulations, 2019.

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 Dispatch Centre (SLDC), as the case may be, a day ahead Supply Schedule, schedule of banking and withdrawal of banked energy and other information, as required in the CRE Regulations, 14 and UP Electricity Grid Code as amended from time to time or provisions of any other regulation, code, order or direction in that regard or as desired otherwise.

5. BILLING PROCEDURE AND PAYMENTS



- 5.1. ABCL shall raise monthly bill for electricity purchased by the Generating Plant as per its normal billing cycle after taking into account energy withdrawn from the banked energy and maximum recorded demand in the manner as specified by the Commission in the CRE Regulations, 2019 and such bill shall be payable within the time period stipulated in the General Conditions of Tariff.
- 5.2. The Generating Plant shall raise monthly bill based on the monthly joint meter reading in the Bill Meter at the grid substation (write name) after deduction of bankable energy as certified by ABCL and in such cases, energy accounting and billing shall be done by the Generating Plant in association with the concerned Distribution Licensee.

The State Load 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 Regulations.

- 5.3. The Monthly Bill raised by the Generating Plant shall be delivered to ABCL at its designated office (write name) on or before the fifth (5th) working day of the following month hereinafter called the Monthly Bill date.
- 5.4. ABCL shall make full payment against such Monthly Bills to the Generating Plant within thirty (30) working days of the receipt of the Monthly Bill through irrevocable revolving & self-replenishing letter of credit of a value equal to the billable amount opened with a public sector bank in favour of the Generating Plant or through any other mode. The L.C. opening and maintenance charges shall be borne by the Distribution Licensee. The L.C. shall cover the average monthly billing for units indicated in the supply schedule furnished under para 4 above for the particular calendar quarter. The LC shall be updated by 5th working day of the calendar quarter.
- 5.5. A rebate of 2 percent on the billed amount shall be allowed for payment made through LC within one month of the date of billing and for default in payment beyond two months from the date of billing, a surcharge at the rate of 1.25 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 1 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 two months from the date of billing.

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5.6. The bills raised by the Generating Plant shall be paid in full subject to the conditions that:

- a. There is no apparent arithmetical error in the bill(s).
- b. The bill(s) is/are claimed as per tariff referred to in Para 2 of this agreement.
- c. 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 amendment thereto and the UP Electricity Grid Code as amended from time to time.

7. GENERATION FACILITIES OWNED AND OPERATED BY THE GENERATING PLANT

7.1. The Generating Company shall own, install, operate, and maintain the generating plant equipment and associated dedicated transmission line described in Annexure I. The Generating Plant shall follow such operating procedures on its side of the electric interconnection with ABCL/STUs (delete whichever not applicable) system, as are consistent with applicable laws, rules and regulations, the terms and conditions of this Agreement, provisions of the UP Electricity Grid Code, and other related guidelines, if any, issued



by UPERC, SLDC, ABCL, STU and any other concerned Transmission licensee.

- 7.2. In the event, any other non-conventional / renewable fuel or fuels are used by the Generating Plant to supplement bagasse / biomass the fuel linkage shall be the responsibility of the Generating Plant. No pass through of cost on account of this shall be permitted. (Applicable only to Cogeneration Plants).

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- 7.3. This point is intentionally left blank for inclusion of site specific changes.
- 7.4. All electrical equipment 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 and amendment thereto.
- 7.5. 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.
- 7.6. 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.
- 7.7. 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 aKV line from the Generating plant located at The power so transmitted shall be interfaced with ABCL's 11KV/33 KV/132KV or higher grid sub-station located at (write name of the sub-station) owned by /STU/other transmission licensee (delete whichever not applicable).

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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 equipment and associated synchronizing equipment, shall be borne by the Generating Plant. (Not applicable in case of solar, small hydro and wind power generating plants.)

8.3. Left blank for parties to enter the provision of construction of the transmission line in accordance with the provisions of CRE Regulations, 2019 and orders of the Commission as mutually agreed.

(Explanation: The technical and other specifications of the work shall be finalized with ABCL's/STU's approval and be in accordance with standards and specifications laid by ABCL, construction of 132 KV or higher voltage line shall be done under the supervision of STU/other transmission licensee (delete whichever not applicable). The lines constructed for the evacuation of power from the Generating Plant, shall not be used for transmitting/supplying power for any other purpose, without a mutual agreement between the Generating Plant and ABCL /STU/other transmission licensee (delete whichever not applicable), and without prior approval of UPERC. Existing transmission/distribution lines of ABCL/ STU (as the case may be) may be utilized for evacuation of power from the Generating Plant to the Grid sub-station, on the basis of a mutual agreement between the Generating Plant and ABCL and/or STU (as the case may be), with the approval of UPERC. Notwithstanding the above, the work of interfacing at ABCL/STU/other transmission licensee's (delete whichever not applicable) Sub-Station will be done by ABCL/STU/other transmission licensee (delete whichever not applicable) only.)

8.4. The Generating Plant shall be responsible for the Maintenance of equipment at the generating end.

8.5. Left blank for parties to enter the provision of maintenance of the transmission line in accordance with the provisions of CRE Regulations as mutually agreed.

8.6. Any work to be done by the Generating Plant shall be taken up only with a specific approval and on the basis of approved drawings and specifications from ABCL and in compliance with the safety requirements as per the UP Electricity Grid Code. On the completion of work, final approval shall be



obtained from ABCL/ STU (as the case may be) before charging the line. The Generating Plant would obtain all statutory clearances/approvals required for this purpose.

8.7. The Generating Plant shall consult ABCL/STU/other transmission licensee(delete whichever not applicable) on the scheme of protection of the interconnecting line/s and the facilities at both ends, and accordingly provide the equipment at both ends. The protection system, installed by the Generating Plant, shall be checked by ABCL/STU/other transmission licensee (delete whichever not applicable).

8.8. Without limiting the foregoing, the Generating Plant and ABCL/STU/other transmission licensee (delete whichever not applicable) shall, operate and maintain the interconnection and parallel operation facility in accordance with accepted good engineering practices in the electricity industry and the UP Electricity Grid Code as amended from time to time and directions of Director Electrical Safety (GOUP) and safety requirements as specified by the Authority under section 53 of the Act.

8.9. The interconnection facilities, to be provided by the Generating Plant are set forth in Annexure IV attached hereto and made a part hereof.

9. PROTECTIVE EQUIPMENT & INTERLOCKING

9.1. The interconnection facilities shall include necessary protective equipment and interlocking devices, which shall be so coordinated that any malfunctioning or abnormality in the generators or in the bus of the Generating Plant shall not adversely reflect on or affect ABCL/STU/other transmission licensee (delete whichever not applicable)'s grid system. In event of any malfunctioning or abnormality, the system shall be designed to ensure that the Generating Plant's breaker trips first to protect the equipment. Prior to adopting it the Generating Plant shall obtain approval of ABCL/STU/other transmission licensee (delete whichever not applicable) for the protection logic of the generator system and the synchronization 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

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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 and amendment thereto.

12. SYNCHRONISATION

- 12.1. The Generating Plant shall synchronize 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 synchronization program to the Nodal Officer:

- a. when commissioning the plant for the first-time,
- b. when commissioning after completion of the annual Maintenance program.

- 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 synchronizing 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)

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

14. METERING

14.1. The Generating Plant shall supply two identical sets of ABT compliant meters, with the facility for downloading data to measure the quantity and time details of the Power exported from and imported by the Generating Plant, conforming to the specifications approved by ABCL/STU, along with all necessary associated equipment. 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 substation 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.

a. Meter readings shall be taken jointly by parties as indicated below:-

b. ABCL side- (Designation of Authorized Official)

14.8. Generating Plant side - Authorized 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 authorized 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 reinstalled 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

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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 synchronize 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 center, 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

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- 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.

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 generationsystem;

- 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 minimize 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 minimize 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 CRE Regulations or as desired by the STU other transmission licensee (delete whichever not applicable) and ABCL.

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

19. CLEARANCES, PERMITS AND LICENSES

The Generating Plant shall obtain, at its own expense, all authorizations, permits, and licenses 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 providereasonable 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

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empowered authorities, including compliance with the UP Electricity Grid Code or as amended from time to time, or

- e. Failure by the Generating Plant to pay ABCL any amount payable and due under this agreement within ninety (90) working days of the demand being raised.

21.2. The occurrence of any of the following at any time during the term of this agreement shall constitute a default by ABCL:

- a. Failure to pay to the Generating Plant any amount payable and due under this agreement within ninety (90) working days of the receipt of the bill/monthly purchase bill; or
- b. Failure to use reasonable diligence in operating, maintaining, or repairing ABCL's interconnecting facilities, such that the safety of persons or property in general, or the Generating Plants equipment or personnel are adversely affected; or
- c. Failure or refusal by ABCL to perform its material obligations under this agreement; or
- d. Abandonment of its interconnection facilities by ABCL or the discontinuance by ABCL of services covered under this agreement, unless such discontinuance is caused by force majeure or an event of default by the Generating Plant.
- e. Except for failure to make any payment due, within ninety (90) working days of receipt of the monthly purchase bill, if an event of default by including non-payment of bills either party extends beyond a period of ninety (90) working days after receipt of written notice of such event of default from the non-defaulting party, then the non-defaulting party may, at its option, terminate this agreement by delivering written notice of such termination to the party in default.
- f. Failure by either ABCL or the Generating Plant to exercise any of its rights under this agreement shall not constitute a waiver of such rights. Neither party shall be deemed to have waived the performance of any obligation by the other party under this agreement, unless such a waiver has specifically been made in writing and approved by the UPERC.

21.3. ABCL reserves the right to terminate this agreement upon one month 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 Authorized Official) on behalf of ABCL, and the authorized 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 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 authorized 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

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(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 attorney's 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 willful 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 attorney's 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 willful 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

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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:

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GENERATING PLANT:

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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.

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41. STANDARD FOR DECISION MAKING

41.1. All operational decisions or approvals that are to be made at the discretion of either ABCL or the Generating Plant, pursuant to the terms of this agreement, including specifications and design criteria etc., shall be made or performed according to good engineering practices prevailing in the electricity industry.

41.2. Professional decisions or activities undertaken by either party for the purpose of constructing, installing, removing, maintaining or operating any facility, which may affect the operations of the other party's facility or facilities, shall be made or performed according to good engineering practices prevailing in the electricity industry.

IN WITNESS:

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

FOR THE GENERATING PLANT:

NAME:

DESIGNATION:

ADDRESS:

FOR ABCL:

NAME:

DESIGNATION:

ADDRESS:

WITNESSED BY:

NAME:

DESIGNATION:

ADDRESS:

WITNESSED BY:

NAME:

DESIGNATION:

ADDRESS:



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

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 with ____ KV 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, synchronizing 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 authorized 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, synchronizing, 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 Dispatch 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 from to
- 4.3. The Generating Plant shall notify ABCL/STU/other transmission licensee (delete whichever not applicable)'s interconnecting substation and SLDC prior to synchronizing a generator on to or taking a generator off of the system. Such notification should be as far in advance as reasonably possible under the circumstances causing the action.

5. **Single Line Diagram**

(To Be Inserted Here)



Annexure II

Sale and Accounting for Power

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

or

The purchase of electricity by ABCL shall be subject to the provisions of the Distribution License, CRE 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)

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ANNEXURE III

SAMPLE MONTHLY BILL
INVOICE

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

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

Banked Energy

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

OTHER CHARGES

Less/Add:	
SUBTOTAL:	
TOTAL DUE :	

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Verified by:

For Generating Plant Ltd.
Authorized Signatory



For ABCL
Authorized Signatory



ANNEXURE IV

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		
<u>PROTECTION FOR INTERNAL FAULTS:</u>		
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		

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

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

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

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

METER READINGS:

KWH	EXPORT METER READING	IMPORT METER READING
PREVIOUS READING		
CURRENT READING		
DIFFERENCE		
DIFFERENCE X MULTIPLYING FACTOR		

Authorised Signatory
EXECUTIVE ENGINEER
TRANSMISSION

Authorised Signatory
EXECUTIVE ENGINEER
ABCL

Authorised Signatory
AUTH. REPRESENTATIVE
GENERATING PLANT

DATE:

NOTES:

1. ABCL / STU/ other transmission licensee (delete whichever not applicable) shall maintain a daily logbook to record hourly readings of the Bill Meter/ HT Meter.
2. The Generating Plant shall maintain a daily log to record the hourly generation and supply in KWh, along with the schedule given by ABCL's Despatcher.




CRE Regulations 2019

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.

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ANNEXURE VI

CHECK METER READINGS OF GENERATING PLANT

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

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



METER READINGS:

KWH	EXPORT METER READING	IMPORT METER READING
PREVIOUS READING		
CURRENT READING		
DIFFERENCE		
DIFFERENCE X MULTIPLYING FACTOR		

Authorised Signatory

Authorised Signatory

Authorised Signatory

EXECUTIVE ENGINEER**EXECUTIVE ENGINEER****AUTH. REPRESENTATIVE****TRANSMISSION****ABCL****GENERATING PLANT**

DATE:

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




ANNEXURE VII

DAILY GENERATION REPORT**Active Power (KWh)**

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

Summary of Active Power, KWh

Time	Scheduled	Meter Reading	Difference x M.F.
Daily			




0600	- 2200			
2200	- 0600			
Cumulative for Month				
0600	- 2200			
2200	- 0600			

To:

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



Annexure VIII

MONTHLY TRIPPING REPORT

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

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

To:

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

ANNEXURE IX

PLANNED & FORCED OUTAGE

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

Progressive Days:

Time Lost (In Hours):

- During Month & Year
- Since First Commissioning

To:

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

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