

Detailed Procedure for Banking of Power and

Model Banking Agreement

In accordance with

Punjab State Electricity Regulatory Commission (Harnessing of Captive Power Generation) Regulations, 2022

To be Approved by

Punjab State Electricity Regulatory Commission

1. OUTLINE:-

This procedure is in accordance with the Punjab State Electricity Regulatory Commission (Harnessing of Captive Power Generation) Regulations, 2022, hereinafter referred as "CPP Regulations". All the applicants shall abide by the provisions of the Regulations. In case of any inconsistency in the provisions of this procedure with the Act/Rules/Regulations framed under the Act, the provisions of the Act/Rules/Regulations shall prevail.

2. Definitions and Interpretation

- i. "Act" means the Electricity Act, 2003 (36 of 2003);
- ii. "Banking" means the facility by which electrical energy remaining unutilized after captive consumption from a RE based Captive Generating Plant during a billing month and credited with the distribution licensee which is allowed to be used for captive consumption at a later stage on payment of banking charges and as per other terms and conditions as may be approved by the Commission;
- iii. **"Banking Charges"** means percentage deduction made in kind from the energy banked or charges in Rs./kWh levied on banked energy, towards banking charges.
- iv. "Billing cycle" means a period of one month;
- v. "Contract Demand" means the maximum demand in kVA sanctioned to a consumer;
- vi. "Captive Generating Plant (CGP) or Captive Power Plant (CPP)" means a RE based power plant set up by any person to generate electricity primarily for his own use and includes a power plant set up by any co-operative society or association of persons for generating electricity primarily for use of members of such cooperative society or association and fulfils the criteria as laid down in Rule 3 of the Electricity Rules, 2005;
- vii. **"Captive User"** means the Green Energy Open Access Consumer, which is end user of the Green/ RE Power generated in Captive Generating Plant and the term "captive use" shall be construed accordingly;
- viii. **"Central Commission (CERC)"** means Central Electricity Regulatory Commission referred to in subsection (1) of Section 76 of the Act.
- ix. **"Cogeneration"** means a process which simultaneously produces two or more forms of useful energy (including electricity);
- x. "Commercial Operation Date (CoD)" means the date on which the Project or any of its units is/are declared as available for commercial operation on successful completion of requisite test(s) and conditions.
- xi. **"Commission"** or **"PSERC"** means the Punjab State Electricity Regulatory Commission referred to in subsection (1) of section 82 of the Act;
- xii. **"Company"** means a company formed and registered under the Companies Act, 1956 and includes any body corporate under a Central, State or Provincial Act;

- xiii. **"Contracted Capacity"** means capacity contracted between the CGP and captive user(s), for which open access has been granted for transmission/ wheeling (out of the power generated from the CGP).
- xiv. "Conventional Fuel" means any fossil fuel such as coal, lignite etc.;
- xv. "Deviation" in a time-block for a Seller means its total actual injection minus its total scheduled generation and for a Buyer means its total actual drawal minus its total scheduled drawal;
- xvi. **"Deviation Charges"** means the Charges for Deviation as specified by the Commission from time to time;
- xvii. "Deviation Settlement Mechanism" means and include the framework for energy accounting, deviation accounting, rules for pricing of deviation(s) payable and receivable by the State entities and other design parameters as specified under DSM Regulations and/or F&S Regulations issued by the Commission;
- xviii. **"Drawl Point"** means the interface point at which the wheeled/banked power shall be drawn by captive user(s) and metering shall be done.
- xix. **"DSM Regulations"** means Punjab State Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2020, as amended from time to time.
- xx. **"F&S Regulations"** means Punjab State Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019, as amended from time to time.
- xxi. **"Financial Year"** means year starting from 1st day of April of a calendar year and ending on the 31st day of March of the following calendar year
- xxii. **"Firm Power"** means the power supplied on agreed terms & conditions by a CGP owner to a licensee as per the contract;
- xxiii. **"Full Open Access Consumer"** shall mean Open Access Consumer connected to transmission system or distribution system but not having any contract demand with the distribution licensee within the state;
- xxiv. **"Generating company"** means any company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person, which owns or operates or maintains a generating station;
- xxv. "Green Energy" means the electrical energy from renewable sources of energy including hydro and storage (if the storage uses renewable energy) or any other technology as may be notified by the Government of India from time to time and shall also include any mechanism that utilizes green energy to replace fossil fuels including production of green hydrogen or green ammonia as per provision of the Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022.
- xxvi. **"Green Energy Open Access"** means the open access allowed to a consumer including captive user for carrying electricity from green energy source as per provisions of these

- Regulations read with the Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022.
- xxvii. "Green Energy Open Access Consumer" means any person who has sanctioned contracted demand of 100 kVA or more or such other limit as may be specified by Commission from time to time, except for captive consumers, who are supplied with electricity from green energy sources for their own use by a licensee or the Government or by any other person engaged in the business of supplying electricity to the public under this Act or any other law for the time being in force and includes any person whose premises are for the time being connected for the purpose of receiving green energy with the works of a licensee, the Government or such person, as the case may be.
- xxviii. **"Grid Code" (or "SGC")**means the Grid Code specified by the Commission under clause (h) of subsection(1) of Section 86 of the Act;
- xxix. **"Imbalance Charges"** means the deviation charges stipulated for open access customers under Regulation 31 of Open Access Regulations.
- xxx. **"Indian Electricity Grid Code" (or "IEGC")** means the Grid Code specified by the Central Electricity Regulatory Commission under Section 79(1)(h) of the Act;
- xxxi. "Infirm Power" means power injected in to the grid by a CGP which is not committed and is not covered under any contract with the distribution licensee.
- xxxii. "Injected Energy" means the kilowatt hour (kWh) of electricity actually exported and measured by the energy meters at the Injection Point.
- xxxiii. "Injection Point" means the interconnection point at which power to be transmitted/ wheeled for captive use shall be injected by the CGP into the PSPCL/PSTCL network.
- xxxiv. "Installed Capacity" means the capacity of the Project at the generating terminal(s).
- xxxv. "Interface Meters or Special Energy Meters (SEM)" means interface/ SEM meters as defined by the Central Electricity Authority under the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, as amended from time to time;
- xxxvi. "Interface Point" or "Interconnection Point" means the interface of captive power generator with the network of distribution or transmission licensee (PSPCL/PSTCL) and interface of captive user with the network of distribution or transmission licensee (PSPCL/PSTCL).
- xxxvii. "Licensee" means a person who has been granted a licence under section 14 of the Act;
- xxxviii. "Load Despatch Centre" means National Load Despatch Centre, Regional Load Despatch Centre or State Load Despatch Centre, as the case may be, responsible for coordinating, scheduling of the Buyers and the Sellers in accordance with the provisions of Grid Code;
- *** "Metering Point" for purposes of recording of Injected Energy at the Injection Point and recording consumption at the drawl point, which shall include ABT/SEM (Special Energy Meters) as specified in the PSERC(Terms and Conditions for Open Access) Regulations, 2011 and State Grid Code, as amended from time to time and in accordance with the CEA (Installation and Operation of Meters) Regulations, 2006 (as amended from time to time)

- with the facilities to record both export and import of electricity to/from the transmission/distribution network of license and to communicate its readings to State Load Dispatch Centre on real time basis or as specified by the Commission.
- xl. "Non-Paddy Season" means lean period of the year, other than paddy season/ peak seasonal period.
- xli. **"Off-Peak Period"** means period of the day, other than Peak Period/ Peak Load Hours approved by the Commission.
- xlii. **"Open Access Regulations"** means the Punjab State Electricity Regulatory Commission (Terms and conditions for Intra-State Open Access) Regulations, 2011, as amended from time to time;
- xliii. "Paddy Season" means peak seasonal period from 1st June to 31st October.
- xliv. "Partial Open Access Consumer" shall mean Open Access Consumer connected to the transmission system or distribution system and having his contract demand with the distribution licensee within the state;
- xlv. **"Peak Period"** means Peak Load Hours period of the day, as approved by the Commission in this procedure.
- xlvi. **"Person"** shall include any company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person;
- xlvii. **"PSPCL"** means Punjab State Power Corporation Limited, a successor company of the erstwhile Punjab State Electricity Board (PSEB), notified as the Distribution Licensee (discom) by Government of Punjab and entrusted with the work of Generation and Distribution business of erstwhile PSEB.
- xlviii. **"PSTCL"** means Punjab State Transmission Corporation Limited, a successor company of erstwhile Punjab State Electricity Board (PSEB), notified as State Transmission Utility (STU) by Government of Punjab and entrusted with the work of transmission business of erstwhile PSEB and responsibility to operate the SLDC.
- xlix. **"Reactive Power"** means the product of voltage and current and the sine of the phase angle between them measured in units of volt amperes reactive and standard multiples thereof;
 - I. "Renewable Energy (RE) Source" means renewable energy source approved by MNRE such as solar, wind, biomass, bagasse, municipal solid waste and other such sources;
 - li. **"Standby contract demand"** means the maximum demand in kVA contracted by the CGP under Standby power agreement with the distribution licensee of his area of supply;
 - lii. **"Standby power"** means the power required in case of planned or forced outage of the CGP:
- liii. **"Startup contract demand"** means the maximum demand in kVA contracted by the CGP under Startup power agreement with the distribution licensee of his area of supply;
- liv. **"Startup power"** means the power required in case of Startup, at the pre-commissioning stage or after a planned/ forced outage;

- lv. **"State Entity"** means such person who is in the SLDC control area and whose metering and energy accounting is done at the state level;
- lvi. "State Load Despatch Centre" (or "SLDC") means the Load Despatch Centre of the State established under sub section (1) of section 31 of the Act, responsible for co-ordinating scheduling of the state entities in accordance with the provisions of State Grid Code;
- lvii. **"Time-Block"** means a time block of 15 minutes or any such shorter duration as may be notified by the Commission, for which specified electrical parameters and quantities are recorded by a special energy meter, with the first time block starting at 00.00 hours;
- Iviii. "Verifying Authority/Agency" means the authority/agency authorised by the Commission to collect and verify the data to check the captive status of the Captive Generating Plant as per the provisions of Section 9 of the Act read with Rule 3 of the Electricity Rules, 2005, as amended from time to time, in accordance with the procedure/guidelines approved by the Commission.

3. Applicability:-

This Procedure shall apply to all RE based Captive Generating Plants (CGP) and Captive users wheeling RE power from such CGPs as defined in CPP Regulations read along with section 2(8) read with section 9 of the Electricity Act, 2003 including cogeneration plants defined in section 2(12) of the Act connected to the intra-state transmission and/or distribution system of the State and fulfilling the criteria prescribed in Rule 3 of the Electricity Rules 2005, as amended from time to time read along with CPP Regulations.

Provided that the captive user, who is a consumer of distribution licensee, and covered under these regulations, shall not be eligible for availing Net Metering or Net Billing or Gross Metering arrangement under PSERC (Grid Interactive Rooftop Solar Photo Voltaic Systems) Regulations, 2021, as amended from time to time, in his premises.

4. Terms & Conditions for operating CGP and Registration of CGP:

- 4.1. The terms & conditions for operating RE based CGP, roles and responsibilities of CGPs shall be in accordance with Regulation 4 of CPP Regulations.
- 4.2. A CGP seeking connectivity and operation in synchronism with the grid, shall register with PSPCL by submitting onetime permission fee at the rates approved by the Commission in the Schedule of General Charges and other requisite documents, as prescribed in the guidelines/ instructions (Sr. No. 122 to 125) in Electricity Supply Instructions Manual of PSPCL. The CGP shall also register with SLDC before availing open access.

- 4.3. PSPCL shall communicate the permission or any constraint or deficiency by e-mail or fax or by any other usually recognized mode of communication, within a period as specified in Open Access Regulations.
- 4.4 It shall be the responsibility of the CGP owner to obtain necessary clearances and approvals from competent authorities while seeking connectivity and operation in synchronism with the grid.Cost of Evacuation system/ transmission line and bay/breaker etc. at PSPCL/PSTCL Grid substations (as per supply code regulations 9.1.1 (f) and 9.1.3 (f) of PSPCL) shall be borne by the CGP/ Captive user.
- 4.5 It shall be the obligation of the captive generating station and the captive user(s) to ensure that conditions as prescribed in Rule 3 of the Electricity Rules, 2005 to get captive status, are complied with at the end of each financial year.

5. Connectivity and Open Access

The CGP/ Captive User shall obtain connectivity to the Intra-State Transmission or Distribution system in line with the provisions of Open Access Regulations read along with Detailed Connectivity Procedure of STU (PSTCL) (as approved by the Commission) and Electricity Supply Instructions Manual (ESIM) of PSPCL. The person, who has constructed a captive generating plant, maintains and operates such plant, shall have the right to open access for the purposes of carrying electricity from his captive generating plant to the destination of his use in line with the provisions of Open Access Regulations read along with LTA/ MTOA Procedure of STU and STOA Procedure of SLDC (as approved by the Commission). Any dispute regarding the availability of transmission and/or distribution facility shall be adjudicated upon by the Commission.

6. Verification of Status of CGP

- 6.1 CGP and the Captive User shall file affidavit in specified format(s) before the State Commission giving details regarding their electricity generation, entity-wise consumption and equity share holding during the previous year before 30th April each year.
- 6.2 Verification of status of CGP and captive users with respect to the criteria of consumption and equity share holding, as prescribed under the Electricity Rules, 2005 shall be done annually by the Verifying Authority/ agency after the end of financial year based on the information submitted by the CGP in line with the provisions of Section 9 of the Act read with Rule 3 of the Electricity Rules, 2005, for fulfilment of following two conditions:-
- (i) not less than twenty six percent of the ownership is held by the captive user(s), and DetailedBanking procedure in accordance with the PSERC (Harnessing of Captive Power Generation) Regulations, 2022

- (ii) not less than fifty one percent of the aggregate electricity generated in such plant, determined on an annual basis, is consumed for the captive use:
- 6.3 The Verifying Authority/ agency shall follow the "detailed procedure for verification of Captive Generating Plant (CGP) status" to be separately approved by the Commission.
- 6.4 In case the verifying agency/authority observes non-compliance of the conditions prescribed under Rule 3 of the Electricity Rules 2005 for captive status during a financial year then the matter shall be referred to the Commission by the verifying agency/authority for adjudication in accordance with the procedure approved by the Commission.

7. Application for Banking

7.1 The RE based CGP/ captive user (wheeling power from RE based CGP) shall apply for banking in the prescribed application form (Annexure-1 A) at least a month prior to the commencement of wheeling/ Banking and shall furnish the complete particulars about the CGP & the consumer(s)/ captive user(s) to whom the power is to be wheeled. Prior to applying for banking, the applicant should have secured connectivity, should have entered into connectivity agreement for open access with the STU/ Transmission licensee or Distribution licensee and should have been granted open access by the nodal agency.

7.2 Nodal Office:

The application for banking shall be submitted to the Nodal Office, which shall be O/o Chief Engineer/ Power Purchase and Regulations (PP&R), PSPCL, Shed No. D-3, Shakti Vihar, Patiala.

7.3 Documents to be submitted along with the Application:

- a. Self-attested Copy of connectivity agreement/approval;
- b. Self-attested Copy of Open Access approval from nodal agency i.e. SLDC/ PSTCL;
- c. Copy of the Board Resolution of the company/ Power of Attorney/ Authorization Letter, authorizing filing of application and designating an authorized person for filing the same, where the Applicant is a company (attested by Company Secretary/ Chartered Accountant);
- d. Self-attested Copy of Accreditation/approval of the project by PEDA;
- e. Certificate of Verifying authority regarding CGP status (For new CGPs i.e. CGPs injecting first time into the Grid, only certificate regarding fulfilment of Rule 3(i) of Electricity

Rules, 2005 i.e. not less than 26 % of ownership held by Captive user(s) shall be required);

- f. Self-attested copy of A&A form of Captive User(s) (if consumers of PSPCL);
- g. Self-attested copy of Latest energy bill of Captive User(s) (if consumers of PSPCL);
- h. Undertaking for acceptance of terms & conditions as per Annexure-1B.
- 7.4 After scrutiny, nodal office shall intimate the deficiencies in the application, if any, to the applicant within ten days of receipt of application. The applicant shall rectify the deficiency within ten days thereafter.

7.5 Banking Agreement

After approval of banking from the nodal office, the applicant shall enter into a tripartite banking agreement with PSPCL& PSTCL at the terms and conditions specified in the agreement, as provided in the CPP Regulations within 30 days of receipt of approval. The agreement shall be terminated in event of any default on the part of the Generator/consumer as provided in the Banking Agreement in case the Commission withdraws the facility of Banking. Copy of Model Banking Agreement enclosed at **Annexure-2.**

8. Terms and conditions for Banking:

8.1 The banking of power shall be allowed to RE based CGP/ captive user (wheeling power from RE based CGP) throughout the year as per the terms & conditions as approved by the Commission from time to time and on payment of banking charges to compensate the distribution licensee for additional cost on this account along with other applicable charges.

Provided that the drawal of banked energy shall not be allowed during the peak seasonal period from 1st June to 31st October and also during following peak load hours:-

Period/ Month	Timings of P	Peak Load Hours
Feriod/ Month	Morning Peak	Evening Peak
February, March & October	06:00 Hrs to 08:00 Hrs	18:30 Hrs to 20:30 Hrs
April & May	05:30 Hrs to 07:30 Hrs	19:00 Hrs to 21:00 Hrs
June to September	-	18:00 Hrs to 22:00 Hrs
November to January	06:30 Hrs to 08:30 Hrs	18:00 Hrs to 20:00 Hrs

8.2 The permitted quantum of banked energy to be carried forward to next month shall be upto 30% the total monthly consumption of electricity from the distribution licensee of the area. The excess energy banked shall be treated as dumped energy and shall not be carried forward to next month.

Provided that the limit of 30% on banked energy to be carried forward to next month shall not be applicable for the energy banked during paddy season, i.e. whole banked energy shall be carried forward to next month(s)/ non-paddy season, which shall be available for drawl by the Green Energy Open Access Consumer/ Captive user(s) during subsequent non-paddy months till the end of financial year and no restriction on such energy (banked during paddy season) shall be imposed till the end of financial year. The banked energy remaining unutilized at the end of the financial year shall lapse and no compensation shall be paid for such lapsed banked energy.

- 8.3 The banked energy shall not be used for third party sale.
- 8.4 It shall be the obligation of the captive generating station and the captive user(s) to ensure that conditions as prescribed in Rule 3 of the Electricity Rules, 2005 to get captive status, are complied with at the end of each financial year and requisite documentary evidence is submitted to the verifying authority/ agency for certification of captive status.
- 8.5 Infirm power generated by the CGP prior to the CoD of the project, if any, injected into the transmission/ distribution network of licensee shall not be considered for the purpose of Banking and shall be treated as dumped power.
- 8.6 PSPCL/PSTCL shall not be liable for any losses/ damages, if any, consequent to any line outage between the point of generation and the injection point for any reason whatsoever, consequent to which power is not evacuated.
- 8.7 If the CGP or Captive User fails to meet the criteria of ownership and consumption, by the end of the year, such CGP or Captive User shall lose its Captive status for that year leading to imposition of Cross Subsidy Surcharge and Additional Surcharge and such other charges as applicable on open access consumers. Further,in such case the total energy banked and utilized by the captive user during the year shall be treated as infirm power injected in to the grid by CGP and shall be treated as dumped power as per Regulation 5.2 of CPP regulations. The energy drawn from the grid by the captive user shall be charged at the tariff rates applicable to the relevant category, as approved by the Commission in the tariff order for the relevant year.
- 8.8 The energy account of all banking transactions shall be maintained by SLDC. The banked energy shall be worked out by SLDC from the time slot wise energy statement in line with Clause 11.7 to 11.12 of this procedure.
- 8.9 The banking charges @15% of power banked (in kind) shall be levied. The charges may be revised or levied in Rs./kWh with prior approval of the Commission.

- 8.10 Besides banking charges, the CGP/ Captive User(s), shall be liable to pay to PSPCL the following charges:
 - (i) Captive User, who is a consumer of PSPCL:-
 - For the energy drawn from the PSPCL, the consumer shall pay as per tariff applicable for the category as approved by the commission from time to time.
 - In case, the captive user(s) exceeds his Sanctioned Contract Demand, he will be liable to pay demand surcharge as applicable for relevant category as per schedule of tariff as approved by PSERC from time to time.
 - The open access charges corresponding to the contracted capacity, as approved by PSERC in Open Access Regulations and tariff related order(s) issued from time to time.
 - Any other charges, as specified in CPP Regulations as amended from time to time shall also be applicable.
 - (ii) Captive User, who is not a consumer of PSPCL:-
 - Captive User, who is not a consumer of PSPCL, shall execute Standby Power Supply Agreement with PSPCL separately for the purpose of availing banking under this agreement, which shall be governed as per the provisions of CPP Regulations and Open Access Regulations and Standby Charges as prescribed in said regulations shall be applicable.
 - (iii) For any import of energy by the CGP for start-up of Project or other allied purposes, the CGP shall take electricity connection for the same from PSPCL as per applicable consumer category. PSPCL shall charge the CGP for the same at the tariff of relevant category for temporary supply as specified by the PSERC from time to time. The CGP shall sign a start-up/ standby power agreement with PSPCL as per terms and conditions of CPP Regulations. The aforesaid Regulations shall also be applicable to the Captive Generating Plant as well as captive user(s).
 - (iv) Beside above, charges specified by the commission (i.e. open access charges e.g. transmission charges, wheeling charges, SLDC operating charges etc.) and Transmission & Distribution (T&D) technical losses (as notified by the commission) shall be borne by the CGP/ captive user(s).
 - (v) The CGP in addition to the above charges shall also be mandated to pay requisite charges towards connection to the distribution system of PSPCL.
- 9. Data Telemetry/ Data Acquisition System (DAS):
- 9.1 Real Time Injection/ Drawl Data from the CGP/ Captive User to SLDC shall be provided by the CGP/ captive user (including necessary interfacing arrangements for data integration at SLDC end) in line with the provisions of State Grid Code. The Real Time data shall be

transmitted upto SLDC through IEC: 101/104 protocol by providing a redundant (main & backup) communication link/ connectivity using any mode of communication e.g. Optical Fibre/PLCC/MPLS/RF/GPRS or any other latest technology available,. Further, main and backup communication links shall preferably be either through different communication modes or from different service providers (if same communication mode is used). The communication network i.e. PLCC/ Optical Fibre from PSTCL sub-stations to SLDC in Punjab is to be provided by STU (PSTCL) for telemetry of real time data upto SLDC.

The Data Acquisition System and communication network facilities including AMR system at the Generating Station/Injection Point and drawl point shall be provided and maintained by the CGP/ captive user, as specified in the State Grid Code with due approval of technical features by SLDC or PSPCL as the case may be.

CGP/ captive user shall follow the provisions of CERC (Communication Systems for Inter-State Transmission of Electricity) Regulations, 2017, as amended from time to time and technical standards, protocols for communication system etc. notified by CEA under aforesaid CERC Regulations for Communication Infrastructure to be used for data communication and tele-protection of power system and shall ensure the correctness of the real-time data.

10. Metering:

10.1 The CGP/ captive user connected to the intra-state transmission and/or distribution system shall provide ABT compatible Special Energy Meter (SEM) at the interconnection point between CGP/ captive user and the licensee for recording and storing all the load survey & billing parameters for every 15-minutes time blocks or such shorter duration as may be specified by the Commission, in accordance with the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, as amended from time to time (CEA Metering Regulations) read with State Grid code. Automated Meter Reading (AMR) system shall be used for communicating interface data on real time basis at SLDC. Internal clock of the interface meter shall be time synchronised with GPS. Meter readings at the interval, as specified by the Commission from time to time, shall be forwarded to the SLDC in addition to data provided through Supervisory Control and Data Acquisition (SCADA) for energy accounting.

In case the CGP and the captive user(s) are located in the same premises then separate metering arrangement shall be made for metering the generation of CGP and consumption by captive user(s) separately.

10.2 The metering equipment for measuring energy at injection point shall comprise of ABT compatible Main, check & Stand by meter and shall be installed at generation end/

interconnection point between generator and licensee where energy is injected (as per existing regulations, the Metering is done at interconnection point i.e. at Generator End) into PSPCL/PSTCL system in line with State Grid Code and CEA Metering Regulations. The CGP shall have a standby, main meter and check meter of the same specification as that of main meter at generator end, tested and sealed by PSPCL at the cost of CGP. The metering (comprising of main and check meters) shall also be provided at the drawl point(s) of the Captive User(s) as per the provisions of State Grid Code and CEA Metering Regulations.

- 10.3 Metering equipment shall be ABT compliant Special Energy Meters (SEMs) with Automatic Meter Reading (AMR) Facility of accuracy class 0.2S required for the Project (main, check and standby meters) capable of recording and storing both import and export of energy for 15 minutes and 5 minutes or lesser time block (preferably configurable) averages of all the Electrical Parameters for a minimum of 45 days. CTs of 0.2S & PTs of 0.2 accuracy class shall also be provided. Meters shall have requisite communication facilities to ensure availability of real time data transfer connectivity with SLDC. Cost of metering and communication facilities shall be borne by the CGP/ Captive User.
- 10.4 Each meter i.e. at injection point, drawl point(s) and at the generation facility shall be jointly inspected and sealed by the PSPCL and shall not be interfered with by either party except in the presence of either party or its authorized representative. In the case of any tampering of metering cubicle or energy meters at the Project/Captive User(s) premises or at the CGP, this agreement shall be terminated.
- 10.5 All the main, check and standby meters shall be tested for accuracy/ RTC time-drift every half yearly. The cost of such test checking shall be borne by the CGP/ captive user at the rates specified by the PSPCL from time to time.
- 10.6 The metering equipment installed shall be as per PSPCL's latest technical specification or its amendment from time to time and shall comply with the requirements under SAMAST report/scheme, CEA metering regulations and CEA guidelines on Advanced metering infrastructure.
- 10.7 Format of downloaded data of ABT compliant meters shall be as per format of PSPCL latest technical specification or its amendment from time to time also considering requirements of SLDC.
- 10.8 The metering system installed shall be tested by Meter testing laboratory of PSPCL and witnessed/sealed jointly by concerned field office of PSPCL in the presence of the authorized representative(s) of the CGP/Captive user(s).

- 10.9 The downloaded data of the SEM/ ABT meters for the previous month for power injected by the CGP and power consumed at the Captive User(s)/ consumer(s) end for the previous month shall be supplied to SLDC, Punjab by 5th day of every month until AMR system is established and SAMAST scheme is implemented. Thereafter, SLDC will process the data on the basis of meter data of generator and Captive User (s) and prepare time slot wise actual energy statement and adjustment sheet including banked units in the current month.
- 10.10 In the case of any tampering of metering cubicle or energy meters at the Project/Captive User(s) premises or at the CGP being detected or observed, the PSPCL shall have the right to withdraw the Banking facilities/Open Access without any notice and penalties shall be imposed as per rules/regulations of PSPCL/PSERC and Banked units for that particular period shall be lapsed and no compensation shall be provided.

11. Forecasting, Scheduling, Accounting and Deviation Settlement:

- 11.1 The forecasting of Solar/ Wind CGPs (located within the State) having individual capacity/ Combined capacity of Pooling Station equal to 5 MW or above shall be in accordance with F&S Regulations. Further, the Scheduling, Accounting and Deviation Settlement of CGPs shall be as per the provisions of SGC read along with:-
 - F&S Regulations, for Solar/ Wind CGPs having individual capacity/ Combined capacity of Pooling Station equal to 5 MW or above.
 - DSM Regulations, for CGPs (other than Solar/ Wind) with capacity above 5 MW connected to Intra-State Transmission System.
 - Open Access Regulations, for Solar/ Wind CGPs having individual capacity/ Combined capacity of Pooling Station less than 5 MW, CGPs (other than Solar/ Wind) with capacity of 5 MW or below and CGPs (other than Solar/ Wind) with capacity above 5 MW connected to distribution system.
- 11.2 The CGP shall furnish its generation schedule to SLDC/PSPCL in line with aforementioned regulations showing his drawl from the following:-
 - 1. Captive Generation (for each captive user).
 - 2. Banked Power (for each captive user).
 - 3. Power to be sold through Open Access (transaction-wise detail), if any.
 - 4. Power to be sold to PSPCL, if any.

- 11.3 In case of purchase of power by Captive User (s) under Open Access or wheeling of power under Open Access without executing banking agreement, scheduling for Open Access transactions shall be done separately without prejudice to the wheeling/banking of power.
- 11.4 Based on the difference between actual injection (as per data of ABT meters installed at injection end) and scheduled injection, the deviation (over-injection/ under-injection) at the injection end of CGP shall be worked out for each time-block and settled on weekly basis in accordance with the provisions of aforementioned regulations, as applicable for respective CGP.
- 11.5 The injection schedule for CGP, located outside the State, shall be based on the scheduling done by NRLDC. However, break-up of schedule as per Sr.No. 11.2 above shall be provided by the CGP to PSPCL/ SLDC.
- 11.6 The drawl schedule of Captive user(s)/ Green Energy Open Access Consumer(s) within the State, wheeling power from RE based CGP, shall be worked out by SLDC after deducting the applicable in-kind Transmission & Wheeling Charges, as approved by Hon'ble PSERC and T&D losses from the injection schedule of the CGP in each time-block, as under:-

Drawl schedule of captive user in ith time-block: (Edi) ={Egi (1-T&D Losses-Transmission & Wheeling charges *)

Where

Egi = Energy injection Schedule of CGP in ith time-block

11.7 Based on the difference between actual drawl (as per data of ABT meters installed at drawl end) and scheduled drawl, the deviation (over-drawl/ under-drawl) at the drawl end of Captive User(s) shall be worked out for each time-block, as under and settled on monthly basis.

Over-drawl in ith time-block = Eci – Edi (if Eci> Edi, else Zero)

Under-drawl in ith time-block = Edi – Eci (if Eci< Edi, else Zero)

Where

Eci = Actual Energy consumption/ drawl of captive user in ith time-block

Edi = Drawl schedule of captive user in ith time-block

11.8 The Over-drawl by the captive user(s) in each time-block shall be considered as the consumption/ drawl of energy from PSPCL, while the **Under-drawl/ energy unutilized by the**

^{*} Transmission and wheeling charges @ 2% or as amended from time to time by PSERC.

captive user(s) during each time-block, shall be treated as banked energy, after deducting in-kind banking charges.

As such, the Banked Energy for RE based CGPs shall be broadly calculated by SLDC as per following formula:-

Banked Energy in ith time block:
(Ebi) = Under-drawl in ith time-block x (1-B)

Or
(Ebi) = (Edi – Eci) x (1-B)

Or
(Ebi) = {Egi (1-T&D Losses-Transmission & Wheeling charges *) -Eci}x(1-B)

Where

Ebi = Banked Energy in ith time-block

Edi = Drawl schedule of captive user in ith time-block

Egi = Energy injection Schedule of CGP in ith time-block

Eci = Actual Energy consumption/ drawl of captive user in ith time-block

B = Banking charges (in kind) @ 15%

Note: 1. Above calculation shall be made keeping in view the restrictions on drawl of banked power during the months/ hours.

- 2. Losses are the transmission losses and distribution losses (Technical losses) as approved by the PSERC in its Tariff Order for the relevant financial year.
- 3. Banked Energy is zero if Eb is negative or zero (Banked Energy shall be calculated only in case of under- drawal).
- 4. The previous balance of banked energy (carried forward from last month)shall be adjusted at the end of month.
- 11.9 The power from CGP shall be adjusted as first charge in order of consumption of energy by Captive User(s)/ consumer. Settlement of wheeled energy consumed at Captive User(s)/ consumer end shall be in the following priority:
 - (i) Captive Power wheeled from RE based CGP
 - (ii) Banked Energy
 - (iii) Power purchased under Open Access, if any (other than energy wheeled/banked for captive use)
 - (iv) Power drawn from PSPCL

^{*} Transmission and wheeling charges @ 2% or as amended from time to time by PSERC.

- 11.10 The adjustment of under-drawl/ over-drawl and banked energy shall be as under:
 - a) The total of banked energy (worked out for each time-block as per Sr. No. 11.7 above) shall be consolidated for the monthly accounting period as "Energy banked by the CGP during the month" in the deviation account.
 - b) <u>During the non-paddy season</u>, the over-drawl/ excess energy drawn by the captive user(s) shall be worked out for each time-block and consolidated for the monthly accounting period in two parts i.e. "Over-drawl during off-peak period of month" and "Over-drawl during peak period of the month".

The "Over-drawl during off-peak period", shall be first settled/ adjusted by the PSPCL against the banked energy accumulated upto the end of the month (i.e. Total of the banked energy accumulated in the current month and banked energy carried forward from previous months). The balance of "over-drawl during off-peak period", if any, remaining after settlement with banked energy, shall be charged by PSPCL at applicable tariff rate (for consumers of PSPCL) or applicable standby charges (for non-consumers of PSPCL). The balance banked energy, if any, remaining after settlement with "over-drawl during off-peak period", shall be carried forward to next month.

Provided that such remaining banked energy to be carried forward to next month in excess of 30 % of over-drawl (monthly consumption of electricity of captive user from PSPCL) shall be considered as dumped energy in line with Regulation 11(iii) of CPP Regulations and will not be carried forward to next month.

The "Over-drawl during peak period" shall be charged by PSPCL at applicable tariff rate (for consumers of PSPCL) or applicable standby charges (for non-consumers of PSPCL) and no drawl of banked energy shall be allowed.

c) <u>During the paddy season</u>, entire over-drawl (both "Over-drawl during off-peak period" and "Over-drawl during peak period") shall be charged by the PSPCL at applicable tariff rate (for consumers of PSPCL) or applicable standby charges (for non-consumers of PSPCL) and no drawl of banked energy shall be allowed.

The energy banked during paddy season shall be carried forward each month till start of non-paddy season.

Provided that there shall be no restriction on the monthly banked energy to be carried forward to next month/ non-paddy season.

d) The "Accumulated Banked Energy carried forward from past month", "Energy banked by the CGP during the month", "Banked Energy drawn by the Captive User/ settled during the month" and "Accumulated Banked Energy carried forward to next month" shall be clearly mentioned in the monthly deviation account of captive user.

Illustrations:

(A) Say Energy Injection Schedule of CGP in ith time-block (Egi) = 10 MW

Energy Drawl Schedule of captive user in ith time-block

(Edi) = {Egi (1-T&D Losses-Transmission & Wheeling charges *)

= 10 x (1-2.46%-2%)

= 10 x 0.9554

= 9.554 MW

Say T&D Losses = 2.46 % (considering both CGP and captive user connected to Intra-State transmission system at 132 kV)

Transmission & Wheeling Charges = 2 % of energy injection schedule

Say Actual Energy consumption/ drawl of captive user in ith time-block (Eci) = 7 MW

Under-drawl/ Unutilized Energy in ith time-block = Edi – Eci

$$= 9.554 - 7$$

$$= 2.554 \text{ MW}$$
Banked Energy in ith time-block = Under-drawl x (1-B)
$$= 2.554 \text{ x (1-15\%)} \qquad \text{(Banking Charges @ 15\%)}$$

$$= 2.1709 \text{ MW}$$

Say the CGP is a solar based CGP and the energy injection schedule, consumption and banked energy remain same as above for 6 no. peak solar hours, 42 MWH are consumed/drawn by captive user against drawl schedule of 57.324 MWH and 13.0254 MWH are banked during a day with zero over-drawl/ consumption from PSPCL.

Say for balance 6 no. solar hours, the injection schedule is less than 7 MW (ranging between 1 to 7 MW, say total drawl schedule of 28 MWH), consumption/ drawl is same as 7 MW (i..e total 42 MWH) and 42-28 = 14 MWH over-drawl (consumption from PSPCL) with no under-drawl/ banked energy.

Say for remaining 12 no. non-solar hours, injection as well as drawl schedule is Zero, total consumption/ drawl and over-drawl (consumption from PSPCL) is same as 7 MW (i.e. total 84 MWH) with no under-drawl/ banked energy.

Say there are 4 no. peak hours within 12 no. non-solar hours, the over-drawl (consumption from PSPCL) during these 4 no. peak hours will be 28 MWH and during over-drawl (consumption from PSPCL) during 8 no. off-peak hours will be 56 MWH.

The daily total shall be as under

Daily Drawl Schedule of captive user = 57.324+28+0 = 85.324 MWH

Daily Consumption/ Drawl = 42+42+84 = 168 MWH

Over-drawl (consumption from PSPCL) during peak hours= 0+0+28 = 28 MWH

Over-drawl (consumption from PSPCL) during off-peak hours= 0+14+56 = 70 MWH

Banked Energy = 13.0254+0+0 = 13.0254 MWH

Say the daily details are same for each day of the month, the total for the month (30 days) shall be as under:-

Monthly Drawl Schedule of captive user = 30x85.324 = 2559.72 MWH

Monthly Consumption/ Drawl = 30x168 = 5040 MWH

Over-drawl (consumption from PSPCL) during peak hours = 30x28 = 840 MWH

Over-drawl (consumption from PSPCL) during off-peak hours = 30x70 = 2100 MWH

Banked Energy = 30x 13.0254 = 390.762 MWH

For non-paddy season

Over-drawl/ consumption from PSPCL (after adjustment of Banked Energy) during off-peak hours = 2100-390.762 = 1709.238 MWh

Total chargeable Over-drawl/ consumption from PSPCL = 1709.238+840 = 2549.238 MWH Net balance of Banked Energy to be carried forward to next month = Zero

For paddy season

Total chargeable Over-drawl/ consumption from PSPCL = 2100+840 = 2940 MWH Net Banked Energy to be carried forward to next month = 390.762 MWH

(B) Say Energy Injection Schedule of CGP in ith time-block (Egi) = 10 MW Energy Drawl Schedule of captive user in ith time-block (Edi) = {Egi (1-T&D Losses-Transmission & Wheeling charges *) = $10 \times (1-2.46\%-2\%)$ = 10×0.9554 = 9.554 MW

Say T&D Losses = 2.46 % (considering both CGP and captive user connected to Intra-State transmission system at 132 kV)

Transmission & Wheeling Charges = 2 % of energy injection schedule
Say Actual Energy consumption/ drawl of captive user in ith time-block (Eci) = 3 MW
Under-drawl/ Unutilized Energy in ith time-block = Edi – Eci

= 9.554 – 3 = 6.554 MW

Banked Energy in ith time-block = Under-drawl x (1-B)

= 6.554 x (1-15%) (Banking Charges @ 15%)

= 5.5709 MW

Say the CGP is a solar based CGP and the energy injection schedule, consumption and banked energy remain same as above for 6 no. peak solar hours, 18 MWH are consumed/drawn by captive user against drawl schedule of 57.324 MWH and 33.4254 MWH are banked during a day with zero over-drawl/ consumption from PSPCL.

Say for balance 6 no. solar hours, the injection schedule is less than 7 MW (ranging between 1 to 7 MW, say total drawl schedule of 28 MWH), consumption/ drawl is same as 3 MW (i..e total 18 MWH) and 28-18 = 10 MWH under-drawl with no over-drawl/ consumption from PSPCL. Banked Energy shall be equal to 10x(1-15%) = 8.5 MWH.

Say for remaining 12 no. non-solar hours, injection as well as drawl schedule is Zero, total consumption/ drawl and over-drawl (consumption from PSPCL) is same as 3 MW (i.e. total 36 MWH) with no under-drawl/ banked energy.

Say there are 4 no. peak hours within 12 no. non-solar hours, the over-drawl (consumption from PSPCL) during these 4 no. peak hours will be 12 MWH and during over-drawl (consumption from PSPCL) during 8 no. off-peak hours will be 24 MWH.

The daily total shall be as under

Daily Drawl Schedule of captive user = 57.324+28+0 = 85.324 MWH

Daily Consumption/ Drawl = 18+18+36 = 72 MWH

Over-drawl (consumption from PSPCL) during peak hours = 0+0+12 = 12 MWH

Over-drawl (consumption from PSPCL) during off-peak hours= 0+0+24 = 24 MWH

Banked Energy = 33.4254+8.5+0 = 41.9254 MWH

Say the daily details are same for each day of the month, the total for the month (30 days) shall be as under:-

Monthly Drawl Schedule of captive user = 30x85.324 = 2559.72 MWH

Monthly Consumption/ Drawl = 30x72 = 2160 MWH

Over-drawl (consumption from PSPCL) during peak hours = 30x12= 360 MWH

Over-drawl (consumption from PSPCL) during off-peak hours = 30x24 = 720 MWH Banked Energy = 30x 13.0254 = 1257.762 MWH

For non-paddy season

Over-drawl/ consumption from PSPCL (after adjustment of Banked Energy) during off-peak hours = Zero

Total chargeable Over-drawl/ consumption from PSPCL = 360 MWH

Net balance of Banked Energy remaining at end of month = 1257.762-720 = 537.762 MWH Limit for Banked Energy allowed to be carried forward to next month

= 30% of consumption from PSPCL

= 30% of (360+720)= 324 MWH

Banked Energy carried forward to next month = Minimum of 537.762 & 324

= 324 MWH

For paddy season

Total chargeable Over-drawl/ consumption from PSPCL = 360+720 = 1080 MWH Net balance of Banked Energy remaining at end of month = 1257.762 MWH Banked Energy carried forward to next month = 1257.762 MWH

11.11 The additional open access transactions, if any, by the CGP for Sale of Power, besides the Intra-State Wheeling transaction (for which banking is applicable), shall be scheduled and accounted for in line with the provisions of applicable regulations (e.g. F&S Regulations (for solar/ wind CGPs located within the State with individual capacity/ capacity of pooling station 5 MW & above) or DSM Regulations (for other CGPs located within the State with capacity above 5 MW) or as per Open Access Regulations (if individual capacity/ capacity of pooling station for solar/wind CGPs located within the State is less than 5 MW or if capacity of other CGPs located within the State is 5 MW or below)}, after adjusting/accounting for the Intra-State Wheeling transaction schedule (for which banking is applicable).

Provided that the injection for inter-state open access transactions by the solar/ wind CGP located within the State (with individual capacity/ capacity of pooling station 5 MW & above) shall be on separate feeder as the scheduling, accounting and deviation settlement of such transactions shall be separate, in line with the provisions of F&S Regulations.

11.12 The additional open access transactions, if any, by the Captive User(s) for purchase of power, besides the Intra-State Wheeling transaction (for which banking is applicable), shall be scheduled and accounted for in line with the provisions of open access regulations, after

adjusting/ accounting for the Intra-State Wheeling transaction schedule (for which banking is applicable).

As the total under-drawl in such cases shall be the difference between the energy actually drawn by the captive user and the total energy scheduled by the captive user (which shall include both Intra-State Wheeling transaction schedule and additional open access transaction schedule), the calculation of banked energy and under-drawl in such cases shall be as under:-

a) During the time-blocks, where the energy actually drawn by the captive user is less than the energy scheduled from Intra-State Wheeling transaction from CGP, the under-drawl in each time-block shall be worked out in two parts i.e. "Underdrawl to be considered as banked energy" (after deducting in-kind banking charges) and "Under-drawl to be settled under Imbalance/ Deviation Charges Mechanism".

The under-drawl worked out as difference between the energy actually drawn by the captive user and the energy scheduled at drawl end from Intra-State Wheeling transaction (from CGP) shall be considered as banked energy (after deducting inkind banking charges)

Provided that the monthly banked energy during non-paddy season to be carried forward to next month, in excess of 30 % of monthly overdrawl (total consumption of electricity of captive user from PSPCL), shall be considered as dumped/lapsed energy in line with Regulation 11(iii) of CPP Regulations and will not be carried forward.

The balance under-drawl worked out after deducting such difference (difference between the energy actually drawn by the captive user and the energy scheduled at drawl end from Intra-State Wheeling transaction (from CGP)) from the total under-drawl shall be settled as per the Imbalance Charges mechanism stipulated in Regulation 31 of Open Access Regulations(in case captive user is a partial open access consumer/ consumer of PSPCL) or as per DSM Regulations (in case captive user is a full open access consumer/ non-consumer of PSPCL).

b) During the time-blocks, where the energy actually drawn by the captive user is less than the total energy scheduled by the captive user (total of Intra-State Wheeling transaction schedule and additional open access transaction schedule) but more than the energy scheduled from Intra-State Wheeling transaction from CGP, the total under-drawl shall be settled as per the Imbalance Charges

mechanism stipulated in Regulation 31 of Open Access Regulations(in case captive user is a partial open access consumer/ consumer of PSPCL) or as per DSM Regulations (in case captive user is a full open access consumer/ non-consumer of PSPCL).

- 11.13 The energy statement shall be forwarded by SLDC to commercial wing of PSPCL, which shall use it for the purpose of preparation and issuing of bills. In case of diverse categories of consumers and different locations of captive users, the SLDC shall send details of banked power to concerned CBCs in ratio of their respective contract demand, for preparation of energy bills based on energy injected; banked energy and energy consumed every month. Based on energy statement issued by SLDC, action shall be taken by PSPCL/PSTCL as under:
 - a) The applicable open access charges for STOA/MTOA/LTOA shall be billed by PSPCL/PSTCL/SLDC as per applicable PSERC Open Access Regulations as amended from time to time.
 - b) Commercial wing of PSPCL shall compile statement (based upon the adjustment sheet prepared by SLDC) showing Energy wheeled from CGP, banked energy, energy consumed in current month, PSPCL energy, amount in rupees payable etc. The finalized banking adjustment sheet shall be forwarded to SLDC for keeping record of the banking power transactions.

12. Security Deposit:

The CGP/ captive user(s) shall submit a security deposit to PSPCL at the time of application in the form of unconditional & irrevocable bank guarantee/ Letter of Credit (LC)/ RBI Letter of Mandate (LM) or any other form of security mutually agreeable, equivalent to 51% captive consumption, towards estimated Cross Subsidy Surcharge and Additional Surcharge payable by general open access consumer for availing open access for the same duration, which shall be encashed by PSPCL in case CGP fails to meets the criteria for captive status.In case of exhausted security deposit, the CGP/ captive user(s) shall reinstate the same within seven (7) days from receipt of such information from PSPCL. Failure to reinstate Bank Guarantee within prescribed time limit, the banking of power shall not be allowed.

The Security deposit shall be submitted before commencement of wheeling of power, which shall be retained by PSPCL till the expiry of banking agreement. This Security amount shall be over & above the Payment Security Mechanism/Security Deposit submitted to SLDC/PSTCL, if any, in line with Open Access Regulations/Procedures. The amount of same shall be reviewed at the beginning of every financial year. Facility of banking will be withdrawn in case the security deposit is not maintained.

13. Events of Default:

The occurrence of any of the following events at any time by the CGP/ Captive User, during the term of this Agreement shall constitute an Event of Default:

- a. Failure or refusal by the CGP or Captive User(s) to perform any of its obligations agreed under this Agreement.
- b. Non-payment of charges or non-payment/non-maintenance of security as specified in this agreement within the time specified.
- c. Failure of the CGP to generate and wheel energy upto 25% of contracted energy/ capacity continuously for a period of six months in a Financial Year as the case may be.
- d. Failure to establish status of Captive Generating Plant in any contract year.
- e. Submission of fake, fabricated or misleading document(s), certificate(s), undertaking(s) etc.
- f. Tempering of metering equipment.

14. Termination of Banking Agreement:

- i) Upon the occurrence of any event of default as set out in clause 13 above, PSPCL may deliver a Default Notice of 15 days to the CGP/ captive user in writing, which shall specify in reasonable detail the event of default giving rise to the default notice and call upon the CGP/ captive user to remedy the same within a month from the date of notice.
- ii) In case the CGP/ captive user fails to remedy the default(s) notified in the above Notice within the time indicated in the notice, PSPCL shall be entitled to terminate the banking agreement with immediate effect.
- iii) Upon termination of banking agreement, PSPCL shall stand discharged of all its obligations undertaken under the agreement. However, the Parties shall fulfill the payment obligations arising as per the agreement prior to the date of termination.
- iv) On termination of contract by PSPCL, Banked units for that particular period shall be lapsed and no compensation shall be provided and besides that, security deposit shall also be forfeited.

15. Re-dressal Mechanism:

Any dispute in scheduling, metering, billing/ energy accounting & Commercial Settlement including unsettled disputes between the PSPCL and CGP/ Captive User shall be first referred to the Commercial & Metering Committee (CMC) formulated under State Grid Code. All users shall abide by the decision of CMC.

The Committee shall investigate and endeavor to resolve the grievance within 30 days after affording opportunity of hearing to all the affected parties. If the Committee is unable to redress the grievance, it shall be referred to the Commission by the Committee. In case the CGP/ Captive user is dissatisfied with the decision of the committee, it may approach the Commission through a petition. Pending the decision of the commission, the directions of the CMC/ SLDC shall be complied with by the CGP/ Captive user.

16. Removal of difficulties:

In case of any difficulty in implementation of this procedure, PSPCL may approach the Commission for review or revision of the procedure with requisite data. In case of any dispute between these Procedures and CPP Regulations, the later shall supersede these procedures and will be applicable.

16. General:

- i. All costs/expenses/ charges associated with the application shall be borne by the applicant.
- ii. The CGP/ Captive User shall abide by the provisions of the Electricity Act, 2003, the PSERC Regulations and Indian Electricity Grid Code and PSERC (State Grid Code) Regulation 2013, and applicable CERC and PSERC regulations as amended from time to time.
- iii. This procedure aims at outlining conditions and steps to streamline and facilitate the process of banking. However, some teething problems may still be experienced. The various implications would be known only after practical experience is gained by way of implementing these procedures. In order to resolve the same, this procedure shall be reviewed or revised by PSPCL with approval of Commission.

Application format for Banking

- 1) Particular of CPP
 - i) Capacity of plant in MW:
 - ii) Type of Fuel:
 - iii) Location of the plant:
 - iv) Interconnection Voltage:
 - v) Date of commissioning of project:
 - vi) Contact Details:
 - vii) Substation where energy is injected:
 - viii) Validity of Open Access:
 - ix) Schedule date of commencement of wheeling of power:
- 2) Capacity to be wheeled/ banked in MW
- 3) Particular of Consumer(s) to whom power is to be wheeled:
 - i) Name of Consumer:
 - ii) Category:
 - iii) Contact Demand:
 - iv) Subdivision:
 - v) Supply Voltage:
 - vi) Quantum of power to be wheeled:
 - vii) Contact Details:
- 4) Metering Details:
 - i) At Generator End:
 - ii) At Consumer End:

Validation:-

I, undertake by the terms and conditions of Banking/Wheeling of power as set out in PSERC (Harnessing of Captive Power Generation) Regulations, 2022 and the details mentioned above are true & correct.

(Signature of the Applicant) (CGP/ Captive User)

Annexure-1 B

UNDERTAKING TO BE GIVEN BY APPLICANT (RE based CGP/ CAPTIVE USER)

Name: M/s	_ (Name of Applicant),
Postal address)	
(To be provided by the State Entity on a stam	np paper attested by Notary Public)

- 1. I/We, as a CGP/ Captive User, will be regulated by PSERC (Harnessing of Captive Power Generation) Regulations, 2022, as amended from time to time.
- 2. I/ We qualify as a Captive Generating Plant in terms of Rule 3 of Electricity Rules, 2005 and under Section 9 read with clause (8) of section 2 of the Electricity Act, 2003. I / We will ensure obligation as captive power plant/ captive user in line with the provisions of Electricity Rules, 2005 and Electricity Act, 2003.
- 3. I/ We shall furnish all the requisite documents to the verifying agency/authority to establish the captive status of the generating plant as laid down Rule 3 of the Electricity Rules 2005.
- 4. I/We agree to submit security deposit in the form of unconditional & irrevocable bank guarantee or any other form of security mutually agreeable, equivalent to estimated Cross Subsidy Surcharge and Additional Surcharge payable by general open access consumer for availing open access for the same duration, which shall be forfeited in case I/We fail to meet the criteria for captive status.
- 5. I/ We agree that in case the if I/We fail to fulfil the conditions to qualify as captive generating plant in a particular financial year, the entire electricity generated in that financial year shall be treated as if it is a supply of electricity by a generating company and shall not be eligible for benefits of a captive generating plant. The total energy banked and utilized by the captive user during the year in such case shall be treated as infirm power injected in to the grid by CGP and shall be treated as dumped power as per Regulation 5.2 of CPP regulations.
- 6. I/We agree that the banked energy during non-paddy season above 30% of total monthly consumption of electricity from the PSPCL shall be treated as dumped energy and shall not be carried forward to next month.
- 7. I/We will be responsible to ensure healthiness of metering equipment during the period of schedule/ injection of power and will inform SLDC about defect/ change in metering equipment within 24 hrs of such defect coming to notice/ change of metering

- equipment. In absence of timely receipt of such information from us, I/We will be responsible for any loss to SLDC/ PSTCL on this account.
- 8. I/We shall establish a round the clock Control Center and shall be responsible for control of its Generation/Drawal. The Control Centre shall have facilities of voice communication with SLDC with voice recording facilities, Fax machine and internet connection available for all the 24 hours.
- 9. I/We agree to provide and meet with all metering, protection and communication requirements, as specified by the Commission/PSPCL/PSTCL from time to time.
- 10. I/We will ensure compliance of the State Grid Code, Indian Electricity Grid Code and regulations and procedure approved by PSERC & CERC, as applicable and any other direction of SLDC issued from time to time for ensuring integrated grid operation and for achieving the maximum economy of the operation of power system.
- 11. I /We (if an obligated entity under RPO Regulation) shall ensure compliance under PSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2011, as amended from time to time.
- 12. I/We agree to accept the decision of Commercial & Metering Committee & Appropriate Commission (CERC/PSERC).
- 13. I/We agree to bear any loss to PSPCL incurred on account of misrepresentation/concealment of facts by me/us.
- 14. I/We will comply any additional conditions imposed by PSPCL in line with the Relevant Regulations issued by PSERC/ CERC.

I/We undertake all operational and commercial responsibilities as per the prevalent PSERC Regulations and are agreeing for the above terms and conditions for registering as CGP/ Captive User with PSPCL.

Details of Payment Security is enclosed	
(Signatures, Name and Postal address of Applicant (CGP/ captive User))	
	

Declaration: All that is stated in the above is true and correct.

Note: Copy of Board Resolution of Authorized Signatory/ Power of attorney/ Authorization Letter in respect of signing authority to be enclosed.

Annexure-2

MODEL BANKING AGREEMENT

This Banking Agreement is made and entered into at Patiala onday ofof
BETWEEN
Punjab State Power Corporation Limited, a Company formed and incorporated under the Companies Act, 1956, with its registered office located at PSEB H.O. Building, The Mall, Patiala (hereinafter referred to as " PSPCL " which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators and permitted assigns),
Punjab State Transmission Corporation Limited, a Company formed and incorporated under the Companies Act, 1956, with its registered office located at PSEB H.O. Building, The Mall, Patiala (herein after referred to as the "PSTCL" which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators and permitted assigns),
M/s, having a Captive Generating Plant (CGP) in the State of Punjab of capacity MW at incorporated under the Companies Act, 1956 or Companies Act, 2013 as the case may be and having its Registered Office at
WHEREAS: The PSPCL is Distribution Licensee engaged in the business of electricity distribution in the State of Punjab and PSTCL (Punjab State Transmission Corporation Ltd.) i.e. State Transmission Utility (STU) engaged in the business of electricity transmission in the State of Punjab. Both PSPCL and PSTCL are under a statutory obligation to provide non-discriminatory open access to its transmission/ distribution system under the provisions of the Electricity Act, 2003. The Company is a generator who have a Captive Generating Plant (CGP) of Capacity MW located at and connected to the distribution/ transmission system of the PSPCL/PSTCL through kV line from the Plant to kV Sub Station of PSPCL/PSTCL and have executed the Open Access Agreement/ Approval dated executed with/ issued by PSTCL/SLDC to transmit/wheel upto MW to
andpower under intrastate bilateral transaction, out of power generated from Captive Generating Plant to

i)

the Captive User(s), located in the State of Punjab having equity share holding with voting rights in the Company as under:-

Sr. No.	Unit wise Capacity Share in Company (in MW)	%age equity Shares holding with voting rights

ii)	The New and Renewable Energy Department, G	ovt. of Punjab/	Punjab Energy	Developmer	١t
	Agency (PEDA), vide its Memo No	dated	has acco	orded sanctio	n
	to the proposal of the Company for installation	n of Renewable	Energy (RE)	oased Captiv	'e
	Generating Plant ofMW capacity at		_ and the Con	npany plan t	0
	construct, own, operate and maintain/own and	operates the al	oove said Pow	er Generatin	g
	Station.				
iii)) The Company is desirous of availing the banking f	acility in respect	of power up	to M\	N
,	(combined contracted capacity of the captive use		-		
	power generated from the Project for its captive		· ·		
	power generated from the Project for its capti	ve, own use at	then Offic(3), i	•	-, 2)
				/ \2	-,
	, by utilizing the transmission and/ or distribut	ion network of t	he PSTCL/ PSP	 CL and for th	e
	said purpose intends to enter into a Banking Agre				
	Terms and Conditions as set out in this agreement.		, -	,	

NOW THEREFORE IN VIEW OF THE FOREGOING PREMISES AND IN CONSIDERATION OF THE MUTUAL COVENANTS AND CONDITIONS HEREINAFTER SET FORTH, THE PSPCL/ PSTCL AND THE COMPANY, HEREBY AGREE AS FOLLOWS:

ARTICLE 1

1.1 **DEFINITIONS**

For the purposes of this Agreement, unless the context otherwise requires, the following words and expressions shall have the respective meanings set forth below:

- i. "Act" means the Electricity Act, 2003 (36 of 2003);
- ii. "Agreement" shall mean the Banking Agreement executed herein and shall include the schedules enclosed hereto, amendments, modifications and supplements made in writing by the parties from time-to-time.

- "Banking" means the facility by which electrical energy remaining unutilized after captive consumption from a RE based Captive Generating Plant during a billing month and credited with the distribution licensee which is allowed to be used for captive consumption at a later stage on payment of banking charges and as per other terms and conditions as may be approved by the Commission;
- iv. **"Banking Charges"** means percentage deduction made in kind from the energy banked or charges in Rs./kWh levied on banked energy, towards banking charges.
- v. "Billing cycle" means a period of one month;
- vi. "Contract Demand" means the maximum demand in kVA sanctioned to a consumer;
- vii. "Captive Generating Plant (CGP) or Captive Power Plant (CPP)" means a RE based power plant set up by any person to generate electricity primarily for his own use and includes a power plant set up by any co-operative society or association of persons for generating electricity primarily for use of members of such cooperative society or association and fulfils the criteria as laid down in Rule 3 of the Electricity Rules, 2005;
- viii. "Captive User" means the Green Energy Open Access consumer, who is end user of the Green/ RE power generated in Captive Generating Plant and the term "captive use" shall be construed accordingly;
- ix. "Central Commission (CERC)" means Central Electricity Regulatory Commission referred to in subsection (1) of Section 76 of the Act.
- x. "Cogeneration" means a process which simultaneously produces two or more forms of useful energy (including electricity);
- xi. "Commercial Operation Date (CoD)" means the date on which the Project or any of its units is/are declared as available for commercial operation on successful completion of requisite test(s) and conditions.
- xii. **"Commission" or "PSERC"** means the Punjab State Electricity Regulatory Commission referred to in subsection (1) of section 82 of the Act;
- xiii. **"Company"** means a company formed and registered under the Companies Act, 1956 and includes any body corporate under a Central, State or Provincial Act;
- xiv. **"Contract Year" means** the period beginning from the date of signing of this Banking Agreement and ending on the immediately succeeding 31st March and thereafter each period of 12 months beginning on April and ending on 31st March provided that the last Contract year shall end on the last day of the term of the Banking Agreement.
- xv. "Contracted Capacity" means capacity contracted between the company and captive user(s), for which open access has been granted for transmission/ wheeling (out of the power generated from the Project/ company).
- xvi. "Conventional Fuel" means any fossil fuel such as coal, lignite etc.;
- xvii. "Deviation" in a time-block for a Seller means its total actual injection minus its total scheduled generation and for a Buyer means its total actual drawal minus its total scheduled drawal;

- xviii. **"Deviation Charges"** means the Charges for Deviation as specified by the Commission from time to time;
- xix. "Deviation Settlement Mechanism" means and include the framework for energy accounting, deviation accounting, rules for pricing of deviation(s) payable and receivable by the State entities and other design parameters as specified under DSM Regulations and/or F&S Regulations issued by the Commission;
- xx. "Drawl Point" means the interface point at which the wheeled/banked power shall be drawn by captive user(s) and metering shall be done.
- xxi. **"DSM Regulations"** means Punjab State Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2020, as amended from time to time.
- xxii. **"F&S Regulations"** means Punjab State Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019, as amended from time to time.
- xxiii. **"Financial Year"** means year starting from 1st day of April of a calendar year and ending on the 31st day of March of the following calendar year
- xxiv. **"Firm Power"** means the power supplied on agreed terms & conditions by a CGP owner to a licensee as per the contract;
- xxv. "Force Majeure Events" means the events and circumstances as described in Article-6.
- xxvi. **"Full Open Access Consumer"** shall mean Open Access Consumer connected to transmission system or distribution system but not having any contract demand with the distribution licensee within the state;
- xxvii. "Generating company" means any company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person, which owns or operates or maintains a generating station;
- xxviii. "Green Energy" means the electrical energy from renewable sources of energy including hydro and storage (if the storage uses renewable energy) or any other technology as may be notified by the Government of India from time to time and shall also include any mechanism that utilizes green energy to replace fossil fuels including production of green hydrogen or green ammonia as per provision of the Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022.
- xxix. "Green Energy Open Access" means the open access allowed to a consumer including captive user for carrying electricity from green energy source as per provisions of these Regulations read with the Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022.
- xxx. "Green Energy Open Access Consumer" means any person who has sanctioned contracted demand of 100 kVA or more or such other limit as may be specified by Commission from time to time, except for captive consumers, who are supplied with electricity from green energy sources for their own use by a licensee or the Government

- or by any other person engaged in the business of supplying electricity to the public under this Act or any other law for the time being in force and includes any person whose premises are for the time being connected for the purpose of receiving green energy with the works of a licensee, the Government or such person, as the case may be.
- xxxi. **"Grid Code" (or "SGC")** means the Grid Code specified by the Commission under clause (h) of subsection (1) of Section 86 of the Act;
- xxxii. **"Imbalance Charges"** means the deviation charges stipulated for open access customers under Regulation 31 of Open Access Regulations.
- xxxiii. **"Indian Electricity Grid Code" (or "IEGC")** means the Grid Code specified by the Central Electricity Regulatory Commission under Section 79(1)(h) of the Act;
- xxxiv. "Infirm Power" means power injected in to the grid by a CGP which is not committed and is not covered under any contract with the distribution licensee.
- xxxv. "Injected Energy" means the kilowatt hour (kWh) of electricity actually exported and measured by the energy meters at the Injection Point
- xxxvi. "Injection Point" means the interconnection point at which power to be transmitted /wheeled for captive use shall be injected by the Company into the PSPCL/PSTCL network.
- xxxvii. "Installed Capacity" means the capacity of the Project at the generating terminal(s).
- "Interface Meters or Special Energy Meters (SEM)" means interface/ SEM meters as defined by the Central Electricity Authority under the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, as amended from time to time;
- xxxix. "Interface Point" or "Interconnection Point" means the interface of captive power generator with the network of distribution or transmission licensee (PSPCL/PSTCL) and interface of captive user with the network of distribution or transmission licensee (PSPCL/PSTCL).
 - xl. "Licensee" means a person who has been granted a licence under section 14 of the Act;
 - xli. **"Load Despatch Centre"** means National Load Despatch Centre, Regional Load Despatch Centre or State Load Despatch Centre, as the case may be, responsible for coordinating, scheduling of the Buyers and the Sellers in accordance with the provisions of Grid Code;
 - xlii. "Metering Point" for purposes of recording of Injected Energy at the Injection Point and recording consumption at the drawl point, which shall include ABT/SEM (Special Energy Meters) as specified in the PSERC(Terms and Conditions for Open Access) Regulations, 2011 and State Grid Code, as amended from time to time and in accordance with the CEA (Installation and Operation of Meters) Regulations, 2006 (as amended from time to time) with the facilities to record both export and import of electricity to/from the transmission/distribution network of license and to communicate its readings to State Load Dispatch Centre on real time basis or as specified by the Commission.
 - xliii. **"Non-Paddy Season"** means lean period of the year, other than paddy season/ peak seasonal period.

- xliv. **"Off-Peak Period"** means period of the day, other than Peak Period/ Peak Load Hours approved by the Commission.
- xlv. **"Open Access Regulations"** means the Punjab State Electricity Regulatory Commission (Terms and conditions for Intra-State Open Access) Regulations, 2011, as amended from time to time;
- xlvi. "Paddy Season" means peak seasonal period from 1st June to 31st October.
- xlvii. **"Partial Open Access Consumer"** shall mean Open Access Consumer connected to the transmission system or distribution system and having his contract demand with the distribution licensee within the state;
- xlviii. **"Peak Period"** means Peak Load Hours period of the day, as approved by the Commission in detailed banking procedure.
- xlix. **"Person"** shall include any company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person;
 - I. "PSPCL" means Punjab State Power Corporation Limited, a successor company of the erstwhile Punjab State Electricity Board (PSEB), notified as the Distribution Licensee (discom) by Government of Punjab and entrusted with the work of Generation and Distribution business of erstwhile PSEB.
 - li. **"PSTCL"** means Punjab State Transmission Corporation Limited, a successor company of erstwhile Punjab State Electricity Board (PSEB), notified as State Transmission Utility (STU) by Government of Punjab and entrusted with the work of transmission business of erstwhile PSEB and responsibility to operate the SLDC.
- lii. "Reactive Power" means the product of voltage and current and the sine of the phase angle between them measured in units of volt amperes reactive and standard multiples thereof;
- liii. **"Renewable Energy (RE) Source"** means renewable energy source approved by MNRE such as solar, wind, biomass, bagasse, municipal solid waste and other such sources;
- liv. **"Standby contract demand"** means the maximum demand in kVA contracted by the CGP under Standby power agreement with the distribution licensee of his area of supply;
- lv. **"Standby power"** means the power required in case of planned or forced outage of the CGP:
- lvi. **"Startup contract demand"** means the maximum demand in kVA contracted by the CGP under Startup power agreement with the distribution licensee of his area of supply;
- lvii. **"Startup power"** means the power required in case of Startup, at the pre-commissioning stage or after a planned/ forced outage;
- lviii. **"State Entity"** means such person who is in the SLDC control area and whose metering and energy accounting is done at the state level;
- lix. "State Load Despatch Centre" (or "SLDC") means the Load Despatch Centre of the State established under sub section (1) of section 31 of the Act, responsible for co-ordinating scheduling of the state entities in accordance with the provisions of State Grid Code;

- lx. "Time-Block" means a time block of 15 minutes or any such shorter duration as may be notified by the Commission, for which specified electrical parameters and quantities are recorded by a special energy meter, with the first time block starting at 00.00 hours;
- lxi. "Verifying Authority/Agency" means the authority/ agency authorised by the Commission to collect and verify the data to check the captive status of the Captive Generating Plant as per the provisions of Section 9 of the Act read with Rule 3 of the Electricity Rules, 2005, as amended from time to time, in accordance with the procedure/ guidelines approved by the Commission.

Any words and expressions used but not defined in this Agreement shall have the same meaning as defined in the Act, PSERC Regulations and the Grid Code. A reference to any Regulation shall include its amendment or subsequent re-enactment if any.

Unless otherwise stated, all references made in this Agreement to "Articles" and "Schedules" shall refer, respectively, to Articles of and Schedules to this Agreement. The Schedules to this Agreement shall form part of this Agreement and shall be in force and effect as though they were expressly set out in the body of this Agreement.

ARTICLE-2

CONNECTIVITY AND OPEN ACCESS AGREEMENTS

2.1	The interconnection/Connectivity between the Project of the Company and / or premises of the Captive User(s) shall be as per the Feasibility Clearance granted by PSPCL. The power from the
	Project shall be evacuated through thekV line constructed and maintained by the
	Company/Licensee up to the kVSubstation of the PSPCL/PSTCL and is to be drawn
	by the Captive User(s) atkV at the premises located at (1)
	, (2)
	from
	KVSubstation of the PSPCL/PSTCL.
	every such captive user where banked power is intended to be used within the State of Punjab.
2.2	The parties shall be bound by the conditions of the Feasibility Clearance datedand Open Access Agreement/ Approval dated executed between the parties, which will be an integral part of this Banking agreement.
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2.2	The parties shall be bound by the conditions of the Feasibility Clearance datedand Open Access Agreement/ Approval dated executed between the parties, which will be an integral part of this Banking agreement. This Banking Agreement shall remain valid till the validity of Open Access Agreement/ Approval

ARTICLE 3

CHARGES

- **3.1** The CGP/CPP shall be allowed to be bank power with PSPCL subject to the condition that 15% of power banked shall be deducted (in kind) towards banking charges.
- **3.2** Besides banking charges, the Captive User(s), shall be liable to pay to PSPCL the following charges:
 - (i) Captive User, who is a consumer of PSPCL:
 - a) For the energy drawn from the PSPCL, the consumer shall pay as per tariff applicable for the category as approved by the commission from time to time.
 - b) In case, the captive user(s) exceeds his Sanctioned Contract Demand, he will be liable to pay demand surcharge as applicable for relevant category as per schedule of tariff as approved by PSERC from time to time.
 - c) The open access charges corresponding to the contracted capacity, as approved by PSERC in PSERC (Terms & Conditions for Intra-State Open Access) Regulations, 2011, as amended from time to time and tariff related order(s) issued from time to time.
 - d) Any other charges, as specified in PSERC (Harnessing of Captive Power Generation) Regulations, 2022, as amended from time to time shall also be applicable.
 - (ii) Captive User, who is not a consumer of PSPCL:-

Captive User, who is not a consumer of PSPCL, shall execute Standby Power Supply Agreement with PSPCL separately for the purpose of availing banking under this agreement, which shall be governed as per the provisions of PSERC (Harnessing of Captive Power Generation) Regulations, 2022 and PSERC (Terms & Conditions for Intra-State Open Access) Regulations, 2011, as amended from time to time and Standby Charges as prescribed in said regulations shall be applicable.

3.3 For any import of energy by the Company for start-up of Project or other allied purposes, the company shall take electricity connection for the same from PSPCL as per applicable consumer category. PSPCL shall charge the Company for the same at the tariff of relevant category for temporary supply as specified by the PSERC from time to time. The company shall sign a start up/ standby power agreement with PSPCL as per terms and conditions of PSERC (Harnessing of Captive Power Generation) Regulations, 2022, as amended from time to time. The aforesaid Regulations shall also be applicable to the Captive Generating Plant as well as captive user(s).

3.4 Banked Energy remaining unutilized at the end of financial year

The Energy Banked shall be permitted to be carried forwarded from month to month. The banked power shall be utilized within the same financial year failing which the unutilized banked energy at the end of the financial year shall lapse, and no compensation whatsoever shall be claimed/paid for such lapsed banked energy.

3.5 Energy Losses:

Loss of Energy in wheeling/transmission shall be calculated as per the technical losses determined by the Commission for the relevant year.

- **3.6** The Company shall also be liable to pay, in case of default by Captive User(s), partly or fully, any open access charges, or any other charges based on the bills raised by PSPCL/ PSTCL/ SLDC.
- 3.7 The Company shall submit the documentary evidence to the verifying authority/ agency by 30th of April to establish its status of being a Captive Generating Plant for that particular contract year/ financial year and subsequently submit the certification of verifying authority/ agency to PSPCL. Besides this, the Company shall be required to submit any additional documents/information which may be required by PSPCL to satisfy itself regarding captive status of the plant. In case, the Company fails to comply with the requirement to qualify the Status of Captive Generating Plant during any contract year/financial year, the Company shall be liable to pay all applicable charges for the said year, from which it was having exemption on account of its claimed CPP status. Further, Banked units, if any, shall stand lapsed and no compensation shall be provided.

ARTICLE- 4

BANKING OF ENERGY

4.1 WHEELING:

- **4.1.1** The Company shall apply for grant of Open Access to the nodal agency in line with the Open Access Regulations and Procedures approved by Hon'ble PSERC, indicating the quantum of power to be wheeled to captive user(s).
- **4.1.2** PSPCL reserves the right to withdraw the facility of banking either wholly or partly in case of any breach of conditions of this agreement or under force majeure conditions. In such an event, PSPCL shall not be liable to pay any compensation or damages to the Company.

4.2 BANKING:

Terms and conditions for Banking:

- A Captive Generating Plant commissioned in the State of Punjab by the Company may bank power for own/captive use/consumption on payment of the following charges applicable for use of transmission and/or distribution network of PSTCL and/or PSPCL:
 - a) Banking charges as per the agreement.
 - b) Open Access Charges as per PSERC (Terms & Conditions for Intra-State Open Access) Regulations, 2011, as amended from time to time.
 - c) Any other charges, as specified by the Commission.
 - d) The Transmission and distribution losses (Technical losses) shall be applicable as notified by Commission for year to year.
- i) The Company, after the end of every contract year/financial year shall submit requisite documents to the verifying authority/ agency by 30th of April to establish its status of being a Captive Generating Plant for that particular contract year/ financial year and subsequently submit the certification of verifying authority/ agency to PSPCL. In case the company fails to establish the Status of Captive Generating Plant during any contract year/financial year, then Clause No.3.7 under Article 3 of this Agreement shall be applicable.
- ii) Infirm power generated by the CGP prior to the CoD of the project, if any, injected into the transmission/ distribution network of licensee shall not be considered for the purpose of Banking and shall be treated as dumped power.
- ii) The power shall be allowed to be banked with PSPCL subject to the condition that 15% of power banked (in kind) shall be deducted toward banking charges.
- v) The banking shall be allowed throughout the year, however, the drawl of banked power shall not be allowed during the peak season/period i.e. 1st June to 31st October.
- vi) The drawl of banked power shall not be allowed during peak load hours.
- vi) The permitted quantum of banked energy to be carried forward to next month shall be upto 30% the total monthly consumption of electricity from the distribution licensee of the area. The excess

energy banked shall be treated as dumped energy and shall not be carried forward to next month. Provided that the limit of 30% on banked energy to be carried forward to next month shall not be applicable for the energy banked during paddy season, i.e. whole banked energy shall be carried forward to next month(s)/ non-paddy season, which shall be available for drawl by the Green Energy Open Access Consumer/ Captive user(s) during subsequent non-paddy months till the end of financial year and no restriction on such energy (banked during paddy season) shall be imposed till the end of financial year. The banked power shall be utilized within the same financial year failing which the unutilized energy at the end of the financial year shall lapse, and no compensation whatsoever shall be claimed/ paid for such lapsed banked energy.

- vii) If the CGP or Captive User fails to meet the criteria of ownership and consumption specified in Rule 3 of Electricity Rules 2005 (amended from time to time), by the end of the year, such CGP or Captive User shall lose its Captive status for that year leading to imposition of Cross Subsidy Surcharge and Additional Surcharge and such other charges as applicable on open access consumers. Further, in such case the total energy banked and utilized by the captive user during the year shall be treated as infirm power injected in to the grid by CGP and shall be treated as dumped power as per Regulation 5.2 of PSERC (Harnessing of Captive Power Generation) Regulations, 2022 (amended from time to time). The energy drawn from the grid by the captive user shall be charged at the tariff rates applicable to the relevant category, as approved by the Commission in the tariff order for the relevant year.
- ix) The Company shall pay and maintain, security deposit equivalent to the estimated open access charges for two months with PSPCL before commencement of wheeling of power, which shall be retained by PSPCL till the expiry of this agreement. This Security amount shall be over & above the Payment Security Mechanism/Security Deposit submitted to SLDC/PSTCL, if any, in line with Open Access Regulations/Procedures. The amount of same shall be reviewed at the beginning of every financial year. Facility of banking will be withdrawn in case the security deposit is not maintained. The security deposit shall be encashed in case the Company fails to comply with the requirement to qualify the Status of Captive Generating Plant during any contract year/financial year.
- x) PSPCL/PSTCL shall not be liable for any losses/ damages, if any, consequent to any line outage between the point of generation and the injection point for any reason whatsoever, consequent to which power is not evacuated.
- xi) The Power Factor, if required, shall be considered as 0.9 for the purpose of accounting.
- xi) Metering and communication facilities along with associated AMR system shall be provided and maintained by the Company at its own cost in accordance with the provisions of this agreement.
- xii) Cost of Evacuation system/ transmission line and bay/breaker etc. at PSPCL/PSTCL Grid substations (as per supply code regulations 9.1.1 (f) and 9.1.3 (f) of PSPCL) shall be borne by the Company.
- xiv) The Company shall pay one time permission charges as per Electricity Sales Instructions Manual (ESIM) instructions 123.1.6(a) and 125.1(a) at the time of synchronizing the CPP with PSPCL supply

system.

- xv) The captive generating plant shall be governed by State Grid Code, IEGC read along with regulations and procedures approved by PSERC and CERC from time to time without prejudice to the terms and conditions of this agreement.
- xi) The CGP located within the State, shall furnish its generation schedule to SLDC/PSPCL as per Punjab State Grid Code read along with Punjab State Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2019, PSERC (Deviation Settlement Mechanism & related matters) Regulations, 2020 & PSERC (Terms & Conditions for Intra-State Open Access) Regulations, 2011, as amended from time to time as amended from time to time read along with detailed procedure approved by the Commission under these regulations, showing its drawl from the following:-
 - 1. Captive Generation.
 - 2. Banked Power.
 - 3. Power to be sold through Open Access.
 - 4. Power to be sold to PSPCL.
- xii) The injection schedule for CGP, located outside the State, shall be based on the scheduling done by NRLDC. However, break-up of schedule as above shall be provided by the CGP to PSPCL/ SLDC
- xwii) The drawl schedule of Captive user(s)/ Green Energy Open Access Consumers within the State, wheeling power from RE based CGP, shall be worked out by SLDC after deducting the applicable in-kind Transmission & Wheeling Charges, as approved by Hon'ble PSERC and T&D losses from the injection schedule of the CGP in each time-block.
- xix) The Banked Energy for RE based CGPs shall be broadly calculated by SLDC as per following formula:-

Banked Energy in each time block:

(Ebi) = {Egi (1-T&D Losses-Transmission & Wheeling charges *) -Eci}x(1-B)

* Transmission and wheeling charges @ 2% or as amended from time to time by PSERC.

Where

Ebi = Banked Energy in ith time-block

Egi = Energy injected in ith time-block

Eci = Energy consumption in ith time-block

B = Banking charges (in kind) @ 15%

- Note: 1. Above calculation shall be made keeping in view the restrictions on drawl of banked power during the months/ hours.
 - 2. Losses are the transmission losses and distribution losses (Technical losses) as approved by the PSERC in its Tariff Order for the relevant financial year.

- 3. Banked Energy is zero if Eb is negative or zero (Banked Energy shall be calculated only in case of under- drawal).
- 4. The previous balance of banked energy (carried forward from last month) shall be adjusted at the end of month.
- xx) The power from CGP shall be adjusted as first charge in order of consumption of energy by Captive User(s)/ consumer. Settlement of wheeled energy consumed at Captive User(s)/ consumer end shall be in the following priority:
 - (i) Captive Power wheeled from RE based CGP
 - (ii) Banked Energy
 - (iii) Power purchased under Open Access, if any (other than energy wheeled/banked for captive use)
 - (iv) Power drawn from PSPCL.

The accounting/adjustment of under-drawl/ over-drawl and banked energy shall be done by SLDC as per Section 11.9 to 11.11 of the banking procedure by considering the under-drawl/ energy unutilized by the captive user(s) during each time-block, as banked energy, after deducting in-kind banking charges. Provided that the monthly banked energy to be carried forward during non-paddy months, in excess of 30 % of monthly overdrawl (total consumption of electricity of captive user from PSPCL) shall be considered as dumped energy in line with Regulation 11(iii) of PSERC (Harnessing of Captive Power Generation) Regulations, 2022, as amended from time to time. The Over-drawl by the captive user(s) (during off-peak period and non-paddy period) shall be settled/adjusted by PSPCL against the banked energy accumulated upto the end of the month.

- At the end of a month, the total RE power injected during the month, the total RE Power adjusted during the month, RE Power adjusted from the previous banked energy during the month and net banked energy for the month shall be worked out by SLDC from the time slot wise energy statement prepared by SLDC, Punjab with the downloaded meter data.
- xii) SLDC shall prepare every month, the accounts of scheduled and actual energy injection by CPP and energy drawl by captive user(s). The monthly energy accounts shall be prepared by SLDC as per the provisions of Regulations issued by Hon'ble PSERC from time to time and shall be sent to all concerned for the purpose of monthly billing.
- xii) Based on time slot wise actual energy statement, action shall be taken by PSPCL/PSTCL as under:
 - a) The applicable open access charges for STOA/MTOA/LTA shall be billed by PSPCL/PSTCL/SLDC as per applicable PSERC Open Access Regulations as amended from time to time.
 - b) Commercial wing of PSPCL shall compile statement (based upon the adjustment sheet prepared by SLDC) showing Energy wheeled from CGP, banked energy, energy consumed in current month, PSPCL energy, amount in rupees payable etc. The finalized banking adjustment sheet shall be forwarded to SLDC for keeping record of the banking power transactions.

ARTICLE - 5

METERING, TESTING AND COMMUNICATION

5.1 Metering:

- a) The metering shall be provided for recording the energy injected as per the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 read with subsequent amendments or re-enactment of the same or otherwise specified by the PSERC. The metering equipment for measuring energy at injection point by the company shall comprise of ABT compatible Main, check & Stand by meter and shall be installed at generation end/interconnection point between generator and licensee where energy is injected (as per existing regulations, the Metering is done at interconnection point i.e. at Generator End) into PSPCL/PSTCL system in line with State Grid Code and CEA Metering Regulations. The CGP shall have a standby, main meter and check meter of the same specification as that of main meter at generator end, tested and sealed by PSPCL at the cost of CGP. The metering (comprising of main and check meters)shall also be provided at the drawl point(s) of the Captive User(s) as per the provisions of State Grid Code and CEA Metering Regulations.
- b) Metering equipment shall be ABT compliant Special Energy Meters (SEMs) with Automatic Meter Reading (AMR) Facility of accuracy class 0.2S required for the Project (main, check and standby meters) capable of recording and storing both import and export of energy for 15 minutes and 5 minutes or lesser time block (preferably configurable) averages of all the Electrical Parameters for a minimum of 45 days. CTs of 0.2S & PTs of 0.2 accuracy class shall also be provided. Meters shall have requisite communication facilities to ensure availability of real time data transfer connectivity with SLDC. Cost of metering and communication facilities shall be borne by the Company.
- c) Each meter i.e. at injection point, drawl point(s) and at the generation facility shall be jointly inspected and sealed by the PSPCL and shall not be interfered with by either party except in the presence of either party or its authorized representative. In the case of any tampering of metering cubicle or energy meters at the Project/Captive User(s) premises or at the Company's power generating plant, this agreement shall be terminated.
- d) All the main, check and standby meters shall be tested for accuracy/ RTC time-drift every half yearly. The cost of such test checking shall be borne by the Company at the rates specified by the PSPCL from time to time.
- e) The metering equipment installed shall be as per PSPCL's latest technical specification or its amendment from time to time and shall comply with the requirements under SAMAST report/scheme, CEA metering regulations and CEA guidelines on Advanced metering infrastructure.

- f) Format of downloaded data of ABT compliant meters shall be as per format of PSPCL latest technical specification or its amendment from time to time also considering requirements of SLDC.
- g) The metering system installed shall be tested by Meter testing laboratory of PSPCL and witnessed/sealed jointly by concerned field office of PSPCL in the presence of the authorized representative(s) of the Company/Captive user(s).
- h) The downloaded data of the meter for the previous month shall be supplied to SLDC, Punjab by 5th day of every month until AMR system is established and SAMAST scheme is implemented.
- 5.2 Data Acquisition System [DAS] and Communication facilities: The Company shall install and maintain at its cost, Data Acquisition System and communication network facilities including AMR system at the Generating Station/Injection Point, as specified in the State Grid Code with due approval of technical features by SLDC or PSPCL as the case may be. The communication facilities shall also comply with the provisions of CERC (Communication System) Regulations, 2017 and SAMAST report/scheme.
- 5.3 In the case of any tampering of metering cubicle or energy meters at the Project/Captive User(s) premises or at the Company's power generating plant being detected or observed, the PSPCL shall have the right to withdraw the Banking facilities/Open Access without any notice and penalties shall be imposed as per rules/regulations of PSPCL/PSERC and Banked units for that particular period shall be lapsed and no compensation shall be provided.

ARTICLE – 6

FORCE MAJEURE

- 6.1 In the event of Force Majeure conditions like war, mutiny, riot, earthquake, hurricane, strike, tempest, accident to machinery, curtailment by SLDC for maintaining Grid security/stability, affecting the wheeling and /or banking of power, the PSPCL shall have no obligation to Bank and Wheel the energy as per this agreement. However, all reasonable efforts shall be made to restore normalcy within 30 (thirty) days and if the same is not possible, this agreement is to be treated as temporarily suspended for the period in which Force Majeure conditions continue and in such case the PSPCL shall also make efforts to supply power to 'Captive User(s)' from its own source subject to availability and payment of charges as applicable to the power supplied to the relevant category of consumers.
- **6.2** During the period in which Force Majeure conditions prevail, PSPCL shall not be liable to pay any compensation or damage or any claims whatsoever for any direct or indirect loss that may be suffered by the Captive User(s)/ company on account of wheeling and/or Banking of Electricity not being performed during the period.
- 6.3 In case PSPCL on account of any force majeure conditions or breakdown of Grid/ transmission/ distribution lines are not in a position to evacuate/ wheel the power, then PSPCL shall not be liable to pay any compensation or damage or any other claims whatsoever for any direct or indirect loss to the Company. PSPCL shall not also be liable to pay any compensation for any damage caused to any part of the Project resulting on account of parallel operation of the grid.

ARTICLE – 7

TERM, TERMINATION AND DEFAULT

7.1 Term of the Agreement:

This Agreement shall become effective upon the execution and delivery thereof by the Parties
hereto and unless terminated pursuant to other provisions of the Agreement, shall continue to be
in force till i.e. a period ofyears from the date of CoD of the Captive Generating
Plant i.enot exceeding the validity of Open Access Agreement/approval, which may
be extended/renewed for a further period by PSPCL based on the request of company.

7.2 Events of Default:

Company's Default: The occurrence of any of the following events at any time during the term of this Agreement shall constitute an Event of Default by the Company:

- a. Failure or refusal by the Company or Captive User(s) to perform any of its obligations agreed under this Agreement.
- b. Non-payment of charges or non-payment/non-maintenance of security as specified in this agreement within the time specified.
- c. Failure of the Company to generate and wheel energy upto 25% of contracted energy/capacity continuously for a period of six months in a Financial Year as the case may be.
- d. Failure to establish status of Captive Generating Plant in any contract year.
- e. Submission of fake, fabricated or misleading document(s), certificate(s), undertaking(s) etc.
- f. Tempering of metering equipments.

7.3 Termination:

Termination for Company's Default:

- i) Upon the occurrence of any event of default as set out in sub-clause 7.2 above, the PSPCL may deliver a Default Notice of 15 days to the Company in writing, which shall specify in reasonable detail the event of default giving rise to the default notice and call upon the Company to remedy the same within a month from the date of notice.
- ii) In case the Company fails to remedy the default(s) notified in the above Notice within the time indicated in the notice, the PSPCL shall be entitled to terminate this Agreement with immediate effect.

- iii) Upon termination of this agreement, the PSPCL shall stand discharged of all its obligations undertaken under this Agreement. However, the Parties shall fulfill the payment obligations arising as per the Agreement prior to the date of termination.
- iv) On termination of contract by PSPCL, Banked units for that particular period shall be lapsed and no compensation shall be provided and besides that, security deposit shall also be forfeited.

ARTICLE 8

DISPUTE RESOLUTION

- **8.1** The Parties to this agreement hereby agree to attempt to resolve all disputes arising hereunder promptly, equitably and in good faith.
- **8.2** All disputes or differences between the Parties arising out of or in connection with this Agreement shall, as far as possible, be settled through mutual negotiations.
- **8.3** Each Party shall designate in writing and communicate to the other Party its own representative who shall be authorized to resolve any dispute arising under this Agreement in an equitable manner and, unless otherwise expressly provided herein, to exercise the authority of the Parties hereto to make decisions by mutual agreement.
- **8.4** Any dispute in scheduling, metering, billing/ energy accounting & Commercial Settlement including unsettled disputes between the PSPCL and CGP/ Captive User shall be first referred to the Commercial & Metering Committee (CMC) formulated under State Grid Code. All users shall abide by the decision of CMC.

The Committee shall investigate and endeavor to resolve the grievance within 30 days after affording opportunity of hearing to all the affected parties. If the Committee is unable to redress the grievance, it shall be referred to the Commission by the Committee. In case the CGP/ Captive user is dissatisfied with the decision of the committee, it may approach the Commission through a petition. Pending the decision of the commission, the directions of the CMC/ SLDC shall be complied with by the CGP/ Captive user.

ARTICLE - 9

OTHER OBLIGATIONS

- 9.1 The Company shall abide by the Electricity Act, 2003, PSERC(Punjab State Grid code) Regulations 2013 as amended from time to time, PSERC (Electricity Supply Code and Related Matters) Regulations 2014, as amended from time to time, PSERC (Harnessing of Captive Power Generation)Regulations, 2022, PSERC(Forecasting, Scheduling, Deviation Settlement and related matters) Regulations, 2019, (Deviation Settlement Mechanism & related matters) Regulations, 2020 and PSERC (Terms & Conditions for Intra-State Open Access)Regulations, 2011, as amended from time to time, Rules, Codes and Standards made there under.
- **9.2** Quality of power supplied by the CPP shall be in compliance with the relevant Regulations issued by the PSERC from time to time.
- **9.3** The Company shall strictly comply with the CEA (Safety requirements for construction, operation and maintenance of electrical plants and lines) Regulations, 2011 and CEA (Measures relating to safety and electricity supply) Regulations, 2010, as amended from time to time.
- **9.4** The Company shall pay any applicable taxes, cess, duties or levies imposed by the Government or Competent Authority from time to time.
- **9.5** The Company shall furnish when required, any data necessary for the system studies conducted by the PSPCL.
- **9.6** The cost of Stamp Duty charges shall be borne by the Company.

ARTICLE - 10

MISCELLANEOUS PROVISIONS

10.1 Governing Law:

This Agreement shall be interpreted, construed and governed by the Laws of India including the Electricity Act, 2003 and the Rules/ Regulations framed there under.

10.2 Waivers:

Any failure on the part of a Party to exercise, and any delay in exercising, exceeding three years, any right hereunder shall operate as a waiver thereof. No waiver by a Party of any right hereunder with respect to any matter or default arising in connection with this Agreement shall be considered as a waiver with respect to any subsequent matter of default.

10.3 Limitation, Remedies and Damages:

Neither Party shall be liable to the other for any consequential, indirect or special damages to persons or property whether arising in tort, contract or otherwise, by reason of this Agreement or any services performed or undertaken to be performed hereunder.

10.4 Notices:

Any notice, communication, demand, or request required or authorized by this Agreement shall be in writing and shall be deemed properly given upon the date of receipt, if delivered by hand or sent by courier, if mailed by registered or certified mail at the time of posting, if sent by fax when dispatched (provided if the sender's transmission report shows the entire fax to have been received by the recipient and only if the transmission was received in legible form),

i) In case of PSPCL:

Designation of authorized representative:

PSPCL Punjab State Power Corporation Ltd.

Telephone No.:

E-mail:

ii) In case of the Company:

Designation of authorized representative:

Telephone No.:

E- mail:

10.5 Severability:

Any provision of this Agreement, which is prohibited or unenforceable under any law, shall be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof and without affecting the validity, enforceability or legality of such other provisions.

10.6 Amendments:

This Agreement shall not be amended, changed, altered, or modified except by a written instrument duly executed by the authorized representatives of both the Parties and approved by the Commission. However, the Commission shall be entitled to modify/alter the conditions of this contract [agreement] at the instance of either of the parties, or suo-moto, after giving an opportunity of hearing to all the parties.

10.7 Assignment:

The Company shall not assign this Agreement or any portion hereof without the prior written consent of the PSPCL and approval of the Commission.

Provided further that any assignee shall expressly assume in writing the assignor's obligations arising under this Agreement prior to the assignment.

10.8 Entire Agreement, Appendices:

This Agreement constitutes the entire agreement between PSPCL and the Company, concerning the subject matter hereof. All previous documents, undertakings, and agreements, whether oral, written, or otherwise, between the Parties concerning the subject matter hereof are hereby cancelled and shall be of no further force or effect and shall not affect or modify any of the terms or obligations set forth in this Agreement, except as the same may be made part of this Agreement in accordance with its terms, including the terms of any of the appendices, attachments or exhibits. The appendices, attachments and exhibits are hereby made an integral part of this Agreement and shall be fully binding upon the Parties.

In the event of any inconsistency between the text of the Articles of this Agreement and the appendices, attachments or exhibits hereto or in the event of any inconsistency between the provisions and particulars of one appendix, attachment or exhibit and those of any other appendix, attachment or exhibit, PSPCL and the Company shall mutually consult to resolve the inconsistency however without prejudice to the provisions of the Act, Rules and Regulations made there under.

10.9 Further Acts and Assurances:

Each of the Parties agrees to execute and deliver all such further agreements, documents and instruments, and to do and perform all such further acts and things, as shall be necessary or convenient to carry out the provisions of this Agreement and to consummate the transactions contemplated hereby.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their authorized representatives and copies delivered to each Party, as of the day and year first above stated.

FOR AND ON BEHALF OF PSPCL

Name:

Designation of authorized representative:

WITNESSES

1.

2.

FOR AND ON BEHALF OF PSTCL

Name:

Designation of authorized representative:

WITNESSES

1.

2.

FOR AND ON BEHALF OF THE COMPANY

Name:

Designation of authorized representative:

WITNESSES

1.

2.